

# Monthly Ground-Water Conditions in Pennsylvania July 1999

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#### U.S. DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY 840 Market Street Lemoyne, PA 17043-1584

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

## WATER LEVELS FROM PENNSYLVANIA OBSERVATION-WELL NETWORK JULY 1999

County   Well number   Page   Page			record	Mean depth to water below land surface, in feet										
Allegheny   AG-700   1967   7.18   6.53   6.24   6.79   7.53/77   6.13/89   7.40   7/27   DOWN   DOWN  39	County			_		month last	month, for all	for this month/ year of	for this month/ year of	recorded water	recorded water	from last	from last	mean for all years,
Beaver   BV-156   1967   9.26   8.45   8.53   9.33   11.50/73   8.51/90   9.56   7/28   DOWN   DOWN   .07	Observation wells in the Ohio River Basin													
Butler   BT-311   1970   20.30   7.62   22.98   16.34   26.53/88   3.85/90   21.48   7/20   DOWN   UP   -3.96   Crawford   CW-413   1967   N/D   51.07   52.07   51.03*   54.59/92*   48.03/89*   52.79   7/20   N/D   N/D   N/D   N/D   N/D   N/D   Elik   EK-108   1975   6.31**   5.88**   5.80**   4.36   6.14/97**   2.78/90   6.41**   7/20   DOWN   DOWN   -1.95   Eric   ER-82   1966   21.04   19.94   21.76   20.28   22.25/83   18.49/96   21.39   7/20   DOWN   DOWN   -7.67   Common   2.25   2.25/83   18.49/96   21.39   7/20   DOWN   DOWN   -7.67   Common   2.25   2.25/83   2.25/83   2.25/83   2.35/95   2.25/96   23.54   7/21   DOWN   DOWN   -4.36   Common   2.25   2.25/83   2.25/8	Allegheny	AG-700	1967	7.18	6.53	6.24	6.79	7.53/77	6.13/89	7.40	7/27	DOWN	DOWN	39
Crawford         CW-413         1967         N/D         51.07         52.07         51.03*         54.59/92*         48.03/89*         52.79         7/20         N/D         N/D         N/D           Elk         EK-108         1975         6.31***         5.88**         5.80**         4.36         6.14*97***         2.7890         6.41***         7/20         DOWN         DOWN         1-95           Erie         ER-82         1966         21.04         19.94         21.76         20.28         22.25/83         18.49/96         21.39         7/20         DOWN         UP        76           Fayette         FA-17         1968         23.44         22.96         21.94         23.01         23.95/95         21.65/96         23.54         7/21         DOWN         DOWN        46           Green         GR-118         1973         34.48         28.75         27.78         33.30         41.41/87         24.74/96         38.17         7/28         DOWN         DOWN        46           Green         MR-1364         1964         3.25+         2.93+         4.13         4.36         5.70/88         34.46/78         18.58         7/27         DOWN         DOWN         -1.26 </td <td>Beaver</td> <td>BV-156</td> <td>1967</td> <td>9.26</td> <td>8.45</td> <td>8.53</td> <td>9.33</td> <td>11.50/73</td> <td>8.51/90</td> <td>9.56</td> <td>7/28</td> <td>DOWN</td> <td>DOWN</td> <td>.07</td>	Beaver	BV-156	1967	9.26	8.45	8.53	9.33	11.50/73	8.51/90	9.56	7/28	DOWN	DOWN	.07
Elk         EK-108         1975         6.31**         5.88**         5.80**         4.36         6.14/97**         2.78/90         6.41**         7/20         DOWN         DOWN         -1.95           Erie         ER-82         1966         21.04         19.94         21.76         20.28         22.25/83         18.49/96         21.39         7/20         DOWN         UP        76           Fayette         FA-17         1968         23.44         22.96         21.94         23.01         23.95/95         21.65/96         23.54         7/21         DOWN         DOWN        46           Green         GR-118         1973         34.48         28.75         27.78         33.30         41.41/87         24.74/96         38.17         7.28         DOWN         DOWN        16           Green         GR-118         1973         34.48         28.75         27.78         33.30         41.41/87         24.74/96         38.17         7.22         DOWN         DOWN        126           Mercer         MR-1364         1964         3.25+         2.93+         4.13         4.36         5.70/88         3.44/96         2.93+         7/21         DOWN         DOWN        51.3*<	Butler	BT-311	1970	20.30	7.62	22.98	16.34	26.53/88	3.85/90	21.48	7/20	DOWN	UP	-3.96
