

## WATER LEVELS FROM PENNSYLVANIA OBSERVATION-WELL NETWORK JULY 1998

| County  | Well number | Year record began | Mean depth to water below land surface, in feet |            |                      |                           |   |   | Last recorded water level | Date of last recorded water level | Trend from last month | Trend from last year | Departure from mean for all years, in feet |
|---|-------------|-------------------|---|------------|----------------------|---------------------------|---|---|---------------------------|-----------------------------------|-----------------------|----------------------|--|
|   |             |                   | This month                                      | Last month | This month last year | This month, for all years | Maximum for this month/year of occurrence | Minimum for this month/year of occurrence |                           |                                   |                       |                      |  |
| Observation wells in the Ohio River Basin     |             |                   |   |            |                      |                           |   |   |                           |                                   |                       |                      |  |
| Allegheny                                     | AG-700      | 1967              | 6.22  | 6.10       | 6.32                 | 6.81                      | 7.53/77                                   | 6.13/89                                   | 6.52                      | 7/29                              | DOWN                  | UP                   | 0.59                                       |
| Beaver  | BV-156      | 1967              | 8.40  | 8.40       | 8.99                 | 9.36                      | 11.50/73                                  | 8.40/98                                   | 8.81                      | 7/28                              | SAME                  | UP                   | 0.96                                       |
| Butler  | BT-311      | 1970              | 20.21   | 10.39      | 20.21                | 16.08                     | 26.53/88                                  | 3.85/90                                   | 22.15                     | 7/20                              | DOWN                  | SAME                 | -4.13                                      |
| Crawford                                      | CW-413      | 1967              | 51.53   | 49.91      | 50.85                | 50.96*                    | 54.59/92*                                 | 48.03/89*                                 | 52.31                     | 7/20                              | DOWN                  | DOWN                 | -0.57*                                     |
| Elk   | EK-108      | 1975              | 5.62**  | 5.21**     | 6.14**               | 4.28                      | 6.14/97**                                 | 2.78/90                                   | 5.78**                    | 7/20                              | DOWN                  | UP                   | -1.34**                                    |
| Erie  | ER-82       | 1966              | 21.61   | N/D        | 20.03                | 20.18*                    | 22.25/83*                                 | 18.49/96*                                 | 21.82                     | 7/24                              | N/D                   | DOWN                 | -1.43*                                     |
| Fayette                                       | FA-17       | 1968              | 21.70   | 22.06      | 23.42                | 23.05                     | 23.95/95                                  | 21.65/96                                  | 22.60                     | 7/25                              | UP                    | UP                   | 1.35                                       |
| Forest  | FO-11       | 1974              | 8.87  | 8.67       | 9.53                 | 9.83                      | 10.93/88                                  | 8.87/98                                   | 9.60                      | 7/19                              | DOWN                  | UP                   | 0.96                                       |
| Green   | GR-118      | 1973              | 27.50   | 27.56      | 29.81                | 33.54                     | 41.41/87                                  | 24.74/96                                  | 29.27                     | 7/27                              | UP                    | UP                   | 6.04                                       |
| Lawrence                                      | LA-1201     | 1967              | 18.03   | 17.52      | 17.36                | 17.09                     | 18.37/88                                  | 14.67/78                                  | 18.21                     | 7/29                              | DOWN                  | DOWN                 | -0.94                                      |
| Mercer  | MR-1364     | 1964              | 3.80  | 2.66       | 3.76                 | 4.37                      | 5.70/88                                   | 3.44/96                                   | 3.92                      | 7/22                              | DOWN                  | DOWN                 | 0.57                                       |
| Somerset                                      | SO-2        | 1937              | 33.20   | 32.99      | 32.83                | 33.43*                    | 34.45/88*                                 | 32.64/96*                                 | 33.41                     | 7/20                              | DOWN                  | DOWN                 | 0.23*                                      |
| Warren  | WR-50       | 1972              | 42.47   | 41.40      | 40.70                | 42.59                     | 44.31/77                                  | 40.70/97                                  | 42.75                     | 7/29                              | DOWN                  | DOWN                 | 0.12                                       |
