

# SHELTER ISLAND WATER ADVISORY COMMITTEE – MARCH 2025, Height data report DRAFT

## Summary/Conclusion - “Guarded”

The

No actions recommended at this time – continue to monitor levels.

## Discussion:

### Section 1a - National Drought Monitoring:

Shelter Island (and the balance of the east end) remains in D0 Abnormally Dry status. Central Long Island remains “None.” The lower Hudson Valley and most of Connecticut remains in a D2 Severe Drought.

### Section 1b – New York DEC Drought monitor.

The entire state is “Normal,” which means drought is not in progress or anticipated.

**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 Four wells continued to drop, now at the 20 percentiles. The current value is similar to 2016 and 2023, although these lows were both in mid-summer.

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

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

Most wells were below March median values. Slight increases are noted in the Big 4 wells (this may indicate the start of the seasonal recharge). The Near Shore group dropped, but this may reflect the tidal effect (a few days of western gale force preceded the reading date, causing very low tides that can increase freshwater outflow to the Sounds).

**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.*

Review need for this chart – values are included in Section 3 section.

### 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.* There was a slight uptick in the March 11 readings – not a lot, but this could foretell the belated start of the recharge season (it may also represent the gale force winds prior to the reading!). The low points for Goat Hill, Manwaring and Condon wells are slightly higher than in previous years, which may reflect as reserve from the sharp spike last year. The low point for the Manhasset is lower than the 5 previous years.

## Current Rainfall versus history

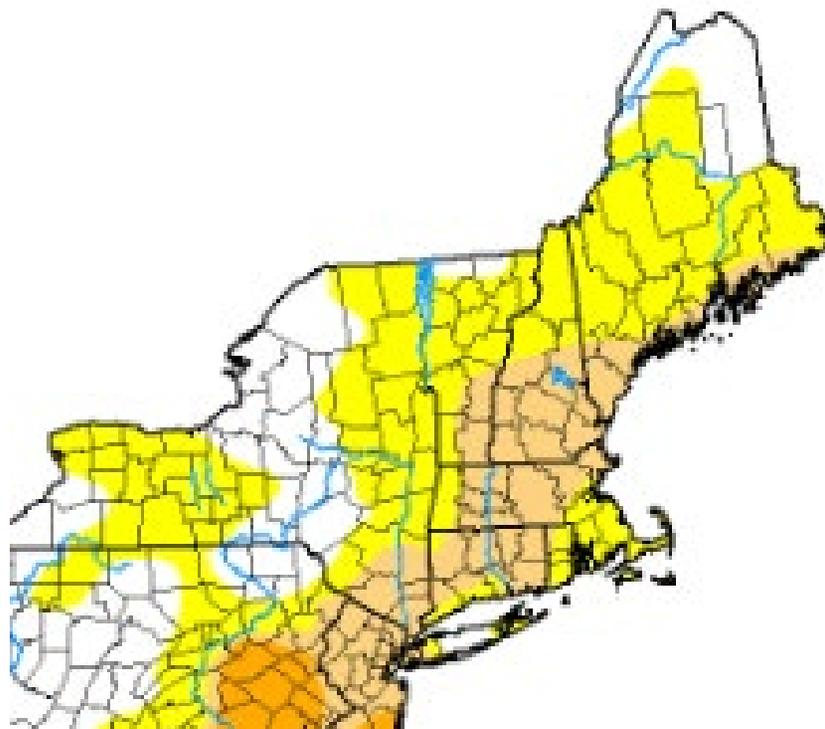
| Precipitation Report for March 2025 |      |      |      |      |      |      |      |
|-------------------------------------|------|------|------|------|------|------|------|
| Year                                | 2025 | 2024 | 2023 | 2022 | 2021 | 2020 | 2019 |
| This Month to 3/11                  |      |      |      |      |      |      |      |
| Year to date to 3/11                |      |      |      |      |      |      |      |

## Section 1a National Drought Monitoring

Shelter Island (and the balance of the east end) remains in D0 Abnormally Dry status. Central Long Island remains “None.” The lower Hudson Valley and most of Connecticut remains in a D2 Severe Drought.

