

Water Levels and Artesian Pressure in Observation Wells in the United States in 1949

Part 1. Northeastern States

Prepared under the direction of C. G. PAULSEN, Chief Hydraulic Engineer

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*Prepared in cooperation with the States
of Connecticut, Delaware, Indiana,
Massachusetts, Michigan, New Jersey,
New York, Ohio, Pennsylvania, and
Rhode Island, and other agencies*



UNITED STATES DEPARTMENT OF THE INTERIOR

Oscar L. Chapman, *Secretary*

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PREFACE

This report was prepared by the Geological Survey in cooperation with the States of Connecticut, Delaware, Indiana, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Rhode Island, and other agencies, by personnel of the Water Resources Division under the direction of:

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WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS
IN THE UNITED STATES IN 1949

Part 1. NORTHEASTERN STATES

INTRODUCTION

By A. N. Sayre and others

The publication of records of water levels and artesian pressures annually in the United States was begun by the Geological Survey in 1935. Prior to 1940 the records were published in a single volume--1935, 777; 1936, 817; 1937, 840; 1938, 845; and 1939, 886. Beginning with 1940 the records have been published in six volumes, covering the northeastern, southeastern, north-central, south-central, northwestern, and southwestern sections of the country. Hawaii is included in the southwestern section. The following table gives the numbers of water-level reports from 1940 through 1949.

Year	North- eastern (1)	South- eastern (2)	North- central (3)	South- central (4)	North- western (5)	South- western (6)
1940	906	907	908	909	910	911
1941	936	937	938	939	940	941
1942	944	945	946	947	948	949
1943	986	987	988	989	990	991
1944	1016	1017	1018	1019	1020	1021
1945	1023	1024	1025	1026	1027	1028
1946	1071	1072	1073	1074	1075	1076
1947	1096	1097	1098	1099	1100	1101
1948	1126	1127	1128	1129	1130	1131
1949	1156	1157	1158	1159	1160	1161

Ground-water investigations are concerned with the availability of usable water supplies, land drainage, flood control, construction of waterways and dams, mine drainage, and other problems to which the principles of ground-water hydrology are pertinent. Water levels in wells indicate the stages of the aquifers; they show the extent to which water supplies

are depleted by drought or by heavy pumping, and the extent to which they are replenished in seasons of abundant rainfall or melting snow. The recorded changes of pressure in artesian wells also indicate depletion or replenishment of the artesian supplies.

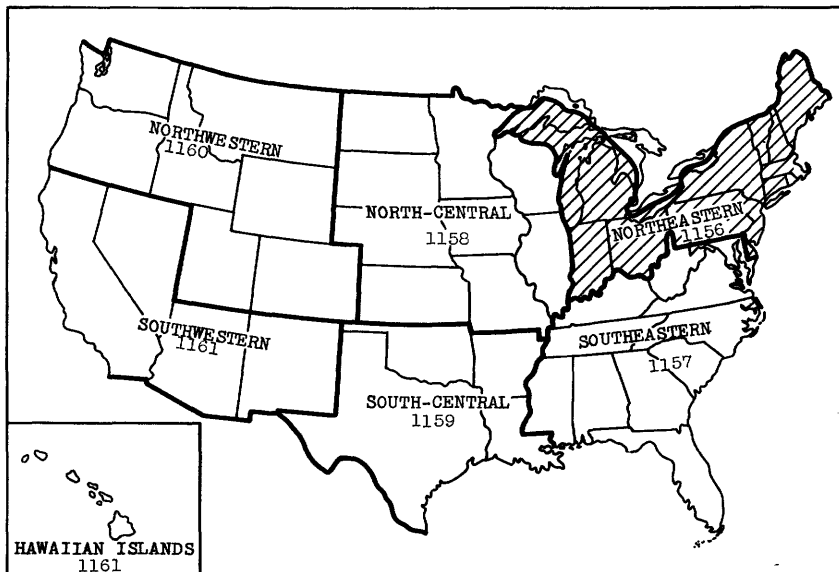


Figure 1.--Outline map of the United States showing States included in each of the six water-supply papers on water levels and artesian pressures in observation wells in 1949. The shaded area indicates the States included in this volume.

This volume gives records of water levels and artesian pressures in observation wells in the northeastern States (Connecticut, Delaware, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island and Vermont). Of the 1,400 wells listed, 300 are equipped with recording gages.

Before 1943, the water levels and artesian pressures for some wells were given in feet above or below the measuring points and for other wells in feet above or below sea level or above or below various assumed datum planes. In 1943, a precise datum plane was selected at each well which was approximately the land surface. The water levels and artesian heads

for all wells in this volume are given in feet and referred to land-surface datum or mean sea level.

Measurements of water levels and artesian pressures in wells were made under the direction of the district supervisors of the Ground Water Branch in the several States. Verda M. Dougherty edited the reports; Rodney Hart edited the illustrations; and Penn Livingston had general charge of the nation-wide observation-well program.

CONNECTICUT

By R. V. Cushman

PROGRAM OF WORK

The investigation of ground-water conditions in Connecticut was continued during 1949 in cooperation with the State Water Commission. The over-all purpose of the studies is to obtain information on the occurrence and availability of the ground-water resources of the State. The plan of study consists of an areal reconnaissance of the entire State which is to be followed by more intensive work in areas of particular need or interest. The reconnaissance studies consist of detailed geologic mapping of surficial deposits, inventories of wells and springs and their discharge, and water sampling to determine quality of water in certain local areas. An investigation of the geology and water resources of the tobacco and potato-growing area in north-central Connecticut was completed during 1949.

A basic phase of the studies in Connecticut during 1949 comprised the periodic measurement of water levels in 44 observation wells, one of which was equipped with a recording gage. About 700 individual measurements were recorded, the period of observation for most readings being approximately 1 month.

Samples of water were collected at the beginning of the year at 20 ground-water pumping plants in New Haven for determination of chloride content (salinity) in order to show the trend of salt-water contamination as induced by industrial pumpage. Sampling was continued at monthly intervals at five of these plants throughout 1949. In Waterbury, bimonthly samples of ground water were collected at five pumping plants for determination of sulfate content, resulting from inflow of acid-contaminated water from the Naugatuck River.

The sources of ground water in Connecticut are the bedrock and the overlying glacial drift. The bedrock consists of relatively impermeable crystalline and sedimentary rocks. Water is contained in cracks and fractures which generally furnish small but reliable supplies to rural homes, small industries, and small municipalities.

The mantle of glacial drift consists of till, a relatively impermeable mixture of clay, sand, and boulders, and stratified outwash, consisting mostly of permeable sand and gravel. The stratified deposits partly fill many of the stream valleys whereas till covers the surface in the upland areas.

FLUCTUATIONS OF WATER LEVELS

Over half of the observation wells in Connecticut are in stratified glacial sand and gravel. The wells which penetrate glacial materials are as follows:

Be 1	Fairfield	NHn 108	City of New Haven
EH 21	Hartford	NHn 110	" " "
Na 10	New Haven	NHn 131	" " "
Na 11	" "	NHn 138	" " "
Sb 1	" "	NHn 170	" " "
Wb 1	" "	NHn 175	" " "
Wb 16	" "	NHn 178	" " "
Wb 25	" "	NHn 183	" " "
Wb 336	" "	NHn 235	" " "
Wb 340	" "	NHn 250	" " "
NL 2	New London	NHn 270	" " "
Pl 1	Windham		

All other wells are believed to penetrate glacial till except well W11 1, in Willimantic, which taps bedrock.

In Connecticut the major fluctuations of ground-water level are chiefly the result of differences in the amount and distribution of precipitation. The usual yearly trend of water levels consists of a rise during the early months of the year with the peak being reached in April. Thereafter the stage declines throughout the growing and harvesting season with a recovery commencing in November. Water levels during the year 1949 followed this general pattern but the over-all range in fluctuations from the peak to the minimum stage was of greater than normal magnitude due to unusual climatic conditions.

Water levels in wells within the city limits of New Haven are affected by pumping and natural climatic conditions that are somewhat different from those elsewhere in the State. As a result, maximum stages in New Haven wells are usually not recorded until May or June and the minimum stage generally occurs late in December.

The following tables include the net change in water levels in 38 wells during 1949. All readings are in feet below land-surface datum except for those wells within the city limits of New Haven which are in feet with

reference to mean sea level. Data for the wells in New Haven are given in a separate table.

County and well number	First measured	Lowest observed water level		Highest observed water level		Water level at end of 1949
		Level	Date	Level	Date	
<u>Fairfield</u>						
Be 1	July 18,46	24.40	Dec.15,49	17.20	Mar.30,48	24.00
<u>Hartford</u>						
Bu 2	Apr.13,46	37.41	Dec.22,48	15.08	July 5,48	36.40
EH 21	Nov.22,34	19.60	Sept.22,49	14.10	June 24,47	18.61
EH 153	Nov.12,34	12.68	Nov.30,38	7.58	Mar.30,36	12.17
SW 64	Nov.20,34	13.84	Dec.31,49	7.15	Mar.30,36	13.84
<u>Litchfield</u>						
Wy 1	Oct.4,13	33.50	Oct.10,14	19.89	Mar.30,48	28.74
<u>Middlesex</u>						
Es 1	July 16,46	3.97	Oct.26,48	0.57	May 27,47	1.53
Mf 1	July 17,46	12.95	Oct.27,49	3.76	Jan. 8,49	8.20
<u>New Haven</u>						
Na 10 a	Jan.10,46	16.45	Oct.24,47	3.90	Mar.30,48	15.92
Na 11 a	Jan.10,46	16.64	Oct.24,47	3.86	Mar.30,48	16.33
Na 30 a	Jan.18,49	31.57	Dec.29,49	+5.57	May 5,49	31.57
Sb 1	Oct. 4,13	21.70	Oct.14,16	13.17	June 6,46	15.43
Wb 1	Apr.29,43	10.99	Sept.11,44	6.85	Mar.23,48	10.17
Wb 16 a	Feb. 2,44	17.80	Feb.27,47	8.88	Mar.30,48	b11.39
Wb 25	Feb. 3,44	8.62	Aug.29,44	4.27	June 6,46	c 5.90
Wb 93	Feb.18,44	28.39	Aug.29,44	25.28	Mar.30,48	27.68
Wb 119	Feb.18,44	13.85	Oct.27,48	2.93	Nov.30,44	4.62
Wb 176	Feb.18,44	15.20	Nov.26,49	3.14	Mar. 4,45	11.78
Wb 198	Feb.18,44	21.00	Nov.26,49	5.49	Jan.10,46	20.18
Wb 336 a	June 20,44	20.40	Aug.29,44	11.14	May 1,47	18.82
Wb 340 a	Aug. 8,44	24.87	Sept.27,45	15.83	May 19,45	17.89
<u>New London</u>						
NL 2	July 1,37	17.99	Aug.16,37	12.88	Feb.26,48	14.25
NWH 4	July 16,46	14.66	Sept.29,48	5.13	Feb.26,48	8.25
<u>Tolland</u>						
U 3	July 18,46	(d)	Dec.1,49	14.60	Mar.29,48	(d)
<u>Windham</u>						
Af 1	July 18,46	(d)	Oct.27,49	3.83	Mar.29,48	13.60
Pl 1	Oct. 1,42	31.72	Feb.3,44	28.10	Apr.27,48	31.30
Wil 1	July 17,46	8.50	Oct.27,47	5.45	Mar.29,48	7.53

- a Affected by pumping from nearby wells.
 b Measurement discontinued June 3, 1949.
 c Measurement discontinued Nov. 26, 1949.
 d Dry.

City of New Haven

City of New Haven						
Well Number	First measured	Lowest observed water level		Highest observed water level		Water level at end of 1949
		Level	Date	Level	Date	
Residential area						
NHn 170	June 23,39	15.64	Jan.14,42	18.63	June 25,48	+16.56
NHn 175	June 23,39	2.27	Dec.17,41	4.51	June 23,39	+3.11
NHn 183	Dec.13,39	2.67	Dec. 3,41	5.94	Mar.23,49	+4.28
NHn 270	May 21,41	3.78	Dec.17,41	7.10	May 26,49	+5.18

Well number	First measured	Lowest observed water level		Highest observed water level		Water level at end of 1949
		Level	Date	Level	Date	
Cont.----						
<u>Air-conditioning area</u>						
NHn 250	Oct. 9,40	.67	Sept.25,47	4.98	Apr.27,49	+3.96
<u>Cold-storage area</u>						
NHn 108	May 12,39	-3.40	Aug.26,46	1.26	May 8,40	+3.32
NHn 110	May 12,39	-2.20	Oct.27,44	.99	Apr.27,49	+3.36
<u>Industrial area</u>						
NHn 131	June 1,39	-5.65	May 26,44	-.38	May 26,49	-1.91
NHn 138	Feb.28,40	-5.70	June 23,44	.13	May 26,49	-1.25
NHn 178	July 21,39	-6.98	Oct.28,47	.04	June 12,40	-5.82
NHn 235	Oct. 2,40	-3.59	Feb. 1,45	1.24	May 26,49	+4.44

Net change, in feet, in water levels in observation wells in Connecticut, during 1949

County	Well	Net rise (+) or net decline (-)
Fairfield Hartford	Be 1	-0.57
	Bu 2	+1.01
	EH 21	-1.06
	EH 153	-.04
	SW 64	-1.02
Litchfield Middlesex	Wy 1	+5.54
	Es 1	+0.01
	Mf 1	+5.55
New Haven	a Na 10	+1.11
	a Na 11	+0.04
	Sb 1	-.09
	Wb 1	+1.18
	a Wb 16	(b)
	Wb 25	(c)
	Wb 93	-.24
	Wb 119	+1.00
	Wb 176	-1.75
	Wb 198	-1.87
	a Wb 336	-1.25
	a Wb 340	+4.80
New London	NL 2	+1.15
	NWH 4	-.05
Tolland	U 3	.....
Windham	Af 1	-1.01
	Pl 1	-.49
	Will 1	-.37

a Affected by pumping from nearby wells.

b Measurement discontinued June 3, 1949.

c Measurement discontinued Nov. 26, 1949.

Net change, in feet, in water levels, in observation wells in New Haven, Conn. during 1949

Area	Well	Net rise(+), decline(-)
Residential	NHn 170	-0.43
	NHn 175	-.33
	NHn 183	-.05
	NHn 270	-.31
Air-conditioning Cold-storage	NHn 250	+4.41
	NHn 108	-.15
	NHn 110	-.29
Industrial	NHn 131	+1.10
	NHn 138	+0.02
	NHn 178	-.23
	NHn 235	+1.18

Water levels in observation wells in Connecticut, other than those in New Haven, were at normal or slightly below-normal stages at the beginning of 1949. Above-normal precipitation beginning in November 1948 and continuing through January 1949 caused water levels to rise rapidly throughout the first of the year. Maximum stages were reached at approximately the end of April and were close to the highest on record. In May the seasonal lowering of the water table began, despite above-normal precipitation. However, stages were generally above average at the end of the month. Beginning in June, under the influence of the record drought, water levels receded rapidly and by the end of October had reached stages which were, in general, below normal and, in some cases, were at record or near-record low levels. Lowest water levels on record were observed at nine wells during the last few months of 1949. Though precipitation was below normal for the remainder of the year, the reduction in the demands of evaporation and transpiration halted the general decline in November and water levels in some wells began to rise by the end of the year. The rise was not sufficient to offset the effect of the summer's drought, and the year ended with water levels in many cases lower than those recorded at the end of the preceding year.

Because of the drought which brought about an accumulated deficiency in rainfall of about 8 inches for the year, it might be expected that ground-water levels at the end of 1949 should have been considerably lower than they were at the end of the previous year. This would have been the case had there not been a greater-than-normal amount of ground water in storage at the beginning of the drought to offset the deficiency in precipitation during 1949. Thus, the records show that the water table at the end of 1949 was only slightly below normal in most sections of Connecticut.

In New Haven water levels in the air-conditioning, cold-storage, and industrial areas are affected by pumping of ground water for industrial and commercial use. In the residential area of the city pumping is at a minimum and water levels fluctuate in response to natural conditions, though there may be some slight response to withdrawals in the pumping areas. Prior to 1948 overdevelopment of the aquifers in the pumping areas had caused a progressive decline in water levels and had resulted in two separate "crater-like" depressions being formed in the water table. The

bottom of the largest depression is as much as 10 feet below sea level with the water level in pumping wells being at even greater depths. In 1948 a reduction in the rate of withdrawals by industry brought about a recovery in water levels in the three pumping areas and may also have resulted in a slight increase in the amount of ground water in storage in the residential area. At least the records show that by the beginning of 1949 water levels in this area were nearly half a foot above average, as compared to normal or slightly below-normal stages elsewhere in the State.

The water table rose sharply in the residential area in the early months of 1949 and, in general, reached the peak stage by the end of March, although record high levels were recorded at the end of May in two of the four wells. Levels receded rapidly from then until the end of 1949 due to the general precipitation deficiency, and showed a net decline for the year. They were, however, still above normal at the end of December, as the result of above-normal stages at the beginning of 1949 and somewhat less severe drought conditions in the New Haven area than in other sections of the State. Precipitation at New Haven was only 4.71 inches below normal for the year.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

All measurements of water levels in Connecticut are in feet below land-surface datum except for those wells within the city limits of New Haven which are in feet with reference to mean sea level.

The number assigned to each well is its number in the town in which it is situated.

Fairfield County

Be 1. Fred Andrews. 248 Greenwood Ave., Bethel. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	22.27	June 30	20.90	Sept. 1	22.70	Nov. 3	23.80
Apr. 5	18.16	July 7	21.15	8	22.65	10	24.00
May 5	19.18	14	21.40	15	23.00	17	24.10
12	19.30	21	21.65	22	23.10	25	24.20
19	18.65	28	21.80	29	23.20	Dec. 1	24.20
26	19.40	Aug. 4	21.90	Oct. 7	23.50	8	24.30
June 2	19.50	11	22.10	13	23.60	15	24.40
9	19.80	18	22.20	20	23.70	22	24.20
18	20.20	25	22.50	27	23.80	29	24.00
23	20.50						

Hartford County

Bu 2. E. E. Edman. On State Highway 116, about 1,000 feet west of Burlington Center. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	22.54	Apr. 19	16.39	June 27	18.50	Sept. 19	32.10
10	25.09	25	16.39	July 11	20.38	25	33.00
15	25.69	May 3	16.19	21	21.56	Oct. 3	33.19
29	17.69	10	15.89	Aug. 6	23.79	10	33.40
31	17.69	17	15.99	12	26.00	17	33.89
Feb. 6	17.26	25	15.99	20	25.88	24	34.39
27	15.75	June 6	17.39	26	27.22	Nov. 2	34.69
Mar. 20	15.94	16	17.69	Sept. 4	27.99	13	35.19
29	15.61	21	19.28	11	28.39	Dec. 30	36.40
Apr. 12	16.09						

EH 21. Burnside Ice Co. 790 Tolland St., East Hartford. Records available: 1946-49.

Jan. 27	16.27	May 2	15.87	July 29	18.63	Oct. 27	18.79
Feb. 26	15.98	26	15.98	Aug. 30	18.37	Dec. 1	18.68
Mar. 28	15.79	June 30	17.49	Sept. 22	19.60	31	18.61

EH 153. John Kentz. 38 Main St., East Hartford. Abandoned dug well, diameter 89 inches, depth 15.4 feet. Measured 1934-39 by Connecticut Ground Water Survey and records published in Bulletin GW-6 (pp. 58-59). Measurements from Nov. 2, 1948, by Geological Survey. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 2, 1948	12.40	June 30, 1949	12.30	Sept. 22, 1949	12.45
Dec. 23	12.13	Aug. 9	12.37	Oct. 27	12.43
Feb. 2, 1949	11.66	Sept. 8	12.39	Dec. 1	12.17

SW 64. H. F. Church. Station 37, South Windsor. Abandoned dug well, diameter 24 inches, depth 17 feet. Measured 1934-39 by Connecticut Ground Water Survey and records published in Bulletin GW-6 (pp. 165-166). Measurements from Oct. 4, 1948, by Geological Survey. Records available: 1948-49.

Oct. 4, 1948	12.69	June 30, 1949	11.94	Oct. 27, 1949	13.60
26	12.95	Aug. 9	12.70	Dec. 1	13.83
Dec. 23	12.82	30	13.06	31	13.84
Feb. 26, 1949	10.70	Sept. 22	13.20		

Litchfield County

Wy 1. James Crowfut. Woodbury. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	20.93	May 5	21.42	Sept. 9	28.90	Nov. 26	28.99
Mar. 4	20.86	25	21.54	Oct. 28	29.03	Dec. 30	28.74
Apr. 5	21.14	July 7	23.65				

Middlesex County

Es 1. John Giza. 53 Warsaw St., Ivoryton. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	1.47	Apr. 21	1.39	July 29	2.13	Oct. 27	3.57
Feb. 26	1.45	May 28	1.11	Aug. 30	3.82	Nov. 30	1.69
Mar. 28	1.44	June 30	1.80	Sept. 22	3.84	Dec. 31	1.53

Mf 1. Lyman Gun Sight Corp. Middlefield. Records available: 1946-49.

Jan. 8	3.76	Feb. 26	4.80	Aug. 1	11.58	Oct. 27	12.95
18	5.98	Mar. 28	5.36	29	12.38	Nov. 30	12.26
27	4.37	Apr. 28	5.87	Sept. 27	12.90	Dec. 31	8.20
Feb. 14	5.12	June 29	9.30				

New Haven County

Na 10. Naugatuck Water Co. Beacon Valley Rd., Naugatuck. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	4.84	Apr. 29	4.75	July 1	13.92	Oct. 27	15.90
Mar. 14	4.67	May 27	4.75	July 26	15.12	Dec. 29	15.92
29	4.94						

Na 11. Naugatuck Water Co. Beacon Valley Rd., Naugatuck. Records available: 1946-49.

Jan. 28	4.79	Apr. 29	4.76	Sept. 9	16.20	Nov. 26	16.81
Mar. 14	4.66	July 1	14.22	Oct. 28	16.28	Dec. 29	16.33
29	4.95	26	15.39				

Na 30. U. S. Rubber Co., Naugatuck Chemical Division. Naugatuck. East bank of Naugatuck River at junction of Cotton Hollow Brook, about 720 feet south of gaging station. Records available: 1949.

Jan. 18	+0.16	Apr. 17	0.06	June 17	0.78	July 22	15.47
Feb. 3	.01	29	.05	20	.86	Sept. 9	28.48
Mar. 14	+2.23	May 5	+5.57	July 1	1.92	Dec. 29	31.57
29	+1.13	June 3	.44				

*NHn 108. Leonard Marena. Formerly owned by Whiting Realty Co. About 100 feet south of Whiting St. and about 100 feet west of State St., New Haven. Records available: 1939-49.

Jan. 25	+0.80	Apr. 27	+0.97	July 25	0.62	Oct. 26	0.49
Mar. 3	+0.78	May 26	+0.79	Aug. 25	.97	Nov. 25	+1.11
23	+0.83	June 24	.15	Sept. 23	.91	Dec. 29	+3.32

*NHn 110. Federal Packing Co. On east side of State St. at Whiting St., New Haven. Records available: 1939-49.

Mar. 23	+0.88	June 24	+0.06	Sept. 23	0.86	Nov. 25	+0.23
Apr. 27	+0.99	July 25	.42	Oct. 25	.45	Dec. 29	+3.36
May 26	+0.84	Aug. 25	.86				

*NHn 131. New Haven Clock Co. On west side of Wallace St., about 120 feet north of St. John St., New Haven. Records available: 1939-49.

Jan. 25	1.17	Apr. 27	0.41	July 25	0.53	Oct. 25	1.63
Mar. 3	.86	May 26	.38	Aug. 25	1.07	Nov. 25	1.76
23	.64	June 24	.64	Sept. 23	1.30	Dec. 29	1.91

*NHn 138. Associated Realty Co. On south side of Greene St., about 130 feet west of East St., New Haven. Records available: 1940-49.

Jan. 25	0.47	Apr. 27	+0.03	July 25	0.10	Oct. 25	0.98
Mar. 3	.34	May 26	+0.13	Aug. 25	.50	Nov. 25	1.09
23	.22	June 24	.17	Sept. 23	.64	Dec. 29	1.25

NHn 170. Yale University. About 100 feet southwest of Grove St. and about 200 feet northwest of College St., New Haven. Records available: 1939-49.

Jan. 25	+18.07	Apr. 27	+18.35	July 25	+17.84	Oct. 25	+16.87
Mar. 2	+18.39	May 26	+18.31	Aug. 25	+17.51	Nov. 25	+16.69
23	+18.48	June 24	+18.21	Sept. 23	+17.39	Dec. 29	+16.56

NHn 175. Monarch Laundry. About 200 feet north of Derby Ave. and about 70 feet west of Ellsworth St., New Haven. Records available: 1939-49.

Jan. 25	+4.24	Apr. 27	+4.47	July 25	+4.09	Oct. 25	+3.44
Mar. 2	+4.47	May 26	+4.47	Aug. 25	+3.84	Nov. 25	+3.28
23	+4.47	June 24	+4.36	Sept. 23	+3.62	Dec. 29	+3.11

* Water level in feet below mean sea level. Plus signs indicate water level above mean sea level.

*NHn 178. Connecticut Co. About 40 feet south of Grand Ave. and about 200 feet west of Haven St., New Haven. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	4.53	May 26	3.93	Aug. 25	4.61	Nov. 3	5.62
Mar. 3	4.44	June 24	4.33	Sept. 23	5.06	25	5.94
23	4.22	July 25	3.17	Oct. 25	5.74	Dec. 29	5.82
Apr. 27	4.18						

NHn 183. Frank X. Hald Storage Co. On south side of Davenport Ave., about 500 feet west of West St., New Haven. Records available: 1940-49.

Jan. 25	+5.73	Apr. 27	+5.55	July 25	+4.86	Oct. 25	+4.34
Mar. 2	+5.93	May 26	+5.33	Aug. 25	+4.57	Nov. 25	+4.36
23	+5.94	June 24	+5.12	Sept. 23	+4.54	Dec. 29	+4.28

*NHn 235. C. Cowles & Co. About 100 feet north of Water St. and about 70 feet west of Chestnut St., New Haven. Records available: 1940-49.

Jan. 25	+1.17	Apr. 27	+1.06	July 25	+0.74	Oct. 25	+0.32
Mar. 3	+1.17	May 26	+1.24	Aug. 25	+4.48	Nov. 25	+4.40
23	+1.15	June 24	+9.3	Sept. 23	+6.2	Dec. 29	+4.44

NHn 250. I. Newman & Sons. On north side of Oak St., about 180 feet east of Factory St., New Haven. Records available: 1940-49.

Jan. 25	+4.23	Apr. 27	+4.98	July 25	+4.30	Oct. 25	+3.96
Mar. 3	+4.48	May 26	+4.88	Aug. 25	+3.83	Nov. 25	+4.11
23	+4.63	June 24	+4.48	Sept. 23	+3.54	Dec. 29	+3.96

NHn 270. Carl E. Altmann. On east side of Auburn St., about 190 feet south of Legion Ave., New Haven. Records available: 1941-49.

Jan. 25	+6.58	Apr. 27	+7.04	July 25	+6.64	Oct. 25	+5.61
Mar. 2	+6.97	May 26	+7.10	Aug. 25	+6.28	Nov. 25	+5.38
23	+7.08	June 24	+7.06	Sept. 23	+5.92	Dec. 29	+5.18

Sb 1. James Fleming. Southbury. Records available: 1944-49.

Feb. 3	13.78	May 5	13.08	Sept. 9	15.10	Nov. 26	15.58
Mar. 4	13.48	*25	13.00	Oct. 28	15.37	Dec. 30	15.43
Apr. 5	13.42	July 7	14.17				

Wb 1. Waterbury Ash Removal Co. Thomaston Ave., Waterbury. Records available: 1944-49.

Jan. 14	7.44	Apr. 18	9.40	Aug. 1	10.57	Oct. 11	10.66
Feb. 5	9.05	28	9.23	11	10.50	18	10.70
15	8.98	May 10	8.86	19	10.54	25	10.68
26	8.64	17	9.32	24	10.64	Nov. 8	10.73
Mar. 7	8.74	28	9.30	31	10.56	17	10.74
14	8.84	June 10	9.80	Sept. 10	10.68	Dec. 5	10.64
22	9.13	22	10.33	20	10.68	17	10.17
30	9.06	July 11	10.66	26	10.72	27	10.17
Apr. 9	9.22	18	10.68	Oct. 5	10.67		

Wb 16. Chase Brass & Copper Co. Inc. Thomaston Ave., Waterville. Records available: 1944-49. Measurement discontinued June 3, 1949.
Feb. 3, 10.75; Mar. 4, 10.38; Apr. 29, 10.78; June 3, 11.39.

Wb 25. United States Time Corp. 31 Cherry Ave., Waterbury. Measurement discontinued Nov. 26, 1949. Records available: 1944-49.

Jan. 28	4.51	June 3	5.67	July 25	6.35	Sept. 26	6.20
Mar. 4	4.84	July 1	6.38	Sept. 9	6.24	Nov. 26	5.90
Apr. 29	5.16						

Wb 93. Mrs. William Nichols, Sr. 118 Pearl Lake Rd., Waterbury. Records available: 1944-49.

Jan. 28	26.09	Mar. 29	26.35	July 26	27.85	Oct. 28	28.17
Feb. 16	26.35	Apr. 29	26.23	Sept. 9	28.06	Nov. 26	28.03
Mar. 4	26.02	May 27	26.60	26	28.10	Dec. 29	27.68
14	25.80	July 1	27.57				

Wb 119. James O'Connor. 947 Pearl Lake Rd., Waterbury. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	4.66	Apr. 29	4.80	July 26	6.74	Oct. 28	9.41
Mar. 14	4.70	May 27	5.10	Sept. 9	9.00	Nov. 26	10.96
29	5.05	July 1	8.10	26	9.94	Dec. 29	4.62

Wb 176. Mrs. Frank Bergin. 535 Scott Rd., Waterbury. Records available: 1944-49.

Jan. 28	3.84	Apr. 29	5.80	July 25	12.68	Oct. 28	15.16
Mar. 14	4.96	May 27	6.68	Sept. 9	14.19	Nov. 26	15.20
29	5.93	July 1	10.92	26	14.45	Dec. 29	11.78

Wb 198. E. L. Bronson. Pierpont Rd., Waterbury. Records available: 1944-49.

Jan. 28	6.56	Mar. 14	7.95	July 1	13.35	Oct. 28	20.24
Feb. 3	8.63	29	9.22	26	14.99	Nov. 26	21.00
16	6.41	Apr. 29	9.40	Sept. 9	17.98	Dec. 29	20.18
Mar. 4	8.25	May 27	10.90	26	19.22		

Wb 336. The Bristol Co. Platts Mills Rd., Waterbury. Records available: 1944-49.

Jan. 28	12.50	Apr. 29	13.24	July 26	18.62	Oct. 28	19.86
Mar. 14	12.26	June 3	14.75	Sept. 9	19.72	Nov. 26	17.94
29	12.40	July 1	17.39	26	19.80	Dec. 29	18.82

Wb 340. Connecticut Light and Power Co. Eagle St., Waterbury. Records available: 1944-49.

Jan. 28	21.37	Apr. 29	21.60	July 26	21.14	Oct. 28	22.32
Mar. 14	20.27	June 3	21.20	Sept. 9	22.45	Nov. 26	22.02
29	20.82	July 1	20.88	26	22.07	Dec. 29	17.89

New London County

NL 2. New London Historical Society. 11 Blinman St., New London. Records available: 1946-49.