Erie   ER-82   1966   21.04   19.94   21.76   20.28   22.25/83   18.49/96   21.39   7/20   DOWN   UP  76	Crawford	CW-413	1967	N/D	51.07	52.07	51.03*	54.59/92*	48.03/89*	52.79	7/20	N/D	N/D	N/D
Fayette   Fa-17   1968   23.44   22.96   21.94   23.01   23.95/95   21.65/96   23.54   7/21   DOWN   DOWN  43	Elk	EK-108	1975	6.31**	5.88**	5.80**	4.36	6.14/97**	2.78/90	6.41**	7/20	DOWN	DOWN	-1.95
Forest         FO-11         1974         10.27         9.09         9.34         9.81         10.93/88         9.03/87         10.52         7/21         DOWN         DOWN        46           Green         GR-118         1973         34.48         28.75         27.78         33.30         41.41/87         24.74/96         38.17         7/28         DOWN         DOWN         -1.18           Lawrence         LA-1201         1967         18.38         17.93         18.04         17.12         18.37/88         14.67/78         18.58         7/27         DOWN         DOWN         -1.26           Mercer         MR-1364         1964         3.25+         2.93+         4.13         4.36         5.70/88         3.44/96         2.93+         7/21         DOWN         DOWN         -1.11           Somerset         SO-2         1937         38.55         35.12*         33.33         33.42*         34.45/88*         32.64/96*         37.79         7/23         DOWN         DOWN         DOWN         -2.22           Washington         WS-155         1971         36.90         36.57         35.79         36.08         37.14/88         35.38/77         37.36         7/28         DOWN	Erie	ER-82	1966	21.04	19.94	21.76	20.28	22.25/83	18.49/96	21.39	7/20	DOWN	UP	76
Green         GR-118         1973         34.48         28.75         27.78         33.30         41.41/87         24.74/96         38.17         7/28         DOWN         DOWN         -1.18           Lawrence         LA-1201         1967         18.38         17.93         18.04         17.12         18.37/88         14.67/78         18.58         7/27         DOWN         DOWN         -1.26           Mercer         MR-1364         1964         3.25+         2.93+         4.13         4.36         5.70/88         3.44/96         2.93+         7/21         DOWN         UP         1.11           Somerset         SO-2         1937         38.55^*         35.12^*         33.33         33.42*         34.45/88*         32.64/96*         37.79         7/23         DOWN         DOWN         -5.13*           Warren         WR-50         1971         36.90         36.57         35.79         36.08         37.14/88         35.3877         37.36         7/28         DOWN         DOWN         -22           Westmoreland         WE-300         1968         17.26         16.08         N/D         17.91         28.74/68         14.85/89         17.72         7/16         DOWN         DOWN	Fayette	FA-17	1968	23.44	22.96	21.94	23.01	23.95/95	21.65/96	23.54	7/21	DOWN	DOWN	43