### U.S. Drought Monitor Northeast

**March 11, 2025**  
(Released Thursday, Mar. 13, 2025)  
Valid 8 a.m. EDT



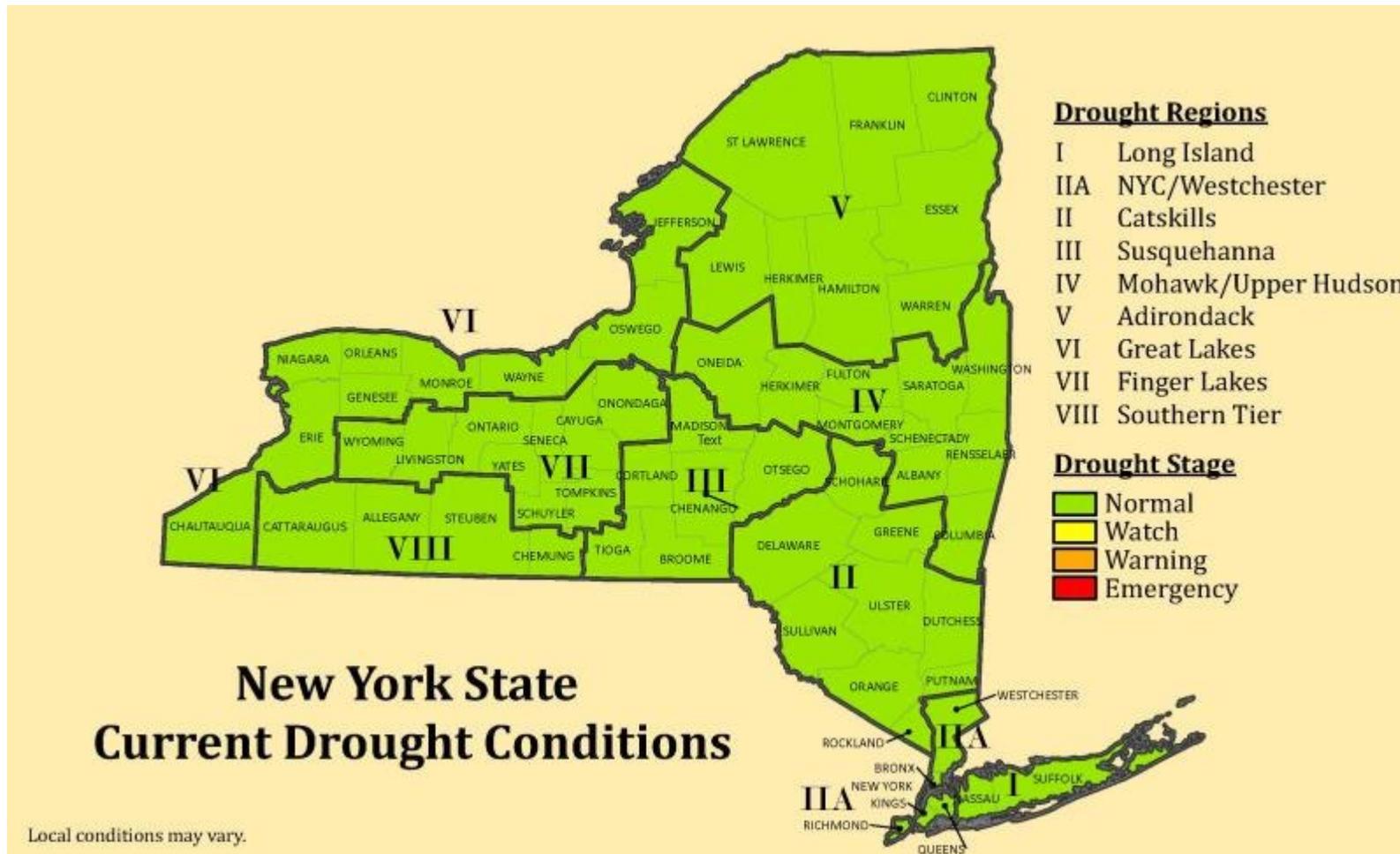
#### *Intensity:*

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