Jan. 27	15.47	Apr. 21	14.49	July 29	17.00	Oct. 27	16.68
Feb. 26	13.30	May 28	15.61	Aug. 30	17.22	Dec. 1	15.73
Mar. 28	14.03	June 30	16.95	Sept. 22	17.28	31	14.25

NWH 4. A. Duch. 20 Church St., Norwich. Records available: 1946-49.

Jan. 27	5.26	May 28	5.25	July 29	12.06	Oct. 27	9.53
Mar. 28	5.23	June 30	9.08	Aug. 30	12.24	Dec. 31	5.25
Apr. 21	5.23						

Tolland County

U 3. Yale University Forest, at Union. About 1.5 miles east of Morey Pond and 600 feet north of Tolland-Windham County line. Records available: 1946-49.

Feb. 26	18.20	June 30	19.43	Sept. 22	23.42	Dec. 1	(a)
Mar. 28	16.87	July 29	20.88	Oct. 27	24.68	31	(a)
May 9	16.86	Aug. 30	22.48				

a Dry.

Windham County

Af 1. Yale University Forest, at Ashford. About 1.75 miles east of Westford on Westford-Eastford Rd. Records available: 1946-49.

Feb. 26	4.85	June 30	11.00	Sept. 22	15.10	Dec. 1	(a)
Mar. 28	4.96	July 29	13.10	Oct. 27	(a)	31	13.60
May 9	5.79	Aug. 30	14.68				

a Dry.

Pl 1. W. P. Lewis, Pleasant St., Plainfield. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	29.85	Apr. 21	29.10	July 29	30.83	Oct. 27	31.52
Feb. 26	29.56	May 17	29.56	Aug. 30	31.30	Dec. 1	31.55
Mar. 28	29.18	June 30	30.29	Sept. 22	31.00	31	31.30

Wil 1. American Thread Co. 322 Main St., Willimantic. Unused drilled well, diameter 6 inches, depth 83 feet. Records available: 1946-49.

Jan. 27	6.22	Apr. 21	6.00	July 29	7.46	Oct. 27	7.73
Feb. 26	5.83	May 17	6.60	Aug. 30	7.76	Dec. 1	7.79
Mar. 28	5.93	June 30	7.16	Sept. 22	7.80	31	7.53

DELAWARE

By J. M. Birdsall

PROGRAM OF WORK

The program of ground-water investigations, which was begun in 1943, was continued through 1949 in cooperation with the office of the Post Engineer, Fort Miles. The two wells being observed are at the Fort Miles pumping station near the Town of Lewes. Test well S-1 is equipped with a Friez weekly water-stage recorder, and test well S-2 is measured manually once a week.

FLUCTUATIONS OF WATER LEVELS

These wells reflect a tidal fluctuation and the record of S-1 shows the effect of pumping. There were no new record high or record low water levels noted during the year. The highest level observed during the year on well S-1 was on March 15 when a depth to water of 15.30 feet below land surface was noted and the lowest was 19.2 feet below land surface on August 4.

For test well S-2, which was measured manually, the highest water level noted was 15.1 feet below land surface on February 24, and the lowest, 17.1 feet below land surface on July 22. These fluctuations could reflect either a distribution of pumpage or climatic conditions.

The hydrographs representing the lowest daily water levels in test well 1 and the weekly measurements of the water level in well 2 correspond more or less uniformly with those for the years of record starting with 1944 to the present. An analysis of the available water-level data from these wells would indicate that no trend has developed either upward or downward.

The danger of salt-water intrusion should be recognized when plans for additional diversions are considered.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Sussex County

S-1. Dept. of the Army. Fort Miles test well 1. Extremes of observed water level, in feet below land surface: Highest, 14.9 June 3, 4, 1948; lowest, 19.3 Sept. 15, 16, 25, 1945. Records available: 1944-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	....	....	17.2	17.5	17.7	17.2	17.2	18.7	18.2
2	....	17.8	17.2	17.2	17.7	17.1	17.2	18.9	18.4
3	....	17.8	17.1	17.2	17.7	17.1	17.3	19.0	18.2
4	....	17.3	17.1	17.1	17.7	17.2	17.4	19.2	18.2
5	17.2	17.1	17.1	17.1	17.8	17.2	17.5	19.0	18.2
6	17.2	16.9	17.1	17.0	....	17.2	17.5	....	18.3
7	17.4	16.9	17.0	17.4	....	....	17.4	....	18.2
8	17.4	....	16.7	17.2	....	....	17.4	....	17.9
9	17.3	....	17.3	17.3	....	17.3	17.5	....	18.0
10	17.3	....	16.8	17.1	....	17.2	17.4	....	18.1
11	17.2	....	16.7	17.3	16.6	17.4	17.4	18.9	18.1
12	17.3	....	17.1	....	16.3	17.3	17.4	18.6	18.0
13	17.4	....	17.6	....	16.6	17.3	17.3	18.3	17.6
14	17.5	....	17.6	....	16.8	17.3	17.3	17.9	17.9
15	17.6	....	16.9	17.1	16.9	17.2	17.3	18.0	18.0
16	17.3	....	17.0	17.3	16.8	17.2	17.1	18.1	17.9
17	17.3	....	....	17.3	17.0	17.1	17.2	18.4	17.9
18	17.3	17.4	....	17.4	17.1	17.1	17.5	18.5	18.0
19	17.3	17.5	17.6	17.3	17.2	17.1	17.6	18.1	18.1
20	17.5	17.3	17.7	17.5	17.1	17.1	17.6	18.0	18.3
21	17.3	17.1	17.8	17.7	16.8	17.2	17.7	18.2	18.3
22	17.3	17.0	17.7	....	16.7	17.2	17.7	19.0	18.2
23	17.4	17.1	....	....	17.0	17.3	17.7	18.3	17.7
24	17.3	17.1	....	....	16.9	17.4	17.8	18.3	17.4
25	17.3	17.3	17.5	....	17.0	17.4	17.8	18.2	17.5
26	17.2	17.1	17.5	....	17.0	17.6	17.8	18.3	17.6
27	17.1	17.0	17.4	....	17.0	17.6	17.8	18.4	17.7
28	17.0	16.8	17.6	....	17.0	17.6	17.7	18.4	....
29	17.1	....	17.6	....	17.1	17.3	18.6	18.4	....
30	....	....	17.6	17.8	17.2	17.1	18.7	18.4	....
31	....	....	17.4	....	17.2	....	18.8	18.3	....

S-2. Dept. of the Army. Fort Miles test well 2. Extremes of observed water level, in feet below land surface: Highest, 14.8 June 4, 11, 1948; lowest, 18.0 July 1, 1945. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	15.8	Mar. 10	15.5	May 24	16.3	July 29	17.0
11	15.9	18	15.8	31	16.3	Aug. 11	17.0
18	15.7	25	16.0	June 8	16.5	18	16.8
25	15.9	Apr. 1	15.7	15	16.4	25	16.8
Feb. 1	15.7	8	15.7	23	16.4	Sept. 1	16.8
7	15.6	15	15.6	30	16.5	8	16.7
18	15.5	29	16.1	July 7	16.8	15	16.8
24	15.1	May 10	16.0	14	16.6	22	16.9
Mar. 3	15.6	17	16.1	22	17.1	30	16.9

INDIANA

By B. W. Swartz and F. H. Klaer, Jr.

PROGRAM OF WORK

The cooperative water-resources investigation in Indiana was continued during 1949 in cooperation with the Indiana Department of Conservation, Division of Water Resources. A report entitled "Ground-water resources of Boone County, Indiana" by E. A. Brown, of the U. S. Geological Survey was published in mimeographed form as Bulletin 4 of the Division of Water Resources, Indiana Department of Conservation. Field investigations of ground-water resources were continued in Adams, Starke, and Newton Counties.

The State-wide observation-well program was continued during 1949. On January 1, 1949, measurements of water level were being made at regular intervals in 174 wells. During the year measurements of water level were discontinued in the following wells:

Boone 13	Dearborn 5	Floyd 6	Johnson 1
Brown 2	Delaware 3	Hendricks 2	Starke 11
Clinton 3	Floyd 4	Hendricks 3	White 3
Daviess 1			

The following wells were added to the program:

Clinton 4	Madison 9	Union 4
Daviess 2	Putnam 2	Union 5
Madison 8	Tippecanoe 12	Wayne 3

At the end of 1949, the observation-well program included 170 wells, of which 119 were measured weekly, 3 semimonthly, 2 monthly, 2 daily, 6 at irregular intervals, and 38 were equipped with automatic water-stage recorders. About 7,900 individual measurements of water level were made and about 12,000 water levels were computed from recorder charts during the year. The locations of these wells are shown in figure 2.

Four wells in Clark and Floyd Counties were measured in connection with the Louisville, Kentucky, ground-water investigation by personnel of the Louisville office of the ground-water branches, M. I. Rorabaugh, district engineer.

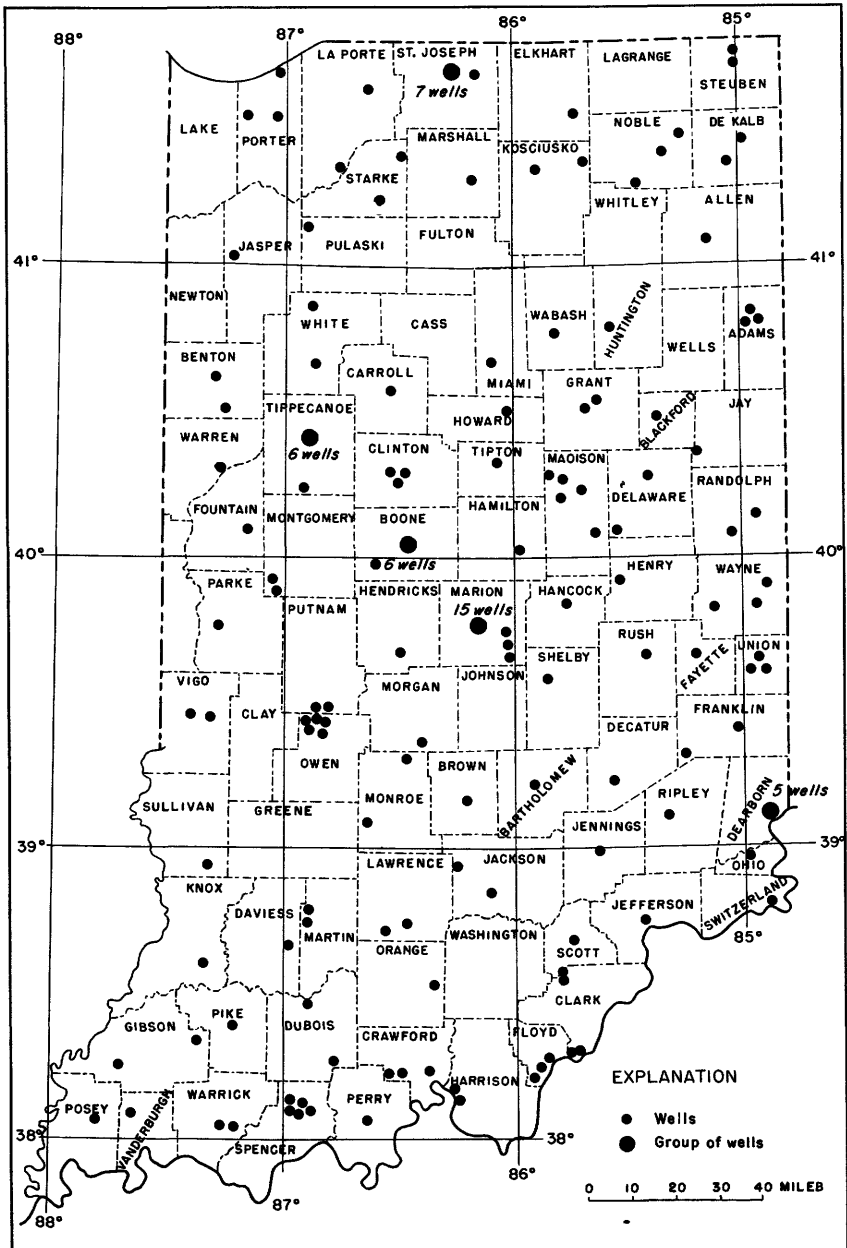


Figure 2.--Map of Indiana showing location of observation wells, 1949.

PRECIPITATION

The average precipitation for the State during 1949 was 45.19 inches, about 5.82 inches above the normal used by the U. S. Weather Bureau. The precipitation was above normal during January through March, below normal during April and May, above normal from June through October, below normal in November and above normal in December. November was the driest month with only 1.12 inches of precipitation and January was the wettest month with 7.74 inches of precipitation. The precipitation was fairly well distributed throughout the year although it was somewhat heavier during July and August, the period of major crop growth.

FLUCTUATIONS OF WATER LEVELS

Water levels in observation wells in Indiana generally reached their low stage during 1948 in September or October and by January 1, 1949, had risen several feet above the low stages of 1948. They continued to rise, generally reaching the highest stage for the year toward the end of January. Twenty-seven wells reached their highest stage of record during January. During February and March, the general trends in water levels were not consistent, some water levels declining from the high levels of January and others continuing to rise to reach the highest stages for the year during March and April. Twenty wells reached the highest stages of record during late March and April.

From April through September, water levels generally declined, most wells reaching their lowest stages for the year in September or October. Excessive rainfall in October, 1.18 inches above normal, generally caused water levels to rise and, by December, the general trend of water levels in nearly all wells was upward.

Water levels in observation wells in Indiana, 1949

Well	Date of first measurement	Lowest observed water level		Highest observed water level		Water level on last date of record
		Water level	Date	Water level	Date	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Adams 1a/	May 27, 1944	55.90	Nov. 10, 1945	42.20	Mar. 23, 1946	46.62
Adams 2a/	June 23, 1945	83.71	July 13, 1946	44.05	Dec. 17, 1949	44.72
Adams 3	Apr. 9, 1947	29.65	Oct. 21, 1948	23.11	Jan. 28, 1949	26.68
			Nov. 2, 1948			
Allen 3a/	May 25, 1944	12.72	Sept. 6, 1946	7.58	Feb. 27, 1949	11.10
Bartholomew 2	Dec. 3, 1948	15.77	Dec. 10, 1949	10.28	Jan. 31, 1949	15.39
			Dec. 11, 1949			
Benton 1a/	May 25, 1944	49.1	Nov. 4, 1949	37.38	June 1, 1944	43.34
Benton 2	May 25, 1944	19.41	Sept. 29, 1949	5.02	Jan. 21, 1949	13.66
Blackford 1	Sept. 27, 1945	7.98	Dec. 28, 1946	(b)	Jan. 15, 1949	4.01

*See footnotes at end of table.

Water levels in observation wells in Indiana, 1949--Con.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Boone 2	Oct. 15, 1935	12.09	Sept. 30, 1949	2.00	Apr. 6, 1948	5.46
Boone 4a/	May 24, 1945	74.30	Sept. 23, 1949	30.40	Dec. 25, 1949	32.50
Boone 10a/	Oct. 26, 1945	53.50	Aug. 15, 1947	13.59	May 10, 1946	31.90
Boone 11a/	Oct. 26, 1945	53.42	Aug. 8, 1947	18.18	May 15, 1946	50.75
Boone 12a/	Oct. 26, 1945	53.73	Sept. 29, 1948	23.15	May 17, 1946	23.46
Boone 13a/	Oct. 26, 1945	14.45	Sept. 9, 1949	2.33	Apr. 17, 1948	14.45
Boone 14a/	Oct. 26, 1945	51.09	Aug. 5, 1949	35.78	Oct. 4, 1947	37.75
Boone 16	Sept. 17, 1946	11.00	Nov. 1, 1948	.4	Jan. 14, 1949	9.58
Brown 2	Dec. 8, 1936	17.65	Jan. 1, 1940	.33	Apr. 11, 1948	2.68
			Feb. 1, 1940			
Brown 3	Dec. 8, 1936	9.84	Nov. 2, 1947	+ .3	Feb. 2, 1945	2.56
Carroll 1	Sept. 28, 1945	(d)	Oct. 1, 1949	2.72	Mar. 16, 1946	5.60
			Oct. 8, 1949			
Clark 1	Dec. 2, 1936	26.69	Dec. 31, 1944	(b)	Jan. 24, 1949	22.21
Clark 2	Dec. 2, 1936	24.86	Nov. 29, 1944	.45	June 3, 1943	8.76
Clark 3a/	Aug. 26, 1943	33.99	May 12, 1944	19.55	Apr. 22, 1948	24.25
Clark 5	Feb. 21, 1944	17.86	Feb. 21, 1944	4.58	May 2, 1948	14.50
Clinton 1a/	Feb. 7, 1944	54.38	Dec. 2, 1944	18.05	Mar. 11, 1949	35.70
Clinton 2a/	Feb. 7, 1944	71.11	Dec. 3, 1944	34.26	Mar. 14, 1949	49.60
Clinton 3a/	Apr. 20, 1944	41.50	Sept. 12, 1947	13.87	May 15, 1946	16.40
Clinton 4a/	May 18, 1949	42.60	Aug. 11, 1949	25.05	Dec. 27, 1949	25.29
Crawford 1	Mar. 3, 1944	12.26	Oct. 29, 1948	.68	Jan. 14, 1949	3.11
Crawford 2	July 27, 1944	7.26	Dec. 22, 1946	+ .10	Mar. 2, 1945	1.52
Crawford 3	July 27, 1944	18.50	Oct. 27, 1946	5.90	Mar. 8, 1945	11.6
Davless 1	Feb. 24, 1944	28.30	Mar. 2, 1944	18.53	June 11, 1947	(1)
Davless 2	Mar. 9, 1949	10.65	Sept. 26, 1949	1.20	Mar. 28, 1949	7.96
Dearborn 1-8a/	Oct. 6, 1944	107.89	Oct. 12, 1944	57.60	Feb. 27, 1949	90.40
Dearborn 1-10a/	Feb. 26, 1946	44.39	Nov. 6, 1948	4.40	Feb. 22, 1949	42.00
Dearborn 2a/	Sept. 21, 1944	67.25	Nov. 20, 1944	32	Mar. 12, 1945	54
			Dec. 4, 1944			
Dearborn 4	Sept. 21, 1944	45.68	Nov. 7, 1948	(c)	Mar. 12, 1945	39.35
Dearborn 5	Aug. 29, 1945	41.90	Nov. 7, 1948	18.76	Jan. 14, 1946	34.85
Decatur 1	Sept. 8, 1944	9.71	Sept. 17, 1948	.70	June 17, 1949	3.54
De Kalb la/	Nov. 24, 1936	14.5	Aug. 15, 1944	4.5	June 2, 1947	6.5
De Kalb 2	Sept. 7, 1945	17.10	Dec. 6, 1946	1.27	Apr. 4, 1947	2.13
Delaware 2	Mar. 30, 1945	14.80	Dec. 7, 1946	2.50	Jan. 9, 1949	15.09
Delaware 3	Dec. 11, 1946	13.00	Oct. 2, 1948	5.95	Mar. 27, 1948	12.39
			Oct. 30, 1948			
Dubois	Dec. 1, 1936	18.45	Nov. 13, 1944	5.47	May 15, 1943	9.71
Dubois 5	July 28, 1944	22.16	Dec. 29, 1944	8.28	Mar. 9, 1945	18.47
Elkhart 2	Sept. 10, 1945	6.64	Sept. 9, 1946	.86	Oct. 1, 1945	4.57
Fayette 2	Apr. 24, 1946	14.54	Dec. 27, 1946	.37	Jan. 5, 1949	6.55
Floyd 1	Dec. 21, 1943	47.06	Nov. 13, 1944	8.75	Feb. 19, 1948	36.37
			Nov. 14, 1944			
Floyd 2	Dec. 21, 1943	(f)	Aug. 20, 1945	6.11	Feb. 19, 1948	32.32
			Aug. 10, 1946			
			Nov. 21, 1946			
Floyd 3	Dec. 21, 1943	22.23	Feb. 18, 1944	5.95	Apr. 1, 1948	12.56
Floyd 4	Dec. 21, 1943	30.23	Feb. 18, 1944	9.21	Apr. 1, 1948	(g)
Floyd 6	Feb. 4, 1944	20.08	Feb. 28, 1944	1.53	Feb. 27, 1945	(g)
Fountain 1	May 26, 1944	42.45	Feb. 14, 1945	34.32	June 14, 1944	40.37
			Mar. 7, 1945			
Franklin 1a/	Dec. 9, 1936	31.71	Oct. 16, 1939	21.50	May 3, 1947	28.25
					Jan. 29, 1949	
Franklin 4	Feb. 18, 1944	44.28	Jan. 26, 1945	16.86	Apr. 7, 1944	32.19
Gibson 1	Aug. 24, 1944	20.64	Oct. 12, 1944	11.05	Jan. 20, 1947	18.80
Gibson 2	Feb. 20, 1947	26.78	Dec. 26, 1947	3.12	Mar. 26, 1949	9.18
Grant 2a/	Mar. 8, 1945	86.1	Apr. 30, 1945	58.0	May 13, 1946	72.70
Grant 5a/	Apr. 16, 1945	61.53	Sept. 27, 1947	44.35	Apr. 24, 1949	54.45
Hamilton 2a/	Nov. 2, 1935	27.33	Sept. 15, 1941	14.71	May 19, 1942	23.8
Hancock 1	Apr. 24, 1945	28.48	Oct. 7, 1949	12.95	June 20, 1946	26.60
Harrison 1	Dec. 2, 1936	5.65	Nov. 15, 1941	(b)	Mar. 31, 1939	1.39
					Apr. 15, 1939	
					Feb. 25, 1939	
					Feb. 28, 1939	

*See footnotes at end of table.

Water levels in observation wells in Indiana, 1949--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Harrison 3	Oct. 25, 1938	7.8	Sept. 30, 1941 Sept. 11, 1949	2.00	Mar. 21, 1939	7.26
Hendricks 1	Feb. 25, 1944	8.46	Jan. 29, 1945	(c)	Apr. 17, 1944 Apr. 24, 1944	5.60
Hendricks 2	Oct. 9, 1948	24.11	Oct. 17, 1948	20.82	Dec. 5, 1948	(h)
Hendricks 3	Oct. 9, 1948	8.46	Oct. 23, 1948 Oct. 31, 1948	.90	Jan. 23, 1949	(h)
Henry 2	July 31, 1946	18.15	Nov. 17, 1946	11.25	Apr. 11, 1948	14.52
Howard 4	Mar. 28, 1945	15.22	Jan. 25, 1947	.96	Apr. 10, 1948	2.35
Huntington 1	Sept. 27, 1945	38.80	Sept. 12, 1948	1.85	Mar. 17, 1946	5.00
Jackson 1a/ Jackson 2	Dec. 3, 1936 Feb. 16, 1944	16.71 18.87	Nov. 7, 1949 Feb. 16, 1944	1.2 10.70	Apr. 15, 1939 May 20, 1946	10.62 14.47
Jasper 3	June 10, 1948	12.15	Nov. 14, 1949	9.40	June 10, 1948	11.66
Jay 2a/ Jefferson 2	July 16, 1947 Mar. 3, 1937	38.29 32.5	Dec. 6, 1947 Aug. 16, 1943	32.13 15.33	May 31, 1949 Apr. 1, 1946	33.78 28.22
Jennings 1	Dec. 3, 1936	16.98	Dec. 15, 1943	.41	Jan. 24, 1949	6.27
Johnson 1	Feb. 22, 1944	10.45	Oct. 25, 1944 Oct. 31, 1944	1.71	Jan. 5, 1949	4.72
Knox 1	Aug. 24, 1944	37.22	Feb. 22, 1945	31.13	Apr. 29, 1949	32.58
Kosciusko 2	Nov. 3, 1938	+1.35	Nov. 3, 1938	+3.25	May 1, 1944	+1.79
Kosciusko 3	Sept. 11, 1945	14.29	Dec. 27, 1948	10.60	Feb. 14, 1946	13.26
La Porte 1a/ La Porte 2	July 4, 1942 July 2, 1942	17.30 7.22	Aug. 23, 1947 Oct. 11, 1946	+0.05 1.07	Jan. 29, 1949 June 1, 1937	.12 4.16
Lawrence 1	Feb. 24, 1944	22.45	Sept. 18, 1947	6.55	Jan. 27, 1949	12.88
Lawrence 2	Feb. 23, 1944	22.34	Nov. 2, 1949	7.29	Jan. 26, 1949	18.21
Madison 3	Sept. 23, 1935	25.3	Oct. 15, 1940 Nov. 29, 1940 Dec. 18, 1940 Dec. 30, 1940	18.39	June 16, 1939	23.06
Madison 6	Apr. 1, 1947	12.51	Oct. 27, 1949	3.33	Apr. 8, 1948	6.62
Madison 7	Jan. 1, 1946	13.9	Aug. 7, 1946	(j)	Apr. 9, 1948	7.20
Madison 8a/ Madison 9a/ Marion 1a/ Marion 2a/ Marion 3a/ Marion 4a/ Marion 9a/ Marion 10a/ Marion 13a/	June 17, 1949 Aug. 16, 1949 Aug. 1, 1935 Oct. 15, 1935 Oct. 15, 1935 Dec. 3, 1937 July 26, 1939 Aug. 2, 1939 Jan. 12, 1928	49.20 40.20 37.46 70.55 71.06 15.72 62.48 70.78 (k)	Dec. 7, 1949 Dec. 8, 1949 Oct. 1, 1949 Aug. 5, 1941 Sept. 21, 1941 Oct. 7, 1941 May 27, 1941 Oct. 3, 1942 Aug. 29, 1941 Sept. 20, 1930 Jan. 12, 1945 Feb. 14, 1945 Sept. 9, 1946 July 16, 1948 Aug. 20, 1948 Sept. 30, 1948 Oct. 25, 1948 Dec. 19, 1949 Nov. 1, 1930 Feb. 14, 1945 Feb. 5, 1945 Feb. 13, 1945 Feb. 14, 1945 Feb. 5, 1945 Aug. 4, 1944 July 14, 1944 Jan. 31, 1947 Oct. 4, 1948 Oct. 11, 1948 Oct. 16, 1948 Sept. 5, 1948 Sept. 18, 1948 Oct. 28, 1949 Feb. 15, 1945 Dec. 2, 1944 Sept. 20, 1948	16.00 24.70 13.85 45.40 41.41 +3.92 39.45 50.64 +2.19	Dec. 27, 1949 Dec. 22, 1949 Apr. 16, 1938 Apr. 21, 1949 May 2, 1949 Apr. 16, 1938 Apr. 25, 1949 Feb. 13, 1940 Jan. 20, 1932	33.10 25.00 17.48 46.85 42.18 3.28 41.45 51.87 (d)
Marion 14a/ Marion 18 Marion 19 Marion 21a/ Marion 22a/ Marion 25a/ Marion 26 Marion 27 Marion 28 Marion 29a/ Marion 30a/ Marshall 1 Martin 3 Martin 4 Miami 1a/	June 3, 1929 Oct. 11, 1943 Oct. 18, 1943 Mar. 28, 1944 Apr. 11, 1944 May 7, 1945 Aug. 5, 1947 Aug. 5, 1947 Aug. 5, 1947 Jan. 10, 1948 Mar. 25, 1948 May 20, 1948 Mar. 1, 1944 Mar. 1, 1944 June 3, 1948	(m) 28.33 21.48 67.28 90.40 53.12 9.80 5.37 13.37 53.60 58.06 9.34 22.71 12.56 48.20	Feb. 14, 1945 Feb. 5, 1945 Feb. 13, 1945 Feb. 14, 1945 Feb. 5, 1945 Aug. 4, 1944 July 14, 1944 Jan. 31, 1947 Oct. 4, 1948 Oct. 11, 1948 Oct. 16, 1948 Sept. 5, 1948 Sept. 18, 1948 Oct. 28, 1949 Feb. 15, 1945 Dec. 2, 1944 Sept. 20, 1948	11.75 13.41 15.96 49.17 61.48 17.95 2.15 .90 1.46 42.11 43.55 3.58 18.02 2.08 40.46	Jan. 18, 1937 Mar. 20, 1946 June 24, 1946 Dec. 31, 1949 Feb. 1, 1948 Jan. 31, 1949 Mar. 22, 1948 Aug. 15, 1949 Jan. 28, 1949 Apr. 19, 1949 Apr. 20, 1949 Mar. 3, 1949 June 2, 1947 Jan. 24, 1949 Jan. 31, 1949	21.71 21.09 18.27 49.17 65.65 27.60 6.00 1.10 11.44 43.95 45.60 4.38 21.33 2.97 43.76

*See footnotes at end of table

Water levels in observation wells in Indiana, 1949--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Monroe 2	Sept. 15, 1944	25.10	Sept. 11, 1945	6.47	June 3, 1947	18.70
Monroe 3	Sept. 15, 1944	27.44	Feb. 27, 1945	16.10	Apr. 10, 1948	20.36
Montgomery 1	Sept. 27, 1935	15.45	Nov. 16, 1940	3.66	May 17, 1945	6.84
Montgomery 4	Sept. 27, 1935	17.33	Oct. 15, 1940	1.33	Apr. 4, 1938	10.29
Morgan 3	Aug. 14, 1945	8.80	Sept. 11, 1945	2.28	Feb. 1, 1949	5.80
Noble 5	May 1, 1942	9.20	Feb. 3, 1945	.49	May 17, 1943	2.18
			Feb. 17, 1945			
Noble 6a/	May 28, 1946	25.28	Feb. 28, 1947	17.27	May 26, 1949	21.20
Noble 7	Aug. 10, 1947	22.52	Nov. 24, 1947	19.42	Mar. 20, 1949	21.93
Ohio 1	Sept. 7, 1944	14.94	Oct. 30, 1948	.63	Mar. 3, 1945	14.62
Orange 1	Mar. 1, 1944	14.49	Mar. 1, 1944	(c)	Apr. 9, 1944	5.01
Owen 2	Sept. 10, 1946	25.65	Oct. 15, 1946	10.00	Apr. 12, 1947	18.20
Owen 3	June 5, 1946	109.94	July 17, 1946	108.29	Apr. 15, 1949	108.81
Owen 4	June 20, 1946	84.58	Sept. 20, 1948	68.81	Apr. 19, 1947	79.33
Owen 5	June 5, 1946	13.39	Aug. 3, 1946	1.54	Mar. 27, 1948	4.37
Owen 6	June 5, 1946	9.57	Oct. 2, 1948	1.72	Mar. 26, 1949	4.37
Parke 1	June 14, 1945	8.47	Sept. 30, 1945	2.38	June 21, 1945	4.88
Perry 1	Mar. 3, 1944	10.12	Aug. 13, 1944	1.36	May 25, 1947	3.72
Pike 1	Dec. 1, 1936	12.94	Dec. 30, 1944	3.50	Mar. 31, 1945	7.29
Porter la/	Oct. 16, 1935	62.90	Sept. 18, 1949	50.63	Aug. 3, 1943	58.86
Porter 3	Oct. 18, 1935	17.3	Dec. 3, 1940	11.19	July 2, 1945	16.00
Porter 6	June 11, 1948	21.89	Dec. 18, 1948	3.23	Apr. 2, 1949	5.27
Possey 2	Feb. 19, 1947	9.90	Dec. 7, 1947	3.18	May 20, 1949	5.88
Pulaski 1	Dec. 1, 1935	12.14	Dec. 1, 1935	5.75	June 9, 1947	7.52
Putnam 2	Apr. 1, 1949	129.89	Apr. 1, 1949	116.50	Oct. 23, 1949	116.70
Putnam 3	Sept. 10, 1946	132.29	Oct. 21, 1946	124.33	Mar. 2, 1948	131.56
Randolph la/	Feb. 8, 1942	18.43	Jan. 31, 1945	12.08	Jan. 31, 1949	15.55
Randolph 2	Dec. 19, 1946	12.84	Dec. 28, 1946	.3	Mar. 27, 1948	8.60
Ripley 1	Sept. 7, 1944	13.10	Jan. 15, 1945	1.58	May 3, 1947	7.87
Rush 1	July 12, 1945	10.03	Oct. 29, 1948	1.64	Jan. 21, 1949	4.74
St. Joseph la/	Oct. 16, 1935	14.59	Aug. 1, 1946	4.46	May 25, 1943	11.00
St. Joseph 4T-2	Feb. 16, 1945	9.57	Nov. 29, 1949	4.77	June 2, 1947	9.54
			Dec. 7, 1949			
			Dec. 13, 1949			
St. Joseph 10-2a/	Jan. 26, 1946	39.24	Dec. 23, 1949	34.45	July 26, 1947	39.21
			Dec. 24, 1949		July 27, 1947	
			Dec. 25, 1949		July 30, 1947	
					July 31, 1947	
St. Joseph 16-la/	June 28, 1944	34.00	May 16, 1949	23.2	Mar. 1, 1946	32.50
St. Joseph 22a/	June 8, 1944	46.92	Aug. 28, 1948	28.83	June 2, 1947	33.70
St. Joseph 53a/	Mar. 23, 1945	9.58	Nov. 19, 1949	2.10	June 4, 1947	7.70
St. Joseph 85a/	Jan. 19, 1945	16.75	Dec. 22, 1949	10.62	June 12, 1947	16.49
St. Joseph 89a/	May 17, 1945	48.90	Aug. 11, 1949	38.38	June 4, 1947	46.65
Scott la/	May 4, 1942	27.84	Oct. 22, 1948	16.23	May 21, 1946	22.15
Shelby 1	Apr. 23, 1946	10.56	Jan. 4, 1948	4.72	Jan. 30, 1949	9.57
Spencer 4	Mar. 2, 1944	18.02	July 18, 1948	.44	Jan. 27, 1945	1.92
Spencer 5	Mar. 2, 1944	31.88	Nov. 21, 1945	23.50	Mar. 8, 1944	30.78
Spencer 6	Aug. 23, 1944	30.25	Nov. 22, 1944	21.96	Apr. 6, 1949	24.68
			Dec. 20, 1944			
Spencer 7	Aug. 23, 1944	11.31	Dec. 23, 1944	1.31	June 1, 1944	6.76
Spencer 8	Aug. 23, 1944	8.23	Nov. 11, 1944	1.57	Mar. 17, 1945	4.84
Starke 2	Oct. 3, 1935	5.59	Sept. 15, 1941	.83	June 17, 1949	2.79
Starke 11	July 1, 1948	17.25	Nov. 7, 1948	13.58	Sept. 23, 1948	15.76
Steuben 1	Sept. 16, 1935	4.72	Nov. 1, 1935	+1.00	June 1, 1943	.82
Steuben 2	Sept. 16, 1935	6.7	Oct. 19, 1946	.03	Apr. 15, 1939	2.79
			Oct. 26, 1946			
			Nov. 2, 1946			
Sullivan 1	Aug. 24, 1944	15.38	Nov. 5, 1944	.70	Apr. 15, 1945	1.94
Switzerland 1	Sept. 7, 1944	21.90	Dec. 2, 1944	3.15	Apr. 12, 1947	17.76
			Dec. 15, 1944			
Tippecanoe 4a/	Apr. 24, 1944	22.16	Aug. 13, 1944	+1.80	Jan. 23, 1949	7.30
Tippecanoe 5a/	Apr. 24, 1944	89.36	Apr. 7, 1947	87.83	May 1, 1944	88.27
Tippecanoe 7	Aug. 10, 1945	166.25	Jan. 17, 1947	163.12	Apr. 15, 1949	164.69
			Jan. 22, 1947			
Tippecanoe 8a/	Nov. 28, 1945	14.05	Oct. 18, 1946	3.06	Feb. 3, 1949	9.28
Tippecanoe 9a/	Feb. 15, 1946	76.85	May 3, 1949	69.05	Jan. 2, 1948	71.42

*See footnotes at end of table.