Lawrence         LA-1201         1967         18.38         17.93         18.04         17.12         18.37/88         14.67/78         18.58         7/27         DOWN         DOWN         -1.26           Mercer         MR-1364         1964         3.25+         2.93+         4.13         4.36         5.70/88         3.44/96         2.93+         7/21         DOWN         UP         1.11           Somerset         SO-2         1937         38.55^^         35.12^^         33.33         33.42*         34.45/88*         32.64/96*         37.79         7/23         DOWN         DOWN         -5.13*           Warren         WR-50         1972         42.80         42.03         42.49         42.58         44.31/77         40.70/97         42.90         7/27         DOWN         DOWN         -22           Washington         WS-155         1971         36.90         36.57         35.79         36.08         37.14/88         35.38/77         37.36         7/28         DOWN         DOWN         -82           Westmoreland         WE-300         1968         17.26         16.08         N/D         17.91         28.74/68         14.85/89         17.72         7/16         DOWN         DOWN	Forest	FO-11	1974	10.27	9.09	9.34	9.81	10.93/88	9.03/87	10.52	7/21	DOWN	DOWN	46
Mercer         MR-1364         1964         3.25+         2.93+         4.13         4.36         5.70/88         3.44/96         2.93+         7/21         DOWN         UP         1.11           Somerset         SO-2         1937         38.55^^         35.12^^         33.33         33.42*         34.45/88*         32.64/96*         37.79         7/23         DOWN         DOWN         -5.13*           Warren         WR-50         1972         42.80         42.03         42.49         42.58         44.31/77         40.70/97         42.90         7/27         DOWN         DOWN         -22           Washington         WS-155         1971         36.90         36.57         35.79         36.08         37.14/88         35.38/77         37.36         7/28         DOWN         DOWN         -22           Westmoreland         WE-300         1968         17.26         16.08         N/D         17.91         28.74/68         14.85/89         17.72         7/16         DOWN         DOWN         -26           Westmoreland         WE-300         1975         13.71         138.00         131.75         130.04         137.092         115.70/84         140.29         7/27         DOWN         DOWN	Green	GR-118	1973	34.48	28.75	27.78	33.30	41.41/87	24.74/96	38.17	7/28	DOWN	DOWN	-1.18
Somerset   SO-2   1937   38.55^   35.12^   33.33   33.42*   34.45/88*   32.64/96*   37.79   7/23   DOWN   DOWN   -5.13*	Lawrence	LA-1201	1967	18.38	17.93	18.04	17.12	18.37/88	14.67/78	18.58	7/27	DOWN	DOWN	-1.26
Warren         WR-50         1972         42.80         42.03         42.49         42.58         44.31/77         40.70/97         42.90         7/27         DOWN         DOWN        22           Washington         WS-155         1971         36.90         36.57         35.79         36.08         37.14/88         35.38/77         37.36         7/28         DOWN         DOWN        82           Westmoreland         WE-300         1968         17.26         16.08         N/D         17.91         28.74/68         14.85/89         17.72         7/16         DOWN         N/D         .65           Observation wells in the Delaware River Basin           Berks         BE-623         1975         139.71         138.00         131.75         130.04         137.00/92         115.70/84         140.29         7/27         DOWN         DOWN         -9.67           Bucks         BK-929         1967         47.66         46.36         44.62         43.96*         45.93/93*         40.58/89*         48.09         7/29         DOWN         DOWN         DOWN         -3.70*           Bucks         BK-1020         1975         34.70         32.38         32.17         33.84 <td>Mercer</td> <td>MR-1364</td> <td>1964</td> <td>3.25+</td> <td>2.93+</td> <td>4.13</td> <td>4.36</td> <td>5.70/88</td> <td>3.44/96</td> <td>2.93+</td> <td>7/21</td> <td>DOWN</td> <td>UP</td> <td>1.11</td>	Mercer	MR-1364	1964	3.25+	2.93+	4.13	4.36	5.70/88	3.44/96	2.93+	7/21	DOWN	UP	1.11