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

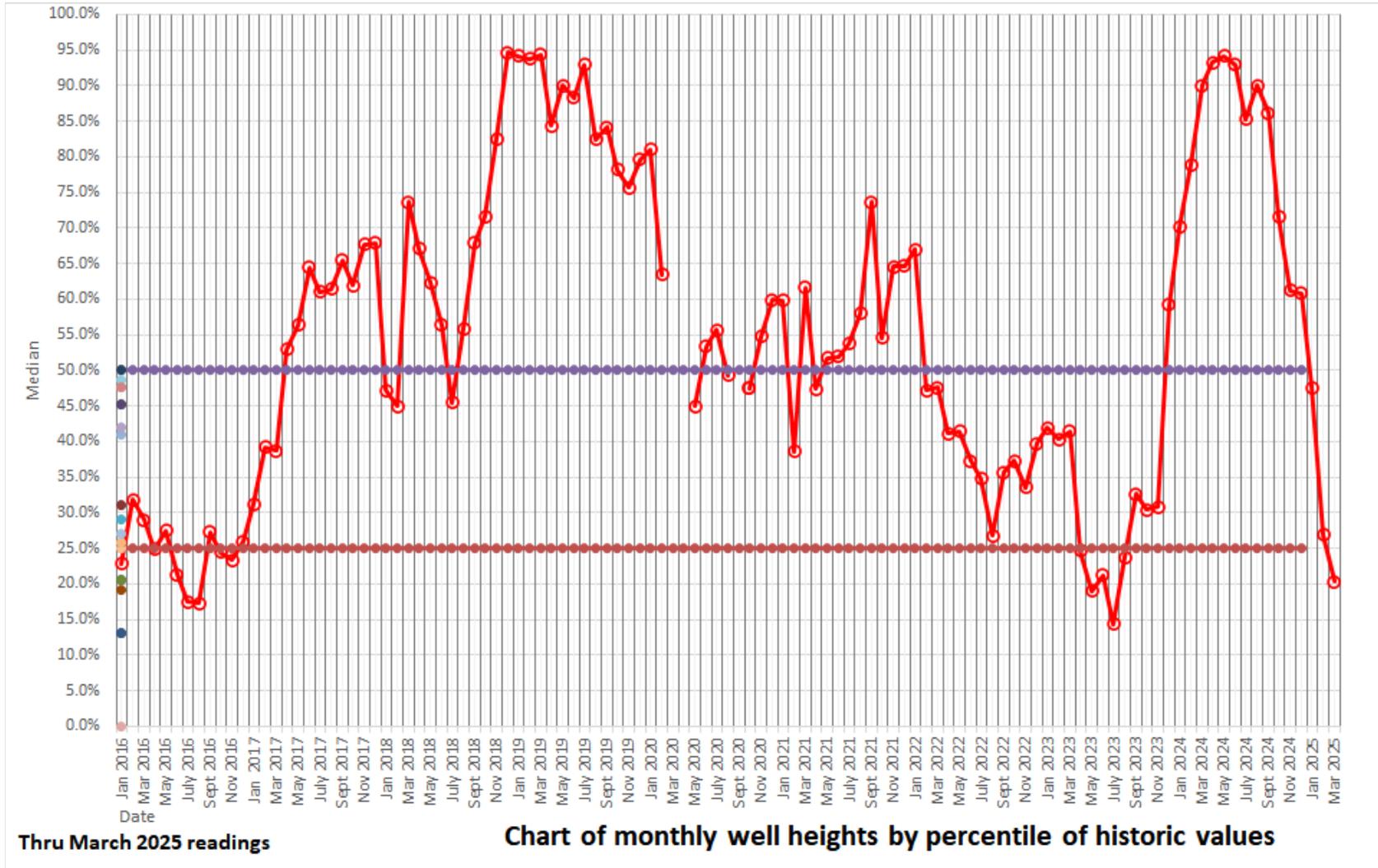
## Section 1b – New York DEC Drought monitor

The New York DEC version of Drought stage. The entire state is “Normal,” which means drought is not in progress or anticipated.