Water levels in observation wells in Indiana, 1949--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Tippecanoe 11	May 1, 1948	98.39	Dec. 25, 1948	95.12	Apr. 15, 1949	97.17
Tippecanoe 12	Aug. 3, 1949	21.07	Dec. 19, 1949	19.53	Aug. 3, 1949	20.68
Tipton 1	Mar. 27, 1945	5.40	Sept. 23, 1945	+ .60	June 10, 1946	.22
Union 3	Apr. 24, 1946	14.30	Dec. 9, 1946	3.86	May 27, 1947	13.84
Union 4	Feb. 3, 1949	25.42	Oct. 23, 1949	19.71	Mar. 27, 1949	25.37
Union 5	May 29, 1949	23.53	Dec. 25, 1949	21.10	May 29, 1949	23.53
Vanderburgh 1	Feb. 20, 1947	10.39	Dec. 12, 1948	.22	Mar. 27, 1949	9.08
Vigo 2a/	Feb. 13, 1946	60.94	Dec. 18, 1948	46.47	June 15, 1947	54.20
Vigo 3	June 15, 1945	9.19	Nov. 22, 1946	.54	Jan. 18, 1949	1.24
Wabash 2	June 1, 1945	14.05	Sept. 5, 1946	1.50	May 13, 1948	2.80
Warren 1	May 26, 1944	19.43	Oct. 16, 1948	5.71	Mar. 27, 1948	6.85
Warrick 1	Dec. 1, 1936	20.30	Apr. 2, 1947	12.37	Dec. 12, 1949	13.30
Warrick 2	Feb. 18, 1944	15.47	Feb. 18, 1944	(c)	Mar. 16, 1945	2.34
Wayne 1	July 11, 1945	31.84	Dec. 17, 1946	25.77	Apr. 4, 1945	
Wayne 2	Dec. 18, 1946	19.97	Nov. 15, 1948	2.36	June 16, 1947	31.32
Wayne 2a/	Apr. 12, 1949	30.60	Dec. 17, 1949	15.69	June 2, 1947	13.80
White 1a/	Dec. 4, 1935	20.34	Oct. 3, 1941	(n)	May 2, 1949	30.40
White 3	June 4, 1948	33.72	Apr. 19, 1949	31.80	Apr. 3, 1936	11.16
					May 6, 1949	32.42

a Affected by pumping.

b Well full of water.

c Flowing.

d Dry.

e Measurement discontinued Oct. 29, 1948.

f Dry at 49.02+ feet.

g Measurement discontinued Aug. 2, 1949.

h Not published this year.

i Measurement discontinued Jan. 25, 1949.

j Full at measuring point which is 0.5 foot above land-surface datum.

k Dry at 6.00 feet.

m Dry at 22.96 feet.

n Overflowing at measuring point, 8.00 feet below land-surface datum.

A comparison of net changes in water level during 1949 shows that the water level in 81 wells was higher in December 1949 than in December 1948 and in 64 wells it was lower.

Net changes, in feet, in water levels in observation wells in Indiana, 1949

Well	Net rise (+) or net decline (-)	Well	Net rise (+) or net decline (-)
Adams 1a/	+6.75	Crawford 2	+0.20
Adams 2a/	+22.75	Dearborn 1-8a/	+ .80
Adams 3	+ .30	Dearborn 1-10a/	-5.37
Bartholomew 2	-4.11	Decatur 1	-2.06
Benton 2	-7.28	De Kalb 1a/	+4.
Blackford 1	-2.36	De Kalb 2	+1.40
Boone 2	-4.73	Delaware 2	-3.73
Boone 4a/	+30.70	Dubois 2	+2.15
Boone 10a/	+4.46	Dubois 5	+ .50
Boone 11a/	+6.45	Elkhart 2	+1.08
Boone 12a/	+6.92	Fayette 2	-3.92
Boone 14a/	+6.54	Floyd 1	-18.84
Boone 16	-5.48	Floyd 2	-16.15
Carroll 1	+1.60	Floyd 3	-2.98
Clark 1	-12.59	Fountain 1	+ .80
Clark 2	+1.87	Franklin 1	-1.
Clark 3a/	-.69	Franklin 4a/	-7.24
Clark 5	-3.84	Gibson 1	+ .52
Clinton 1a/	-.71	Grant 2a/	-4.47
Clinton 2a/	+1.11	Grant 5a/	-2.60
Crawford 1	-2.03	Hamilton 2a/	-.87

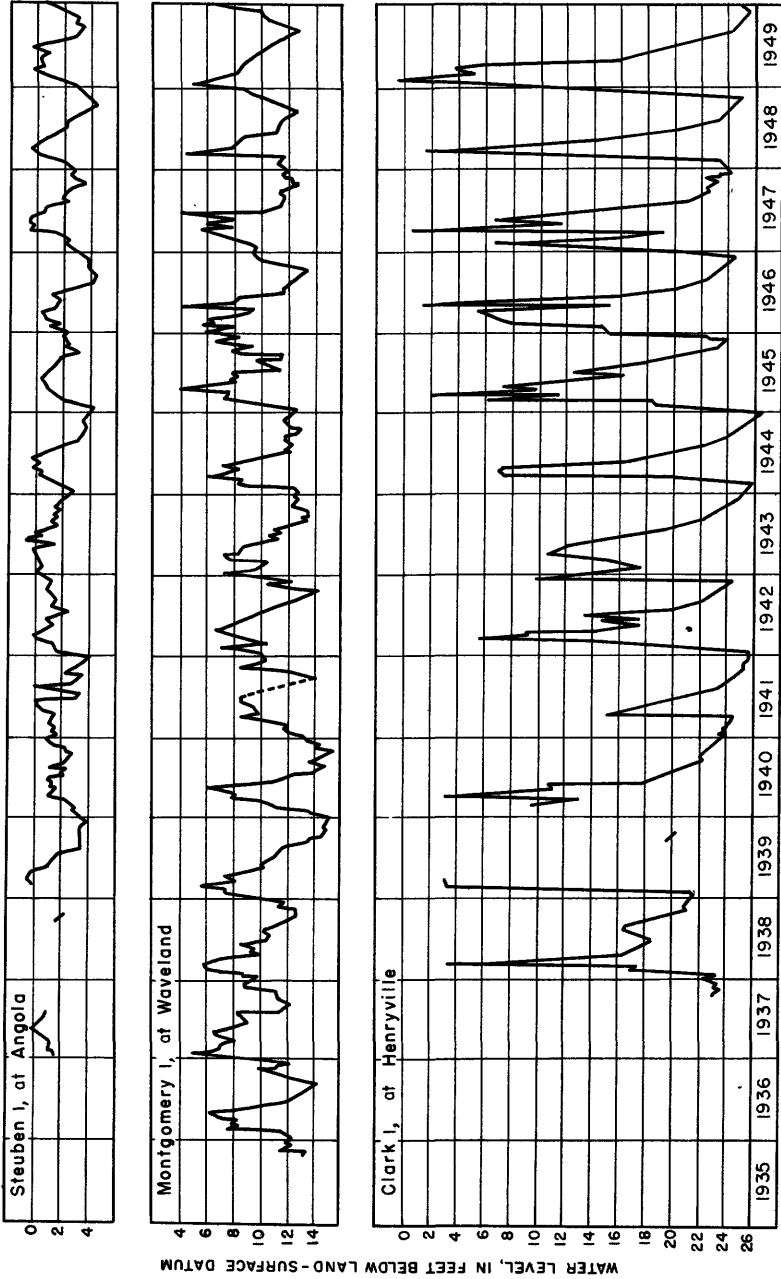


Figure 3.-Graphs showing fluctuations of water levels in three wells in Indiana that represent widely separated parts of the State.

Net changes, in feet, in water levels in observation wells
in Indiana, 1949--Continued

Well	Net rise (+) or net decline (-)	Well	Net rise (+) or net decline (-)
Hancock 1	-1.03	Owen 4	-1.44
Harrison 1	-.41	Owen 5	-.91
Harrison 3	-4.21	Owen 6	+1.09
Hendricks 1	-1.85	Parke 1	-.06
Henry 2	-.74	Perry 1	+5.55
Howard 4	+5.22	Pike 1	-.39
Huntington 1	-.75	Porter 1a/	-5.51
Jackson 1a/	-2.67	Porter 5	+4.46
Jackson 2	-1.41	Porter 6	+5.17
Jasper 3	-1.16	Posey 2	-.22
Jefferson 2	-1.82	Pulaski 1	+8.86
Jennings 1	+0.05	Putnam 3	+0.07
Knox 1	+0.97	Randolph 1a/	-2.38
Kosciusko 2	+0.19	Randolph 2	-3.10
Kosciusko 3	+0.67	Ripley 1	+4.04
La Porte 1a/	+0.33	Rush 1	+0.19
La Porte 2	+1.27	St. Joseph 1a/	-1.25
Lawrence 1	-1.10	St. Joseph 4T-2	-.76
Lawrence 2	+0.81	St. Joseph 10-2a/	-1.50
Madison 3	-.28	St. Joseph 16-1a/	-3.00
Madison 6	-.50	St. Joseph 22a/	+1.78
Madison 7	-1.03	St. Joseph 53a/	+1.70
Marion 1a/	+1.08	St. Joseph 85a/	-1.66
Marion 2a/	+3.58	St. Joseph 89a/	-1.40
Marion 3a/	+4.88	Scott 1a/	-1.79
Marion 4a/	(b)	Shelby 1	-1.22
Marion 9a/	+2.81	Spencer 4	+1.19
Marion 10a/	+3.69	Spencer 5	+0.05
Marion 18	+1.10	Spencer 6	+0.07
Marion 19	+1.20	Spencer 7	+0.74
Marion 21a/	+5.69	Spencer 8	+1.05
Marion 22a/	+5.83	Starke 2	-.76
Marion 25a/	+5.20	Steuben 1	+2.06
Marion 26	-.38	Steuben 2	+2.66
Marion 27	+2.10	Sullivan 1	+2.73
Marion 28	-2.44	Switzerland 1	-8.47
Marion 29a/	+3.48	Tippecanoe 4a/	+5.40
Marion 30a/	+3.35	Tippecanoe 5a/	+0.14
Marshall 1	+3.50	Tippecanoe 7	+0.76
Martin 3	-.36	Tippecanoe 8a/	-.46
Martin 4	+0.10	Tippecanoe 9a/	-1.57
Miami 1a/	-.33	Tippecanoe 11a/	+0.67
Monroe 2	+2.09	Tipton 1	+1.10
Monroe 3	+4.57	Vanderburgh 11	+1.09
Montgomery 1	+1.88	Vigo 2a/	+3.83
Montgomery 4	+0.62	Vigo 3	+1.16
Morgan 3	-2.93	Wabash 2	+5.59
Noble 5	+5.54	Warren 1	+6.61
Noble 6	+0.26	Warrick 1	+4.09
Noble 7	-.20	Warrick 2	+3.00
Ohio 1	-3.74	Wayne 1	-.05
Owen 2	-1.31	Wayne 2	-3.91
Owen 3	+0.11	White 1a/	-1.84

a Affected by pumping.

b No change.

The graphs of water levels in three key wells at widely spaced locations throughout the State are shown in figure 3. The low level of 1949 in well Steuben 1 was about 0.6 foot higher than the low level of 1948 and about 1.0 foot higher than the lowest stage of record in 1946. The low level of 1949 in well Montgomery 1 was nearly the same as that of

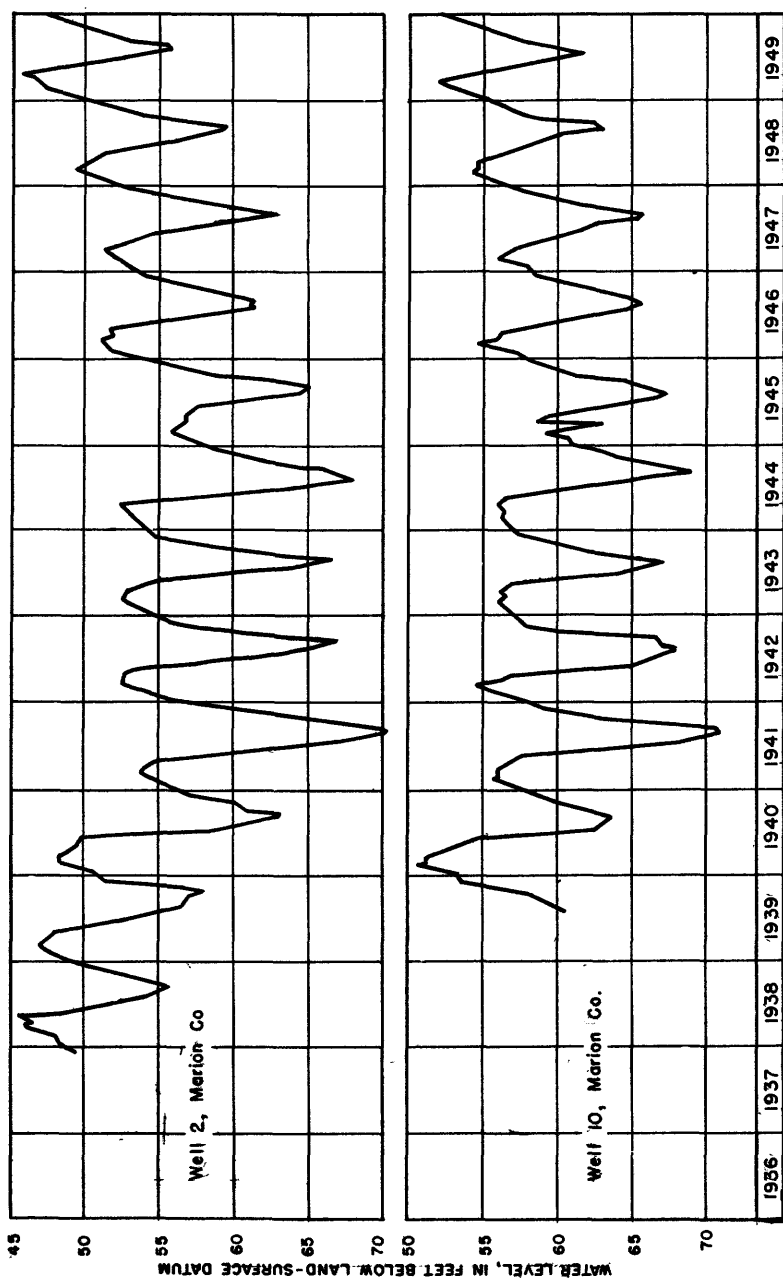


Figure 4.--Graphs showing fluctuations of water levels in two wells in the downtown area of Indianapolis, Marion County, Indiana.

1948 and about 3.5 feet higher than the lowest stage of record in 1940. The low level of 1949 in well Clark 1 was 0.8 foot lower than the low level of 1948 and only 0.9 foot higher than the lowest stage of record in 1944.

Water levels in the downtown area of Indianapolis continued to show a generally rising trend, as shown by the graphs of water levels of two wells in figure 4. The low level of well Marion 2 during 1949 was about 3.5 feet higher than the lowest level of 1948 and more than 14 feet higher than the lowest stage of record in 1941. The low level of 1949 in well Marion 10 was about 1.5 feet higher than the low level of 1948 and nearly 9 feet higher than the lowest level of record in 1941. This generally rising trend in water levels has been due in large part to more normal precipitation and to a general decrease in pumping from wells in the downtown area.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Adams County

Adams 1. City of Decatur. In Decatur, 50 feet north of Park Street and 120 feet east of North Fifth Street. Measurements made by personnel of Water Dept. Ralph E. Roop, superintendent. Records available: 1945-49

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	52.28	Apr. 9	49.12	July 23	47.87	Oct. 15	47.37
15	51.70	16	50.62	30	47.20	22	45.95
22	52.28	25	51.87	Aug. 6	47.53	29	49.28
29	51.28	30	47.30	13	47.62	Nov. 5	46.87
Feb. 5	50.53	May 7	52.62	20	47.20	12	45.95
12	50.87	14	52.37	27	46.95	19	47.45
19	50.03	24	47.37	Sept. 3	46.95	26	47.95
26	50.20	June 4	49.45	12	43.70	Dec. 3	46.62
Mar. 5	52.76	11	47.95	17	46.95	10	46.24
12	49.37	22	47.90	24	46.70	17	45.95
19	49.20	July 2	47.20	Oct. 2	46.78	24	45.70
26	51.87	9	49.20	8	46.87	31	46.62
Apr. 2	50.95	16	46.95				

Adams 2. City of Decatur. "7th and Dayton well". In Decatur, at southwest corner of intersection of 7th and Dayton Sts., about 1 foot south of concrete sidewalk. Measurements made by personnel of Water Dept. Ralph E. Roop, superintendent. Records available: 1945-49.

Jan. 3	71.05	Apr. 9	68.05	July 23	73.47	Oct. 15	58.72
15	71.47	16	71.55	30	56.47	22	63.38
22	74.38	25	72.47	Aug. 6	47.05	29	46.38
29	63.30	30	50.63	13	60.93	Nov. 5	49.05
Feb. 5	69.88	May 7	72.55	20	63.88	12	56.47
12	71.05	14	71.47	27	59.38	19	45.30
19	69.97	24	66.05	Sept. 3	46.30	26	44.72
26	70.38	June 4	69.63	12	46.80	Dec. 3	57.47
Mar. 5	74.38	11	71.38	17	60.97	10	44.84
12	70.30	22	71.97	24	47.05	17	44.05
19	69.80	July 2	62.47	Oct. 2	59.30	24	50.47
26	73.13	9	67.30	8	61.30	31	44.72
Apr. 2	74.05	16	48.30				

Adams 3. St. Joseph Cemetery. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T. 28 N., R. 14 E., on north side of State Highway 224, about 1.2 miles west of U. S. Highway 27, west of Decatur. Measurements made by Francis J. Geola, sexton, Decatur. Records available: 1947-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.37	25.57	25.66	24.97	25.98	26.18	26.89	27.93	28.71	29.33	28.24	28.62
2	26.58	25.94	25.75	24.94	25.97	26.30	27.02	27.90	.....	29.34	28.08	28.64
3	26.88	25.99	25.85	25.24	25.99	26.40	27.31	27.95	.....	29.30	28.24	28.74
4	27.02	25.82	25.84	25.52	26.17	26.48	27.37	28.02	.....	29.25	28.26	28.54
5	25.55	26.08	25.67	25.58	26.26	26.64	27.26	28.10	.....	29.14	28.42	28.64
6	24.81	26.16	25.70	25.43	26.26	26.51	27.34	28.12	.....	29.03	28.41	28.65
7	25.55	26.11	26.08	25.63	26.40	26.58	27.22	28.26	.....	29.02	28.55	28.46
8	26.00	26.14	25.99	25.73	26.40	26.83	27.31	28.15	.....	29.05	28.28	28.70
9	26.15	26.20	25.95	25.98	26.36	26.85	27.33	28.26	28.96	29.02	28.39	28.78
10	26.51	26.24	25.84	26.12	26.47	26.90	27.29	28.42	29.02	28.97	28.33	28.67
11	25.52	26.56	26.00	26.07	26.69	27.04	27.39	28.51	28.05	28.93	28.31	28.62
12	25.62	26.40	26.02	26.05	26.62	26.85	27.34	28.43	29.04	28.82	28.39	28.53
13	25.88	26.32	26.12	25.90	26.67	26.93	27.51	28.44	28.98	28.17	28.25	28.59
14	26.03	26.40	26.10	25.99	26.75	26.85	27.57	28.68	29.05	29.07	28.29	28.52
15	26.25	23.15	26.11	25.90	26.76	26.81	27.51	28.56	29.07	28.09	28.30	28.47
16	25.81	23.41	26.19	26.17	26.80	26.83	27.77	28.61	29.06	28.06	28.39	28.42
17	25.18	24.41	26.11	26.24	26.84	.....	27.83	28.58	29.06	28.09	28.41	28.36
18	25.44	24.90	26.05	25.83	26.97	.....	27.62	28.47	29.06	28.16	28.45	28.28
19	.....	25.17	26.30	25.85	26.85	.....	27.61	28.36	29.10	28.18	28.42	28.34
20	.....	25.41	26.40	25.95	26.88	.....	28.96	28.40	29.11	28.15	28.51	28.27
21	24.90	25.70	26.20	25.92	26.70	.....	27.73	28.43	29.07	28.19	28.51	28.15
22	25.44	25.45	26.03	25.84	.....	.....	27.70	28.42	29.00	28.00	28.65	27.12
23	25.82	24.84	25.91	25.90	.....	.....	27.80	28.42	28.97	28.13	28.38	26.95
24	25.66	25.00	26.01	25.90	23.76	26.94	27.80	28.47	29.11	28.21	28.48	27.22
25	25.33	24.79	25.85	26.16	24.62	27.12	27.95	28.59	29.14	28.20	28.44	27.36
26	25.28	25.16	26.05	26.06	24.99	27.05	27.95	28.63	29.17	28.15	28.59	27.22
27	24.40	25.28	24.84	26.00	25.39	26.89	27.87	28.65	29.14	28.30	28.35	26.62
28	23.11	25.36	24.83	25.82	25.63	26.92	28.17	28.62	29.19	28.20	28.55	26.56
29	24.07	.....	25.38	25.88	25.84	26.96	28.02	28.61	29.18	28.19	28.44	26.68
30	25.08	.....	25.57	25.97	25.98	26.91	28.03	28.69	29.28	28.13	28.50	.....
31	25.16	.....	25.46	.....	26.04	.....	27.99	28.68	.....	28.12	.....	.....

a Estimated.

Allen County

Allen 3. City of Fort Wayne. In Fort Wayne, Lawton Park, about 700 feet east of Clinton St. and about 800 feet north of East Fourth St. Measurements made by Earl P. Cox. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	10.01	Apr. 2	9.25	June 4	9.90	July 23	11.20
15	9.69	9	9.31	11	10.24	29	11.23
22	9.79	23	9.64	18	10.37	Aug. 6	11.43
Feb. 5	8.31	30	9.79	25	10.55	27	11.83
12	8.69	May 8	9.86	July 2	10.74	Sept. 10	11.68
27	7.58	14	10.07	10	10.92	Oct. 8	11.89
Mar. 4	7.97	21	10.19	16	11.05	22	11.10
19	8.86	28	9.58				

Bartholomew County

Bartholomew 2. V. E. Sprouse Co., Inc. In Columbus, NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 9 N., R. 6 E., 1804 East 22d St. Measurements made by Joseph McAuliffe. Records available: 1948-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.79	10.30	11.32	11.14	12.44	13.53	14.16	14.72	15.24	15.50	15.26	15.68
2	14.77	10.36	11.37	11.18	12.49	13.56	14.17	14.73	15.26	15.51	15.27	15.69
3	14.76	10.38	11.42	11.20	12.53	13.60	14.18	14.76	15.27	15.52	15.29	15.70

Bartholomew 2--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	14.74	10.41	11.46	11.25	12.59	13.63	14.20	14.78	15.29	15.54	15.30	15.71
5	14.66	10.52	11.50	11.28	12.62	13.65	14.21	14.80	15.28	15.54	15.33	15.72
6	13.63	10.58	11.55	11.29	12.65	13.68	14.24	14.82	15.28	15.55	15.35	15.73
7	13.09	10.66	11.63	11.36	12.68	13.71	14.26	14.84	15.28	15.56	15.35	15.73
8	12.76	10.72	11.66	11.42	12.72	13.74	14.28	14.85	15.30	15.57	15.36	15.75
9	12.55	10.78	11.70	11.48	12.75	13.78	14.30	14.87	15.31	15.59	15.38	15.76
10	12.47	10.85	11.72	11.53	12.79	13.80	14.32	14.89	15.32	15.60	15.39	15.77
11	12.41	10.95	11.73	11.58	12.83	13.83	14.34	14.90	15.33	15.60	15.47	15.77
12	12.37	11.00	11.71	11.62	12.86	13.86	14.36	14.92	15.35	15.61	15.43	15.76
13	12.37	11.06	11.69	11.65	12.90	13.90	14.39	14.94	15.36	15.62	15.44	15.73
14	12.87	11.14	11.66	11.70	12.94	13.94	14.41	14.96	15.38	15.62	15.46	15.73
15	12.40	11.17	11.64	11.74	12.98	13.97	14.43	14.98	15.39	15.62	15.47	15.72
16	12.43	11.09	11.65	11.81	13.01	13.93	14.46	15.00	15.40	15.63	15.49	.....
17	12.47	11.03	11.62	11.86	13.05	13.95	14.48	15.02	15.41	15.64	15.50	.....
18	12.46	10.94	11.61	11.89	13.08	13.97	14.50	15.03	15.43	15.65	15.52	.....
19	12.37	10.88	11.69	11.96	13.12	13.99	14.52	15.05	15.42	15.66	15.53	.....
20	12.55	10.88	11.72	12.01	13.15	14.00	14.54	15.07	15.41	15.67	15.54	.....
21	12.04	10.94	11.71	12.04	13.18	14.01	14.56	15.09	15.41	15.68	15.56	15.70
22	11.90	10.94	11.71	12.07	13.21	14.02	14.58	15.12	15.41	15.58	15.57	15.63
23	11.82	11.62	11.77	12.12	13.26	14.04	14.60	15.13	15.41	15.51	15.58	15.68
24	11.75	11.05	11.80	12.16	13.29	14.05	14.61	15.16	15.43	15.45	15.59	15.66
25	11.52	11.11	11.81	12.22	13.32	14.07	14.61	15.18	15.44	15.38	15.60	15.63
26	.....	11.18	11.85	12.25	13.34	14.09	14.62	15.19	15.45	15.34	15.62	15.60
27	11.02	11.20	11.69	12.29	13.37	14.11	14.64	15.22	15.46	15.30	15.62	15.56
28	10.78	11.26	11.55	12.34	13.41	14.12	14.65	15.23	15.46	15.28	15.64	15.53
29	10.58		11.59	12.37	13.44	14.13	14.67	15.20	15.47	15.26	15.64	15.48
30	10.42		11.26	12.41	13.47	14.14	14.69	15.20	15.49	15.25	15.66	15.43
31	10.28		11.16		13.50		14.71	15.21		15.25		15.39

a Estimated.

Benton County

Benton 1. Northern Indiana Public Service Co. In Fowler, in sec. 15, T. 25 N., R. 8 W., South Van Buren St., 2½ blocks south of U. S. Highway 52. Measurements made by W. E. Furr, Northern Indiana Public Service Co. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 4	46.86	Sept. 8	47.5	Oct. 20	48.1	Nov. 25	45.27
11	47.32	29	40.45	Nov. 4	49.1	Dec. 2	44.22
25	44.91	Oct. 6	39.74	10	45.59	8	43.62
28	44.00	13	46.6	17	48.14	15	43.34
Sept. 2	46.0						

Benton 2. City of Boswell. In Boswell, in SE¼ sec. 13, T. 24 N., R. 9 W., near northwest corner of intersection of U. S. Highway 41 and State Highway 352. Measurements made by Charles W. Brady. Records available: 1944-49.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	6.80		7	9.01		7	9.83		13	19.02	
13	5.94		15	9.85		14	10.63		20	15.86	
21	5.02		23	10.45		22	11.18		27	15.73	
28	4.78		28	14.67		28	11.98		Nov. 3	16.26	
Feb. 4	5.35		May 6	11.78		Aug. 4	15.28		10	16.73	
11	6.01		15	12.04		11	15.57		18	15.55	
18	5.85		21	11.58		19	13.26		24	16.61	
24	5.03		26	10.64		Sept. 1	18.17		Dec. 1	17.01	
Mar. 4	5.29		June 3	13.04		7	15.16		8	14.60	
10	5.88		10	15.62		22	16.60		15	16.06	
17	7.00		16	16.92		29	19.41		22	14.53	
24	7.18		24	15.24		Oct. 6	16.36		29	13.66	
Apr. 1	7.72		July 1	9.69							

Blackford County

Blackford 1. Owner unknown. In Hartford City, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 24 N., R. 10 E., about 500 feet east of State Highway 3 and about 1 $\frac{1}{2}$ blocks north of north corporation line. Measurements made by Harry A. Miles. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	2.64	Apr. 9	2.22	July 10	4.07	Oct. 8	6.18
8	1.88	16	2.42	16	4.26	15	6.14
15	(a)	23	1.95	23	4.48	22	6.05
22	1.38	30	1.96	30	3.68	29	5.99
29	1.39	May 7	2.47	Aug. 6	4.89	Nov. 5	6.08
Feb. 5	2.38	14	2.97	13	5.09	12	6.09
12	2.64	21	3.26	20	5.29	19	6.20
19	1.33	28	3.46	28	5.30	26	6.32
26	1.08	June 4	3.74	Sept. 3	5.41	Dec. 3	6.39
Mar. 5	1.62	11	4.08	10	5.69	10	6.36
12	1.78	18	4.38	17	5.81	17	6.34
19	2.27	24	4.36	24	6.02	24	5.05
26	.86	July 2	4.44	Oct. 1	6.21	31	4.01
Apr. 2	1.62						

a Full of water.