| Washington                                    | WS-155      | 1971              | 35.42   | 35.84      | 36.52                | 36.09                     | 37.14/88                                  | 35.38/77                                  | 36.30                     | 7/28                              | UP                    | UP                   | 0.67                                       |
| Westmoreland                                  | WE-300      | 1968              | 15.97   | 15.36      | 16.55                | 17.94                     | 28.74/68                                  | 14.85/89                                  | 16.12                     | 7/15                              | DOWN                  | UP                   | 1.97                                       |
| Observation wells in the Delaware River Basin |             |                   |   |            |                      |                           |   |   |                           |                                   |                       |                      |  |
| Berks   | BE-623      | 1975              | 131.69  | 128.71     | 132.38               | 129.98                    | 137.00/92                                 | 115.70/84                                 | 133.23                    | 7/29                              | DOWN                  | UP                   | -1.71                                      |
| Bucks   | BK-929      | 1967              | 44.51   | 42.59      | 44.35                | 43.90*                    | 45.93/93*                                 | 40.58/89*                                 | 45.39                     | 7/28                              | DOWN                  | DOWN                 | -0.61*                                     |
| Bucks   | BK-1020     | 1975              | 32.07   | 29.62      | 33.77                | 33.92                     | 38.11/85                                  | 28.49/89                                  | 33.39                     | 7/29                              | DOWN                  | UP                   | 1.85                                       |
| Carbon  | CB-104      | 1969              | 64.33   | 55.84      | 67.77                | 58.27                     | 74.32/93                                  | 33.16/73                                  | 70.46                     | 7/29                              | DOWN                  | UP                   | -6.06                                      |
| Chester                                       | CH-10       | 1966              | 13.21   | 12.31      | 12.77                | 13.10                     | 15.21/66                                  | 9.50/89                                   | 13.65                     | 7/29                              | DOWN                  | DOWN                 | -0.11                                      |
| Delaware                                      | DE-723      | 1983              | 7.20  | 6.79       | 6.99                 | 6.80                      | 7.99/95                                   | 5.30/89                                   | 7.47                      | 7/29                              | DOWN                  | DOWN                 | -0.40                                      |
| Lebanon                                       | LB-372      | 1973              | 8.17  | 7.64       | 9.58                 | 8.76                      | 10.34/91                                  | 6.58/84                                   | 8.59                      | 7/29                              | DOWN                  | UP                   | 0.59                                       |
| Lehigh  | LE-644      | 1971              | 57.91   | 52.67      | 62.28                | 59.34                     | 73.65/81                                  | 38.42/84                                  | 61.04                     | 7/29                              | DOWN                  | UP                   | 1.43                                       |
| Monroe  | MO-190      | 1968              | 10.44   | 9.94       | 13.02                | 11.50                     | 14.22/93                                  | 9.12/84                                   | 12.24                     | 7/29                              | DOWN                  | UP                   | 1.06                                       |
| Montgomery                                    | MG-225      | 1956              | 15.61   | 14.19      | 15.92                | 29.19                     | 55.27/63                                  | 14.83/96                                  | 16.28                     | 7/29                              | DOWN                  | UP                   | 13.58                                      |
| Montgomery                                    | MG-917      | 1997              | 9.62  | 8.90       | N/D                  | N/D                       | N/D                                       | N/D                                       | 10.30                     | 7/29                              | DOWN                  | N/D                  | N/D  |
| Pike  | PI-200      | 1981              | 81.90   | 64.76      | 80.90                | 55.26                     | 81.90/98                                  | 38.07/82                                  | 88.49                     | 7/29                              | DOWN                  | DOWN                 | -26.64                                     |
| Schuylkill                                    | SC-296      | 1975              | 50.52   | 48.96      | 51.61                | 48.19                     | 53.83/93                                  | 39.15/84                                  | 51.79                     | 7/29                              | DOWN                  | UP                   | -2.33                                      |
| Wayne   | WN-64       | 1968              | 24.29   | 24.41      | 27.21                | 26.92*                    | 28.71/91*                                 | 24.29/98*                                 | 26.02                     | 7/29                              | UP                    | UP                   | 2.63*                                      |