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

The Big Four wells continued to drop, now at the 20 percentile. The current value is similar to 2016 and 2023, although these lows were both in mid-summer.



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

Most wells were below March median values. Slight increases are noted in the Big 4 wells (this may indicate the start of the seasonal recharge). The Near Shore group dropped, but this may reflect the tidal effect (a few days of western gale force preceded the reading date, causing very low tides that can increase freshwater outflow to the Sounds).

| Well readings in FEET compared to the the months Median for each well for: | Manhansett, Well #1 Big 4 | Rocky Point Ave/Belvdr Well #2 | Big Ram Island Well #3 | Manwaring Rd Well #4 | Congdon Well #5 Big 4 | Brander/Lillip ut 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 Big 4 | Shorewood Well #13 | White Birch Well #14 |
|--|---------------------------|--------------------------------|------------------------|----------------------|-----------------------|---------------------------|---------------------|------------------------|--------------------|------------------------|--------------------|--------------------------|--------------------|----------------------|
| <b>March 2025</b>  | 48                        | 28                             | 21                     | 39                   | 50                    | 32                        | 26                  | 32                     | 19                 | 18                     | 25                 | 22                       | 23                 | 13                   |
| <b>Median Value</b>  | 3.01                      | 1.77                           | 1.35                   | 4.20                 | 5.70                  | 1.99                      | 1.72                | 3.43                   | 1.18               | 1.75                   | 2.14               | 6.76                     | 1.49               | 1.57                 |
| <b>Reading March 11 2025</b>   | 2.46                      | 1.63                           | 1.35                   | 3.38                 | 4.94                  | 1.85                      | 1.67                | 3.03                   | 1.34               | 1.61                   | 1.96               | 6.18                     | 1.26               | 1.26                 |
| <b>Prior Month</b>   | 2.38                      | 1.49                           | 0.77                   | 3.35                 | 4.93                  | 2.1                       | 1.91                | 3.25                   | 0.07               | 1.47                   | 1.92               | 6.1                      | 1.27               | 1.36                 |
| <b>Change from previous</b>  | 0.08                      | 0.14                           | 0.58                   | 0.03                 | 0.01                  | (0.25)                    | (0.24)              | (0.22)                 | 1.27               | 0.14                   | 0.04               | 0.08                     | (0.01)             | (0.10)               |
| <b>Big 4</b>   |                           |                                |                        | <b>Big 4</b>         | <b>Big 4</b>          |                           |                     |                        |                    |                        |                    | <b>Big 4</b>             |                    |                      |
|  | 7.01                      |                                |                        |                      | 10.16                 |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 5.21                      |                                |                        |                      | 8.36                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 4.45                      |                                |                        |                      | 7.68                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 4.37                      |                                |                        |                      | 7.55                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 4.29                      |                                |                        | 8.45                 | 7.44                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 4.28                      |                                |                        | 6.86                 | 7.35                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 4.18                      |                                |                        | 6.05                 | 7.32                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 3.95                      |                                |                        | 6.00                 | 7.19                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 3.91                      |                                |                        | 5.62                 | 7.09                  | 4.94                      |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 3.89                      |                                |                        | 5.57                 | 7.02                  | 3.13                      |                     | 6.94                   |                    |                        |                    |                          |                    |                      |
|  | 3.87                      | 4.47                           |                        | 5.27                 | 6.85                  | 3.03                      |                     | 5.58                   |                    |                        |                    |                          |                    |                      |
|  | 3.8                       | 2.68                           |                        | 5.24                 | 6.79                  | 2.76                      | 3.8                 | 4.84                   |                    |                        |                    |                          |                    |                      |
|  | 3.74                      | 2.61                           |                        | 5.15                 | 6.62                  | 2.74                      | 2.49                | 4.52                   |                    | 5                      |                    |                          |                    |                      |