Boone County

Boone 2. Elmer P. Slipher. In NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 18 N., R. 1 E., about 2.5 miles east of intersection of U. S. Highway 52 and State Highway 32, 5 feet east of northeast corner of abandoned school building, 43 feet south of center of State Highway 32, and 94 feet west of center of section road. Measurements made by Fred Price, Lebanon Utilities, Inc. Records available: 1935-42, 1945-49.

Jan. 14	3.28	Apr. 15	5.15	July 8	7.49	Oct. 14	10.64
21	3.40	22	4.59	15	7.92	21	10.34
28	2.28	29	4.04	29	8.47	28	10.25
Feb. 4	4.78	May 6	5.15	Aug. 5	8.76	Nov. 4	10.36
11	5.11	13	5.62	12	9.10	12	10.70
18	3.45	20	5.80	19	9.43	18	10.59
25	3.24	27	5.68	26	9.39	25	10.66
Mar. 4	4.33	June 3	6.17	Sept. 2	10.29	Dec. 2	10.88
11	4.22	9	6.64	16	11.18	9	11.13
18	4.30	17	6.54	23	11.59	16	10.74
25	4.30	24	6.30	30	12.09	23	8.46
Apr. 1	3.50	July 1	6.88	Oct. 8	11.97	30	5.46
8	4.63						

Boone 4. Lebanon Utilities, Inc. At city water works, 100 feet south of center of Chicago Ave., 42 feet east of center of drive immediately west of boiler room. Measurements made by Fred Price, Lebanon Utilities, Inc. Records available: 1945-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	60.50	59.50	58.10	63.20	63.00	68.60	72.10	72.80	72.60	72.70	71.50	60.30
2	60.30	59.45	58.00	63.10	67.50	70.70	72.10	73.20	73.40	66.10	71.40	40.00
3	60.40	59.20	58.10	62.70	68.20	71.20	72.10	73.40	73.60	61.20	70.00	35.30
4	60.70	59.40	57.80	66.70	68.60	71.30	71.40	73.00	69.80	60.60	.....	32.90
5	60.80	59.30	57.80	62.70	69.00	69.60	72.00	67.20	72.40	56.80	.....	42.50
6	61.00	59.20	57.90	65.40	67.10	70.60	72.90	72.50	73.20	56.00	.....	48.10
7	60.90	59.20	57.80	65.40	65.60	71.20	72.90	72.60	73.60	66.20	.....	51.70
8	59.60	59.20	57.70	63.20	65.40	71.10	71.60	72.70	74.00	71.40	.....	54.80
9	59.40	59.10	58.00	63.30	70.60	71.20	73.10	70.00	73.50	70.30	.....	52.80
10	59.80	59.00	58.20	63.50	70.80	71.70	73.10	69.50	70.00	71.40	.....	52.70
11	59.60	58.80	58.10	62.90	70.70	70.00	72.30	69.00	67.40	71.60	.....	.....
12	59.20	58.80	58.10	64.80	71.20	66.90	72.30	72.60	70.90	73.10	.....	.....
13	58.90	58.75	58.00	63.40	71.40	69.60	72.70	73.00	72.50	73.10	42.00	.....
14	58.90	58.75	58.00	66.60	71.20	66.20	73.10	72.50	73.20	73.30	45.40	.....

Boone 4--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
15	59.70	59.25	58.35	63.90	69.10	69.50	72.80	73.30	73.70	72.70	36.50	50.30
16	58.60	58.95	58.20	63.60	70.70	67.50	68.80	73.40	73.00	71.50	37.80	40.60
17	58.40	58.65	58.15	63.50	71.40	63.70	58.40	68.40	67.50	67.40	40.20	35.70
18	55.20	59.00	58.00	63.00	70.90	69.20	69.40	71.40	62.00	60.00	41.20	32.20
19	59.30	58.90	57.95	63.85	71.60	66.70	72.40	73.20	59.20	56.70	37.50	.....
20	59.00	58.60	57.50	67.55	65.30	70.40	72.90	72.60	66.90	52.80	32.60	32.90
21	59.10	58.30	57.50	68.05	63.60	69.40	72.80	72.50	73.10	50.90	32.80	31.40
22	59.00	58.20	57.50	64.05	63.60	66.00	72.90	73.00	74.00	49.30	40.80	31.50
23	59.00	58.30	57.80	63.40	66.70	70.60	72.90	73.50	74.30	63.40	40.00	36.10
24	59.20	58.30	57.75	63.80	62.90	71.20	73.00	69.60	74.20	70.00	33.80	31.70
25	59.20	58.30	66.40	63.25	63.20	70.00	73.20	69.60	73.70	71.90	32.30	30.40
26	59.10	58.30	65.20	63.80	61.60	68.50	73.30	71.30	71.60	72.70	37.20	.....
27	58.90	58.10	65.60	63.40	60.90	70.20	64.60	68.60	72.00	72.90	39.60	.....
28	59.20	58.00	67.50	63.55	61.10	71.00	71.80	60.40	73.80	69.10	44.20	.....
29	59.20		64.70	65.90	62.50	71.40	73.00	62.90	74.20	69.80	53.60	.....
30	59.40		66.70	63.40	59.40	71.80	73.20	71.40	74.10	72.40	60.00	41.00
31	59.20		63.30		65.30		71.40	72.50		71.80		32.50

Boone 10-A. Lebanon Utilities, Inc. Near city water works, 165 feet south of center of Chicago Ave., and 148 feet east of center of Kersey St. Measurements made by Fred Price, Lebanon Utilities, Inc. Records available: 1945-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	30.55	29.00	27.40	28.90	30.70	38.05	39.65	35.35	37.00	35.80	.....
2	.....	30.60	28.90	27.40	29.15	31.60	38.35	39.85	36.25	36.50	35.55	34.70
3	.....	30.35	29.00	26.90	29.55	32.10	38.60	39.65	36.75	35.15	33.15	34.90
4	.....	30.00	28.80	27.10	29.85	31.70	38.00	39.40	38.10	34.50	34.25	35.45
5	.....	30.00	28.45	26.90	30.15	33.50	38.40	38.20	37.30	.....	35.05	35.05
6	.....	30.00	28.35	27.05	31.55	33.20	38.40	39.15	37.22	.....	34.60	34.60
7	.....	29.85	28.60	27.05	31.05	33.20	38.15	40.10	36.85	34.65	34.35	35.65
8	.....	29.65	28.35	.....	30.65	32.00	.....	40.20	37.05	35.25	.....	36.20
9	.....	29.70	28.10	.....	30.30	33.80	.....	39.70	37.20	35.40	.....	35.50
10	.....	29.85	28.00	.....	29.80	32.50	.....	38.80	36.00	35.75	.....	35.75
11	.....	29.90	28.00	.....	29.70	33.45	.....	38.05	35.55	36.15	.....	35.85
12	.....	29.60	27.95	.....	29.80	34.35	.....	39.15	35.85	35.85	35.30	35.15
13	.....	29.40	27.95	.....	30.00	33.30	.....	39.70	36.30	36.25	33.80	33.70
14	.....	29.40	27.90	.....	29.80	33.60	.....	39.35	36.40	36.65	33.00	34.60
15	30.55	29.25	28.05	27.75	29.30	33.05	38.60	39.70	36.65	36.50	33.80	33.85
16	30.35	29.40	28.00	27.80	29.20	31.65	37.15	39.25	36.55	37.70	34.10	34.30
17	30.50	29.40	27.80	27.65	30.25	32.95	37.90	38.50	35.95	37.45	33.55	33.80
18	30.50	29.35	27.70	27.90	29.90	33.65	37.95	37.45	36.20	37.40	31.50	31.40
19	30.80	29.25	.....	28.25	29.85	34.30	38.65	38.25	36.25	37.25	31.80	32.10
20	30.80	29.35	.....	28.40	30.00	34.90	39.05	38.05	36.30	34.90	30.90	31.80
21	30.60	29.15	27.45	28.55	29.70	35.25	39.25	37.20	35.75	36.00	32.90	30.90
22	30.90	29.20	27.45	28.35	29.70	35.30	39.30	37.60	.....	36.10	33.15	31.85
23	30.90	29.10	27.55	28.00	29.80	35.40	39.90	38.45	36.35	35.35	33.65	30.45
24	30.45	29.05	27.50	27.65	30.05	35.60	40.35	37.60	36.50	35.00	33.95	29.10
25	30.50	29.25	27.40	27.95	28.30	36.25	40.20	39.30	36.55	34.80	33.25	28.50
26	30.40	29.20	27.45	28.20	28.80	37.15	40.20	38.85	35.95	35.55	33.10	31.00
27	30.40	29.00	26.85	28.60	28.50	37.25	39.20	38.30	35.00	.....	33.00	31.10
28	30.50	29.00	27.10	28.90	28.85	37.35	39.45	37.90	36.15	35.25	33.50	32.00
29	30.90		27.20	29.10	28.65	37.55	39.85	36.10	36.85	35.30	33.75	32.30
30	30.90		27.20	29.25	28.95	37.95	39.95	36.05	37.15	35.10	.....	31.40
31	30.55		27.10		29.05		40.35	35.80		35.70		31.90

Boone 11. Lebanon Utilities, Inc. At city water works, about 110 feet south of center of Chicago Ave., 35 feet west of center of Kersey St. Measurements made by Fred Price, Lebanon Utilities, Inc. Records available: 1945-49.

Boone 11--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	34.99	Apr. 15	32.28	July 15	42.05	Oct. 14	40.57
21	34.40	22	33.09	22	42.57	21	38.85
28	33.76	29	32.73	29	43.02	28	38.07
Feb. 4	34.28	May 6	32.52	Aug. 5	42.25	Nov. 4	36.25
11	34.15	13	34.79	12	41.33	12	37.40
18	33.70	20	35.06	19	41.82	19	33.73
25	33.30	27	32.04	26	42.74	25	33.04
Mar. 4	33.10	June 3	35.20	Sept. 2	40.04	Dec. 2	36.34
11	32.48	9	37.32	9	41.30	9	36.20
18	32.23	17	35.13	16	40.98	16	34.68
25	31.99	24	38.70	23	39.48	23	30.94
Apr. 1	32.05	July 1	41.30	30	41.18	30	30.75
8	31.86	8	41.58	Oct. 8	37.14		

Boone 12. Lebanon Utilities, Inc. Near city water works, about 35 feet south of center of Franklin St., and 18 feet east of center of Klotz St., extended. Measurements made by Fred Price, Lebanon Utilities, Inc. Records available: 1945-49.

Jan. 14	28.32	Apr. 15	25.83	July 15	32.20	Oct. 14	30.37
21	27.78	22	26.17	22	32.44	21	29.55
28	26.73	29	26.38	29	32.95	28	29.66
Feb. 4	26.06	May 6	27.12	Aug. 5	33.42	Nov. 4	29.28
11	25.79	13	28.04	12	33.33	12	28.02
18	25.61	20	29.20	19	33.26	19	27.38
25	25.96	27	29.00	26	33.01	26	26.00
Mar. 4	25.03	June 3	30.86	Sept. 2	30.76	Dec. 2	25.78
11	24.92	9	29.48	9	31.12	9	24.94
18	24.46	17	29.87	16	30.12	16	24.53
25	24.62	24	28.07	23	30.24	23	23.93
Apr. 1	25.54	July 1	29.95	30	30.55	30	23.46
8	25.86	8	31.53	Oct. 8	29.58		

Boone 13. Lebanon Utilities, Inc. In Memorial Park, about 300 feet east of State Highway 39, 4 feet south of southeast corner of tool shop, and about 20 feet north of center of road east of park entrance, at west side and near northern end of park. Measurements made by Fred Price, Lebanon Utilities, Inc. Records available: 1945-49. Measurement discontinued Sept. 23, 1949.

Jan. 14	7.30	Mar. 18	5.79	May 20	7.45	July 22	10.82
21	5.57	25	6.14	27	7.55	29	11.35
28	3.81	Apr. 1	4.99	June 3	8.36	Aug. 5	10.80
Feb. 4	5.31	8	5.45	9	8.78	12	12.49
11	5.90	15	5.90	17	8.84	19	12.87
18	4.55	22	6.07	24	9.30	26	13.53
25	4.62	29	5.74	July 1	9.43	Sept. 2	14.03
Mar. 4	4.76	May 6	6.16	8	9.73	9	14.45
11	5.54	13	6.87	15	10.08		

Boone 14. Lebanon Utilities, Inc. About 187 feet east, along north sidewalk of Big Four right-of-way, 82 feet north of center of East Elm St. Measurements made by Fred Price, Lebanon Utilities, Inc. Records available: 1945-49.

Jan. 14	42.42	Apr. 15	41.27	July 15	50.57	Oct. 14	42.80
21	41.68	22	41.50	22	50.41	21	42.25
28	39.46	29	41.73	29	50.94	28	42.00
Feb. 4	38.89	May 6	44.25	Aug. 5	51.09	Nov. 4	41.88
11	38.46	13	45.28	12	50.26	12	40.08
18	39.60	20	47.03	19	50.57	19	40.50
25	40.47	27	45.79	26	45.31	25	39.38
Mar. 4	38.57	June 3	46.09	Sept. 2	43.84	Dec. 2	38.92
11	38.58	9	46.57	9	43.07	9	38.38
18	38.07	17	47.07	16	42.95	16	38.28
25	39.31	24	42.97	23	41.79	23	38.03
Apr. 1	41.33	July 1	40.30	30	43.04	30	37.75
8	41.29	8	50.10	Oct. 8	42.44		

Boone 16. Leland H. Dale. In NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 18 N., R. 1 W., about 3 miles south of Lebanon and about 1 mile west of State Highway 39. Measurements made by Leland H. Dale. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.8	Apr. 6	2.39	July 5	5.8	Sept. 26	8.98
14	.4	12	2.95	11	6.05	Oct. 3	7.3
21	.7	19	3.37	18	6.3	10	9.05
24	.6	26	2.37	25	7.31	18	9.3
Feb. 7	2.79	May 3	3.4	Aug. 1	6.84	24	8.59
15	3.39	11	3.83	8	7.1	Nov. 2	9.49
21	.9	16	4.05	15	7.1	7	9.54
Mar. 2	4.2	June 2	4.6	22	7.9	25	10.25
8	2.28	6	4.74	29	7.9	Dec. 6	8.3
15	2.30	16	5.14	Sept. 5	8.27	12	9.8
21	3.33	20	5.1	12	7.0	22	9.55
28	2.3	July 1	5.7	20	8.7	28	9.38

Brown County

Brown 2. Brown County State Park. Near head of valley northwest of blockhouse. Measurements made by A. E. Weddle, superintendent, and Earl Rose, Brown County State Park. Measurements discontinued and well filled Apr. 17, 1949. Records available: 1936-49.

Feb. 26	2.28	Mar. 14	3.20	Apr. 3	2.70	Apr. 17	2.68
Mar. 7	3.69	Mar. 20	2.30	11	2.50		

Brown 3. Brown County State Park. In front of Hoosier's Nest cabin, near tower at entrance to Brown County State Game Preserve. Measurements made by A. E. Weddle, superintendent, and Earl Rose, Brown County State Park. Records available: 1936-49.

Feb. 8	2.19	Apr. 13	4.17	Oct. 10	8.89	Nov. 21	7.86
26	1.41	17	4.47	17	8.70	28	8.20
Mar. 7	4.19	Sept. 6	8.72	24	6.96	Dec. 5	8.51
20	1.40	12	8.30	31	6.40	12	7.10
27	.90	19	8.50	Nov. 7	6.92	19	5.96
Apr. 3	2.60	26	9.13	14	7.50	26	2.36
11	3.90	Oct. 3	8.88				

Carroll County

Carroll 1. Roy R. Richter, Flora. SW corner SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 25 N., R. 1 W., in building about 15 feet east of owner's residence. Measurements made by Roy R. Richter. Records available: 1945-49.

Jan. 1	5.33	Apr. 2	5.80	July 2	9.30	Oct. 8	(a)
8	4.75	9	6.60	9	9.30	15	9.10
15	4.55	16	6.90	16	9.77	22	9.75
22	4.40	23	7.30	23	9.72	29	8.25
29	4.43	30	6.85	30	7.30	Nov. 5	9.85
Feb. 5	5.80	May 7	7.53	Aug. 6	9.30	12	8.75
12	6.77	14	8.10	13	10.20	19	8.52
19	4.90	21	4.63	20	10.65	26	8.88
26	4.55	28	6.10	27	10.60	Dec. 3	9.22
Mar. 5	5.88	June 4	7.80	Sept. 3	10.57	10	9.47
12	6.38	11	8.33	10	10.88	17	8.52
19	6.02	18	8.45	17	11.75	24	6.08
26	5.75	25	8.15	Oct. 1	(a)	31	5.60

a Dry.

Clark County

Clark 1. Clark State Forest. Sec. 36, T. 2 N., R. 6 E. Schlamm well, on west side of trail 9, about an eighth of a mile north of trail 10, near Henryville. Measurements made by Kenneth Cook. Records available: 1936-49.

Clark 1--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.94	6.57	9.73	3.23	14.80	19.34	20.40	22.72	23.31	24.58	25.19	25.60
2	9.59	7.34	10.25	4.14	14.94	19.45	20.52	22.77	23.84	24.61	25.20	25.61
3	10.22	7.92	10.77	5.03	15.10	19.54	20.64	22.81	23.88	24.64	25.21	25.64
4	10.51	8.34	11.24	6.02	15.27	19.65	20.75	22.85	23.91	24.67	25.24	25.67
5	1.99	7.93	11.61	6.73	15.45	19.76	20.86	22.87	23.94	24.80	25.26	25.70
6	2.59	7.71	11.64	7.24	15.63	19.87	20.96	22.92	23.97	24.69	25.29	25.73
7	5.38	7.79	10.13	7.80	15.79	19.97	21.06	22.97	23.99	24.70	25.30	25.74
8	6.72	7.97	9.94	7.97	15.94	20.07	21.09	23.02	24.00	24.73	25.31	25.75
9	7.47	8.30	9.95	8.42	16.09	20.19	21.18	23.07	24.02	24.75	25.32	25.77
10	8.31	8.71	.77	8.95	16.26	20.28	21.27	23.11	24.05	24.78	25.33	25.79
11	9.04	9.15	1.50	9.41	16.42	20.39	21.36	23.16	24.09	24.80	25.33	25.81
12	9.49	9.68	3.14	9.87	16.59	20.49	21.45	23.15	24.12	24.81	25.34	25.67
13	9.92	10.14	4.49	10.23	16.74	20.59	21.52	23.19	24.15	24.81	25.35	25.49
14	10.43	10.49	5.45	10.62	16.91	20.69	21.60	23.22	24.18	24.84	25.36	25.44
15	10.99	1.09	6.36	10.96	17.06	20.77	21.67	23.25	24.20	24.86	25.38	25.44
16	11.48	1.60	7.05	11.36	17.21	19.95	21.75	23.29	24.22	24.88	25.39	25.45
17	10.54	3.49	7.44	11.69	17.36	19.77	21.82	23.32	24.24	24.93	25.41	25.48
18	9.01	4.73	7.69	11.96	17.52	19.21	21.89	23.34	24.27	24.93	25.42	25.51
19	1.54	5.63	6.47	12.30	17.66	19.14	21.96	23.35	24.30	24.95	25.44	25.40
20	4.49	5.63	6.37	12.64	17.77	19.17	22.03	23.38	24.33	24.95	25.45	25.35
21	6.04	5.66	6.65	12.96	17.91	19.26	22.09	23.42	24.35	24.97	25.47	25.32
22	5.57	6.11	6.94	13.21	18.04	19.37	22.14	23.46	24.36	24.99	25.50	25.30
23	5.99	6.74	1.42	13.47	18.17	19.48	22.21	23.50	24.38	25.02	25.52	25.29
24	(a)	7.24	2.71	13.69	18.31	19.61	22.28	23.54	24.41	25.04	25.54	25.30
25	.69	7.66	3.74	13.90	18.44	19.73	22.34	23.58	24.44	25.04	25.52	25.34
26	1.44	8.22	4.52	14.09	18.59	19.85	22.41	23.62	24.48	25.09	25.54	25.37
27	1.34	8.67	.77	14.25	18.70	19.97	22.46	23.65	24.51	25.09	25.54	23.64
28	.99	9.14	1.68	14.41	18.83	20.09	22.52	23.68	24.53	25.12	25.56	22.87
29	2.49		2.76	14.51	18.96	20.20	22.57	23.71	24.52	25.14	25.58	22.49
30	4.26		3.57	14.66	19.09	20.32	22.62	23.75	24.54	25.16	25.59	22.28
31	5.46		2.97		19.22		22.67	23.78		25.17		22.21

a Full.

b Estimated.

c Tape measurement.

Clark 2. Clark State Forest. NW $\frac{1}{4}$ lot 282, Clark Military Grant, at former Purdue camp site. Measurements made by Kenneth Cook. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.6	Apr. 7	1.64	July 7	4.22	Oct. 5	9.82
13	9.67	14	2.0	14	5.01	12	9.83
20	7.12	21	2.22	21	5.52	19	9.90
27	1.65	28	2.1	28	6.24	26	9.91
Feb. 3	1.48	May 5	2.61	Aug. 4	7.25	Nov. 3	10.0
10	1.34	12	2.17	11	8.41	10	10.1
17	1.08	19	3.22	17	8.13	17	10.19
24	1.4	26	3.90	25	8.74	25	10.26
Mar. 3	1.85	June 2	4.57	Sept. 1	9.05	Dec. 1	10.32
11	.68	9	5.37	7	9.3	9	10.4
17	1.54	16	1.85	14	9.71	15	9.2
24	1.27	23	2.86	21	9.82	22	9.36
31	1.15	30	3.38	28	9.85	29	8.76

Clark 3. Indiana Gas & Water Co. In Jeffersonville, in public water-supply well field, Tenth and Fulton Sts. Measurements made by T. G. Meloy, Indiana Gas & Water Co. Records available: 1943-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.95	22.87	22.35	22.15	22.17	21.95	21.81	24.27	25.35	24.15	25.55	24.95
2	24.07	22.95	22.75	22.65	22.05	22.75	21.84	24.55	25.35	24.38	25.75	25.05
3	24.33	22.95	23.07	22.47	21.95	23.27	22.15	24.51	25.07	24.53	25.75	24.83
4	24.15	22.75	23.39	22.15	22.65	23.15	21.87	24.89	24.75	24.15	25.45	24.75

Clark 3--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	24.35	22.77	22.95	21.99	22.41	22.75	22.17	24.75	24.77	23.85	25.15	24.75
6	23.95	23.11	23.27	21.75	22.75	23.17	22.35	24.35	25.15	23.83	24.85	24.95
7	23.99	22.79	23.57	21.75	23.65	22.95	22.75	23.77	24.75	24.75	24.55	24.55
8	24.07	23.17	23.65	21.55	23.61	22.77	22.85	23.77	24.55	24.55	24.75	24.57
9	24.18	23.13	23.45	21.15	22.35	23.17	22.75	23.95	24.77	24.37	25.15	24.45
10	24.29	23.75	22.75	21.40	22.09	22.75	21.95	24.39	24.75	24.57	25.05	24.15
11	24.25	23.27	22.85	20.95	21.75	22.35	22.75	24.45	24.67	25.15	24.51	23.75
12	24.17	22.79	22.93	21.45	21.55	21.97	23.15	24.07	23.75	25.75	24.45	23.75
13	24.15	23.21	23.11	20.75	21.85	22.75	23.41	23.95	24.75	25.53	23.95	24.15
14	23.97	23.05	22.75	21.15	22.75	22.19	22.75	23.75	25.55	25.25	24.95	24.75
15	24.07	22.85	22.85	21.27	21.85	22.05	22.35	23.75	25.15	25.05	24.75	24.05
16	.....	23.35	22.65	21.25	21.77	21.35	22.75	24.55	24.75	24.75	24.57	23.75
17	24.01	23.55	22.51	21.18	22.17	21.09	22.65	24.35	24.65	24.65	24.97	23.65
18	24.45	23.75	21.95	20.95	22.15	21.15	22.81	24.75	24.35	25.15	24.95	23.43
19	24.07	23.55	21.99	21.09	22.35	20.99	23.45	24.77	24.15	25.75	24.75	23.85
20	24.25	21.75	.....	21.75	22.55	21.75	23.51	24.53	24.75	25.55	24.68	24.15
21	24.13	22.15	22.45	21.57	22.43	22.07	23.15	23.75	24.85	25.75	24.53	24.55
22	23.75	22.05	22.25	22.15	22.01	21.81	23.17	23.75	24.75	25.05	24.75	24.45
23	23.99	22.75	21.89	21.75	21.85	22.05	22.95	23.81	24.75	24.75	24.75	24.65
24	23.75	22.65	21.95	22.21	21.75	21.93	.....	23.75	24.65	24.85	24.55	24.55
25	23.51	22.79	21.75	21.75	21.95	22.05	23.55	23.75	24.37	24.75	24.75	23.75
26	22.95	23.15	21.75	22.25	21.99	21.81	23.53	23.78	24.75	24.55	24.47	23.75
27	22.75	23.33	21.95	21.91	21.75	21.85	23.95	23.75	24.55	25.15	24.55	24.15
28	21.95	23.05	22.35	21.99	21.77	21.85	24.35	23.83	24.55	25.05	24.05	24.55
29	22.75		22.61	22.07	21.75	21.84	24.55	24.55	24.99	24.89	24.75	24.55
30	22.96		22.27	21.95	21.85	21.81	24.29	24.95	23.95	24.75	24.75	24.05
31	22.85		22.19		21.77		24.31	25.15		24.79		24.25

Clark 5. Owner unknown. About 40 feet north of Kenwood Ave., about 100 feet east of intersection with Gutford Road. Maintained in connection with Louisville, Ky., project, by Geological Survey, U. S. Dept. of Interior. Records available: 1944-49. Aug. 2, 12.26; Oct. 28, 15.00; Dec. 28, 14.50.

Clinton County

Clinton 1. Frankfort Water Co. In Frankfort, about 380 feet north of Washington St. and about 240 feet east of Jackson St. Measurements made by S. E. Stern, Frankfort Water Co. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	29.09	Apr. 15	19.38	July 8	28.58	Oct. 7	39.20
14	28.48	22	19.28	15	28.45	14	39.55
21	27.05	29	19.90	22	31.57	21	38.18
28	24.70	May 6	22.57	29	33.25	28	37.79
Feb. 4	24.05	13	22.86	Aug. 5	33.40	Nov. 4	37.12
11	24.12	20	24.45	12	36.75	12	38.50
25	20.03	27	24.58	19	38.09	18	39.14
Mar. 4	20.84	June 3	22.42	26	39.89	25	36.12
11	18.05	10	22.55	Sept. 2	38.59	Dec. 2	37.13
18	18.70	17	25.03	9	39.60	9	37.02
25	19.28	24	25.37	16	39.70	16	36.69
Apr. 1	19.19	July 1	28.74	23	40.12	23	35.70
8	18.45						

Clinton 2. Frankfort Ice Co. In Frankfort, about 150 feet west of alley on east side of ice plant and about 60 feet north of center-line of track of Toledo, St. Louis & Western Railroad Co. Measurements made by S. E. Stern, Frankfort Water Co. Records available: 1944-49.

Clinton 2--Continued.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	49.90	41.90	.....	36.28	36.36	39.80	45.20	48.90	.....	57.09	54.82	54.63
2	48.90	42.25	.....	36.57	35.79	40.29	46.28	49.63	.....	56.55	54.55	54.77
3	47.92	41.98	.....	35.75	37.60	40.20	.....	49.76	55.80	55.97	54.83	54.77
4	48.05	41.69	36.73	34.83	38.54	40.93	46.12	.....	.....	56.04	54.77	54.14
5	47.70	41.90	36.11	34.95	39.10	40.48	45.93	.....	55.03	56.19	55.00	53.76
6	47.25	41.20	35.13	34.80	39.75	39.53	46.83	51.20	54.80	55.90	55.51	54.02
7	47.20	40.19	34.80	34.95	40.05	40.85	.....	50.80	55.47	56.38	56.08	53.88
8	47.27	40.80	35.20	35.50	38.97	41.32	46.72	50.87	.....	56.95	55.82	54.52
9	46.38	41.30	35.20	36.00	38.63	.....	46.55	51.96	.....	56.55	55.72	54.46
10	45.75	41.25	35.46	35.87	38.87	41.96	.....	52.95	56.30	55.88	55.58	54.20
11	46.37	41.80	35.59	34.70	38.96	42.30	45.76	.....	.....	56.30	55.30	53.47
12	46.18	41.60	36.00	35.05	39.27	41.95	45.87	54.05	.....	56.35	55.15	52.85
13	46.24	40.50	.....	34.98	40.13	41.45	45.87	54.18	.....	56.74	55.85	53.74
14	46.10	39.72	34.26	36.06	40.88	42.10	.....	53.70	.....	56.78	56.63	54.00
15	46.40	39.85	35.32	36.75	.....	42.22	46.22	53.27	.....	56.63	56.46	54.06
16	45.03	40.38	35.40	37.17	39.97	.....	46.50	53.83	.....	56.09	56.41	53.85
17	44.59	40.60	35.87	36.28	40.62	.....	.....	54.19	56.52	55.81	56.32	53.68
18	44.98	40.30	36.45	34.98	41.08	41.92	46.14	54.85	56.05	56.04	56.33	52.86
19	44.53	40.08	36.75	35.60	.....	.....	47.22	54.87	55.45	55.93	56.02	52.22
20	45.55	39.44	36.50	35.85	41.63	40.80	48.30	55.40	56.13	55.79	55.28	52.30
21	44.72	.....	35.40	36.37	41.85	41.87	.....	.....	56.38	55.75	55.05	51.99
22	45.12	.....	35.55	35.94	41.24	42.11	49.40	54.08	.....	55.73	55.71	51.55
23	44.00	.....	36.05	36.24	40.72	.....	49.47	54.75	56.92	55.59	55.00	52.41
24	42.45	.....	36.50	35.54	41.75	42.93	.....	55.35	56.86	55.18	54.90	52.45
25	43.25	.....	36.44	34.77	42.22	43.38	47.60	.....	56.45	55.50	54.05	51.80
26	43.04	.....	36.98	35.72	.....	.....	48.41	56.44	56.55	55.52	54.45	51.95
27	43.02	.....	35.55	35.88	.....	42.38	49.04	56.89	.....	55.72	53.92	51.05
28	42.40	.....	35.30	36.80	42.22	43.50	.....	.....	56.45	55.36	53.55	51.10
29	43.13	.....	36.20	37.22	41.60	43.97	50.10	.....	56.69	55.40	53.90	50.80
30	42.30	.....	36.30	37.20	40.25	.....	50.40	.....	57.03	54.78	54.24	50.15
31	41.38	.....	36.00	.....	39.20	.....	.....	.....	.....	54.22	.....	49.60

a Estimated.

b Tape measurement.