N/D indicates no data                      NDR indicates no data received at time of report

DOWN = Water level is lower than that reported for last month or year

UP = Water level is higher than that reported for last month or year

Shaded block indicates this month is a recorded maximum or minimum

Year refers to water year, October 1 - September 30.

\* Value for well is computed using less than the full period of record because of a change in well hydraulics, or nearby non-climatic hydrologic stress.

\*\* Below normal conditions for well EK-108 are probably due to recent land use changes.

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|--|-------------|-------------------|---|------------|----------------------|---------------------------|---|---|---------------------------|-----------------------------------|-----------------------|----------------------|--|
|  |             |                   | This month                                      | Last month | This month last year | This month, for all years | Maximum for this month/year of occurrence | Minimum for this month/year of occurrence |                           |                                   |                       |                      |  |
| Observation wells in the Susquehanna River Basin |             |                   |   |            |                      |                           |   |   |                           |                                   |                       |                      |  |
| Adams  | AD-146      | 1968              | 12.86   | 12.46      | 13.14                | 12.63                     | 13.82/88                                  | 11.66/70                                  | 13.07                     | 7/29                              | DOWN                  | UP                   | -0.23                                      |
| Bedford  | BD-150      | 1965              | N/D   | N/D        | 15.70                | 16.59                     | 38.24/69                                  | 2.00/89                                   | 15.04                     | 7/28                              | N/D                   | N/D                  | N/D  |
| Blair  | BA-74       | 1969              | 14.94   | 14.57      | 14.74                | 13.43                     | 16.04/92                                  | 10.43/89                                  | 15.65                     | 7/28                              | DOWN                  | DOWN                 | -1.51                                      |
| Bradford   | BR-92       | 1966              | 8.57  | 7.40       | 10.76                | 9.86                      | 11.25/91                                  | 7.88/82                                   | 10.17                     | 7/31                              | DOWN                  | UP                   | 1.29                                       |
| Cameron  | CM-13       | 1967              | 23.98   | 22.59      | 23.81                | 23.69                     | 24.84/93                                  | 23.09/89                                  | 24.24                     | 7/29                              | DOWN                  | DOWN                 | -0.29                                      |
| Clinton  | CN-1        | 1950              | 49.42   | 47.88      | 49.90                | 49.55                     | 52.30/65                                  | 46.19/72                                  | 50.13                     | 7/29                              | DOWN                  | UP                   | 0.13                                       |
| Cumberland                                       | CU-2        | 1951              | 20.63   | 16.50      | 22.84                | 21.18                     | 24.75/91                                  | 15.53/89                                  | 22.14                     | 7/24                              | DOWN                  | UP                   | 0.55                                       |
| Dauphin  | DA-350      | 1964              | 5.14  | N/D        | 5.63                 | 5.40                      | 6.13/66                                   | 4.39/89                                   | 5.47                      | 7/29                              | N/D                   | UP                   | 0.26                                       |
| Franklin   | FR-332      | 1975              | 17.11   | 16.84      | 19.72                | 28.02                     | 33.68/76                                  | 17.09/96                                  | 17.47                     | 7/29                              | DOWN                  | UP                   | 10.91                                      |