|  | 3.74                      | 2.3                            | 2.5                    | 4.87                 | 6.55                  | 2.53                      | 2.44                | 4.17                   |                    | 3.41                   |                    | 10.07                    | 3.84               |                      |
|  | 3.64                      | 2.23                           | 1.98                   | 4.79                 | 6.38                  | 2.39                      | 2.37                | 4.03                   |                    | 2.89                   |                    | 8.13                     | 2.31               |                      |
|  | 3.51                      | 2.15                           | 1.92                   | 4.77                 | 6.28                  | 2.21                      | 2.21                | 3.97                   | 1.9                | 2.44                   |                    | 7.87                     | 2.25               |                      |
|  | 3.51                      | 2.05                           | 1.74                   | 4.74                 | 6.17                  | 2.19                      | 2.01                | 3.97                   | 1.75               | 2.39                   |                    | 7.37                     | 1.95               |                      |
|  | 3.4                       | 2.03                           | 1.58                   | 4.73                 | 6.03                  | 2.17                      | 2.01                | 3.85                   | 1.72               | 2.24                   |                    | 7.12                     | 1.9                | 2.03                 |
|  | 3.35                      | 1.97                           | 1.45                   | 4.72                 | 5.84                  | 2.15                      | 1.99                | 3.82                   | 1.66               | 2.14                   |                    | 7.09                     | 1.83               | 1.98                 |
|  | 3.24                      | 1.93                           | 1.43                   | 4.54                 | 5.75                  | 2.14                      | 1.91                | 3.79                   | 1.48               | 1.99                   |                    | 7.01                     | 1.74               | 1.89                 |
|  | 3.18                      | 1.88                           | 1.43                   | 4.54                 | 5.75                  | 2.09                      | 1.88                | 3.55                   | 1.43               | 1.97                   |                    | 6.94                     | 1.74               | 1.87                 |
|  | 3.12                      | 1.83                           | 1.42                   | 4.23                 | 5.73                  | 2.07                      | 1.86                | 3.46                   | 1.34               | 1.85                   |                    | 6.92                     | 1.57               | 1.83                 |
|  | 3.04                      | 1.8                            | 1.38                   | 4.22                 | 5.73                  | 2.05                      | 1.77                | 3.43                   | 1.21               | 1.76                   |                    | 6.8                      | 1.52               | 1.81                 |
| <b>MEDIAN</b>  | <b>3.01</b>               | <b>1.77</b>                    | <b>1.35</b>            |                      | <b>5.70</b>           | <b>1.99</b>               | <b>1.72</b>         | <b>3.43</b>            | <b>1.18</b>        |                        | <b>2.14</b>        | <b>6.76</b>              | <b>1.49</b>        | <b>1.57</b>          |
|  | 2.93                      | 1.76                           | 1.28                   | 4.18                 | 5.68                  | 1.98                      | 1.71                | 3.43                   | 1.18               | 1.74                   | 2.13               | 6.52                     | 1.47               | 1.44                 |
|  | 2.93                      | 1.66                           | 1.24                   | 4.1                  | 5.57                  | 1.98                      | 1.71                | 3.42                   | 1.12               | 1.65                   | 2.11               | 6.45                     | 1.47               | 1.42                 |
|  | 2.91                      | 1.65                           | 1.18                   | 4.1                  | 5.49                  | 1.96                      | 1.68                | 3.41                   | 1.03               | 1.61                   | 2.03               | 6.26                     | 1.45               | 1.28                 |
|  | 2.8                       | 1.63                           | 1.14                   | 4                    | 5.47                  | 1.89                      | 1.67                | 3.38                   | 0.99               | 1.57                   | 2.01               | 6.26                     | 1.44               | 1.26                 |
|  | 2.78                      | 1.63                           | 1.13                   | 3.98                 | 5.42                  | 1.85                      | 1.59                | 3.37                   | 0.95               | 1.55                   | 1.96               | 6.18                     | 1.34               | 1.13                 |
|  | 2.76                      | 1.62                           | 1.08                   | 3.92                 | 5.4                   | 1.85                      | 1.58                | 3.31                   | 0.9                | 1.55                   | 1.91               | 6.16                     | 1.28               |                      |
|  | 2.73                      | 1.58                           | 1.05                   | 3.82                 | 5.4                   | 1.8                       | 1.53                | 3.24                   | 0.89               | 1.49                   | 1.9                | 6.02                     | 1.26               |                      |
|  | 2.72                      | 1.57                           | 0.96                   | 3.72                 | 5.37                  | 1.74                      | 1.49                | 3.22                   | 0.68               | 1.49                   | 1.85               | 5.79                     | 1.23               |                      |