Washington         WS-155         1971         36.90         36.57         35.79         36.08         37.14/88         35.38/77         37.36         7/28         DOWN         DOWN        82           Westmoreland         WE-300         1968         17.26         16.08         N/D         17.91         28.74/68         14.85/89         17.72         7/16         DOWN         DOWN         N/D         .65           Observation wells in the Delaware River Basin           Berks         BE-623         1975         139.71         138.00         131.75         130.04         137.00/92         115.70/84         140.29         7/27         DOWN         DOWN         -9.67           Bucks         BK-929         1967         47.66         46.36         44.62         43.96*         45.93/93*         40.58/89*         48.09         7/29         DOWN         DOWN         -9.67           Bucks         BK-1020         1975         34.70         32.38         32.17         33.84         38.11/85         28.49/89         35.77         7/27         DOWN         DOWN        86           Carbon         CB-104         1969         72.79         63.20         65.31         58.53         <	Somerset	SO-2	1937	38.55^	35.12^	33.33	33.42*	34.45/88*	32.64/96*	37.79	7/23	DOWN	DOWN	-5.13*
Westmoreland   WE-300   1968   17.26   16.08   N/D   17.91   28.74/68   14.85/89   17.72   7/16   DOWN   N/D   .65	Warren	WR-50	1972	42.80	42.03	42.49	42.58	44.31/77	40.70/97	42.90	7/27	DOWN	DOWN	22
Design   D	Washington	WS-155	1971	36.90	36.57	35.79	36.08	37.14/88	35.38/77	37.36	7/28	DOWN	DOWN	82
Berks         BE-623         1975         139.71         138.00         131.75         130.04         137.00/92         115.70/84         140.29         7/27         DOWN         DOWN         -9.67           Bucks         BK-929         1967         47.66         46.36         44.62         43.96*         45.93/93*         40.58/89*         48.09         7/29         DOWN         DOWN         -3.70*           Bucks         BK-1020         1975         34.70         32.38         32.17         33.84         38.11/85         28.49/89         35.77         7/27         DOWN         DOWN        86           Carbon         CB-104         1969         72.79         63.20         65.31         58.53         74.32/93         33.16/73         76.06         7/27         DOWN         DOWN         -14.26           Chester         CH-10         1966         14.47         13.78         13.25         13.11         15.21/66         9.50/89         14.75         7/27         DOWN         DOWN         -1.36           Delaware         DE-723         1983         8.08         7.41         7.22         6.83         7.99/95         5.30/89         8.41         7/28         DOWN         DOWN	Westmoreland	WE-300	1968	17.26	16.08	N/D	17.91	28.74/68	14.85/89	17.72	7/16	DOWN	N/D	.65
Bucks         BK-929         1967         47.66         46.36         44.62         43.96*         45.93/93*         40.58/89*         48.09         7/29         DOWN         DOWN         -3.70*           Bucks         BK-1020         1975         34.70         32.38         32.17         33.84         38.11/85         28.49/89         35.77         7/27         DOWN         DOWN        86           Carbon         CB-104         1969         72.79         63.20         65.31         58.53         74.32/93         33.16/73         76.06         7/27         DOWN         DOWN         -14.26           Chester         CH-10         1966         14.47         13.78         13.25         13.11         15.21/66         9.50/89         14.75         7/27         DOWN         DOWN         -1.36           Delaware         DE-723         1983         8.08         7.41         7.22         6.83         7.99/95         5.30/89         8.41         7/28         DOWN         DOWN         -1.25           Lebanon         LB-372         1973         10.78         10.36         8.21         8.74         10.34/91         6.58/84         10.96         7/27         DOWN         DOWN					0	bservation	wells in the	e Delaware F	River Basin					