Clinton 3. Frankfort Light Plant. In Frankfort, southeast corner of settling ponds at municipal light plant. Measurements made by S. E. Stern, Frankfort Water Co. Records available: 1944-49. Recorder removed and records discontinued May 6, 1949.

From recorder charts					
Day	Jan.	Feb.	Mar.	Apr.	May
1	32.07	28.24	26.65	22.36	19.30
2	31.06	28.30	27.07	22.20	17.38
3	30.30	28.02	.....	21.80	15.38
4	30.51	27.93	26.74	22.38	16.43
5	29.86	28.40	26.66	23.59	16.40
6	30.13	29.64	26.85	24.22	.....
7	30.00	30.07	27.44	24.68	.....
8	29.92	29.57	28.63	22.80	.....
9	29.98	28.68	29.23	19.50	.....
10	29.76	a28.22	29.05	a17.82	.....
11	29.97	a28.00	28.02	16.43	.....
12	29.67	27.80	27.60	15.67	.....
13	.....	27.57	27.27	15.30	.....
14	30.00	27.45	26.89	16.60	.....
15	29.52	27.09	26.73	16.79	.....
16	29.75	.....	25.37	.....	.....
17	29.34	.....	23.24	.....	.....
18	28.97	.....	22.51	.....	.....
19	.....	28.49	22.24	.....	.....
20	.....	29.50	20.66	.....	.....
21	28.30	29.98	20.73	.....	.....
22	28.35	30.16	21.30	.....	.....
23	28.21	.....	22.60	14.40	.....
24	28.04	.....	24.01	15.71	.....

a Estimated.

Clinton 3--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May
25	28.03	27.42	27.18	17.40	.....
26	.....	27.35	28.36	18.23	.....
27	.....	27.00	27.80	16.86	.....
28	.....	26.67	27.50	17.51	.....
29	29.75		25.75	20.83	.....
30	29.91		23.42	19.58	.....
31	28.73		22.43		.....

Clinton 4. Frankfort Light Co. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 21 N., R. 1 W., northwest corner of light company site in Frankfort. Unused drilled well, diameter 12 inches, depth 230 feet. Measuring point, edge of board covering over well opening, 0.5 foot above land-surface datum. Automatic water-stage recorder installed May 18, 1949. Measurements made by Ray Atkins, Frankfort. Records available: 1949.

From recorder charts

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	38.68	41.32	40.94	41.55	33.33	30.24	26.10
2	.....	39.99	41.47	40.73	41.43	32.76	31.58	26.84
3	.....	40.62	41.30	40.73	40.77	31.00	32.42	26.70
4	.....	41.07	41.57	37.65	37.15	32.64	32.54	26.36
5	.....	41.05	40.80	41.77	35.37	34.17	30.57	26.15
6	.....	40.86	40.78	41.10	34.50	33.95	29.72	26.65
7	.....	38.98	40.83	40.80	34.53	34.63	28.18	26.33
8	.....	40.02	42.00	40.68	35.08	34.70	27.67	26.48
9	.....	40.73	41.24	40.74	35.28	32.49	28.19	30.18
10	.....	41.06	41.49	41.52	35.47	30.84	27.73	31.05
11	.....	41.19	40.83	42.60	34.57	32.54	27.78	29.53
12	.....	41.70	40.78	41.56	32.12	33.85	27.53	28.00
13	.....	41.67	40.77	41.48	33.25	34.36	31.99	27.46
14	.....	41.25	40.83	41.68	34.33	34.57	32.37	27.08
15	.....	41.08	40.82	40.94	35.00	34.73	28.23	26.90
16	.....	41.55	40.83	41.29	35.34	34.20	26.93	27.25
17	.....	41.26	41.66	41.32	35.00	31.67	28.54	26.99
18	.....	41.07	42.06	41.53	32.87	31.00	30.02	26.62
19	38.68	40.96	41.37	41.62	31.40	30.15	30.83	26.18
20	34.31	40.75	41.24	41.79	32.17	30.20	29.75	26.12
21	33.04	40.88	42.01	41.49	33.95	31.68	27.87	26.05
22	32.35	41.98	41.92	41.03	34.91	32.82	27.50	26.32
23	32.02	40.99	41.47	41.09	35.40	32.85	27.51	26.39
24	30.40	40.94	41.20	41.42	35.88	30.69	27.08	26.38
25	33.70	40.87	41.78	41.59	34.16	30.35	26.68	26.64
26	35.15	41.40	41.11	41.64	32.83	29.53	26.98	25.60
27	36.22	41.53	41.02	41.84	31.72	29.16	26.26	25.05
28	38.12	41.07	40.97	41.83	33.30	29.42	25.78	25.18
29	39.73	40.98	42.20	41.85	34.65	28.92	26.13	25.22
30	38.65	41.02	41.84	41.12	35.08	28.98	26.08	25.29
31	34.80		41.85	41.43		28.24		.....

Crawford County

Crawford 1. J. F. Blevins. Near English, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 3 S., R. 1 W., west side of State Highway 37, 2.3 miles south of junction with State Highway 64. Measurements made by Everett Enlow and Dennis V. Scheckles. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	2.55	Aug. 12	11.07	Oct. 1	11.13	Nov. 18	9.30
14	.68	19	10.60	7	7.56	25	9.99
23	1.41	26	10.93	14	7.83	Dec. 4	10.40
28	2.81	Sept. 2	11.17	23	8.03	10	10.40
Feb. 3	2.78	9	11.52	28	7.73	17	5.00
11	1.23	17	11.40	Nov. 4	8.30	24	4.50
Aug. 10	11.02	23	11.15	11	9.40	30	3.11

Crawford 2. Zenis R. Parkhill. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 3 S., R. 1 E., 2 miles northwest of Leavenworth, about 400 feet northwest of Mansfield Church and about 30 feet southwest of edge of road. Measurements made by Zenis R. Parkhill. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	1.30	Apr. 8	2.25	July 8	4.52	Oct. 8	3.89
14	1.40	15	1.85	15	4.60	14	3.39
21	.43	22	2.90	22	4.73	21	3.52
28	.44	29	3.18	29	4.84	28	3.77
Feb. 4	1.28	May 6	3.62	Aug. 5	4.89	Nov. 4	5.82
11	.11	13	3.25	12	5.03	11	4.17
18	1.24	20	3.71	19	5.09	18	5.22
25	1.56	27	3.89	26	5.20	25	4.30
Mar. 4	2.53	June 3	4.23	Sept. 2	4.31	Dec. 2	4.44
11	1.09	10	4.39	9	5.45	9	.48
18	1.11	17	4.17	16	5.48	16	1.25
25	.43	24	4.30	23	5.60	23	1.30
Apr. 1	1.63	July 1	4.45	30	5.69	30	1.52

Crawford 3. J. Elmer Faulkenburg. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 3 S., R. 1 W., about 100 feet south of county road, about 50 feet east of Crawford-Perry County line, near St. Croix. Measurements made by J. Elmer Faulkenburg. Records available: 1944-49.

Mar. 5	13.4	May 7	15.4	Sept. 3	15.4	Nov. 12	16.0
12	11.3	14	13.5	10	16.0	21	16.4
19	10.1	28	11.6	17	15.5	28	16.4
26	7.1	June 4	12.4	24	15.4	Dec. 3	16.7
Apr. 2	9.8	July 23	17.1	Oct. 1	15.8	10	15.5
9	11.3	Aug. 6	13.7	8	14.6	17	15.9
16	14.1	13	15.5	15	15.9	24	14.5
23	15.1	20	15.5	Nov. 5	16.0	31	11.6
30	14.9	27	15.7				

Daviess County

Daviess 1. John Harbin. In Cannelburg, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 3 N., R. 5 W. Measurements discontinued Oct. 29, 1948.

Daviess 2. Thresa Seal. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 3 N., R. 5 W., 1 block south of Baltimore & Ohio Railroad and 600 feet west of main street. Unused dug well, diameter 24 inches, depth 16.5 feet. Measuring point, east side of shoulder of 24-inch tile, 0.5 foot above land-surface datum. Measured by Virgil J. Seal, Cannelburg. Records available: 1949.

Mar. 9	4.36	May 2	7.70	July 25	8.80	Oct. 25	8.93
14	1.90	9	8.40	Aug. 1	9.40	31	9.54
21	2.85	16	8.66	8	9.86	Nov. 7	10.02
28	1.20	30	9.33	16	9.28	14	10.00
Apr. 4	2.35	June 13	8.64	Sept. 12	9.88	28	10.42
11	3.90	20	7.00	19	9.88	Dec. 6	10.63
18	4.90	July 11	8.83	26	10.65	12	7.73
25	6.90	18	9.25	Oct. 17	9.55	20	7.96

Dearborn County

Dearborn 1-8. Schenley Distillers, Inc. Old Quaker plant, Greendale, Lawrenceburg. Measurements made by Frank C. Caveman. Records available: 1944-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	87.60	75.50	60.65	73.55	79.10	85.60	86.45	.....	93.65	91.90	90.35	90.90
2	87.50	75.50	60.75	73.60	81.10	86.40	86.70	.....	93.70	90.00	89.20	90.60
3	87.20	71.45	62.35	73.30	81.40	86.40	86.80	.....	94.25	91.30	89.40	90.10
4	90.00	70.80	62.50	75.60	83.15	86.40	87.25	.....	91.40	89.80	91.40	88.80

Dearborn 1-8--Continued.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	88.30	70.10	65.00	75.60	83.25	86.10	.....	.....	94.50	90.80	89.65	93.46
6	87.85	68.50	66.20	78.05	83.35	86.20	89.55	.....	95.40	90.60	87.45	90.85
7	88.85	69.25	61.85	78.30	84.10	87.05	89.95	.....	95.80	90.50	98.50	94.40
8	87.35	71.80	70.30	78.40	81.80	85.65	87.55	85.40	95.40	90.10	89.80	92.40
9	86.15	70.75	69.65	77.10	85.10	83.85	87.30	85.65	96.00	89.30	89.55	92.55
10	89.93	70.65	72.10	75.00	83.80	83.75	86.00	87.40	96.65	90.10	89.95	92.35
11	90.45	72.60	71.70	78.40	83.70	83.50	.....	89.30	92.40	91.10	90.30	89.30
12	.....	73.00	71.10	.....	84.65	.....	.....	89.40	95.35	93.50	90.50	91.50
13	.....	71.05	69.70	.....	84.00	87.35	.....	89.90	95.00	93.90	87.20	91.20
14	.....	72.35	72.40	.....	85.00	85.45	.....	88.50	96.55	94.25	92.30	90.70
15	.....	68.85	71.15	.....	83.40	86.60	.....	91.20	95.85	93.75	90.15	91.00
16	.....	68.30	70.65	.....	86.60	88.55	.....	91.60	95.90	93.30	98.90	91.85
17	84.12	68.80	71.25	.....	84.55	87.70	.....	91.65	94.55	94.20	90.00	91.40
18	.....	72.10	71.40	.....	81.75	88.85	.....	92.20	90.40	94.20	89.75	89.80
19	.....	73.40	71.65	.....	80.40	86.35	.....	92.10	94.70	93.95	89.50	90.30
20	.....	70.40	71.40	.....	80.35	87.90	.....	92.40	93.80	93.15	87.95	91.20
21	.....	68.70	73.30	.....	78.70	87.80	.....	88.10	95.00	90.75	98.90	90.70
22	.....	62.50	71.55	.....	79.05	84.40	.....	91.50	94.90	89.80	89.85	90.85
23	.....	61.05	73.55	.....	.....	85.50	.....	92.25	94.40	92.50	90.55	91.60
24	.....	60.00	76.00	.....	.....	85.60	.....	93.00	94.55	92.65	89.90	90.40
25	81.70	60.40	75.50	.....	.....	85.70	.....	93.05	90.95	92.05	91.15	88.20
26	80.50	59.90	75.20	80.80	.....	85.90	.....	93.70	94.60	91.90	91.90	.....
27	80.20	57.60	73.10	81.80	.....	89.40	.....	93.55	94.05	90.05	88.65	.....
28	79.00	60.00	77.35	81.50	.....	87.65	.....	91.40	93.00	89.10	90.40	90.20
29	79.50	.....	77.30	81.25	.....	86.50	.....	92.60	92.90	89.50	90.50	91.10
30	76.00	.....	78.60	79.60	81.80	86.50	.....	93.05	92.20	86.95	91.85	91.60
31	75.30	.....	76.20	.....	83.45	.....	.....	93.00	.....	91.90	.....	90.40

a Tape measurement.

Dearborn 1-10. Schenley Distillers, Inc. Old Quaker plant, Lawrenceburg. 10 feet east of well 10 and 170 feet west of well 11. Measurements made by personnel of Schenley Distillers, Inc. Records available: 1946-49.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	14.55	13.40	15.60	24.85	27.50	.....	.....	37.60	41.00	42.80
2	.....	.....	14.50	13.40	25.80	25.20	27.55	.....	38.70	37.80	41.10	43.60
3	34.05	.....	.....	11.00	25.85	.....	27.55	.....	38.80	38.10	41.10	.....
4	34.95	.....	.....	20.50	18.50	25.95	27.50	.....	38.60	38.30	41.15	.....
5	34.85	.....	.....	.....	18.70	.....	.....	.....	38.50	38.55	41.20	42.70
6	34.60	.....	.....	.....	18.90	29.10	.....	.....	39.50	38.75	41.20	43.35
7	33.50	.....	6.37	.....	19.05	29.05	.....	.....	40.15	38.95	41.25	44.00
8	33.35	.....	.....	13.30	.....	29.25	.....	.....	41.40	39.10	41.30	44.15
9	.....	.....	.....	13.70	19.70	.....	.....	.....	41.70	39.20	41.40	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	42.20	39.30	41.60	43.80
11	23.35	.....	.....	.....	20.40	.....	33.40	.....	40.00	39.45	41.75	43.60
12	22.95	.....	.....	.....	20.65	.....	34.20	.....	41.60	39.65	41.70	43.00
13	22.30	.....	.....	.....	20.85	.....	.....	.....	41.50	39.80	41.70	43.60
14	21.65	.....	.....	.....	.....	36.75	.....	.....	42.15	39.90	42.65	43.50
15	21.40	.....	11.10	.....	18.90	36.95	33.20	.....	42.10	40.00	42.55	.....
16	20.90	.....	11.25	.....	21.55	37.05	33.30	.....	41.80	40.05	42.30	.....
17	20.35	.....	11.60	.....	.....	.....	33.10	.....	41.50	40.10	.....	43.75
18	20.45	.....	11.90	15.20	.....	.....	34.65	.....	40.05	40.20	.....	.....
19	20.35	.....	12.10	15.35	.....	.....	34.55	.....	41.80	40.30	.....	.....
20	20.40	.....	9.95	15.45	.....	.....	34.95	.....	42.10	40.35	.....	.....
21	20.20	4.50	.....	15.60	.....	.....	35.05	.....	42.60	40.40	42.70	43.70
22	20.35	4.40	.....	16.00	.....	.....	35.00	.....	42.60	40.50	43.10	43.80
23	18.10	4.60	.....	16.10	23.35	26.70	35.20	.....	42.20	40.55	43.10	43.80
24	19.45	.....	.....	13.85	23.40	26.80	35.25	.....	42.10	40.55	.....	43.10
25	19.60	.....	.....	16.25	23.60	.....	.....	.....	.....	40.65	.....	42.95
26	18.90	.....	.....	16.40	23.85	.....	.....	36.45	35.85	40.70	.....	43.15
27	17.25	5.30	.....	17.00	24.10	28.00	.....	36.70	36.20	40.80	43.25	42.60
28	16.30	.....	13.50	17.30	24.30	28.05	.....	36.80	36.60	40.80	43.10	42.80
29	14.90	.....	13.50	17.60	24.00	27.35	.....	.....	36.90	40.90	42.70	42.90
30	.....	.....	13.35	17.70	24.50	27.45	.....	.....	37.25	40.95	43.30	42.50
31	.....	.....	13.25	.....	24.80	.....	.....	.....	.....	41.00	.....	42.00

a Tape measurement.

Dearborn 2. City of Lawrenceburg. In Lawrenceburg, at municipal water plant, Third and Shipping Sts. Measurements made by air line to nearest foot. Measured by R. C. Patton, Lawrenceburg Water Department. Records available: 1944-49. Feb. 13, 56; Mar. 20, 52; May 22, 54.

Dearborn 4. City of Lawrenceburg. In Lawrenceburg, 43.4 feet north of centerline of High St. and 2.5 feet east of curb line of Mulberry St. Measurements made by R. C. Patton, Lawrenceburg Water Department. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	30.38	Feb. 13	31.45	Apr. 24	32.20	May 22	39.35
23	31.17	Mar. 20	30.66	May 15	37.07		

Dearborn 5. City of Lawrenceburg. In Lawrenceburg, at north side of east Center St. in northeast corner of alley between Arch and St. Clair Sts. Measurements made by R. C. Patton, Lawrenceburg Water Dept. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 13	22.65	Apr. 24	27.57	May 22	34.85
Mar. 20	26.20	May 15	32.19		

Decatur County

Decatur 1. Decatur County "public well". Letts. Measurements made by M. S. Elliott. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	1.30	Apr. 8	1.16	July 9	3.91	Oct. 7	3.59
14	1.67	15	2.80	15	4.50	14	2.65
21	1.89	22	3.20	22	4.54	21	1.80
28	1.79	29	3.38	29	2.80	28	2.10
Feb. 4	1.21	May 6	3.83	Aug. 5	4.40	Nov. 4	2.37
11	2.40	13	4.10	12	4.90	11	3.40
18	2.17	20	4.20	19	5.40	19	3.44
25	1.89	27	4.13	26	5.82	25	3.79
Mar. 4	1.31	June 3	4.70	Sept. 2	3.50	Dec. 3	3.62
11	1.10	10	4.34	9	4.55	10	2.53
18	4.47	17	.70	16	3.60	16	3.31
25	2.79	24	1.20	23	2.70	23	3.86
Apr. 1	1.10	July 1	1.00	30	2.86	30	3.54

De Kalb County

De Kalb 1. Auburn Water Dept. well 3. At Auburn Water Works. Measurements made by Ted Haynes, Auburn Water Dept. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	9.5	Apr. 4	7.5	July 4	10.5	Oct. 3	10.5
10	7.5	11	8.5	11	9.5	10	12.5
17	10.5	18	8.5	18	11.5	16	10.5
24	8.5	25	10.5	25	11.5	24	9.5
31	9.5	May 2	6.5	Aug. 1	6.5	31	10.5
Feb. 7	10.5	9	8.5	8	10.5	Nov. 7	10.5
14	10.5	16	6.5	15	8.5	14	9.5
21	9.5	23	8.5	22	10.5	21	10.5
28	9.5	30	6.5	29	9.5	28	11.5
Mar. 7	9.5	June 6	9.5	Sept. 5	8.5	Dec. 5	11.5
14	10.5	13	9.5	12	9.5	12	12.5
21	9.5	20	9.5	19	9.5	19	11.5
28	7.5	27	7.5	26	9.5	26	6.5

De Kalb 2. Worth Wareham. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 34 N., R. 13 E., about 0.3 mile north of U. S. Highway 6 and 100 feet east of U. S. Highway 27. Measurements made by Worth Wareham. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	2.50	Apr. 8	3.20	July 8	4.67	Oct. 14	3.90
14	2.39	15	4.00	15	4.65	21	3.88
21	2.31	22	4.02	Aug. 5	5.60	28	3.91
28	2.30	29	3.82	12	5.62	Nov. 4	5.00
Feb. 4	2.32	May 6	3.88	19	6.10	11	5.02
11	2.33	13	4.50	26	6.13	18	5.30
18	2.29	20	4.70	Sept. 2	6.16	25	5.33
25	2.30	27	4.10	9	6.60	Dec. 2	5.29
Mar. 4	3.10	June 3	4.70	16	6.90	9	5.37
11	3.12	10	5.00	23	6.92	16	3.59
18	3.14	17	4.70	30	6.93	23	2.10
25	3.60	23	4.68	Oct. 7	6.88	30	2.13
Apr. 1	3.50	July 1	4.70				

Delaware County

Delaware 2. Merlin V. Painter. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 19 N., R. 8 E. Measurements made by Merlin V. Painter. Records available: 1945-49.

Jan. 9	2.50	Apr. 16	6.67	July 16	10.60	Oct. 8	13.95
15	5.20	23	7.02	22	11.00	17	14.11
22	4.60	29	7.32	31	11.48	22	13.95
29	6.60	May 9	8.10	Aug. 6	11.80	29	14.52
Feb. 5	5.75	14	8.38	13	12.04	Nov. 5	14.48
12	6.32	22	8.39	19	12.50	14	14.72
19	4.20	28	8.35	29	12.95	21	14.71
27	5.46	June 6	8.88	Sept. 5	12.97	28	14.78
Mar. 5	6.13	10	9.30	10	13.15	Dec. 3	14.75
12	6.15	19	9.85	17	13.20	12	15.30
19	7.18	24	10.15	24	12.10	18	15.72
Apr. 2	6.00	July 2	10.44	Oct. 1	13.79	24	15.09
9	6.85						

Delaware 3. Harry C. Stafford. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 21 N., R. 10 E., about 2 miles east of U. S. Highway 35 and about 1 mile north of State Highway 28. Measurements made by Harry C. Stafford. Records available: 1946-49. Measurement discontinued Oct. 21, 1949.

Jan. 1	8.52	Feb. 26	7.15	Apr. 23	7.94	July 9	10.07
8	7.35	Mar. 5	8.18	30	7.38	16	10.72
15	6.84	12	8.87	May 7	8.21	23	11.17
22	7.45	19	9.09	21	8.56	30	11.30
29	6.69	26	6.51	June 4	9.77	Aug. 6	11.56
Feb. 5	8.62	Apr. 2	7.96	18	10.28	26	12.47
12	8.95	9	8.98	25	10.59	Oct. 21	12.39
19	7.11	16	8.96	July 2	9.81		

Dubuois County

Dubuois 2. Ferdinand State Forest. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 3 S., R. 3 W., north side of road near foot of hill at entrance to forest. Measurements made by Henry Huff, Ferdinand State Forest. Records available: 1936, 1937, 1942-49.

Jan. 14	10.30	Mar. 9	9.98	May 9	10.60	July 6	12.18
17	9.88	18	8.07	16	8.20	21	12.91
24	6.39	30	7.53	23	10.70	25	13.36
Feb. 1	9.35	Apr. 5	8.42	31	12.17	Aug. 1	13.89
7	9.91	11	9.37	June 6	12.91	15	15.27
14	7.60	22	9.41	13	13.19	22	15.19
21	9.39	25	10.09	23	9.89	29	14.78
28	10.29	May 2	9.86	27	10.72	Sept. 7	15.29

Dubois 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 12	15.45	Oct. 17	12.50	Nov. 17	15.59	Dec. 12	11.63
19	14.37	24	11.17	21	15.75	20	11.07
Oct. 3	15.48	31	12.75	30	15.98	27	9.71
10	12.59	Nov. 7	14.44				

Dubois 5. Harry Baker. In Haysville, in NW $\frac{1}{4}$ sec. 25, T. 1 N., R. 5 W., near southeast corner of intersection of State Highway 45 and Main St. Measurements made by Joe M. Popp. Records available: 1944-49.

Jan. 1	18.82	Apr. 9	13.46	July 9	17.83	Oct. 8	19.30
8	17.85	16	14.49	16	18.10	15	19.07
15	16.88	23	15.76	23	18.66	22	19.09
22	16.36	30	14.66	30	19.13	29	19.16
29	13.18	May 7	14.19	Aug. 6	19.54	Nov. 5	19.63
Feb. 5	13.86	14	16.38	13	20.90	12	19.89
12	14.76	21	16.77	20	19.85	19	20.21
19	14.85	28	17.39	27	20.13	26	20.33
26	12.14	June 4	17.10	Sept. 3	20.40	Dec. 3	20.84
Mar. 5	13.05	11	13.40	10	20.63	10	20.65
12	13.44	18	17.57	17	20.69	17	20.04
19	13.07	25	17.30	24	20.81	24	19.21
26	12.20	July 2	17.44	Oct. 1	20.87	31	18.47
Apr. 2	12.29						

Elkhart County

Elkhart 2. Grace Leer. SW $\frac{1}{4}$ sec. 29, T. 36 N., R. 7 E., about 1,000 feet south of New York Central Railroad, 3 miles west and 1 mile north of Millersburg. Measurements made by Gerald W. Leer. Records available: 1945-49.

Jan. 2	5.17	Apr. 4	4.52	July 4	4.88	Oct. 9	5.56
9	4.98	11	4.90	10	4.25	16	5.19
17	5.12	18	5.03	17	4.94	23	5.25
24	4.07	25	5.08	24	4.16	30	5.45
31	3.68	May 2	5.16	31	4.65	Nov. 6	5.54
Feb. 7	4.64	9	5.24	Aug. 15	5.19	13	5.57
14	4.24	16	5.48	22	5.43	20	5.55
21	3.90	23	5.14	29	5.54	28	5.72
28	4.09	29	5.23	Sept. 4	5.65	Dec. 4	5.73
Mar. 7	4.55	June 6	5.90	11	5.72	12	6.10
14	4.80	12	5.58	18	5.72	17	6.00
21	5.00	19	4.86	26	5.77	26	4.57
28	4.94	27	4.92	Oct. 2	5.85		

Fayette County

Fayette 2. Irene Kerr. NW $\frac{1}{4}$ sec. 8, T. 14 N., R. 12 E., about 5.5 miles northwest of Connersville. Measurements made by Mrs. Irene Kerr. Records available: 1946-49.

Jan. 5	0.37	Apr. 8	2.70	June 30	5.56	Sept. 29	8.30
19	2.49	13	3.95	July 7	5.28	Oct. 4	8.73
25	2.55	21	3.26	14	6.80	11	9.04
Feb. 1	3.02	27	3.84	19	7.17	Nov. 8	8.14
9	3.68	May 3	4.33	26	7.46	17	8.43
17	2.65	10	4.77	Aug. 3	7.79	24	8.68
22	3.02	19	4.85	12	8.32	29	8.85
Mar. 3	3.36	24	4.66	21	8.86	Dec. 7	9.15
10	3.19	31	5.37	Sept. 1	9.24	13	9.22
15	2.69	June 8	6.06	7	9.38	21	8.98
23	2.61	17	3.27	13	9.74	28	6.55
29	2.66	21	4.18	20	6.90		

Floyd County

Floyd 1. (50-13-27). Mr. Shane. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 3 S., R. 6 E., in field 110 feet west of Ohio River bank, 240 feet east of a point on River Road about 0.23 mile north of an east-west line through the Middle Creek stone bridge. Measurements made by personnel of the Geological Survey, U. S. Dept. of Interior. Records available: 1943-49. Mar. 14, 28.77; Aug. 2, 43.38; Oct. 28, 45.97; Dec. 28, 36.37.

Floyd 2. (50-13-26). Mr. Randall. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 3 S., R. 6 E., on land beside electric fence about 150 feet west of a point on River Road, 0.7 mile north of Middle Creek stone bridge. Measurements made by Geological Survey, U. S. Dept. of Interior. Records available: 1943-49. Mar. 14, 27.44; Aug. 2, 45.14; Oct. 28, 45.60; Dec. 28, 32.32.

Floyd 3. (50-14-1). Mr. Heil. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 3 S., R. 6 E., about 150 feet west of River Road and 150 feet north of fence, about 2.2 miles north of Middle Creek stone bridge, and about 2.3 miles south of New Albany city limits. Measurements made by personnel of the Geological Survey, U. S. Dept. of Interior. Records available: 1943-49. Mar. 14, 10.06; Aug. 2, 15.18; Oct. 28, 18.55; Dec. 28, 12.56.

Floyd 4. (50-14-2). Mr. Shane. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 3 S., R. 6 E., in open field 60 feet west of River Road, and 1.1 miles north of Middle Creek stone bridge, and about 2.4 miles south of New Albany city limits. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1943-49. Mar. 14, 16.42; Aug. 2, dry at 22 feet, measurement discontinued.

Floyd 6. (50-15-1). Mr. Royse. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 3 S., R. 1 E., about 150 feet west of River Road and about 1.4 miles south of New Albany city limits. Measurements made by personnel of the Geological Survey, U. S. Dept. of Interior. Records available: 1944-49. Mar. 14, 4.77; Aug. 2, well covered by concrete and pump installed, measurement discontinued.

Fountain County

Fountain 1. City of Hillsboro. In Hillsboro, at northeast corner of Regal Store, north of intersection of State Highways 34 and 341. Measurements made by L. E. Davidson. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	41.09	Apr. 19	38.50	July 12	39.55	Oct. 4	40.70
12	40.48	26	38.82	20	39.80	11	39.05
25	35.75	May 3	38.87	26	39.45	18	39.55
Feb. 1	36.80	10	38.90	Aug. 2	39.78	25	39.45
8	37.49	17	38.18	11	39.88	Nov. 1	39.25
15	38.17	24	39.24	17	40.00	8	39.55
22	37.86	June 1	38.60	23	40.28	16	39.85
Mar. 1	37.37	9	38.85	30	40.20	22	39.82
6	38.16	14	38.75	Sept. 8	40.42	29	39.76
15	39.50	22	39.12	13	40.31	Dec. 7	40.18
22	38.30	28	39.22	20	40.55	20	40.09
29	38.86	July 5	39.42	27	40.45	24	40.37
Apr. 12	38.40						

Franklin County

Franklin 1. Brookville Water Department. In Brookville, at south end of pumping plant. Public-supply well. Measurements made by Walter Cleaver, Brookville Water Dept. Records available: 1936-49

Franklin 1 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	27.0	Apr. 2	25.5	July 9	27.0	Oct. 1	28.7
9	23.5	9	26.2	16	27.5	8	29.5
16	25.5	16	27.5	23	26.0	15	29.4
22	23.5	30	28.0	30	28.0	22	28.5
29	21.5	May 7	28.5	Aug. 6	28.5	29	28.7
Feb. 5	25.5	14	28.2	13	28.2	Nov. 6	29.0
12	27.5	21	28.5	20	28.5	16	29.2
19	27.2	28	28.0	27	28.7	26	29.2
26	25.5	June 5	28.5	Sept. 3	28.5	Dec. 3	29.2
Mar. 5	26.5	13	28.2	10	28.7	17	29.0
12	26.5	18	26.5	17	28.5	24	28.5
19	26.2	25	27.0	24	28.7	31	28.2
26	25.5	July 2	27.2				

Franklin 4. Henry H. Harmeyer. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 10 N., R. 11 E., about 2 miles northwest of Batesville. Measurements made by Henry H. and Alvin A. Harmeyer. Records available: 1944-49.

Jan. 1	27.38	Apr. 9	20.57	July 9	20.29	Oct. 8	28.27
8	24.39	16	20.34	16	20.73	15	26.41
15	24.79	23	20.29	23	20.47	22	26.74
22	23.92	30	20.08	30	20.72	29	27.46
29	22.62	May 7	18.49	Aug. 6	27.04	Nov. 5	25.93
Feb. 5	22.72	14	19.77	13	24.72	12	25.43
12	22.26	21	21.69	20	26.89	19	21.37
19	21.84	28	22.41	27	24.82	26	22.73
26	21.47	June 4	22.17	Sept. 3	26.08	Dec. 3	22.46
Mar. 5	21.29	11	21.19	10	23.39	10	23.47
12	21.94	18	21.47	17	23.88	17	34.42
19	22.16	25	20.28	24	22.37	24	30.41
29	20.69	July 3	20.02	Oct. 1	22.92	31	32.19
Apr. 2	20.78						

Gibson County

Gibson 1. Oakland City College Farm. In Oakland City, on West St., south of State Highway 64. Measurements made by John D. McCarty. Records available: 1944-49.