| Huntingdon                                       | HU-301      | 1969              | 54.02   | 53.71      | 54.21                | 54.18                     | 55.19/81                                  | 52.03/89                                  | 54.40                     | 7/27                              | DOWN                  | UP                   | 0.16                                       |
| Juniata  | JU-351      | 1968              | 13.26   | 13.48      | 14.47                | 14.22                     | 15.22/88                                  | 12.46/89                                  | 14.30                     | 7/25                              | UP                    | UP                   | 0.96                                       |
| Lancaster  | LN-514      | 1964              | 31.72   | 29.22      | 33.05                | 32.20                     | 33.33/69                                  | 25.85/72                                  | 32.61                     | 7/27                              | DOWN                  | UP                   | 0.48                                       |
| Luzerne  | LU-294      | 1994              | 33.45   | 32.73      | 34.55                | 33.74                     | 36.50/66                                  | 31.32/72                                  | 34.42                     | 7/28                              | DOWN                  | UP                   | 0.29                                       |
| Lycoming   | LY-112      | 1967              | 90.84   | 89.81      | 93.00                | 89.84                     | 93.28/93                                  | 87.39/72                                  | 91.79                     | 7/29                              | DOWN                  | UP                   | -1.00                                      |
| Mifflin  | MF-344      | 1983              | 51.54   | N/D        | 58.69                | 57.45                     | 66.44/91                                  | 44.08/89                                  | 56.86                     | 7/28                              | N/D                   | UP                   | 5.91                                       |
| Potter   | PO-72       | 1967              | 23.34   | 21.98      | 25.89                | 24.13                     | 30.69/91                                  | 18.09/70                                  | 27.34                     | 7/29                              | DOWN                  | UP                   | 0.79                                       |
| Snyder   | SN-130      | 1968              | 19.16   | 18.96      | 19.31                | 19.09                     | 19.37/87                                  | 17.65/68                                  | 19.26                     | 7/29                              | DOWN                  | UP                   | -0.07                                      |
| Sullivan   | SU-34       | 1965              | 28.11   | 26.87      | 29.38                | 28.18                     | 29.94/83                                  | 25.53/72                                  | 28.84                     | 7/29                              | DOWN                  | UP                   | 0.07                                       |
| Susquehanna                                      | SQ-61       | 1972              | 29.70   | 30.47      | 32.73                | 32.16                     | 35.18/77                                  | 28.25/94                                  | 31.07                     | 7/29                              | UP                    | UP                   | 2.46                                       |
| Tioga  | TI-100      | 1972              | 31.03   | 31.84      | 33.01                | 32.86                     | 33.71/92                                  | 31.03/98                                  | 30.10                     | 7/23                              | UP                    | UP                   | 1.83                                       |
| Union  | UN-51       | 1967              | 40.03   | 38.46      | 39.40                | 38.81                     | 40.56/93                                  | 33.88/72                                  | 40.46                     | 7/29                              | DOWN                  | DOWN                 | -1.22                                      |