Bucks         BK-1020         1975         34.70         32.38         32.17         33.84         38.11/85         28.49/89         35.77         7/27         DOWN         DOWN        86           Carbon         CB-104         1969         72.79         63.20         65.31         58.53         74.32/93         33.16/73         76.06         7/27         DOWN         DOWN         -14.26           Chester         CH-10         1966         14.47         13.78         13.25         13.11         15.21/66         9.50/89         14.75         7/27         DOWN         DOWN         -1.36           Delaware         DE-723         1983         8.08         7.41         7.22         6.83         7.99/95         5.30/89         8.41         7/28         DOWN         DOWN         -1.25           Lebanon         LB-372         1973         10.78         10.36         8.21         8.74         10.34/91         6.58/84         10.96         7/27         DOWN         DOWN         -2.04           Lehigh         LE-644         1971         78.11         73.05         58.18         59.30         73.65/81         38.42/84         80.00         7/27         DOWN         DOWN         -1.	Berks	BE-623	1975	139.71	138.00	131.75	130.04	137.00/92	115.70/84	140.29	7/27	DOWN	DOWN	-9.67
Carbon         CB-104         1969         72.79         63.20         65.31         58.53         74.32/93         33.16/73         76.06         7/27         DOWN         DOWN         -14.26           Chester         CH-10         1966         14.47         13.78         13.25         13.11         15.21/66         9.50/89         14.75         7/27         DOWN         DOWN         -1.36           Delaware         DE-723         1983         8.08         7.41         7.22         6.83         7.99/95         5.30/89         8.41         7/28         DOWN         DOWN         DOWN         -1.25           Lebanon         LB-372         1973         10.78         10.36         8.21         8.74         10.34/91         6.58/84         10.96         7/27         DOWN         DOWN         -2.04           Lehigh         LE-644         1971         78.11         73.05         58.18         59.30         73.65/81         38.42/84         80.00         7/27         DOWN         DOWN         -18.81           Monroe         MO-190         1968         14.22         12.39         10.60         11.48         14.22/93         9.12/84         14.99         7/27         DOWN         DO	Bucks	BK-929	1967	47.66	46.36	44.62	43.96*	45.93/93*	40.58/89*	48.09	7/29	DOWN	DOWN	-3.70*
Chester         CH-10         1966         14.47         13.78         13.25         13.11         15.21/66         9.50/89         14.75         7/27         DOWN         DOWN         -1.36           Delaware         DE-723         1983         8.08         7.41         7.22         6.83         7.99/95         5.30/89         8.41         7/28         DOWN         DOWN         DOWN         -1.25           Lebanon         LB-372         1973         10.78         10.36         8.21         8.74         10.34/91         6.58/84         10.96         7/27         DOWN         DOWN         -2.04           Lehigh         LE-644         1971         78.11         73.05         58.18         59.30         73.65/81         38.42/84         80.00         7/27         DOWN         DOWN         -18.81           Monroe         MO-190         1968         14.22         12.39         10.60         11.48         14.22/93         9.12/84         14.99         7/27         DOWN         DOWN         -2.74           Montgomery         MG-225         1956         16.91++         15.90++         15.60         28.80         55.27/63         14.83/96         17.34         7/27         DOWN	Bucks	BK-1020	1975	34.70	32.38	32.17	33.84	38.11/85	28.49/89	35.77	7/27	DOWN	DOWN	86
