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Monthly Ground-Water Conditions in Pennsylvania

July 1999

This report is also available on the World Wide Web at **http://pa.water.usgs.gov/gw_report**

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
840 Market Street
Lemoyne, PA 17043-1584

WATER LEVELS FROM PENNSYLVANIA OBSERVATION-WELL NETWORK
JULY 1999

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	7.18	6.53	6.24	6.79	7.53/77	6.13/89	7.40	7/27	DOWN	DOWN	-.39
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
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
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	-.43
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	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	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	-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	-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
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
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.

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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	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

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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.

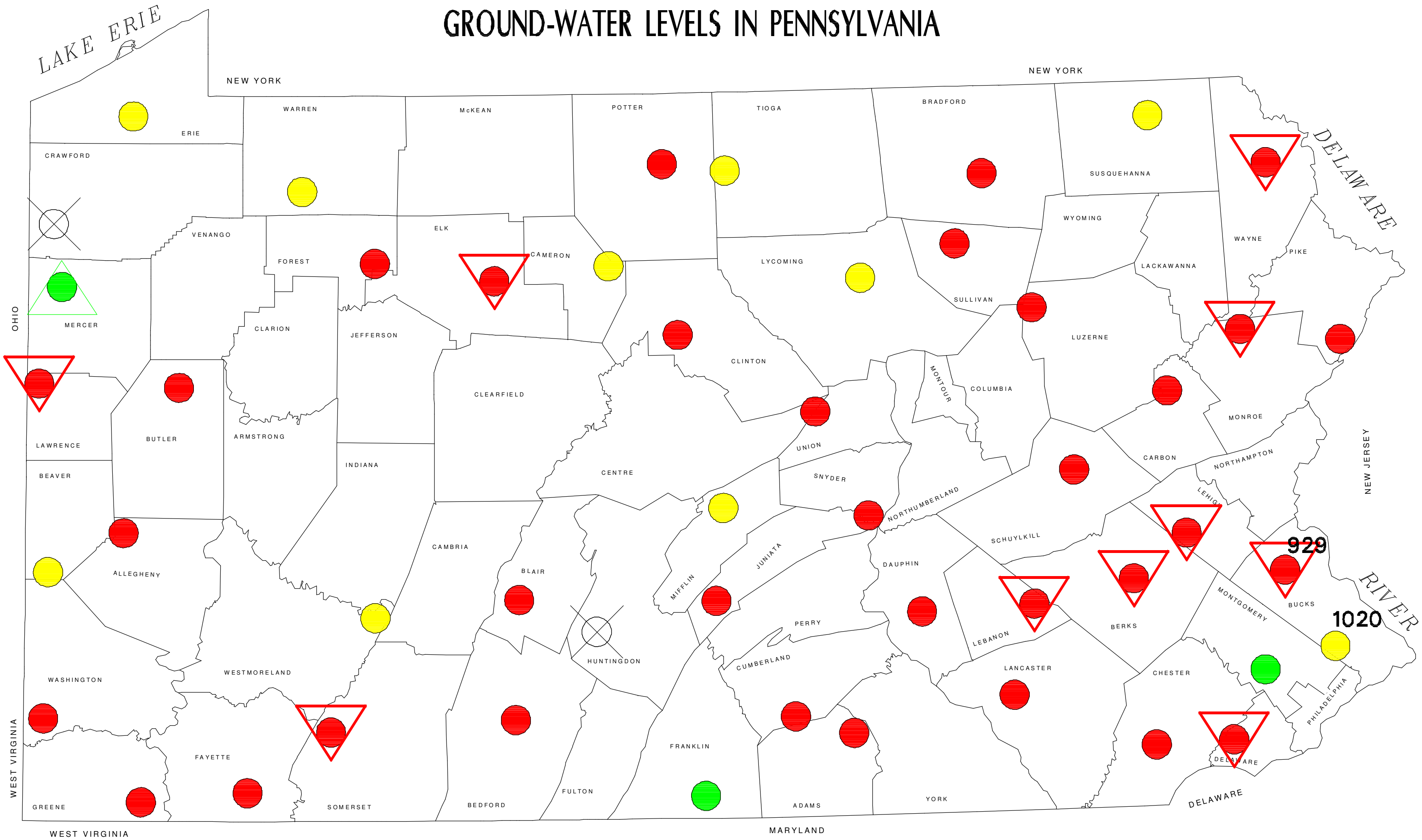
2) Well MG-917 is not shown on map because insufficient years of record have been collected to establish norms.

* 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



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.

Above Normal

Normal

Below Normal

No data for this month

Record High

Record Low