Monthly Ground-Water Conditions in Pennsylvania

November 1999

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

WATER LEVELS FROM PENNSYLVANIA OBSERVATION-WELL NETWORK
NOVEMBER 1999

County	Well number	Year record began	Mean depth to water below land surface, 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	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 Ohio River Basin													
Allegheny	AG-700	1967	7.76	7.94	7.45	7.33	8.33/69	5.92/90	7.93	11/29	UP	DOWN	-0.43
Beaver	BV-156	1967	9.53	9.75	9.25	9.34	10.75/73	8.53/96	9.45	11/23	UP	DOWN	-.19
Butler	BT-311	1970	N/D	N/D	26.52	15.72	29.37/91	3.38/92	26.17	11/20	N/D	N/D	N/D
Crawford	CW-413	1967	N/D	55.27	55.75	51.05*	56.06/95*	41.72/81*	55.23	11/21	N/D	N/D	N/D*
Elk	EK-108	1975	7.63**	7.70**	N/D**	4.97	8.96/96**	2.60/90	7.62**	11/20	UP	N/D	-2.66
Erie	ER-82	1966	N/D	23.71	24.57	19.55*	24.57/98*	18.09/93*	N/D	N/D	N/D	N/D	N/D*
Fayette	FA-17	1968	23.31	23.56	23.93	23.06	24.93/68	21.46/96	23.29	11/22	UP	UP	-.25
Forest	FO-11	1974	8.60	9.60	9.76	9.18	11.16/91	8.06/96	8.63	11/24	UP	UP	.58
Green	GR-118	1973	51.37	50.97	47.26	34.69	47.26/98	23.19/96	52.10	11/23	DOWN	DOWN	-16.68
Lawrence	LA-1201	1967	18.51	19.14	18.99	16.85	19.68/67	15.00/70	18.16	11/29	UP	UP	-1.66
Mercer	MR-1364	1964	1.84+	1.72+	1.66	4.09	5.32/80	1.66/98	1.60+	11/22	DOWN	DOWN	2.25
Somerset	SO-2	1937	40.99^	43.06^	35.99	34.44*	36.61/91*	32.94/96*	38.67^	11/22	UP	DOWN	-6.55*
Warren	WR-50	1972	43.64	43.91	43.80	43.31	44.92/79	40.72/90	43.65	11/29	UP	UP	-.33
Washington	WS-155	1971	36.81	36.84	36.52	35.75	36.87/91	34.63/85	36.79	11/23	UP	DOWN	-1.06
Westmoreland	WE-300	1968	18.54	18.92	18.24	17.93	22.82/68	15.02/90	18.41	11/20	UP	DOWN	-.61
Observation wells in the Delaware River Basin													
Berks	BE-623	1975	137.37	135.79	138.41	135.24	140.50/81	122.20/75	137.85	11/29	DOWN	UP	-2.13
Bucks	BK-929	1967	46.09	47.34	49.55	46.28*	49.55/98*	41.12/89*	46.01	11/23	UP	UP	.19*
Bucks	BK-1020	1975	31.91	30.11	39.84	36.16	40.78/81	28.76/95	32.67	11/29	DOWN	UP	4.25
Carbon	CB-104	1969	43.67	37.94	80.06	59.37	88.32/80	35.31/90	37.97	11/29	DOWN	UP	15.70
Chester	CH-10	1966	12.52	11.67	14.75	13.82	15.52/66	10.37/96	12.01	11/29	DOWN	UP	1.30
Delaware	DE-723	1983	6.78	6.59	8.11	7.20	8.33/85	5.68/96	6.96	11/23	DOWN	UP	.42
Lebanon	LB-372	1973	10.32	9.33	10.47	9.50	11.05/81	7.21/75	10.35	11/29	DOWN	UP	-.82
Lehigh	LE-644	1971	74.92	72.80	75.60	66.61	83.56/81	46.33/75	74.88	11/29	DOWN	UP	-8.31
Monroe	MO-190	1968	11.06	12.81	14.69	11.34	16.59/80	8.69/77	9.99	11/29	UP	UP	.28
Montgomery	MG-225	1956	13.21++	11.97++	17.86	32.31	58.70/63	13.75/95	14.03++	11/23	DOWN	UP	19.10
Montgomery	MG-917	1997	9.35	9.50	11.59	N/D	N/D	N/D	10.13	11/23	UP	UP	N/D
Pike	PI-200	1981	66.68	64.45	96.82	48.82	96.82/98	31.16/85	67.06	11/29	DOWN	UP	-17.86
Schuylkill	SC-296	1975	49.83	46.14	53.90	47.12	55.04/80	39.36/90	48.08	11/29	DOWN	UP	-2.71
Wayne	WN-64	1968	27.98	28.75	N/D	26.19*	29.94/91*	22.86/90*	27.34	11/29	UP	N/D	-1.79*