Delaware         DE-723         1983         8.08         7.41         7.22         6.83         7.99/95         5.30/89         8.41         7/28         DOWN         DOWN         -1.25           Lebanon         LB-372         1973         10.78         10.36         8.21         8.74         10.34/91         6.58/84         10.96         7/27         DOWN         DOWN         -2.04           Lehigh         LE-644         1971         78.11         73.05         58.18         59.30         73.65/81         38.42/84         80.00         7/27         DOWN         DOWN         -18.81           Monroe         MO-190         1968         14.22         12.39         10.60         11.48         14.22/93         9.12/84         14.99         7/27         DOWN         DOWN         -2.74           Montgomery         MG-225         1956         16.91++         15.90++         15.60         28.80         55.27/63         14.83/96         17.34         7/27         DOWN         DOWN         11.89           Montgomery         MG-917         1997         11.56         10.78         9.69         N/D         N/D         N/D         11.58         7/29         DOWN         DOWN         N/D	Carbon	CB-104	1969	72.79	63.20	65.31	58.53	74.32/93	33.16/73	76.06	7/27	DOWN	DOWN	-14.26
Lebanon         LB-372         1973         10.78         10.36         8.21         8.74         10.34/91         6.58/84         10.96         7/27         DOWN         DOWN         -2.04           Lehigh         LE-644         1971         78.11         73.05         58.18         59.30         73.65/81         38.42/84         80.00         7/27         DOWN         DOWN         -18.81           Monroe         MO-190         1968         14.22         12.39         10.60         11.48         14.22/93         9.12/84         14.99         7/27         DOWN         DOWN         -2.74           Montgomery         MG-225         1956         16.91++         15.90++         15.60         28.80         55.27/63         14.83/96         17.34         7/27         DOWN         DOWN         DOWN         11.89           Montgomery         MG-917         1997         11.56         10.78         9.69         N/D         N/D         N/D         11.58         7/29         DOWN         DOWN         N/D           Pike         PI-200         1981         81.03         81.62         82.57         57.10         82.57/98         38.07/82         82.22         7/27         UP         UP </td <td>Chester</td> <td>CH-10</td> <td>1966</td> <td>14.47</td> <td>13.78</td> <td>13.25</td> <td>13.11</td> <td>15.21/66</td> <td>9.50/89</td> <td>14.75</td> <td>7/27</td> <td>DOWN</td> <td>DOWN</td> <td>-1.36</td>	Chester	CH-10	1966	14.47	13.78	13.25	13.11	15.21/66	9.50/89	14.75	7/27	DOWN	DOWN	-1.36
Lehigh         LE-644         1971         78.11         73.05         58.18         59.30         73.65/81         38.42/84         80.00         7/27         DOWN         DOWN         -18.81           Monroe         MO-190         1968         14.22         12.39         10.60         11.48         14.22/93         9.12/84         14.99         7/27         DOWN         DOWN         -2.74           Montgomery         MG-225         1956         16.91++         15.90++         15.60         28.80         55.27/63         14.83/96         17.34         7/27         DOWN         DOWN         DOWN         11.89           Montgomery         MG-917         1997         11.56         10.78         9.69         N/D         N/D         N/D         11.58         7/29         DOWN         DOWN         N/D           Pike         PI-200         1981         81.03         81.62         82.57         57.10         82.57/98         38.07/82         82.22         7/27         UP         UP         -23.93           Schuylkill         SC-296         1975         52.97         50.84         50.62         48.29         53.83/93         39.15/84         53.70         7/27         DOWN <td< td=""><td>Delaware</td><td>DE-723</td><td>1983</td><td>8.08</td><td>7.41</td><td>7.22</td><td>6.83</td><td>7.99/95</td><td>5.30/89</td><td>8.41</td><td>7/28</td><td>DOWN</td><td>DOWN</td><td>-1.25</td></td<>	Delaware	DE-723	1983	8.08	7.41	7.22	6.83	7.99/95	5.30/89	8.41	7/28	DOWN	DOWN	-1.25