Jan. 3	18.80	Apr. 4	16.38	July 4	17.42	Oct. 3	18.33
10	18.15	11	16.40	11	17.48	10	18.28
17	18.14	18	16.49	18	17.50	17	18.40
24	12.48	25	16.30	25	17.64	24	18.55
31	16.65	May 2	16.63	Aug. 1	17.70	31	18.41
Feb. 7	17.60	11	16.68	8	17.67	Nov. 7	18.50
14	15.50	15	16.88	15	17.20	14	18.43
21	17.02	23	16.86	22	17.90	21	18.63
28	17.17	30	17.00	29	17.92	28	18.44
Mar. 7	17.30	June 6	17.07	Sept. 6	18.04	Dec. 5	18.10
14	16.87	13	17.14	12	18.14	12	18.30
21	16.45	20	17.27	19	18.22	19	18.80
28	15.05	28	17.35	26	18.28	26	18.80

Gibson 2. James C. Gardner. W $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 12, T. 3 S., R. 12 W., about $3\frac{1}{2}$ blocks west of center of Owensville. Measurements made by Ivan P. Creek and James C. Gardner, Jr. Records available: 1947-49.

Mar. 12	5.60	May 21	10.58	Aug. 13	10.69	Oct. 23	9.95
19	5.13	June 4	11.63	20	11.36	Nov. 5	11.26
26	3.12	11	12.20	27	12.34	12	11.29
Apr. 2	4.06	18	11.11	Sept. 10	17.35	19	12.07
8	6.27	July 6	10.99	17	16.17	26	13.19
16	8.00	16	11.73	24	17.57	Dec. 3	14.11
30	8.58	Aug. 1	11.17	Oct. 1	18.46	17	11.22
May 7	9.46	6	12.57	16	10.85	24	9.18
14	9.68						

Grant County

Grant 2. Marion Water Works. At pumping station, west of reservoir, and north of railroad. Measurements made by personnel of Marion Water Works, Roy Surber, superintendent. Records available: 1945-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	68.80	68.15	.....	64.25	.....	69.05	72.55	71.05	74.65	75.45	74.20	74.45
2	67.40	67.15	65.50	.....	.....	68.05	71.90	70.90	75.70	75.00	73.30	75.65
3	66.70	66.85	64.00	.....	.....	69.45	71.75	72.00	76.05	74.60	73.80	74.10
4	69.55	66.90	66.50	.....	.....	69.90	72.85	72.25	76.20	75.65	75.40	72.10
5	.....	.....	63.30	63.75	.....	70.15	71.80	72.00	74.40	75.90	76.30	74.20
6	68.25	66.65	64.65	64.55	.....	70.35	72.95	72.30	75.70	75.35	76.60	75.00
7	69.85	66.75	62.95	66.00	.....	70.60	.....	72.20	74.65	76.20	75.50	75.40
8	71.20	67.10	64.40	63.60	.....	70.95	71.90	70.55	74.85	76.70	76.35	76.00
9	68.65	68.25	.....	65.85	.....	69.10	72.70	71.30	75.70	76.85	75.40	74.10
10	69.05	67.20	65.05	62.55	.....	70.15	73.05	71.85	76.15	75.00	76.30	75.10
11	70.85	66.25	63.70	64.80	68.00	70.55	72.00	72.10	76.30	75.50	74.70	73.50
12	69.05	66.85	66.50	65.70	68.25	70.80	72.00	72.20	74.65	75.05	75.95	74.60
13	70.25	.....	63.15	66.10	67.50	70.95	71.20	72.30	75.60	74.95	76.30	75.55
14	71.40	65.15	63.55	66.60	67.50	71.30	71.35	74.00	74.80	74.70	74.65	75.85
15	69.85	66.30	64.40	63.80	67.65	70.60	.....	73.30	72.90	74.60	75.55	76.05
16	68.05	65.90	64.10	65.40	67.10	70.55	.....	73.70	75.35	74.40	76.30	76.20
17	67.25	66.70	.....	64.80	68.55	69.80	71.50	73.15	76.00	74.30	75.40	74.30
18	68.15	65.65	64.70	64.65	.....	69.45	71.65	72.95	75.15	74.40	75.05	75.20
19	70.30	65.80	63.60	65.90	.....	70.00	71.70	74.10	74.70	74.35	75.90	75.95
20	.....	66.00	65.80	64.80	68.15	70.10	71.85	73.80	76.00	74.20	76.20	74.05
21	68.86	.....	62.30	65.90	66.90	70.30	71.90	74.20	74.95	74.10	75.20	75.10
22	68.05	65.10	62.30	62.90	67.30	70.90	73.00	71.65	76.25	74.30	76.00	75.60
23	66.60	65.00	63.70	65.15	66.10	71.10	73.50	73.20	74.90	74.60	76.00	76.25
24	67.20	65.40	64.20	65.75	68.25	.....	73.90	74.20	76.20	73.80	76.45	76.35
25	67.85	64.85	66.05	61.90	66.50	.....	71.70	74.75	76.60	73.90	74.65	73.40
26	66.05	66.80	64.10	.....	68.15	.....	73.20	75.05	76.65	74.25	75.65	69.80
27	67.70	66.15	63.50	.....	68.20	70.20	72.55	75.30	76.70	75.10	75.95	67.50
28	.....	64.25	64.90	.....	.....	.....	72.15	75.05	75.60	74.80	74.45	71.10
29	68.90	.....	63.30	.....	.....	.....	73.40	74.65	76.40	74.75	75.30	72.70
30	67.00	.....	65.80	.....	.....	71.50	73.35	74.40	75.45	73.70	76.00	71.90
31	66.80	.....	63.30	.....	.....	.....	73.35	75.45	.....	73.70	.....	72.70

a Estimated.

Grant 5. Anaconda Wire & Cable Co. In Marion, about 150 feet east of main track of Big Four Railroad and 130 feet south of East 8th St. Measurements made by C. C. Bishop, plant engineer, Anaconda Wire & Cable Co. Records available: 1945-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.35	49.12	47.21	46.72	45.08	48.07	62.18	52.42	55.27	55.41	55.33	54.24
2	49.78	49.33	47.49	46.02	45.87	48.69	51.75	52.80	55.54	54.80	55.55	54.54
3	49.25	49.39	47.75	45.20	46.25	49.37	50.51	53.02	55.25	54.70	55.80	54.76
4	49.75	49.60	47.95	45.82	46.57	48.90	49.73	53.41	53.93	55.07	56.00	54.45
5	51.05	49.00	47.27	46.06	47.13	47.91	50.09	53.60	52.92	55.57	55.63	54.18
6	50.95	48.23	46.57	46.23	47.72	48.65	50.43	53.92	54.05	56.01	54.95	54.55
7	50.93	48.92	47.17	46.38	47.22	49.12	50.73	51.79	54.87	56.13	54.80	54.83
8	50.29	49.50	47.48	46.36	46.47	49.32	51.35	52.42	55.28	55.65	55.25	55.04
9	49.38	49.46	47.70	45.70	47.13	49.58	51.00	53.02	55.56	54.42	55.55	55.15
10	50.67	49.59	47.74	44.99	47.75	49.87	49.89	53.77	55.40	54.58	55.69	54.67
11	50.66	49.59	47.76	45.61	48.07	49.83	50.25	54.07	54.88	55.05	55.89	53.41
12	51.05	49.17	47.05	45.74	48.42	49.86	50.76	54.34	54.76	55.38	55.63	53.90
13	51.25	48.10	46.22	45.88	48.77	49.74	51.44	54.03	55.05	55.64	54.49	54.45
14	51.61	48.50	46.62	46.32	48.25	50.05	51.85	52.67	55.17	55.76	54.55	54.75
15	51.20	48.73	46.94	45.75	47.21	50.48	52.26	53.00	55.36	55.40	54.83	53.98
16	50.20	48.81	47.52	45.12	47.84	50.65	52.00	53.55	55.55	54.37	54.90	55.13
17	50.31	49.94	48.09	44.55	48.38	51.00	51.60	53.96	55.17	54.75	54.97	54.45
18	50.37	49.11	48.80	45.46	48.88	50.45	51.77	54.28	53.95	55.29	55.00	53.47
19	50.50	48.50	47.83	45.81	49.12	49.37	52.47	54.47	54.18	55.73	54.38	53.80
20	50.50	47.57	46.79	46.06	49.12	50.33	52.75	54.00	54.68	56.10	53.20	54.20
21	50.57	47.91	46.90	46.23	48.50	50.88	52.99	52.65	55.12	56.41	53.63	54.45

Grant 5--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
22	50.02	48.13	47.01	45.50	47.73	51.57	53.18	53.20	55.39	56.31	.....	.....
23	49.18	48.17	47.06	44.79	48.28	51.84	52.62	53.80	55.57	56.08	53.82	.....
24	49.65	48.18	47.44	44.35	48.36	52.17	51.48	54.26	55.35	55.63	53.08	.....
25	50.01	48.25	47.39	45.57	48.47	51.82	52.02	54.68	54.08	55.92	52.92	.....
26	50.13	47.50	47.27	45.57	48.78	50.50	52.96	55.00	54.24	56.07	53.42	.....
27	50.01	46.47	46.35	45.85	48.88	50.98	53.68	54.87	56.66	56.19	51.56	.....
28	49.93	46.96	46.47	46.12	48.20	51.14	53.89	54.33	55.07	56.32	52.21	.....
29	49.25		46.41	46.27	47.19	51.40	54.37	54.16	55.58	55.93	52.90	.....
30	48.37		46.46	45.68	46.48	52.00	54.00	54.58	55.61	55.25	53.92	.....
31	48.92		46.65		47.40		52.50	54.98		55.10		.....

Hamilton County

Hamilton 2. Indiana Gas & Water Co. In Noblesville, at water plant, "old ice plant well". Measurements made by Ted Marbaugh and Robert Clover, Indiana Gas & Water Co. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	22.59	Mar. 28	20.09	July 18	22.32	Oct. 17	23.1
10	21.56	Apr. 11	20.5	25	22.5	24	23.4
17	21.31	18	19.47	Aug. 1	22.56	31	23.4
24	20.37	25	20.82	15	23.0	Nov. 8	23.8
31	19.84	May 2	15.20	22	22.9	14	23.9
Feb. 7	20.20	9	18.4	Sept. 6	22.92	21	23.9
14	20.41	23	21.10	12	23.0	28	23.8
21	19.89	June 12	21.54	20	23.3	Dec. 5	24.0
28	19.88	20	21.87	26	23.2	12	21.6
Mar. 7	19.72	July 5	22.0	Oct. 3	23.5	19	24.0
14	18.22	12	22.0	10	23.7	28	23.8
21	20.52						

Hancock County

Hancock 1. Cleveland, Cincinnati, Chicago & St. Louis Railway Co. In Maxwell, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 16 N., R. 7 E. Measurements made by J. L. Gant. Records available: 1946-49.

Jan. 14	25.09	Apr. 2	24.85	Aug. 5	27.10	Oct. 21	27.16
23	27.03	8	24.96	13	26.50	28	27.61
28	25.03	15	25.84	19	27.10	Nov. 7	26.97
Feb. 4	24.94	22	25.94	26	26.10	12	26.73
12	26.85	29	26.28	Sept. 2	26.80	19	26.57
18	25.03	May 6	26.76	16	26.20	25	26.53
25	24.90	13	26.85	23	26.87	Dec. 10	27.10
Mar. 4	24.94	July 14	25.69	30	26.80	16	27.00
21	25.07	23	26.40	Oct. 7	28.48	28	26.60
26	24.91	28	26.10	14	27.43		

Harrison County

Harrison 1. Harrison County State Forest. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 4 S., R. 2 E., on south side of truck trail 1, near Lowe Pond. Measurements made by Rush Curtis and Richard L. Zweig, Harrison County State Forest. Records available: 1936-49.

Jan. 2	0.78	Feb. 20	0.72	Apr. 10	2.12	May 29	1.80
9	.87	27	.98	17	1.41	June 5	2.98
17	.50	Mar. 6	1.00	24	2.09	12	1.78
23	.49	13	.85	30	2.87	19	1.46
30	1.05	20	.88	May 8	2.79	26	1.46
Feb. 6	.88	27	.72	15	2.23	July 3	2.41
13	.90	Apr. 3	1.21	22	1.89	10	2.72

Harrison 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 17	2.30	Sept. 11	4.4	Oct. 23	2.20	Nov. 27	2.26
24	2.75	18	3.15	30	2.47	Dec. 4	2.42
Aug. 14	3.30	25	3.62	Nov. 6	2.39	11	.19
21	3.46	Oct. 9	2.50	13	1.52	18	.69
28	3.35	16	2.57	20	2.24	25	1.39
Sept. 4	4.4						

Harrison 3. Harrison County State Forest. $SE\frac{1}{4}NW\frac{1}{4}$ sec. 2, T. 4 S., R. 2 E., on south side of truck trail 1, about 350 yards northwest of service building. Measurements made by Rush Curtis and Richard L. Zweig, Harrison County State Forest. Records available: 1938-49.

Jan. 2	3.07	Apr. 3	3.01	June 26	2.98	Oct. 9	7.34
9	3.07	10	3.10	July 3	4.40	16	7.14
17	2.46	17	3.00	10	4.84	23	7.10
23	2.45	23	3.10	17	5.12	30	7.20
30	3.00	30	3.11	23	5.45	Nov. 6	7.22
Feb. 6	3.01	May 8	3.40	Aug. 14	6.31	13	7.13
13	3.08	15	3.12	21	6.40	20	7.28
20	2.70	22	3.80	28	6.50	27	7.18
27	3.10	29	3.75	Sept. 4	7.6	Dec. 4	7.26
Mar. 6	3.11	June 5	4.94	11	7.8	11	7.33
13	2.94	12	5.05	18	6.95	18	7.30
20	2.94	19	2.98	25	7.08	25	7.26
27	2.80						

Hendricks County

Hendricks 1. Brocia A. Smith. $W\frac{1}{2}SW\frac{1}{4}SW\frac{1}{4}$ sec. 14, T. 14 N., R. 1 W., at southeast corner of abandoned township school about 1.5 miles south of Clayton. Measurements made by Brocia A. Smith. Records available: 1944-49.

Jan. 3	3.26	Apr. 4	0.87	July 4	4.70	Oct. 11	7.00
10	2.24	11	1.72	12	4.90	17	6.88
17	1.48	18	1.96	18	5.22	24	6.60
24	1.14	25	2.49	25	5.50	31	6.45
31	1.35	May 2	2.70	Aug. 1	5.64	Nov. 7	6.72
Feb. 7	2.06	9	3.20	8	5.98	14	6.73
14	2.50	16	3.64	15	6.15	21	6.89
21	1.43	23	3.75	22	6.40	28	6.98
28	1.07	30	3.94	29	6.46	Dec. 5	7.17
Mar. 7	1.92	June 6	4.27	Sept. 5	6.17	12	7.22
14	1.75	13	4.00	12	6.87	19	6.93
21	1.84	20	4.10	19	6.86	26	5.60
28	1.10	27	4.37	26	6.98		

Hendricks 2. John C. Gambold. $N\frac{1}{2}SE\frac{1}{4}SW\frac{1}{4}$ sec. 28, T. 15 N., R. 2 W., near Coatesville. Measurement discontinued Dec. 26, 1948.

Hendricks 3. John C. Gambold. In Coatesville, in $SE\frac{1}{4}SE\frac{1}{4}$ sec. 31, T. 15 N., R. 2 W. Measurement discontinued Dec. 26, 1948.

Henry County

Henry 2. Gilbert M. Casey. $NE\frac{1}{4}NE\frac{1}{4}$ sec. 18, T. 17 N., R. 9 E., about 2 miles west of Cadiz, about 20 feet west of road fence. Measurements made by G. M. Casey. Records available: 1946-49.

Jan. 2	13.30	Feb. 13	12.24	Mar. 27	11.70	May 8	13.45
9	12.40	20	11.85	Apr. 3	12.88	15	13.65
16	12.10	27	11.90	10	12.55	22	13.77
23	11.90	Mar. 6	12.55	17	12.25	29	13.75
30	11.72	13	12.70	24	13.10	June 5	14.06
Feb. 6	12.32	20	12.40	May 1	13.38	12	14.10

Henry 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 19	13.90	Aug. 7	14.48	Sept. 25	15.38	Nov. 13	14.64
26	13.07	14	14.75	Oct. 2	15.58	20	15.10
July 3	13.05	21	14.95	9	15.28	27	15.28
10	13.35	28	15.20	16	15.05	Dec. 4	15.52
17	13.73	Sept. 4	14.97	23	14.55	11	15.70
24	13.85	11	15.00	30	14.40	18	15.48
31	14.15	18	15.20	Nov. 6	14.75	29	14.52

Howard County

Howard 4. Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 24 N., R. 4 E., 0.75 mile north of Vermont, 30 feet east of road. Measurements made by Abe D. Bontroger. Records available: 1945-49.

Jan. 1	7.15	Apr. 2	3.05	July 2	7.86	Oct. 1	10.22
8	4.32	9	3.85	9	8.05	8	10.47
19	3.15	16	4.53	16	8.26	15	10.05
22	1.89	23	5.02	23	8.33	23	9.52
29	2.73	29	5.35	30	8.42	29	8.89
Feb. 5	3.56	May 7	5.62	Aug. 6	8.56	Nov. 5	9.10
13	4.70	14	5.88	13	8.69	19	9.12
19	2.64	21	6.21	20	8.90	26	9.13
26	2.79	28	6.75	27	9.90	Dec. 3	9.25
Mar. 5	3.09	June 6	7.05	Sept. 3	9.30	10	8.47
12	3.56	13	7.35	10	9.59	17	6.75
19	4.26	18	7.52	17	9.78	24	4.43
26	3.57	25	7.80	27	10.08	30	2.35

Huntington County

Huntington 1. S. Woodward Schell. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 27 N., R. 8 E. Measurements made by S. Woodward Schell. Records available: 1945-49.

Jan. 2	4.20	Apr. 3	3.50	July 3	5.50	Oct. 2	35.27
9	3.70	10	3.55	12	4.95	9	35.90
16	2.82	17	2.95	17	5.25	16	8.20
23	3.00	24	3.55	24	7.00	23	6.75
30	3.25	May 1	3.47	31	6.05	30	6.80
Feb. 6	2.90	8	3.48	Aug. 7	6.90	Nov. 6	4.50
13	2.70	16	3.70	14	16.90	13	6.40
20	2.65	22	2.90	21	27.25	20	5.95
27	3.30	29	4.40	28	36.72	27	6.45
Mar. 6	2.84	June 5	5.70	Sept. 5	38.00	Dec. 4	6.45
13	3.25	12	5.20	11	37.90	11	5.80
20	2.90	19	4.20	18	38.20	18	5.75
27	3.45	26	3.75	24	38.00	25	5.00

Jackson County

Jackson 1. Jackson State Forest. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 5 N., R. 5 E., near northeast corner of office of abandoned Civilian Conservation Corps' camp, Jackson State Forest. Measurements made by T. K. Rosinbarger and Cecil Perry, Indiana Dept. of Conservation. Records available: 1936-49.

Jan. 3	7.15	Mar. 7	5.90	June 6	9.30	Aug. 8	12.16
10	6.10	22	5.12	13	9.13	15	12.51
17	5.02	28	2.70	20	7.82	22	12.54
24	1.50	Apr. 4	4.98	27	8.19	29	12.83
31	2.90	12	6.07	July 4	8.93	Sept. 5	13.18
Feb. 7	5.23	18	6.55	11	9.45	12	13.82
14	5.47	25	7.13	18	9.98	19	14.03
21	4.68	May 2	7.35	25	10.70	26	14.52
28	4.95	23	11.22	Aug. 1	11.20	Oct. 3	15.37

Jackson 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 10	16.04	Oct. 31	15.87	Nov. 21	16.09	Dec. 12	15.05
17	16.12	Nov. 7	16.71	28	15.66	19	12.87
24	16.31	14	16.36	Dec. 5	15.96	26	10.82

Jackson 2. Hiram H. Martin. $W\frac{1}{2}SW\frac{1}{4}NE\frac{1}{4}$ sec. 24, T. 6 N., R. 2 E., about 1 mile south and about 2 miles east of Norman. Measurements made by Ralph Fish. Records available: 1944-49.

Jan. 3	12.22	Apr. 4	11.03	July 4	11.42	Oct. 3	15.38
10	11.00	11	11.11	11	11.41	10	15.44
17	11.72	18	11.11	18	11.54	17	15.56
24	11.53	25	11.53	25	12.12	24	15.61
31	11.70	May 2	11.40	Aug. 1	12.35	31	15.23
Feb. 7	11.29	9	11.57	8	12.85	Nov. 7	15.37
14	12.48	16	11.63	15	13.00	14	15.19
21	11.55	23	11.29	22	13.31	21	15.11
28	11.20	30	11.88	29	13.66	28	15.28
Mar. 7	11.36	June 6	12.11	Sept. 5	14.10	Dec. 5	15.85
14	11.34	13	12.30	12	14.44	12	15.67
21	11.31	20	12.20	19	14.55	19	15.37
28	11.02	27	11.65	26	15.00	26	14.47

Jasper County

Jasper 3. Harry E. Brunton. In Parr, in $NE\frac{1}{4}NE\frac{1}{4}$ sec. 28, T. 30 N., R. 7 W., at elevator and lumber yard. Measurements made by Harry E. Brunton, Parr. Records available: 1948-49.

Jan. 3	10.90	Apr. 4	9.75	July 5	10.54	Oct. 3	11.62
10	10.60	11	9.73	11	10.55	10	11.81
17	10.79	18	9.54	18	10.18	17	11.83
24	10.55	25	9.81	25	10.72	24	11.90
31	10.34	May 2	9.60	Aug. 1	10.36	31	11.93
Feb. 7	10.22	9	9.68	8	10.77	Nov. 14	12.15
14	10.18	16	9.78	15	10.61	21	11.90
21	10.18	23	9.72	22	10.78	28	11.95
28	10.00	31	9.95	29	10.89	Dec. 5	12.04
Mar. 7	10.02	June 6	9.87	Sept. 6	11.21	12	12.06
14	9.96	13	9.98	12	11.37	19	11.99
21	9.74	20	10.00	23	11.53	26	11.66
28	9.72	27	9.99	26	11.77		

Jay County

Jay 2. Armstrong Cork Co. In Dunkirk, in $NE\frac{1}{4}SW\frac{1}{4}$ sec. 9, T. 22 N., R. 12 E. Measured by J. T. Martin, plant engineer, Armstrong Cork Co. Records available: 1947-49.

Feb. 3	32.64	June 11	34.24	Aug. 13	33.04	Oct. 15	33.58
Apr. 5	33.60	18	33.06	20	33.52	30	34.36
9	33.74	25	33.44	29	33.95	Nov. 5	33.92
18	33.94	July 6	33.73	Sept. 3	33.69	12	33.29
May 14	32.79	16	32.39	19	33.89	19	33.88
21	33.77	23	33.18	23	33.44	28	33.59
31	32.13	30	34.01	Oct. 1	33.50	Dec. 3	33.78
June 4	33.49	Aug. 6	33.75	8	33.81		

Jefferson County

Jefferson 2. Clifty Falls State Park. At superintendent's house. Measurements made by Lewis Summers, Clifty Falls State Park. Records available: 1938-49.

Jefferson 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	27.00	May 6	26.80	Aug. 18	27.80	Oct. 13	27.90
6	28.48	26	27.19	Sept. 1	28.09	27	28.22
14	28.41	June 2	27.30	8	27.91	Nov. 10	27.92
21	27.45	9	27.30	15	28.00	25	27.92
28	26.46	24	26.66	22	28.08	Dec. 8	29.92
Mar. 8	26.44	July 1	27.30	29	28.10	24	28.22
Apr. 27	26.68	21	26.90	Oct. 6	27.82		

Jennings County

Jennings 1. Muscatatuck State Park. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 6 N., R. 8 E. Measurements made by Joseph McAuliffe. Records available: 1936-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.37	4.40	5.45	3.31	7.07	10.45	10.05	12.72	13.33	13.62	11.35	12.42
2	7.44	5.02	5.65	3.62	7.09	10.54	10.21	12.77	13.37	13.64	11.42	12.45
3	7.62	5.41	5.79	3.81	7.27	10.65	10.33	12.81	13.41	13.67	11.39	12.62
4	7.86	5.50	5.92	4.06	7.47	10.77	10.43	12.86	13.45	13.68	11.62	12.55
5	.97	5.34	5.94	4.24	7.61	10.85	10.54	12.93	13.39	13.51	11.70	12.59
6	1.87	5.40	5.95	4.29	7.71	10.83	10.65	12.99	13.34	13.24	11.82	12.62
7	3.19	5.44	6.20	4.48	7.75	11.03	10.75	13.03	13.34	13.05	11.91	12.62
8	4.25	5.63	6.25	4.65	7.84	11.17	10.87	13.09	13.36	12.93	11.96	12.64
9	5.12	5.72	6.14	4.87	7.90	11.33	10.99	13.14	13.39	12.87	12.02	12.70
10	5.93	5.96	3.67	5.10	7.98	11.45	11.11	13.20	13.43	12.84	12.06	12.73
11	6.40	6.21	1.82	5.24	8.16	11.55	11.21	13.25	13.47	12.82	12.09	12.71
12	6.45	6.37	2.57	5.33	8.31	11.60	11.31	13.32	13.50	12.81	12.13	10.37
13	6.45	6.44	3.20	5.33	8.45	11.63	11.38	13.28	13.54	12.59	12.15	9.02
14	6.47	6.17	3.72	5.43	8.58	.....	11.47	13.32	13.54	12.36	12.17	8.63
15	6.65	....	4.05	5.51	8.72	.....	11.54	13.26	13.53	12.22	12.18	8.54
16	6.80	....	4.40	5.77	8.86	.....	11.65	.....	13.52	12.15	12.20	8.59
17	5.77	....	4.52	5.97	9.02	.....	11.74	.....	13.50	12.10	12.23	8.69
18	5.14	....	4.59	5.96	9.16	.....	11.82	.....	13.47	12.12	12.26	8.79
19	1.90	....	4.84	6.15	9.28	.....	11.88	.....	13.40	12.16	12.29	8.32
20	2.91	4.57	4.95	6.32	9.36	9.94	11.96	.....	13.34	12.19	12.27	8.11
21	3.76	4.65	4.87	6.40	9.46	9.92	12.04	.....	13.32	12.22	12.28	8.05
22	4.14	4.67	4.75	6.40	9.43	9.92	12.12	13.41	13.32	11.95	12.34	8.04
23	4.37	4.73	1.82	6.40	9.51	10.01	12.19	13.45	13.34	11.37	12.37	7.61
24	.41	4.72	2.52	6.45	9.67	10.09	12.26	13.49	13.37	11.11	12.36	7.77
25	1.27	4.69	2.97	6.66	9.80	9.97	12.33	13.53	13.42	11.01	12.32	7.94
26	2.14	4.98	3.44	6.76	9.90	9.70	12.40	13.51	13.47	10.96	12.35	8.01
27	1.82	5.07	.67	6.82	10.02	9.67	12.47	13.62	13.51	11.02	12.35	4.41
28	.97	5.14	1.89	6.89	10.11	9.73	12.53	13.64	13.53	11.07	12.36	4.97
29	2.10		2.47	7.02	10.22	9.81	12.59	13.40	13.55	11.14	12.35	5.45
30	3.12		2.90	7.05	10.31	9.91	12.64	13.32	13.57	11.20	12.37	5.90
31	3.85		3.17		10.37		.....	13.32		11.23		6.27

a Estimated.

b Tape measurement.

Johnson County

Johnson 1. City of Bargersville. W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 13 N., R. 3 E. Measurements made by D. D. Core. Records available: 1944-49. Destroyed, measurements discontinued, Jan. 25, 1949. Jan. 5, 1.71; Jan. 1, 4.58; Jan. 19, 2.74; Jan. 24, 4.72.

Knox County

Knox 1. William M. Downey. In Monroe City, 1 block north of State Highway 61 on lot 60. Measurements made by William M. Downey. Records available: 1944-49.

Knox 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	33.40	Apr. 14	31.15	July 7	31.64	Oct. 6	32.17
13	33.24	21	31.19	14	31.70	13	32.18
20	33.05	28	31.17	21	31.72	20	32.22
27	32.80	29	31.13	28	31.82	27	32.31
Feb. 3	32.57	May 5	31.17	Aug. 4	31.84	Nov. 3	32.34
10	32.35	12	31.22	11	31.86	10	32.34
17	32.24	19	31.25	18	31.94	17	32.40
24	32.12	26	31.32	25	32.02	24	32.42
Mar. 3	31.95	June 2	31.38	Sept. 1	32.04	Dec. 1	32.45
10	31.93	9	31.44	8	32.10	8	32.53
17	31.70	16	31.47	15	32.12	15	32.54
24	31.63	23	31.52	22	32.17	22	32.56
31	31.59	30	31.59	29	32.20	29	32.58
Apr. 7	31.38						

Kosciusko County

Kosciusko 2. Wawasee State Fish Hatchery. Flowing well at sunken garden. Measurements made by George Fry and C. R. Silvers. Records available: 1938-49.

Jan. 1	+1.54	Apr. 16	+1.93	July 23	+2.17	Oct. 15	+1.74
8	+1.50	23	+2.02	30	+2.25	22	+1.81
15	+1.58	30	+1.96	Aug. 6	+2.17	29	+1.80
22	+1.58	May 7	+1.85	12	+2.23	Nov. 5	+1.77
29	+1.69	14	+1.92	20	+2.08	12	+1.75
Feb. 5	+1.83	21	+2.05	27	+2.05	19	+1.72
12	+1.89	28	+2.03	Sept. 3	+1.98	26	+1.62
19	+2.02	June 11	+2.01	10	+1.96	Dec. 3	+1.54
26	+2.00	18	+2.21	17	+2.00	10	+1.59
Mar. 5	+2.25	25	+2.27	24	+1.85	17	+1.64
12	+2.08	July 2	+2.06	Oct. 1	+1.73	24	+1.54
Apr. 2	+2.02	9	+2.33	8	+1.77	31	+1.79
9	+1.89	16	+2.26				

Kosciusko 3. Millard G. Stookey. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 33 N., R. 5 E. Measurements made by Millard G. Stookey. Records available: 1945-49.

Jan. 7	13.93	Apr. 9	12.67	June 25	12.49	Nov. 5	13.50
15	14.04	16	12.63	July 2	12.70	12	13.80
22	13.82	23	12.76	16	12.68	19	13.84
29	13.78	30	12.50	23	12.82	26	13.88
Feb. 5	13.69	May 7	12.70	Aug. 6	12.66	Dec. 3	13.80
12	13.28	28	12.80	20	12.80	10	13.83
19	12.92	June 4	12.90	Sept. 10	12.50	17	13.78
26	12.69	11	12.76	Oct. 1	12.98	24	13.62
Apr. 2	12.64	18	12.63	24	13.40	31	13.26

La Porte County

La Porte 1. City of La Porte. Well 4 at pumping station of La Porte Water Works. Measurements made by Arthur C. Baker, La Porte Water Works, W. E. Flickenger, superintendent. Records available: 1942-49.