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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Observation wells in the Susquehanna River Basin													
Adams	AD-146	1968	12.08	11.63	12.65	11.95	12.86/88	11.32/71	11.77	11/29	DOWN	UP	-.13
Bedford	BD-150	1965	31.97	31.77	28.59	24.83	39.89/66	6.15/79	32.49	11/25	DOWN	DOWN	-7.14
Blair	BA-74	1969	14.34	14.75	17.47	13.50	17.47/98	11.23/79	14.61	11/23	UP	UP	-.84
Bradford	BR-92	1966	10.96	10.45	11.27	9.36	11.58/91	5.88/67	10.61	11/29	DOWN	UP	-1.60
Cameron	CM-13	1967	23.58	24.08	23.65	23.42	24.71/72	22.54/70	23.43	11/29	UP	UP	-.16
Clinton	CN-1	1950	53.82	53.70	53.06	50.49	55.21/65	46.82/77	53.61	11/29	DOWN	DOWN	-3.33
Cumberland	CU-2	1951	29.47	29.53	29.78	26.21	31.32/64	14.74/96	29.79	11/29	UP	UP	-3.26
Dauphin	DA-350	1964	5.09	4.55	5.71	4.96	6.00/64	4.11/90	4.90	11/29	DOWN	UP	-.13
Franklin	FR-332	1975	25.07	19.35	24.50	28.93	34.31/78	16.38/96	25.32	11/29	DOWN	DOWN	3.86
Huntingdon	HU-301	1969	54.66	54.59	54.71	54.09	55.41/74	52.00/72	54.02	11/29	DOWN	UP	-.57
Juniata	JU-351	1968	13.11	12.87	14.39	13.60	15.05/74	12.53/96	13.19	11/23	DOWN	UP	.49
Lancaster	LN-514	1964	32.98	32.75	33.26	32.88	34.69/67	29.67/96	32.94	11/30	DOWN	UP	-.10
Luzerne	LU-294	1994	33.98	33.59	35.66	33.01	36.81/64	30.39/90	33.74	11/29	DOWN	UP	-.97
Lycoming	LY-112	1967	91.61^^	90.01^^	95.85	88.75	95.85/98	86.32/77	89.53^^	11/29	DOWN	UP	-2.86
Mifflin	MF-344	1983	56.79	55.21	64.98	59.79	71.77/84	46.06/97	58.56	11/23	DOWN	UP	3.00
Potter	PO-72	1967	24.70	28.12	31.69	19.75	31.69/98	10.91/70	12.84	11/29	UP	UP	-4.95
Snyder	SN-130	1968	19.21	18.78	19.47	18.86	19.47/98	17.50/68	18.85	11/29	DOWN	UP	-.35
Sullivan	SU-34	1965	27.30	25.67	29.54	26.58	29.54/98	24.73/92	23.24	11/29	DOWN	UP	-.72
Susquehanna	SQ-61	1972	31.28	30.40	35.12	30.85	36.29/80	26.46/92	31.41	11/29	DOWN	UP	-.43
Tioga	TI-100	1972	32.99	32.19	N/D	33.08	34.45/91	31.81/96	31.84	11/28	DOWN	N/D	.09
Union	UN-51	1967	38.50	36.40	41.86	39.04	42.01/80	32.46/77	38.80	11/29	DOWN	UP	.54

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NOTES:

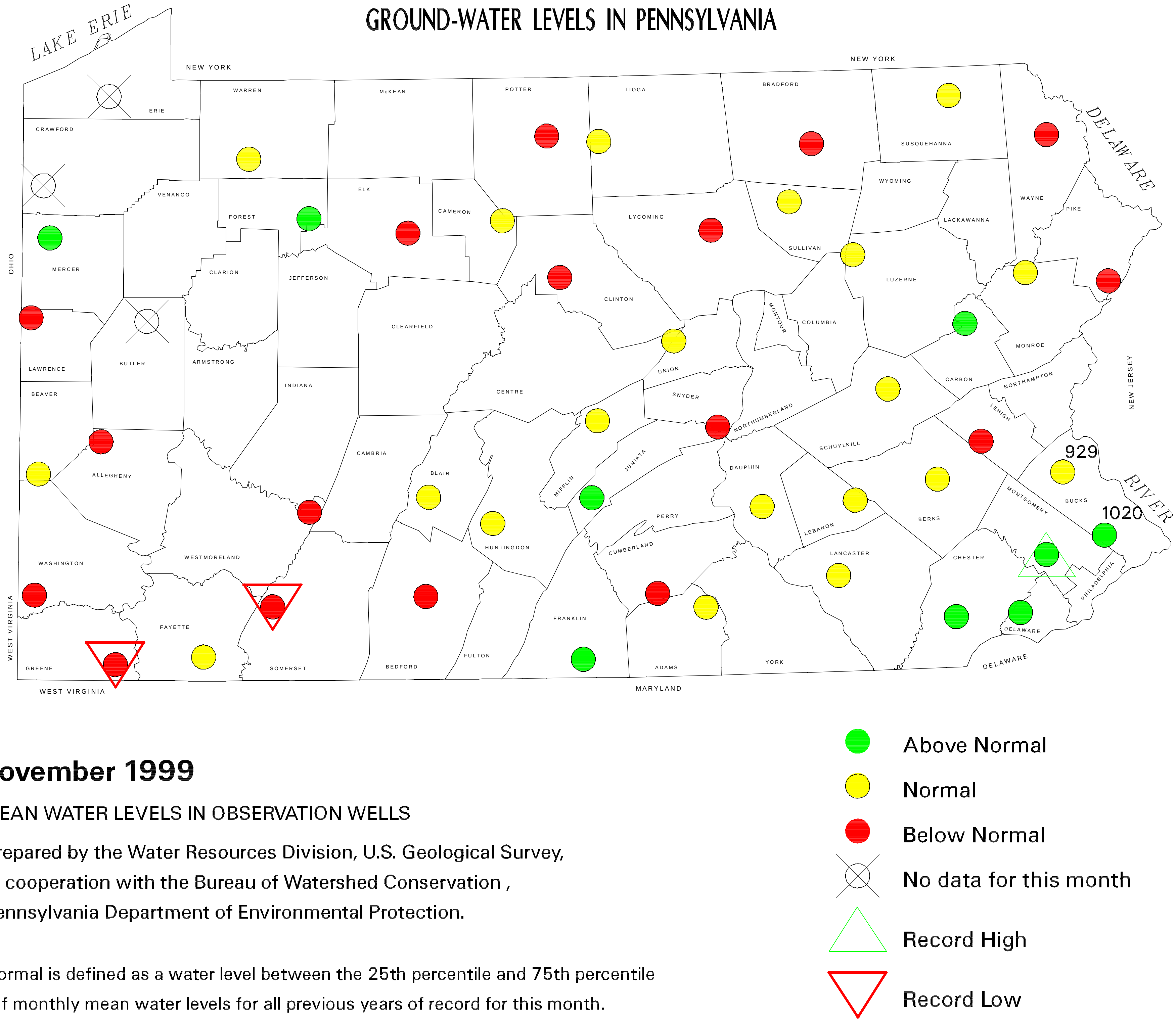
1) Continuous water-level records for wells CE-118 (Centre County) and PH-12 (Philadelphia County) are being collected but are not reported in the monthly summary because they are not used for drought monitoring.
2) Well MG-917 is not shown on map because insufficient years of record have been collected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

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

^^ The reported water level for well LY-112 has been lowered by 13 feet to account for the effects of nearby pumping. In comparison to historical data, this results in a designation of below normal conditions.

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



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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.