Monroe         MO-190         1968         14.22         12.39         10.60         11.48         14.22/93         9.12/84         14.99         7/27         DOWN         DOWN         -2.74           Montgomery         MG-225         1956         16.91++         15.90++         15.60         28.80         55.27/63         14.83/96         17.34         7/27         DOWN         DOWN         DOWN         11.89           Montgomery         MG-917         1997         11.56         10.78         9.69         N/D         N/D         N/D         11.58         7/29         DOWN         DOWN         N/D           Pike         PI-200         1981         81.03         81.62         82.57         57.10         82.57/98         38.07/82         82.22         7/27         UP         UP         -23.93           Schuylkill         SC-296         1975         52.97         50.84         50.62         48.29         53.83/93         39.15/84         53.70         7/27         DOWN         DOWN         -4.68	Lebanon	LB-372	1973	10.78	10.36	8.21	8.74	10.34/91	6.58/84	10.96	7/27	DOWN	DOWN	-2.04
Montgomery         MG-225         1956         16.91++         15.90++         15.60         28.80         55.27/63         14.83/96         17.34         7/27         DOWN         DOWN         11.89           Montgomery         MG-917         1997         11.56         10.78         9.69         N/D         N/D         N/D         11.58         7/29         DOWN         DOWN         N/D           Pike         PI-200         1981         81.03         81.62         82.57         57.10         82.57/98         38.07/82         82.22         7/27         UP         UP         -23.93           Schuylkill         SC-296         1975         52.97         50.84         50.62         48.29         53.83/93         39.15/84         53.70         7/27         DOWN         DOWN         -4.68	Lehigh	LE-644	1971	78.11	73.05	58.18	59.30	73.65/81	38.42/84	80.00	7/27	DOWN	DOWN	-18.81
Montgomery         MG-917         1997         11.56         10.78         9.69         N/D         N/D         N/D         11.58         7/29         DOWN         DOWN         N/D           Pike         PI-200         1981         81.03         81.62         82.57         57.10         82.57/98         38.07/82         82.22         7/27         UP         UP         -23.93           Schuylkill         SC-296         1975         52.97         50.84         50.62         48.29         53.83/93         39.15/84         53.70         7/27         DOWN         DOWN         -4.68	Monroe	MO-190	1968	14.22	12.39	10.60	11.48	14.22/93	9.12/84	14.99	7/27	DOWN	DOWN	-2.74
Pike         PI-200         1981         81.03         81.62         82.57         57.10         82.57/98         38.07/82         82.22         7/27         UP         UP         -23.93           Schuylkill         SC-296         1975         52.97         50.84         50.62         48.29         53.83/93         39.15/84         53.70         7/27         DOWN         DOWN         -4.68	Montgomery	MG-225	1956	16.91++	15.90++	15.60	28.80	55.27/63	14.83/96	17.34	7/27	DOWN	DOWN	11.89
Schuylkill SC-296 1975 52.97 50.84 50.62 48.29 53.83/93 39.15/84 53.70 7/27 DOWN DOWN -4.68	Montgomery	MG-917	1997	11.56	10.78	9.69	N/D	N/D	N/D	11.58	7/29	DOWN	DOWN	N/D
	Pike	PI-200	1981	81.03	81.62	82.57	57.10	82.57/98	38.07/82	82.22	7/27	UP	UP	-23.93
Wayne WN-64 1968 29.33 28.20 24.42 26.73* 28.71/91* 24.30/89* 29.66 7/27 DOWN DOWN -2.60*	Schuylkill	SC-296	1975	52.97	50.84	50.62	48.29	53.83/93	39.15/84	53.70	7/27	DOWN	DOWN	-4.68
	Wayne	WN-64	1968	29.33	28.20	24.42	26.73*	28.71/91*	24.30/89*	29.66	7/27	DOWN	DOWN	-2.60*