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### NOTES:

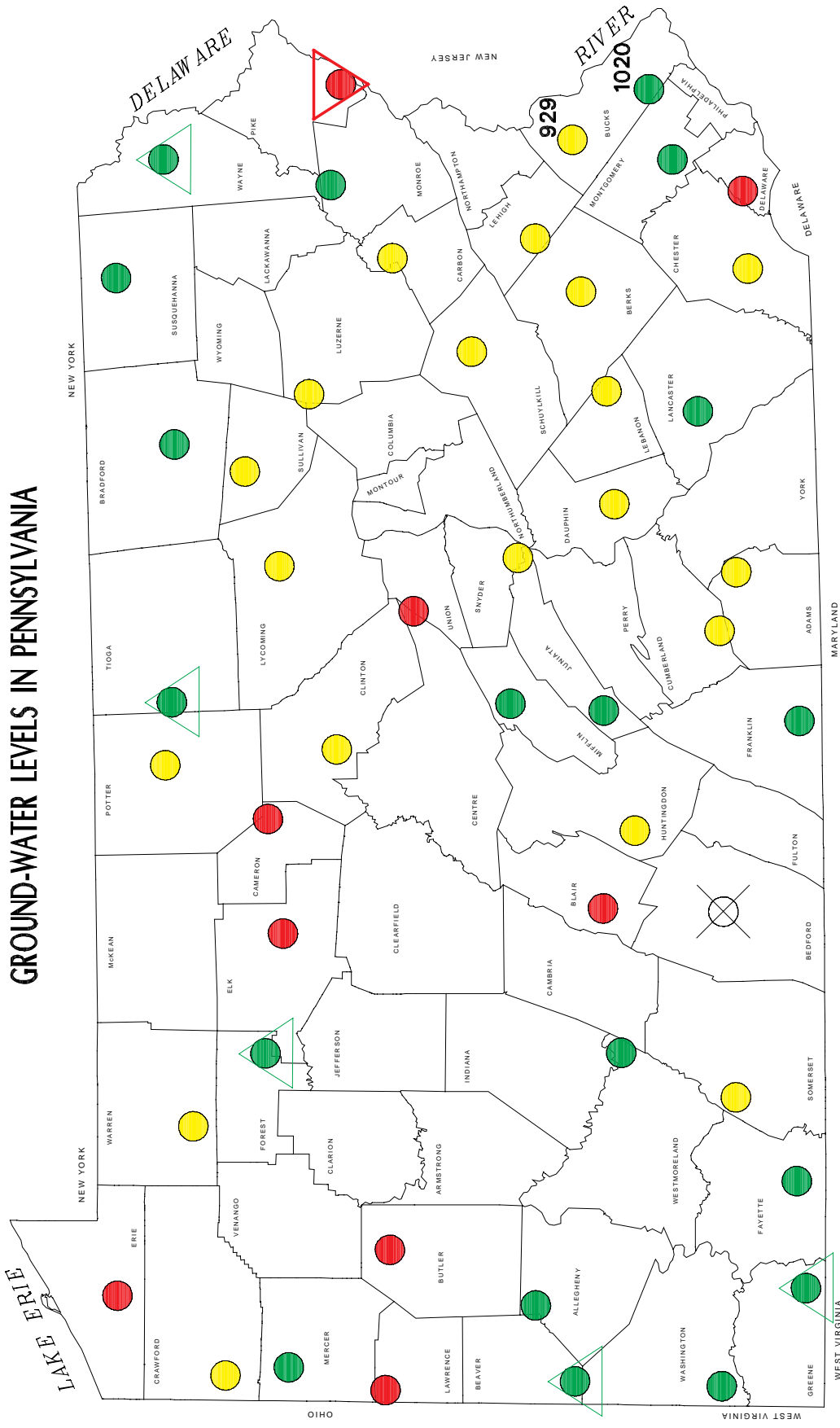
- 1) Continuous water-level records for wells CE-118 (Centre County) and PH-12 (Philadelphia County) are being collected but are not reported in the monthly summary because they are not used for drought monitoring.
- 2) Well MG-917 is not shown on map because insufficient years of record have been collected to establish norms.

\* Estimated values for well LU-294 are based on data from nearby discontinued well LU-243.

### Questions concerning the ground-water observation wells can be directed to:

Dennis Risser, Ground-Water Program Coordinator, USGS, Lemoyne, PA (717) 730-6911  
Naomi Weisbeker, Hydrologic Technician, USGS, Lemoyne, PA (717) 730-6937

# GROUND-WATER LEVELS IN PENNSYLVANIA



- Above Normal
- Normal
- Below Normal
- No data for this month
- ▲ Record High
- ▲ Record Low

## JULY 1998

### MEAN WATER LEVELS IN OBSERVATION WELLS

Prepared by the Water Resources Division, U.S. Geological Survey, in cooperation with the Bureau of Watershed Conservation, Pennsylvania Department of Environmental Protection.

Normal is defined as a water level between the 25th percentile and 75th percentile of monthly mean water levels for all previous years of record for this month.