|  | 2.71                      | 1.56                           | 0.92                   | 3.7                  | 5.34                  | 1.68                      | 1.38                | 3.21                   | 0.62               | 1.18                   | 1.52               | 5.39                     | 1.15               |                      |
|  | 2.6                       | 1.56                           | 0.92                   | 3.69                 | 5.19                  | 1.62                      | 1.34                | 3.08                   |                    |                        | 1.5                | 5                        | 1.06               |                      |
|  | 2.47                      | 1.54                           |                        | 3.69                 | 5.03                  | 1.62                      | 1.26                | 3.03                   |                    |                        | 1.37               |                          | 0.87               |                      |
|  | 2.46                      | 1.28                           |                        | 3.6                  | 4.98                  | 1.56                      | 1.25                | 3.01                   |                    |                        | 0.88               |                          |                    |                      |
|  | 2.45                      | 1.18                           |                        | 3.47                 | 4.95                  | 1.45                      | 1.04                | 2.57                   |                    |                        |                    |                          |                    |                      |
|  | 2.4                       | 1.05                           |                        | 3.38                 | 4.94                  | 1.43                      |                     | 2.41                   |                    |                        |                    |                          |                    |                      |
|  | 2.4                       |                                |                        | 3.35                 | 4.94                  | 1.11                      |                     | 2.14                   |                    |                        |                    |                          |                    |                      |
|  | 2.35                      |                                |                        | 3.26                 | 4.87                  | 1.02                      |                     | 2.11                   |                    |                        |                    |                          |                    |                      |
|  | 2.3                       |                                |                        | 2.67                 | 4.75                  |                           |                     | 3.54                   |                    |                        |                    |                          |                    |                      |
|  | 1.97                      |                                |                        | 2.46                 | 4.57                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 1.94                      |                                |                        | 2.45                 | 4.5                   |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 1.91                      |                                |                        |                      | 4.13                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 1.77                      |                                |                        |                      | 3.97                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 1.74                      |                                |                        |                      | 3.94                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | 1.71                      |                                |                        |                      | 3.91                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  |                           |                                |                        |                      | 3.56                  |                           |                     |                        |                    |                        |                    |                          |                    |                      |
|  | <b>Big 4</b>              |                                |                        | <b>Big 4</b>         | <b>Big 4</b>          |                           |                     |                        |                    |                        |                    | <b>Big 4</b>             |                    |                      |
| <b>CURRENT MONTH ANALYSIS</b>  |                           |                                |                        |                      |                       |                           |                     |                        |                    |                        |                    |                          |                    |                      |
| percentrank current read to historic range                                 | 24%                       | 33%                            | 50%                    | 14%                  | 19%                   | 32%                       | 36%                 | 16%                    | 61%                | 35%                    | 29%                | 25%                      | 18%                | 17%                  |
| historic minimum   | 1.71                      | 1.05                           | 0.92                   | 2.45                 | 3.56                  | 1.02                      | 1.04                | 2.11                   | 0.62               | 1.18                   | 0.88               | 5.00                     | 0.87               | 0.40                 |

## Section 5 - "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.

There was a slight uptick in the March 11 readings – not a lot, but this could foretell the belated start of the recharge season (it may also represent the gale force winds prior to the reading!). The low points for Goat Hill, Manwaring and Condon wells are slightly higher than in previous years, which may reflect as reserve from the sharp spike last year. The low point for the Manhansett is lower than the 5 previous years.