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 new 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.
- ^ Below normal conditions for well SO-2 are due to nearby pumping.
- + Above normal conditions for well MR-1364 are probably due to changes in aquifer caused by Pymatuning Earthquake on Sept. 25, 1998.
- ++ Above normal condtions for well MG-225 are caused by decreased pumping from nearby wells.

## WATER LEVELS FROM PENNSYLVANIA OBSERVATION-WELL NETWORK JULY 1999

County	Well number	Year record began		Mean de	pth to water	below land s							
			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	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
Observation wells in the Susquehanna River Basin													
Adams	AD-146	1968	13.27	12.76	12.88	12.64	13.82/88	11.66/70	13.38	7/27	DOWN	DOWN	63
Bedford	BD-150	1965	25.59	22.11	N/D	16.56	38.24/69	2.00/89	26.82	7/27	DOWN	N/D	-9.03
Blair	BA-74	1969	15.84	15.06	15.16	13.49	16.04/92	10.43/89	16.38	7/27	DOWN	DOWN	-2.35
Bradford	BR-92	1966	11.11	10.75	8.61	9.82	11.25/91	7.88/82	11.39	7/27	DOWN	DOWN	-1.29
Cameron	CM-13	1967	23.58	23.93	24.02	23.70	24.84/93	23.09/89	23.34	7/27	UP	UP	.12
Clinton	CN-1	1950	51.46	50.36	49.48	49.55	52.30/65	46.19/72	51.82	7/27	DOWN	DOWN	-1.91
Cumberland	CU-2	1951	24.02	20.85	21.23	21.18	24.75/91	15.53/89	25.41	7/26	DOWN	DOWN	-2.84
Dauphin	DA-350	1964	6.01	5.66	5.17	5.40	6.13/66	4.39/89	6.11	7/27	DOWN	DOWN	61
Franklin	FR-332	1975	24.47	20.54	17.14	27.60	33.68/76	17.09/96	23.82	7/27	DOWN	DOWN	3.13
Huntingdon	HU-301	1969	NDR	53.45	54.06	54.17	55.19/81	52.03/89	NDR	NDR	NDR	NDR	NDR
Juniata	JU-351	1968	14.99	14.32	13.59	14.19	15.22/88	12.46/89	15.09	7/27	DOWN	DOWN	80
Lancaster	LN-514	1964	33.24	32.97	32.02	32.19	33.33/69	25.85/72	33.25	7/27	DOWN	DOWN	-1.05
Luzerne	LU-294	1994	35.04	34.37	33.74	33.74	36.50/66	31.32/72	35.45	7/28	DOWN	DOWN	-1.30
Lycoming	LY-112	1967	90.97	91.83	90.84	89.86	93.28/93	87.39/72	92.10	7/27	UP	DOWN	-1.11
Mifflin	MF-344	1983	59.49	57.82	52.92	57.12	66.44/91	44.08/89	59.18	7/27	DOWN	DOWN	-2.37
Potter	PO-72	1967	29.46	29.59	23.68	24.12	30.69/91	18.09/70	30.76	7/27	UP	DOWN	-5.34
Snyder	SN-130	1968	19.35	19.28	19.15	19.09	19.37/87	17.65/68	19.32	7/27	DOWN	DOWN	26
Sullivan	SU-34	1965	29.40	29.29	28.13	28.18	29.94/83	25.53/72	29.81	7/27	DOWN	DOWN	-1.22
Susquehanna	SQ-61	1972	33.38	34.16	29.81	32.06	35.18/77	28.25/94	34.59	7/27	UP	DOWN	-1.32
Tioga	TI-100	1972	32.64	31.79	30.72	32.77	33.71/92	30.72/98	32.83	7/26	DOWN	DOWN	.13
Union	UN-51	1967	40.20	39.09	40.06	38.85	40.56/93	33.88/72	40.55	7/27	DOWN	DOWN	-1.35

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 new recorded maximum or minimum

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

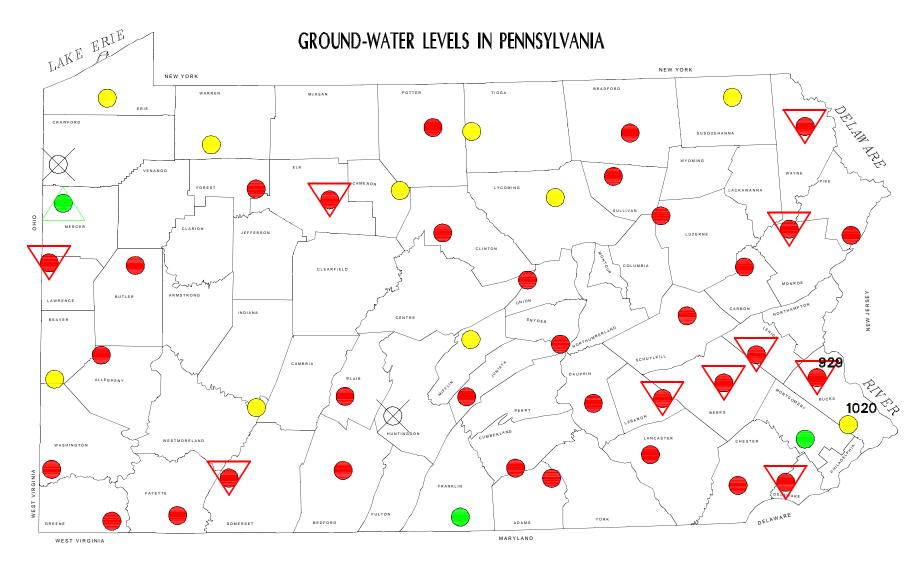
#### **NOTES**:

- 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.

#### 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

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



### **JULY 1999**

#### MEAN WATER LEVELS IN OBSERVATION WELLS

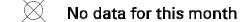
Prepared by the Water Resources Division, U.S. Geological Survey, in cooperation with the Bureau of Watershed Conservation, Pennsylvania Department of Environmental Protection.

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.









Record High