Jan. 8	0.53	Mar. 12	0.22	May 21	0.16	July 30	0.18
15	.62	19	.26	28	.07	Aug. 6	.18
22	.53	26	.22	June 4	.26	13	.20
27	.29	Apr. 2	.07	11	.39	20	.20
29	+.05	11	.24	18	.28	27	.28
Feb. 5	.16	16	.12	25	.12	Sept. 3	.12
12	6.98	23	.16	July 2	.20	10	+.03
19	.32	30	.14	9	.28	17	.13
26	.07	May 7	.20	16	.07	24	+.01
Mar. 5	+.03	14	.20	23	.28	Oct. 1	.20

La Porte 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 8	0.24	Nov. 5	1.03	Nov. 26	.59	Dec. 17	0.76
15	.24	12	.72	Dec. 3	.57	24	.20
22	.28	19	.45	10	.34	31	.12
29	.28						

La Porte 2. Kankakee State Game Preserve. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 33 N., R. 3 W., about 500 feet north of State Highway 8, on west side of Kankakee River. Measurements made by Arthur L. Cole and Frank Burger, Kankakee State Game Preserve. Records available: 1942-49.

Jan. 1	6.09	Apr. 29	4.98	July 23	6.65	Oct. 15	6.55
8	5.69	May 7	5.74	30	6.65	22	6.46
Feb. 5	4.00	14	5.77	Aug. 6	6.67	29	6.45
12	4.05	21	5.45	13	6.67	Nov. 6	6.40
17	3.83	28	5.66	20	6.68	12	6.30
19	3.58	June 4	5.68	27	6.80	19	6.20
26	3.70	11	6.61	Sept. 3	6.70	26	6.12
Mar. 5	3.76	18	5.69	10	6.69	Dec. 3	6.15
12	3.69	25	5.80	17	5.94	10	6.14
19	4.10	July 2	6.62	24	6.62	17	6.00
26	4.34	9	6.63	Oct. 1	6.99	24	5.01
Apr. 2	4.34	16	6.64	8	6.63	31	4.16

Lawrence County

Lawrence 1. David S. Cox. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 3 N., R. 1 W., north of Georgia. Measurements made by David S. Cox. Records available: 1944-49.

Jan. 6	9.24	Apr. 7	16.57	July 7	18.80	Oct. 6	20.53
13	13.74	14	18.05	14	19.88	13	17.78
20	10.33	21	18.68	21	20.35	20	18.85
27	6.55	28	19.54	28	20.04	27	17.83
Feb. 3	14.21	May 5	20.11	Aug. 4	20.25	Nov. 3	18.73
10	16.43	12	18.42	11	21.00	10	19.79
17	10.87	19	18.80	18	21.20	17	20.09
24	15.82	26	19.80	25	21.40	24	20.10
Mar. 3	17.65	June 2	20.29	Sept. 1	21.34	Dec. 1	20.40
10	11.52	9	20.02	8	20.95	8	20.04
17	14.36	16	14.68	15	21.01	15	18.81
24	16.88	23	15.87	22	21.44	22	16.56
31	12.77	30	17.80	29	22.36	29	12.88

Lawrence 2. Roscoe Ingram. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 4 N., R. 1 W., north of Mitchell between Monon Railroad and Robertsville Pike. Measurements made by Roscoe Ingram. Records available: 1944-49.

Jan. 5	21.16	Apr. 6	21.86	July 6	21.39	Oct. 5	21.34
12	14.67	13	21.36	13	21.40	12	21.28
19	10.51	20	21.41	20	21.31	19	21.30
26	7.29	27	21.44	27	21.43	26	20.92
Feb. 2	14.71	May 4	21.41	Aug. 4	21.40	Nov. 2	22.34
9	17.80	11	21.21	10	21.40	9	21.34
16	12.70	18	21.39	17	20.76	16	21.39
23	18.93	25	21.41	24	21.38	30	21.38
Mar. 2	21.20	June 1	21.43	31	21.31	Dec. 7	21.31
9	21.18	8	21.43	Sept. 7	21.33	14	18.66
16	18.26	15	20.56	14	21.26	21	19.19
23	21.00	22	20.81	21	21.38	27	18.21
30	17.26	29	20.73	28	21.38		

Madison County

Madison 3. Albert Closser. In Frankton, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 20 N., R. 7 E., about 2 blocks east of old Civilian Conservation Corps camp. Measurements made by Helen I. Whitcomb, Frankton. Records available: 1935-42, 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	22.29	Mar. 16	20.40	June 27	21.26	Nov. 8	22.39
12	21.89	29	20.48	July 5	21.29	15	22.26
17	21.66	Apr. 11	20.19	15	21.23	22	22.96
29	20.80	May 16	20.40	29	21.50	30	23.16
Feb. 2	20.75	23	20.52	Aug. 8	21.65	Dec. 6	23.18
8	20.60	31	20.78	16	21.73	14	23.33
15	20.49	June 7	21.07	24	21.93	19	23.23
23	20.53	13	21.80	29	21.99	27	23.06
Mar. 1	20.23	20	21.58	Sept. 13	22.40		

Madison 6. Russel Wann. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 21 N., R. 7 E., about 110 feet west of county road, near old house foundation. Measurements made by Joseph Brenner, Alexandria. Records available: 1947-49.

Jan. 2	5.32	Apr. 3	5.56	June 26	7.19	Sept. 25	10.80
9	4.38	10	6.26	July 3	6.24	Oct. 10	8.99
16	3.90	17	6.46	10	6.50	16	7.60
23	4.30	24	6.02	17	7.30	23	7.26
30	4.16	May 1	5.35	24	7.88	30	7.68
Feb. 6	5.66	8	6.18	Aug. 7	7.31	Nov. 6	8.18
20	4.34	15	6.78	14	8.03	20	8.69
27	4.70	22	6.08	21	8.68	24	9.05
Mar. 6	5.57	29	6.38	28	9.34	Dec. 4	9.55
13	6.20	June 5	7.26	Sept. 4	9.76	11	10.39
20	6.52	12	7.29	11	10.23	18	9.00
27	5.16	19	6.75	18	10.40	25	6.62

Madison 7. Mounds State Park. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 19 N., R. 8 E., on west side of State Highway 32 about 0.3 mile south of entrance to park. Measurements made by personnel of Mounds State Park. Records available: 1944-49.

Jan. 3	5.50	Mar. 23	0.60	July 4	3.69	Oct. 3	5.92
10	4.60	Apr. 4	1.00	11	3.34	10	6.04
17	3.20	11	1.42	17	3.28	17	6.15
24	1.80	18	1.75	25	4.06	24	6.37
31	.18	May 2	2.00	Aug. 1	4.26	31	5.70
Feb. 7	.92	9	2.25	8	4.52	Nov. 7	6.10
14	1.60	16	2.70	15	4.68	14	6.62
21	.30	23	3.00	22	4.92	21	6.76
28	.50	30	2.63	29	5.16	28	6.89
Mar. 7	1.00	June 5	2.95	Sept. 5	5.24	Dec. 6	7.00
14	1.70	13	3.28	13	4.47	12	7.01
21	2.70	20	3.53	19	5.60	19	7.16
25	2.00	27	3.79	26	5.79	26	7.20

Madison 8. In Elwood, at Indiana Die Castings Corporation, in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 21 N., R. 6 E., at 26th and H St. Unused drilled well, diameter 8 inches, depth 415 feet. Measuring point, top of casing, 1.1 foot above land-surface datum. Automatic water-stage recorder installed June 17, 1949. Measurements made by Norman Welcher, Elwood. Records available: 1949.

From recorder charts

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.61	29.90	40.15	44.45	41.50	40.70
2	30.00	31.40	39.65	33.25	44.70	41.45
3	20.72	33.40	35.85	36.20	44.70	41.00
4	19.30	37.30	24.40	41.50	42.85	35.20
5	21.60	39.95	21.40	44.20	42.80	38.00
6	20.60	39.50	38.05	43.85	39.40	46.10

Madison 8--Continued.

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	.....	26.50	23.80	36.70	45.40	39.00	49.20
8	.....	31.38	32.40	22.35	45.40	43.20	49.20
9	.....	30.47	35.30	21.00	44.00	46.20	45.30
10	.....	28.65	38.15	20.60	39.00	48.30	44.50
11	.....	27.25	39.10	20.40	43.50	48.80	35.90
12	.....	31.87	39.70	20.30	45.30	48.50	33.10
13	.....	32.85	36.20	20.25	47.55	43.85	41.20
14	.....	33.40	29.90	20.45	48.50	46.30	44.60
15	.....	35.00	34.60	20.50	48.50	47.70	45.50
16	.....	39.14	36.25	20.50	48.10	48.70	43.90
17	.....	37.26	37.20	20.45	36.85	35.95	45.20
18	17.75	35.66	37.50	20.30	43.20	43.10	38.00
19	17.82	39.25	42.10	20.50	42.85	44.80	35.50
20	17.87	42.60	.....	20.75	42.40	39.50	39.60
21	18.02	41.60	29.40	20.80	.....	39.00	40.90
22	18.13	43.55	35.50	20.80	.....	45.90	42.90
23	18.18	43.65	38.30	31.20	.....	48.15	43.80
24	22.60	37.80	40.10	34.20	.....	47.05	40.60
25	20.55	42.80	43.80	31.30	.....	38.40	23.00
26	18.62	45.30	46.90	37.30	.....	40.35	17.80
27	18.40	45.50	46.70	44.80	.....	34.40	16.00
28	18.45	41.50	42.15	46.80	.....	27.50	31.20
29	24.87	43.70	41.25	46.80	.....	36.10	34.80
30	33.35	44.20	41.55	47.20	.....	40.70	34.70
31	.....	.....	40.50	.....	.....	.....	33.10

Madison 9. In Elwood, at Elwood Trailer Corporation, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 21 N., R. 6 E., at intersection of 9th and North J Sts. Unused drilled well, diameter 8 inches, depth 400 feet. Measuring point, top of plate on well, 0.6 foot below land-surface datum. Automatic water-stage recorder installed Aug. 16, 1949. Measurements made by Norman Welcher. Records available: 1949.

From recorder charts

Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	34.20	40.20	29.15	26.40
2	.....	36.70	38.75	29.60	26.75
3	.....	37.00	38.30	30.65	26.50
4	.....	35.40	37.30	30.60	26.00
5	.....	34.85	37.15	30.25	26.60
6	.....	36.00	35.20	29.70	26.30
7	.....	36.95	35.00	30.70	26.65
8	.....	37.35	37.20	30.65	27.20
9	.....	38.40	35.40	30.30	26.90
10	.....	38.10	35.35	30.10	26.30
11	.....	36.50	34.65	30.00	25.95
12	.....	36.65	36.10	28.95	26.30
13	.....	36.95	34.30	28.25	26.60
14	.....	37.55	33.30	28.30	26.45
15	.....	37.70	32.30	28.45	26.40
16	.....	38.05	31.80	28.50	26.30
17	36.80	.....	31.85	28.70	25.80
18	38.10	.....	31.85	28.15	25.10
19	38.15	.....	31.60	27.65	25.50
20	38.00	.....	32.10	26.50	25.40
21	35.95	.....	31.90	27.30	24.90
22	33.70	.....	31.10	27.25	24.70
23	36.80	37.75	30.60	27.25	25.00
24	37.20	38.95	30.90	26.65	.....
25	37.65	38.10	30.60	26.60	.....
26	37.80	38.55	30.75	26.35	.....
27	37.70	38.80	30.25	25.80	.....
28	35.05	38.70	30.00	26.30	.....
29	33.20	39.10	29.85	26.40	.....
30	35.70	39.80	.....	26.40	.....
31	35.95	.....	29.50	.....	.....

Marion County

Marion 1. Indianapolis Water Co. "Motor well 15" in Riverside well field, Indianapolis. Measurements made by personnel of Indianapolis Water Co. L. S. Finch, chief engineer. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	18.18	Mar. 7	16.64	May 18	a17.74	Sept. 20	18.48
5	17.92	8	16.60	June 7	a18.24	21	18.46
6	a17.56	9	16.82	8	18.22	Oct. 28	18.10
13	19.50	11	16.86	18	a18.10	29	17.98
14	21.31	14	16.58	21	a18.94	Nov. 8	a27.08
25	16.68	25	a16.70	25	18.05	9	a32.08
27	16.34	28	a16.30	27	17.96	10	a31.92
30	a18.25	29	a16.32	July 9	18.14	11	a29.08
Feb. 2	16.30	31	a16.82	12	18.22	14	18.18
13	16.36	Apr. 20	a20.70	14	18.40	19	17.88
14	16.62	23	a30.74	Aug. 5	18.60	21	a18.08
15	a16.52	May 9	17.70	20	18.40	Dec. 8	18.16
18	a16.24	10	17.74	23	18.48	9	18.00
21	16.20	12	17.78	Sept. 12	18.38	27	17.52
24	16.40	16	17.72	14	18.42	30	17.48

a Gravel wells in service.

Marion 2. Security Trust Bank Building, 130 East Washington St., Indianapolis. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1935-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.17	48.63	46.81	46.11	45.76	47.75	52.24	55.29	56.20	52.44	50.52	48.12
2	50.05	48.71	46.76	46.09	45.61	48.26	52.43	55.25	56.11	52.33	50.35	48.06
3	49.93	48.63	46.71	46.02	45.74	48.71	52.63	55.27	55.96	52.25	50.24	48.08
4	49.88	48.47	46.65	45.87	45.94	49.01	52.67	55.32	56.00	52.11	50.10	47.96
5	49.81	48.46	46.58	45.72	46.65	.....	.....	55.39	55.98	52.02	49.99	47.91
6	49.77	48.37	46.65	45.53	47.39	.....	52.63	55.51	55.88	52.06	49.86	47.83
7	49.75	48.21	46.69	45.57	47.87	49.55	52.81	55.60	55.79	52.18	49.68	47.70
8	49.72	48.14	46.54	45.56	47.88	49.74	53.00	55.57	55.77	52.29	49.55	47.77
9	49.73	48.06	46.40	45.66	47.42	49.75	53.19	55.52	55.65	52.52	49.50	47.77
10	49.76	48.04	46.31	45.68	47.55	49.87	53.40	55.53	55.46	52.55	49.49	47.67
11	49.72	48.06	46.40	45.53	47.37	50.06	53.47	55.62	55.27	52.51	49.47	47.58
12	49.64	47.94	46.35	45.45	47.06	50.25	53.47	55.74	55.10	52.48	49.59	47.48
13	49.58	47.82	46.29	45.43	47.28	50.30	53.51	55.86	54.90	52.44	49.64	47.51
14	49.52	47.75	46.16	45.58	47.89	50.36	53.63	55.97	54.77	52.32	49.61	47.50
15	49.49	47.57	46.05	45.66	48.27	50.51	53.76	55.98	54.56	52.20	49.49	47.45
16	49.42	47.64	46.05	45.78	48.12	50.60	53.90	55.93	54.35	52.06	49.38	47.39
17	49.39	47.63	45.94	45.72	48.27	50.68	54.04	55.89	54.15	51.90	49.27	47.32
18	49.35	47.57	45.85	45.43	48.63	50.84	54.07	55.92	54.03	51.77	49.19	47.22
19	49.25	47.48	45.93	45.44	48.92	51.00	54.07	56.04	53.94	51.68	49.10	47.16
20	49.38	47.40	45.89	45.45	49.16	51.02	54.12	56.16	53.78	51.65	48.94	47.11
21	49.27	47.38	45.66	45.40	48.84	51.07	54.25	56.19	53.59	51.74	48.87	47.11
22	49.21	47.23	45.61	45.42	48.66	51.16	54.39	56.09	53.48	51.86	48.82	47.15
23	49.15	47.22	45.54	45.59	48.53	51.30	54.59	55.99	53.43	51.84	48.67	47.36
24	48.99	47.14	45.77	45.65	48.46	51.44	54.77	55.96	53.39	51.65	48.60	47.40
25	48.98	47.05	45.71	45.62	48.57	51.58	54.77	56.00	53.24	51.44	48.46	47.33
26	48.92	47.14	45.76	45.49	48.33	51.74	54.76	56.08	53.04	51.22	48.43	47.33
27	48.87	46.97	45.92	45.57	48.09	51.08	54.80	56.19	52.80	51.07	48.27	46.94
28	48.71	46.81	46.15	45.82	47.88	51.85	54.89	56.28	52.65	50.92	48.22	46.93
29	48.80		46.21	45.80	47.74	51.93	55.00	56.25	52.59	50.81	48.11	46.91
30	48.82		46.23	45.76	47.60	52.06	55.12	56.21	52.52	50.72	48.11	46.88
31	48.62		46.12		47.40		55.28	56.16		50.60		46.85

a Estimated.

Marion 3. Emmerich Manual Training High School, Indianapolis. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1935-49.

Marion 3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	46.15	Apr. 4	42.15	July 5	44.97	Oct. 3	46.66
10	46.03	11	41.76	11	45.29	10	45.83
17	45.88	18	42.14	18	45.71	17	45.13
24	45.99	25	41.93	25	46.13	24	46.09
31	44.33	May 2	41.41	Aug. 1	46.74	31	45.49
Feb. 7	44.96	9	42.29	8	47.50	Nov. 7	44.87
14	44.29	16	43.14	15	47.82	14	44.53
21	44.06	23	43.43	22	46.70	21	44.30
28	42.75	31	42.73	29	46.11	28	44.07
Mar. 7	43.23	June 6	43.51	Sept. 6	45.53	Dec. 5	43.46
14	43.61	13	43.12	12	45.01	12	42.73
21	41.97	20	43.89	19	46.12	19	42.38
28	41.63	27	43.81	26	47.18	27	42.18

Marion 4. Layne-Northern Co., Inc. In Indianapolis, in valley of Lick Creek, about 100 feet north of creek, about 700 feet west of South Meridian St., and about 350 feet south of Edwards Ave. Automatic water-stage recorder installed Apr. 7, 1949. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1937-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.68	2.77	3.53	2.83	3.69	3.60	3.65	3.35
281	2.33	3.02	2.83	3.67	3.71	3.55	3.40
3	a5.13	....	....	....	1.22	2.23	2.86	2.86	3.73	3.60	3.64	3.41
4	a0.12	1.19	2.45	2.90	2.97	3.71	3.59	3.63	3.42
5	1.88	2.45	3.04	3.63	3.63	3.54	3.59	3.61
6	1.61	3.05	3.00	3.25	3.59	3.47	3.59	3.53
7	a0.83	a0.03	....	1.55	2.82	3.10	3.24	3.58	3.57	3.64	3.44
8	+ .19	1.53	3.25	2.89	3.45	3.59	3.55	3.62	3.67
9	+ .17	1.92	3.22	2.82	4.47	3.61	3.59	3.60	3.63
10	a2.94	....	....	+ .09	1.64	3.57	2.76	4.00	3.76	3.61	3.53	3.63
11	+ .02	1.58	3.26	2.79	3.85	3.93	3.74	3.64	3.47
12	+ .09	2.28	2.91	2.77	3.78	3.81	3.67	3.55	3.47
13	+ .12	2.59	2.89	2.83	3.83	3.67	3.62	3.51	3.38
14	a .58	a .01	+ .11	2.26	2.69	2.81	3.78	3.61	3.65	3.65	3.34
15	+ .09	2.20	2.56	3.00	3.63	3.60	3.63	3.57	3.36
1606	2.14	2.36	3.13	3.55	3.56	3.73	3.62	3.43
17	a2.54	....	....	.01	2.03	2.37	3.89	3.36	3.50	3.70	3.55	3.36
1806	2.92	2.38	3.44	3.32	3.45	3.68	3.67	3.29
1907	2.48	2.39	4.10	3.30	3.63	3.66	3.50	3.35
2014	2.19	2.43	3.61	3.30	3.54	3.76	3.50	3.29
21	a .07	....	.18	2.06	....	3.43	3.31	3.55	3.69	3.62	3.23
2225	1.80	....	3.24	3.51	3.53	3.55	3.57	3.29
2326	2.08	....	3.15	4.09	3.51	3.59	3.51	3.29
24	a2.24	....	....	.34	1.93	....	3.08	3.87	3.52	3.73	3.50	3.38
2547	1.71	....	3.20	4.23	3.54	3.67	3.45	3.54
2652	1.59	....	3.08	4.10	3.64	3.58	3.48	3.56
2754	1.54	2.74	2.88	4.20	3.59	3.69	3.37	3.36
28	a+.05	a .05	.57	1.60	2.67	2.84	4.06	3.55	3.66	3.48	3.30
2967	1.62	2.55	2.90	3.83	3.52	3.64	3.41	3.36
3073	1.55	2.55	2.84	3.78	3.54	3.57	3.42	3.32
31	a1.17	....	....	1.71	....	....	2.77	3.71	....	3.70	....	3.28

a Tape measurement.

Marion 9. In Indianapolis, at former American Brewery, West Ohio St., at Indianapolis Water Co. canal. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	43.92	Jan. 31	42.58	Feb. 28	40.91	Mar. 27	39.91
10	43.71	Feb. 7	42.14	Mar. 7	40.59	Apr. 4	39.79
17	42.97	14	41.69	14	40.26	11	39.63
24	43.06	21	41.40	21	40.03	18	39.49

Marion 9--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 25	39.45	June 27	41.73	Aug. 29	44.45	Oct. 31	43.28
May 2	39.53	July 5	42.23	Sept. 6	44.46	Nov. 7	42.90
9	39.84	11	42.55	12	44.50	14	42.74
16	39.91	18	42.83	19	44.51	21	42.48
23	40.28	25	43.17	26	44.10	28	42.18
31	40.27	Aug. 1	43.38	Oct. 3	43.97	Dec. 5	42.04
June 6	40.67	8	43.84	10	43.77	12	41.81
13	40.94	15	44.12	17	43.71	19	41.59
20	41.28	22	44.16	24	43.50	27	41.45

Marion 10. Federal Building, Meridian and Ohio Sts., Indianapolis. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1939-49.

Jan. 3	54.61	Apr. 4	51.89	July 5	59.74	Oct. 3	57.73
10	54.67	11	51.80	11	60.37	10	57.27
17	54.72	18	52.08	18	60.23	17	56.93
24	54.34	25	51.94	25	61.13	24	56.40
31	53.91	May 2	52.32	Aug. 1	61.01	31	55.97
Feb. 7	53.62	9	52.93	8	61.48	Nov. 7	55.44
14	53.46	18	55.92	15	61.96	14	54.74
15	53.07	23	55.28	22	61.74	21	53.92
22	53.00	31	54.63	29	61.27	28	53.35
28	52.89	June 6	56.04	Sept. 6	60.63	Dec. 5	53.24
Mar. 7	52.55	13	56.53	12	59.79	12	52.84
14	52.03	20	57.78	19	58.56	19	52.06
23	52.02	27	58.13	26	58.17	27	51.87

Marion 13. Indianapolis Sanitation Plant east observation well. In Indianapolis, about 500 feet east of power plant in E $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 15 N., R. 3 E. Measurements made by W. R. Curran. Records available: 1929-49.

Jan. 7	0.78	Apr. 18	3.35	July 21	4.43	Nov. 16	4.36
Feb. 1	+ .78	May 20	2.85	Aug. 24	4.61	Dec. 19	(a)
Mar. 7	2.38	June 22	3.88	Sept. 30	4.46		

a Dry.

Marion 14. Indianapolis Sanitation Plant "Resettler" observation well. In Indianapolis, about 400 feet southeast of power plant, at south-east edge of resettler tank. In E $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 15 N., R. 3 E. Measurements made by W. R. Curran. Records available: 1928-49.

Jan. 7	17.91	Apr. 18	20.34	July 21	21.21	Nov. 16	21.56
Feb. 1	16.63	May 20	19.92	Aug. 24	21.38	Dec. 19	21.71
Mar. 7	19.80	June 22	21.22	Sept. 30	21.57		

Marion 18. Anna M. Stelzner. In Speedway City, at 4948 Vermont St., in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 15 N., R. 3 E., 500 feet north of Vermont St., and west of junction with Cassell Drive. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1943-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.50	18.10	19.58	16.67	18.57	19.76	21.01	22.26	21.87	22.56	21.61	21.92
2	22.25	18.52	19.59	16.76	18.55	19.77	21.05	22.25	21.93	22.64	21.50	21.98
3	22.19	18.84	19.56	16.80	18.62	19.82	21.09	22.25	21.98	22.69	21.49	22.07
4	22.15	18.97	19.54	16.89	18.72	19.89	21.12	22.28	22.02	22.69	21.51	22.11
5	22.10	19.17	19.42	16.93	18.82	19.96	21.15	22.32	22.04	22.70	21.53	22.14
6	21.66	19.37	19.31	16.86	18.89	20.04	21.18	22.37	22.06	22.68	21.59	22.15
7	21.44	19.50	19.36	16.89	18.94	20.13	21.21	22.42	22.11	22.63	21.61	22.12
8	21.40	19.66	19.40	16.96	19.01	20.28	21.26	22.36	22.14	22.60	21.61	22.13
9	21.39	19.76	19.35	17.09	19.05	20.45	21.31	22.48	22.19	22.57	21.61	22.19
10	21.44	19.91	19.25	17.24	19.10	20.61	21.33	22.52	22.24	22.51	21.61	22.23
11	21.46	20.04	19.28	17.36	19.20	20.73	21.36	22.58	22.30	22.45	21.61	22.22
12	21.46	20.14	19.31	17.41	19.28	20.77	21.37	22.62	22.36	22.36	21.61	22.16
13	21.43	20.18	19.35	17.40	19.35	20.77	21.38	22.64	22.38	22.31	21.62	22.15

a Estimated.

Marion 18--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	21.59	20.25	19.36	17.42	19.43	20.75	21.40	22.67	22.39	22.26	21.62	22.14
15	21.37	19.73	19.36	17.45	19.52	20.74	21.43	22.61	22.44	22.19	21.62	22.10
16	21.34	18.41	19.37	17.59	19.61	20.74	21.47	22.54	22.47	22.12	21.63	22.05
17	21.34	18.65	19.28	17.76	19.71	20.72	21.52	22.41	22.48	22.10	21.64	21.98
18	21.32	18.91	19.17	17.80	19.79	20.71	21.56	22.25	22.49	22.00	21.67	21.91
19	17.53	19.03	19.14	17.94	19.85	20.72	21.62	22.10	22.47	21.97	21.71	21.82
20	17.41	19.14	19.17	18.10	19.89	20.72	21.70	21.98	22.44	21.95	.....	21.75
21	18.00	19.42	19.09	18.19	19.93	20.71	21.80	21.90	22.41	21.92	.....	21.66
22	18.44	19.40	18.94	18.21	19.88	20.70	21.88	21.85	22.38	21.86	21.79	21.54
23	18.90	19.48	18.84	18.23	19.86	20.72	21.96	21.78	22.34	21.83	21.82	21.49
24	19.17	19.54	18.86	18.26	19.87	20.74	22.03	21.74	22.34	21.78	21.83	21.48
25	19.38	19.53	18.81	18.37	19.87	20.74	22.08	21.73	22.36	21.75	21.79	21.45
26	19.63	19.62	18.82	18.42	19.84	20.77	22.11	21.76	22.39	21.69	21.83	21.39
27	19.08	19.63	17.43	18.45	19.82	20.83	22.14	21.82	22.39	21.66	21.83	21.28
28	16.69	19.55	16.74	18.50	19.79	20.88	22.18	21.87	22.39	21.64	21.86	21.21
29	16.36		16.78	18.56	19.79	20.92	22.22	21.86	22.41	21.60	21.85	21.17
30	17.17		16.81	18.57	19.78	20.97	22.24	21.86	22.47	21.56	21.87	21.13
31	17.70		16.72		19.76		22.24	21.87		21.52		21.09

a Estimated.

Marion 19. Peoria & Eastern Railway Co. In Indianapolis, on Tenth St. at Big Four Railroad tracks, 60 feet south of centerline of Tenth St. and 250 feet west of Exeter Ave. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	19.22	Apr. 4	16.22	July 5	17.32	Oct. 3	17.78
10	18.74	11	16.14	11	17.40	10	17.86
17	17.94	18	16.18	18	17.48	17	17.87
24	17.54	25	16.39	25	17.56	24	17.83
31	16.94	May 2	16.47	Aug. 1	17.66	31	17.84
Feb. 7	16.50	9	16.59	8	17.76	Nov. 7	17.92
14	16.42	16	16.66	15	17.22	14	18.04
21	16.30	23	16.84	22	17.12	21	18.11
28	16.19	31	17.00	29	17.22	28	18.16
Mar. 7	16.25	June 6	17.07	Sept. 6	17.36	Dec. 5	18.27
14	16.26	13	17.11	12	17.48	12	18.33
21	16.35	20	17.28	19	17.56	19	18.38
28	16.31	27	17.39	26	17.67	27	18.27

Marion 21. Continental Baking Co., 339 East Market St., Indianapolis. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1944-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	52.85	.....	52.80	52.79	52.48	54.40	57.27	59.07	56.72	57.14	54.68	53.30
2	52.21	.....	52.86	52.19	52.83	54.95	57.04	59.34	56.56	55.90	54.92	53.36
3	53.01	.....	53.05	51.55	53.59	55.47	56.57	59.52	56.32	56.11	55.10	52.78
4	53.74	.....	52.85	51.98	54.13	55.27	55.68	59.62	55.98	56.45	54.98	51.68
5	54.12	.....	52.39	52.00	54.60	54.90	57.79	59.70	55.16	56.70	54.72	52.01
6	54.54	52.40	51.08	52.28	.....	54.81	58.15	59.54	55.68	56.78	53.76	51.67
7	54.74	53.14	52.00	52.42	54.68	55.67	58.37	59.02	56.29	56.64	53.78	52.21
8	54.42	53.34	52.10	52.80	54.34	55.81	58.53	58.98	56.82	56.22	54.12	52.32
9	53.84	53.90	52.25	52.66	54.19	56.03	58.44	59.22	57.06	55.76	54.19	51.96
10	54.66	54.18	52.72	52.27	54.61	56.10	58.34	59.45	56.90	55.17	54.24	51.40
11	54.88	54.18	52.84	52.18	54.68	55.83	58.56	59.62	56.46	55.15	54.39	50.82
12	55.00	53.53	52.30	52.31	54.80	55.52	58.70	59.65	56.38	55.04	54.12	51.21
13	55.02	52.24	51.10	52.53	55.17	54.66	58.86	59.50	56.76	54.73	53.12	51.32
14	55.24	52.66	51.66	52.63	55.08	54.94	59.12	59.10	57.04	54.39	53.45	51.18
15	54.71	.....	52.17	53.20	54.65	55.35	59.20	58.89	57.05	54.10	53.82	51.05
16	53.50	.....	52.13	52.87	54.57	55.41	59.04	59.16	57.20	53.45	54.06	50.90
17	54.58	.....	52.30	52.21	55.03	55.72	58.66	59.33	57.05	53.52	54.31	50.30
18	54.33	.....	52.64	52.53	55.25	55.52	58.84	59.59	56.68	54.45	54.28	49.67

Marion 21--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19	55.54	.....	52.20	52.94	55.44	55.20	59.17	59.60	56.97	54.76	53.78	50.06
20	55.53	52.12	50.90	53.02	55.38	55.30	59.46	59.44	57.23	55.07	52.67	50.02
21	55.09	52.75	51.15	53.21	54.97	55.66	59.60	58.84	57.28	55.34	53.67	50.02
22	54.57	53.09	51.55	53.42	54.13	56.02	59.84	58.25	57.32	55.56	53.60	50.41
23	53.56	53.26	52.03	53.12	54.43	56.12	59.67	58.20	57.66	55.15	53.73	50.69
24	54.20	52.93	52.14	52.29	54.70	56.27	59.27	58.06	57.44	55.13	53.22	50.25
25	54.70	53.74	52.52	52.75	54.74	56.00	59.32	57.88	56.84	55.10	52.89	49.57
26	54.78	53.24	52.00	53.10	54.87	55.56	59.54	57.81	56.86	55.62	52.42	48.90
27	54.45	51.64	50.29	53.32	54.81	55.92	59.74	57.68	56.94	55.56	51.39	49.67
28	54.20	52.36	51.60	53.62	54.62	56.41	59.85	57.23	57.26	55.64	52.18	49.95
29	53.81		51.98	53.62	54.20	56.80	59.83	56.90	57.24	55.42	52.97	50.17
30	53.33		52.14	53.23	53.02	57.04	59.74	56.77	57.43	54.42	53.30	49.28
31	52.53		52.36		53.61		59.39	56.64		54.72		49.17

Marion 22. Arthur Baxter. In Indianapolis, about 290 feet north of Georgia St., and about 160 feet east of East St. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1944-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	68.35	76.57	74.37	74.51	70.40	77.66	.....	80.32	73.02	78.50	76.85	75.97
2	67.44	77.26	74.73	71.50	75.95	78.57	.....	.....	72.94	73.65	77.27	74.14
3	71.50	77.20	74.74	68.75	77.31	78.72	.....	81.20	72.95	78.50	77.03	69.20
4	73.75	77.50	75.86	74.38	78.00	.....	.....	81.33	71.38	78.84	76.90	67.20
5	74.68	.....	72.55	74.60	78.85	.....	80.94	81.32	70.96	79.10	74.75	70.41
6	75.03	.....	63.25	74.92	78.92	76.59	81.12	80.95	75.48	79.19	69.55	71.70
7	75.20	74.91	73.25	75.40	77.62	77.55	81.44	79.65	78.13	78.00	75.20	72.61
8	74.70	75.37	74.03	75.32	73.45	77.87	80.95	80.99	79.25	74.55	75.75	71.90
9	68.00	75.84	74.20	74.27	77.13	78.27	80.32	81.23	79.65	73.73	75.75	69.13
10	74.45	76.10	74.53	73.00	77.90	77.15	78.75	81.51	79.25	72.25	76.10	68.88
11	74.96	75.88	75.05	74.97	78.02	77.04	80.49	81.74	75.75	72.27	76.14	65.25
12	75.50	73.00	71.50	75.40	78.09	75.05	80.71	81.79	78.30	71.60	73.81	67.48
13	75.80	69.38	63.50	75.30	78.82	77.52	81.98	81.58	79.06	69.90	69.75	67.25
14	75.43	73.39	71.98	75.77	78.45	78.17	81.37	80.15	79.51	69.40	75.00	66.82
15	73.00	75.08	75.71	76.05	75.50	78.03	81.24	80.74	79.61	63.35	74.83	66.74
16	64.85	75.62	74.07	74.40	77.40	78.42	80.90	81.40	79.79	67.43	76.10	66.89
17	75.45	75.61	74.75	70.22	78.26	78.75	79.71	81.67	79.55	73.00	76.82	64.00
18	76.40	76.29	74.88	75.24	78.67	77.75	80.92	82.17	77.73	76.32	76.28	62.10
19	77.05	71.50	72.00	76.11	78.70	75.15	81.50	81.95	79.25	76.93	72.92	65.00
20	76.92	66.60	66.60	76.53	73.47	77.80	81.85	81.26	79.76	77.48	69.00	65.23
21	75.40	73.83	72.27	76.54	77.25	79.02	81.93	77.80	79.80	77.60	75.48	65.27
22	68.70	74.74	73.40	76.32	74.20	79.52	82.07	75.37	79.85	77.62	75.38	65.67
23	65.05	75.50	74.22	76.00	76.81	79.90	.....	75.35	79.94	75.50	75.77	66.21
24	74.12	75.22	74.05	69.50	77.08	80.00	.....	75.13	79.40	77.12	73.00	65.75
25	75.82	75.84	74.62	75.92	77.77	78.60	81.28	74.59	77.10	77.45	73.05	63.92
26	75.98	72.00	71.65	76.47	77.60	.....	.....	74.40	79.28	78.00	72.50	62.30
27	75.87	68.75	66.23	76.80	77.50	.....	.....	74.00	79.93	77.94	68.25	66.05
28	71.70	73.95	73.52	77.05	76.50	.....	.....	73.15	80.00	78.00	74.60	65.65
29	66.84		74.04	77.44	74.15	.....	.....	72.30	79.28	70.65	75.41	.....
30	.....		74.53	75.50	69.80	.....	.....	72.41	79.91	76.50	75.36	.....
31	67.00		75.55		76.11	.....	.....	72.08		76.50		.....

a Tape measurement.

Marion 25. Electric Steel Castings Co. In Speedway City, on Main St., just north of Tenth St., 532 feet east of centerline of Main St. and 393 feet north of centerline of Tenth St. Measurements made by personnel of Geological Survey, U. S. Dept. of Interior. Records available: 1945-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.60	.....	26.80	26.15	28.80	37.70	43.35	39.80	32.10	29.85	29.85	30.65
2	24.60	.....	26.15	25.40	25.40	43.00	40.25	38.65	30.85	28.65	30.55	32.70
3	.....	.....	28.15	20.30	31.10	41.10	38.10	38.95	30.05	37.20	32.00	32.00

Marion 25--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	27.60	.....	26.10	23.60	31.15	40.80	37.80	37.30	29.50	40.00	31.70	28.20
5	28.90	.....	25.60	25.70	37.00	38.10	42.35	37.90	28.50	41.70	30.50	32.85
6	32.65	.....	20.40	25.00	38.85	42.15	42.30	36.80	30.20	42.40	29.00	34.65
7	32.50	18.89	.....	27.35	38.60	43.35	39.70	36.00	32.70	41.35	28.00	35.30
8	29.70	.....	24.50	27.20	30.80	43.15	43.55	39.80	33.15	35.70	30.30	35.70
9	24.00	.....	24.00	26.25	34.70	44.40	41.70	41.60	34.75	32.65	28.60	35.80
10	31.95	.....	26.20	21.80	37.15	43.60	41.00	41.20	34.60	36.10	31.80	33.75
11	32.15	.....	25.75	25.15	36.00	41.80	41.25	41.30	31.00	37.45	30.00	33.05
12	35.25	.....	25.00	28.95	39.35	39.50	42.20	41.75	32.30	37.90	28.85	35.30
13	36.15	.....	20.10	29.60	40.30	42.45	40.10	40.80	31.50	38.20	27.50	36.20
14	35.90	24.30	26.80	28.55	38.50	43.60	42.10	40.55	32.30	37.80	31.75	36.35
15	34.40	23.20	30.50	29.45	37.80	43.05	41.90	41.35	34.65	33.30	33.20	36.75
16	29.80	25.85	30.85	27.25	40.15	43.65	40.40	42.45	32.05	31.25	33.95	36.90
17	.....	25.90	32.10	22.40	42.50	44.05	38.40	41.90	32.40	32.60	37.40	35.50
18	31.70	25.70	33.25	28.50	42.60	43.65	38.80	39.95	33.45	33.25	35.00	33.40
19	32.30	22.35	32.90	31.95	44.00	39.65	43.95	38.00	35.65	35.30	34.10	30.80
20	33.15	20.50	26.70	32.20	43.00	42.70	43.25	36.90	36.90	37.05	29.60	30.50
21	34.30	27.40	30.35	34.40	42.50	44.40	44.40	35.50	36.75	36.70	28.70	29.60
22	32.25	30.90	32.20	34.10	37.10	43.70	44.05	36.05	38.55	36.95	29.20	29.35
23	27.80	32.75	31.90	33.90	36.00	44.40	43.50	39.80	37.30	36.50	28.80	28.95
24	26.45	33.35	32.85	28.75	36.45	43.05	43.30	44.50	37.30	33.60	28.25	28.00
25	26.90	34.85	32.50	32.05	36.00	43.15	42.70	42.30	36.60	31.70	28.20	27.35
26	26.85	34.60	30.20	33.60	37.35	43.45	42.90	42.80	36.55	30.60	27.20	26.90
27	26.55	33.40	26.75	33.85	35.95	40.80	42.75	42.30	32.25	29.90	26.90	28.05
28	26.50	26.30	25.75	36.10	31.95	44.10	44.40	38.90	31.40	32.35	27.55	28.00
29	25.80	.....	26.60	34.40	29.60	41.00	42.95	36.85	31.50	29.50	30.15	28.40
30	22.15	.....	26.05	33.90	24.60	44.45	42.50	36.40	30.20	28.20	32.25	28.20
31	17.95	.....	27.75	.....	32.20	.....	39.00	33.20	.....	29.00	.....	27.60

a Tape measurement.

Marion 26. Otto Schakel. E $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 26, T. 15 N., R. 4 E., 50 feet west of southwest corner of house. Measurements made by Louis Schakel, R. R. 5, Indianapolis. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.48	Apr. 4	5.90	July 5	8.15	Oct. 3	8.27
10	5.00	10	6.72	11	7.86	10	7.80
17	5.00	17	7.65	18	7.96	17	7.93
24	5.88	25	7.12	25	7.95	24	6.94
31	5.16	May 1	6.92	Aug. 1	7.59	31	7.52
Feb. 7	7.32	9	7.40	8	7.85	Nov. 7	7.72
14	6.56	16	7.82	15	7.92	14	7.90
21	5.68	23	6.16	22	7.90	21	8.10
Mar. 1	6.22	31	7.40	29	8.02	28	8.16
7	6.20	June 6	7.80	Sept. 5	7.90	Dec. 5	8.59
14	5.88	13	7.92	12	8.10	19	7.58
21	5.86	20	7.86	19	7.99	26	6.00
28	3.12	27	8.08	26	8.22		

Marion 27. Otto Schakel. E $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 26, T. 15 N., R. 4 E., 200 feet west of house. Measurements made by Louis Schakel, R. R. 5, Indianapolis. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	3.19	Apr. 4	3.08	July 5	3.99	Oct. 3	3.84
10	1.10	10	3.15	11	3.65	10	3.20
17	3.30	17	3.16	18	3.86	17	3.23
24	3.16	25	3.30	25	3.85	24	2.88
31	3.10	May 1	3.22	Aug. 1	3.17	31	3.12
Feb. 7	3.22	9	3.48	8	3.65	Nov. 7	3.26
14	3.06	16	2.40	15	.90	14	3.30
21	2.18	23	2.62	22	3.50	21	3.39
Mar. 1	3.15	31	3.21	29	3.80	28	3.51
7	3.12	June 6	3.63	Sept. 5	3.06	Dec. 5	3.63
14	3.08	13	3.85	12	3.54	19	2.90
21	3.06	20	3.58	19	3.26	26	1.10
28	1.20	27	3.85	26	3.62		

Marion 28. Manuel W. Rabourn. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 14 N., R. 5 E., at rear of owner's house. Measurements made by Manuel W. Rabourn, R. R. 1, Acton. Records available: 1947-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.97	3.24	4.96	3.48	8.59	10.06	11.00	12.10	12.34	12.70	12.13	12.22
2	7.97	3.68	5.14	3.80	8.63	10.10	11.01	12.14	12.35	12.73	12.15	12.24
3	7.98	4.06	5.33	4.10	8.70	10.16	11.03	12.17	12.37	12.76	12.14	12.26
4	7.76	4.32	5.52	4.40	8.77	10.21	11.05	12.21	12.40	12.75	12.13	12.28
5	4.31	4.58	5.68	4.68	8.83	10.27	11.08	12.26	.....	12.74	12.12	12.30
6	3.60	4.89	5.83	4.93	8.90	10.33	11.11	12.31	.....	12.73	12.12	12.31
7	3.80	5.17	6.00	5.15	8.95	10.39	11.13	12.36	.....	12.71	12.12	12.32
8	4.04	5.45	6.17	5.39	9.01	10.46	11.15	12.42	12.35	12.70	12.11	12.34
9	4.21	5.69	6.31	5.65	9.06	10.52	11.19	12.49	12.35	12.69	12.10	12.36
10	4.43	5.94	6.40	5.90	9.11	10.58	11.21	12.54	12.36	12.68	12.10	12.38
11	4.13	6.19	6.37	6.11	9.17	10.63	11.24	12.60	12.37	12.67	12.09	12.37
12	3.92	6.42	6.25	6.31	9.22	10.67	11.28	12.64	12.38	12.66	12.09	12.34
13	3.94	6.59	6.20	6.48	9.28	10.71	11.33	12.68	12.39	12.86	12.08	12.35
14	4.06	6.77	6.15	6.63	9.34	10.73	11.39	12.72	12.38	12.63	12.08	12.35
15	4.23	4.46	5.89	6.79	9.40	10.77	11.45	12.56	12.39	12.61	12.08	12.35
16	4.36	3.73	5.73	6.95	9.46	10.77	11.50	.....	12.38	12.59	12.08	12.35
17	4.05	3.76	5.66	7.12	9.52	10.77	11.54	12.49	12.39	12.58	12.09	12.35
18	4.04	3.91	5.57	7.25	9.59	10.79	11.58	.....	12.39	12.57	12.11	12.31
19	2.06	4.06	5.51	7.41	9.64	10.82	11.63	.....	12.39	12.56	12.12	12.29
20	2.28	4.21	5.52	7.56	9.69	10.84	11.68	.....	12.41	12.56	12.12	12.28
21	2.66	4.40	5.55	7.69	9.74	10.87	11.72	.....	12.43	.....	12.13	12.25
22	3.07	4.57	5.60	7.80	9.77	10.90	11.76	.....	12.45	.....	12.15	12.18
23	3.47	4.56	4.99	7.89	9.74	10.93	11.81	.....	12.47	.....	12.16	12.11
24	3.33	4.63	4.90	7.98	9.78	10.96	11.86	12.27	12.50	.....	12.16	12.05
25	2.83	4.59	4.90	8.10	9.82	10.92	11.91	12.28	12.53	.....	12.16	11.99
26	2.70	4.61	4.99	8.19	9.84	10.93	11.96	12.31	12.57	.....	12.17	11.92
27	2.32	4.70	2.38	8.28	9.87	10.95	11.98	12.35	12.61	.....	12.18	11.80
28	1.46	4.81	2.28	8.38	9.90	10.98	12.01	12.35	12.61	12.29	12.19	11.69
29	1.78		2.57	8.46	9.94	10.98	12.04	12.33	12.64	12.26	12.20	11.61
30	2.29		2.91	8.53	9.98	10.99	12.07	12.34	12.66	12.23	12.21	11.53
31	2.78		3.20		10.01		12.08	12.34		12.20		11.44

a Estimated.

b Tape measurement.

Marion 29. Indiana Amusement Co. In Indianapolis, at 134 West Washington St., in basement of Indiana Theater building. Measurements made by personnel of the Geological Survey, U. S. Dept. of Interior. Records available: 1948-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47.12	45.62	43.55	42.77	42.44	44.30	47.57	49.66	50.92	48.49	46.69	44.82
2	46.96	45.50	43.49	42.64	42.41	.....	47.72	49.73	50.80	48.44	46.56	44.86
3	46.94	45.35	43.43	42.61	42.64	.....	47.67	49.92	50.78	48.24	46.47	44.78
4	46.93	45.36	43.39	42.45	42.95	.....	47.32	50.13	50.75	48.30	46.33	44.70
5	46.87	45.26	43.43	42.35	43.25	.....	47.43	50.25	50.27	48.38	.....	44.62
6	46.87	45.11	43.43	42.35	43.61	45.20	47.71	50.15	50.24	48.45	.....	44.53
7	46.78	44.95	43.26	42.35	43.85	45.45	47.94	50.12	50.35	48.54	46.00	44.62
8	46.86	44.87	43.21	42.40	43.71	45.50	48.16	50.01	50.46	48.62	46.02	44.62
9	46.83	44.88	43.19	42.40	43.64	45.56	48.21	50.08	50.43	48.57	46.06	44.55
10	46.75	44.88	43.14	42.38	43.43	45.73	48.18	50.31	50.42	48.45	46.24	44.55
11	46.69	44.79	43.07	42.26	43.33	45.87	48.11	50.45	50.37	48.57	46.35	44.42
12	46.65	44.70	43.01	42.23	43.53	45.83	48.25	50.61	50.07	48.62	46.41	44.42
13	46.59	44.59	42.96	42.34	43.71	45.79	48.45	50.63	50.02	48.64	46.32	44.42
14	46.52	44.52	42.86	42.42	43.97	45.96	48.62	50.56	49.98	48.52	46.05	44.34
15	46.45	44.48	42.82	42.44	43.93	46.06	48.83	50.25	49.87	48.38	45.90	44.30
16	46.41	44.47	42.74	42.37	44.10	46.07	48.90	50.36	49.75	48.27	45.81	44.21
17	46.40	44.43	42.67	42.26	44.30	46.19	48.85	50.51	49.69	48.05	45.76	44.19
18	.....	44.35	42.69	42.13	44.52	46.32	48.73	50.68	49.62	48.08	45.70	44.06
19	46.39	44.23	42.71	42.11	44.73	46.30	48.83	50.80	49.35	48.15	45.56	44.29
20	46.29	44.17	42.66	42.15	44.76	46.28	49.03	50.67	49.32	48.23	45.46	44.41
21	46.20	44.10	42.40	42.12	44.70	46.42	49.23	50.58	49.34	48.29	45.47	.....
22	46.10	44.08	42.33	42.29	.....	46.61	49.45	50.35	49.38	48.21	45.34	.....

Marion 29--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	46.01	44.02	42.51	42.37	44.62	46.78	49.48	50.44	49.33	47.98	45.26	.....
24	45.92	43.90	42.50	42.32	44.58	46.90	49.43	50.62	49.08	47.64	45.14	.....
25	45.86	43.94	42.63	42.25	44.35	47.05	49.27	.....	49.01	47.47	45.10	.....
26	45.80	43.83	42.69	42.31	44.16	47.01	49.39	.....	48.72	47.30	45.02	.....
27	45.71	43.74	42.65	42.41	44.08	46.85	49.52	.....	48.77	47.33	44.90	43.89
28	45.73	43.62	42.66	42.44	44.12	47.01	49.71	.....	48.82	47.27	44.86	43.87
29	45.71		42.68	42.46	.....	47.22	49.85	50.65	48.78	47.16	44.87	43.88
30	45.63		42.69	42.48	.....	47.37	49.91	50.74	48.53	47.08	44.88	43.87
31	45.56		42.75		44.10		49.87	50.91		46.86		43.95

Marion 30. L. S. Ayres & Co., 1 W. Washington St., Indianapolis. At 30 S. Meridian St., about 75 feet south of alley. Measurements made by W. W. Hoffman. Records available: 1948-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	Oct.	Nov.	Dec.
1	48.55	47.45	44.95	44.65	44.30	.....	48.50	46.35
2	48.30	47.25	44.95	44.30	43.75	.....	48.35	46.30
3	48.15	47.00	44.90	44.45	43.90	.....	48.15	46.40
4	48.20	46.85	44.80	43.95	44.35	.....	48.00	46.40
5	48.20	46.85	46.05	43.85	a44.90	.....	47.95	46.15
6	48.20	46.65	45.20	43.70	.....	.....	47.75	46.15
7	48.35	46.40	44.85	43.75	.....	.....	47.45	46.05
8	48.60	46.30	44.65	44.05	.....	.....	47.45	46.15
9	48.70	46.35	44.60	44.00	.....	.....	47.85	46.15
10	48.40	46.25	44.55	44.15	.....	.....	47.95	46.00
11	48.30	46.30	44.50	43.65	.....	.....	47.95	46.10
12	48.25	46.15	44.45	43.70	.....	51.05	48.10	45.80
13	48.15	46.10	44.40	44.00	45.60	51.20	48.10	45.90
14	a48.10	45.95	44.20	44.20	45.90	51.05	47.65	45.85
15	48.10	45.85	44.15	44.30	46.25	50.85	47.40	45.80
16	48.25	45.90	44.15	.....	45.70	50.75	47.30	45.70
17	47.95	45.90	44.05	a43.85	45.95	49.90	47.20	45.70
18	47.85	45.80	43.95	.....	46.60	49.75	47.10	45.60
19	47.90	45.75	44.00	.....	46.70	50.45	47.00	45.50
20	48.00	45.60	44.10	43.55	.....	50.55	47.10	45.60
21	47.85	45.35	43.80	43.70	.....	50.75	46.90	45.90
22	47.90	45.25	43.85	43.90	.....	.....	46.90	46.00
23	47.60	.....	44.25	44.10	.....	50.35	46.85	45.80
24	47.35	45.20	44.05	44.15	.....	49.70	46.75	a45.80
25	47.40	45.20	44.25	43.70	.....	49.40	46.55	45.70
26	47.35	45.15	44.55	43.60	.....	49.30	46.60	45.35
27	47.30	45.20	44.70	a43.95	.....	49.25	46.45	45.20
28	47.15	45.00	44.30	44.30	.....	49.15	46.25	45.40
29	47.25		44.30	44.25	.....	49.45	46.30	45.30
30	47.25		44.60	44.30	.....	49.35	46.35	45.50
31	47.15		44.60		.....	48.70		45.60

a Estimated.

Marshall County

Marshall 1. Howard Lemler. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, T. 33 N., R. 3 E., 100 feet west of road and opposite lane leading to house near Inwood. Measurements made by Richard W. Becker, R. R. 2, Bourbon. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.24	Feb. 17	4.10	Mar. 31	4.80	May 12	6.75
13	6.39	24	3.79	Apr. 7	5.01	19	7.08
20	4.06	Mar. 3	3.58	14	5.48	26	6.57
27	3.91	10	3.94	21	5.93	June 2	7.02
Feb. 3	4.27	18	4.67	28	6.40	9	7.03
10	4.62	24	5.01	May 5	6.47	16	6.41

Marshall 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 23	6.68	Aug. 4	7.96	Sept. 15	8.89	Nov. 10	8.56
30	7.03	11	8.10	29	9.00	17	8.53
July 8	7.33	18	8.29	Oct. 6	8.97	Dec. 1	8.50
15	7.50	25	8.49	13	8.67	8	8.49
21	7.54	Sept. 1	8.64	20	8.57	22	5.57
29	8.88	8	8.78	27	8.52	29	4.38

Martin County

Martin 3. John Ketcham. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 4 N., R. 5 W., on west side of State Highway 45, 1.3 miles south of intersection with State Highway 58. Measurements made by George W. Melton. Records available: 1944-49.

Jan. 3	19.76	Apr. 4	19.03	July 4	20.97	Oct. 3	21.41
10	19.62	11	19.28	11	20.99	10	21.51
17	19.88	18	19.95	18	21.01	17	21.42
24	19.49	25	20.09	25	21.09	24	21.34
Feb. 1	19.58	May 2	20.38	Aug. 1	21.11	31	21.38
7	19.99	9	20.41	8	22.24	Nov. 7	21.32
14	19.95	16	21.62	15	22.27	14	21.43
21	19.69	23	21.58	22	20.72	21	21.62
28	19.88	30	20.63	29	20.99	28	21.47
Mar. 7	19.97	June 6	20.85	Sept. 5	21.04	Dec. 5	21.61
14	19.99	13	20.84	12	21.12	12	21.53
21	20.02	20	20.89	19	21.24	19	21.37
28	19.02	27	20.96	26	21.32	26	21.33

Martin 4. John Ketcham. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 4 N., R. 5 W., on west side of State Highway 58, about 300 feet north of Martin 3. Measurements made by George W. Melton. Records available: 1944-49.

Jan. 3	3.05	Apr. 4	2.73	July 4	3.19	Oct. 3	5.29
10	2.95	11	2.78	11	3.31	10	5.32
17	2.75	18	3.17	18	3.56	17	4.12
24	2.08	25	3.28	25	3.41	24	3.98
Feb. 1	2.58	May 2	3.64	Aug. 1	3.49	31	4.04
7	2.96	9	3.66	8	4.29	Nov. 7	3.91
14	2.79	16	3.71	15	4.58	14	4.09
21	3.03	23	3.68	22	3.22	21	4.39
28	3.18	30	3.32	29	3.76	28	5.09
Mar. 7	3.18	June 6	3.53	Sept. 5	4.49	Dec. 5	6.09
14	3.28	13	3.38	12	4.98	12	3.02
21	3.29	20	3.44	19	5.02	19	3.05
28	2.76	27	3.54	26	5.25	26	2.97

Miami County

Miami 1. Edna Fish and Clark McConnell. In Bunker Hill, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T. 26 N., R. 4 E., about 200 feet northeast of Baptist Church on State Highway 32. Measurements made by George Koerner and George Plummer, Bunker Hill. Records available: 1948-49.

Jan. 3	43.65	Apr. 4	42.30	July 4	45.40	Oct. 3	44.69
10	44.48	11	43.50	11	43.77	10	46.27
17	41.82	18	43.37	18	45.05	17	46.26
23	40.95	25	43.40	25	44.73	24	45.55
31	40.46	May 2	44.14	Aug. 1	43.77	31	45.56
Feb. 7	43.02	9	43.17	9	46.50	Nov. 7	45.56
14	40.95	16	45.97	15	45.29	14	44.75
21	41.10	23	42.73	22	46.53	21	45.50
28	44.35	June 1	43.59	29	44.75	28	45.35
Mar. 7	43.89	6	44.85	Sept. 5	45.47	Dec. 5	45.35
14	41.91	13	43.64	12	46.55	12	44.20
21	45.22	20	43.75	19	44.57	19	45.14
28	41.67	27	43.34	27	46.63	26	43.76

Monroe County

Monroe 2. State of Indiana, Morgan-Monroe State Forest. On Maggie Farr farm, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 10 N., R. 1 W. Measurements made by Victor McGee, Morgan-Monroe State Forest. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	9.95	Apr. 12	17.40	July 6	22.94	Oct. 5	23.90
14	10.62	19	19.37	12	23.60	11	24.35
17	11.18	26	19.80	19	23.70	18	24.80
25	11.98	28	19.70	26	23.79	25	22.49
Feb. 2	11.80	May 3	21.65	Aug. 2	23.76	Nov. 2	22.60
8	14.60	10	21.57	9	24.35	8	23.85
15	10.30	17	22.60	16	24.20	15	23.70
22	12.28	24	22.85	23	24.10	22	23.90
Mar. 1	16.40	31	23.00	30	24.28	29	24.19
8	15.30	June 8	23.10	Sept. 6	24.10	Dec. 6	24.22
15	16.90	14	23.10	13	24.30	13	23.70
22	14.60	21	23.18	20	24.30	22	22.88
29	9.20	29	22.91	27	24.55	27	18.70
Apr. 5	12.00						

Monroe 3. Dustin McDonald. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 8 N., R. 2 W., west side of county road, 2 miles south of Stanford. Measurements made by Ward Harp. Records available: 1944-49.

Jan. 2	25.87	Mar. 20	19.54	July 2	23.24	Oct. 1	24.22
9	23.54	Apr. 8	19.11	15	23.74	8	24.27
16	22.02	15	20.52	22	24.07	16	24.38
24	20.16	22	21.20	29	24.24	22	19.38
31	16.94	29	21.77	Aug. 5	23.80	29	23.05
Feb. 6	19.37	May 6	22.28	27	22.38	Nov. 12	23.38
13	21.02	13	21.59	Sept. 3	23.05	Dec. 11	23.25
20	18.40	27	23.20	10	23.27	18	21.97
27	21.06	June 3	23.34	17	23.65	24	20.94
Mar. 6	21.10	10	23.77	24	23.91	31	20.36
13	19.78	24	22.38				

Montgomery County

Montgomery 1. W. H. Moore. In Waveland, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 17 N., R. 6 W., at site of burned house. Measurements made by Clarhud H. Moore. Records available: 1935-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.31	6.32	7.42	6.56	8.81	10.14	11.05	11.03	12.27	12.93	11.07	10.83
2	7.41	6.71	7.52	6.75	8.84	10.20	11.09	10.95	12.41	12.92	11.03	10.92
3	7.63	6.84	....	6.81	9.02	10.30	11.11	11.01	12.43	12.93	11.16	11.08
4	7.45	6.86	....	7.01	9.11	10.42	11.13	11.10	12.44	12.59	11.45	11.04
5	4.78	7.23	7.70	7.11	9.17	10.47	11.17	11.18	12.42	12.53	11.36	11.11
6	5.40	7.41	7.83	7.10	9.22	10.53	11.19	11.23	12.50	11.45	11.50	11.14
7	5.87	7.50	8.21	7.38	9.30	10.58	11.20	11.27	12.55	....	11.48	11.01
8	6.13	7.66	8.21	7.56	9.36	10.74	11.11	11.30	12.55	11.68	11.47	11.15
9	6.39	7.79	8.20	7.83	9.37	10.85	....	11.37	12.59	11.70	11.53	11.30
10	6.80	8.00	8.15	8.00	9.45	10.89	10.96	11.45	12.62	11.70	11.56	11.32
11	6.37	8.24	8.36	8.06	9.63	10.83	10.98	11.54	12.63	11.66	11.55	11.10
12	5.89	8.24	8.34	8.10	9.68	10.71	10.92	11.58	12.67	9.78	11.61	10.53
13	5.88	8.27	8.35	8.08	9.73	10.67	10.92	11.56	12.62	9.85	11.10	9.96
14	6.02	8.38	8.33	8.22	9.81	10.60	10.99	11.58	12.67	9.87	10.59	9.46
15	6.33	6.10	8.33	8.25	9.90	10.48	11.07	11.60	12.70	10.00	9.86	9.24
16	6.44	5.80	8.39	8.54	9.95	10.41	11.17	11.64	12.65	10.12	9.66	9.18
17	6.52	5.97	8.29	8.58	10.03	10.32	11.23	11.65	12.66	10.26	9.67	9.18
18	6.58	6.09	8.28	8.43	10.08	10.34	11.27	11.63	12.46	10.45	9.77	9.20
19	4.35	6.23	8.53	8.67	10.11	10.43	11.34	11.68	12.56	10.59	9.86	9.20
20	5.41	6.46	8.62	....	10.09	10.46	11.40	11.78	12.57	10.66	9.76	9.15
21	5.58	....	8.51	....	10.09	10.49	11.46	11.87	12.57	10.73	10.00	9.04
22	6.00	....	8.42	....	9.91	10.52	11.51	11.90	12.56	10.62	10.29	7.55

Montgomery 1--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	6.35	....	8.55	8.71	9.95	10.62	11.56	11.94	12.52	10.69	10.24	6.86
24	6.15	....	8.68	8.73	9.94	10.64	11.57	12.02	12.67	10.71	10.26	6.94
25	6.12	a7.06	8.63	8.90	9.95	10.68	11.56	12.09	12.70	10.75	10.25	7.10
26	6.08	6.99	8.70	8.84	9.86	10.82	11.58	12.14	12.73	10.70	10.49	7.15
27	5.76	7.07	7.35	8.80	9.88	10.90	11.60	12.17	12.71	10.83	10.41	6.33
28	4.77	7.34	6.55	8.84	9.88	10.93	11.51	12.15	12.70	10.84	10.57	6.18
29	5.44	....	6.57	8.86	9.97	10.95	11.64	12.14	12.78	10.88	10.55	6.32
30	5.91	....	6.62	8.80	10.03	10.97	11.63	12.21	12.85	10.87	10.68	6.56
31	5.96	....	6.47	....	10.06	....	11.11	12.23	....	10.90	....	6.84

a Tape measurement.

Montgomery 4. Mrs. W. L. Glenn. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 17 N., R. 6 W., 2.2 miles north of State Highway 47 on State Highway 59. Measurements made by Clarhud H. Moore. Records available: 1935-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a4.43	....	....	a10.62	13.40	14.57	15.70	11.72	11.31
2	13.36	14.63	15.73	11.71	11.34
3	a7.25	13.33	14.68	15.77	11.70	11.37
4	a4.82	a4.43	....	....	....	....	13.32	14.73	15.78	11.70	11.39
5	13.31	14.77	15.79	11.71	11.42
6	a4.45	....	....	13.33	14.82	15.78	11.72	11.45
7	a9.60	....	....	a4.12	....	....	....	13.35	14.86	15.67	11.74	11.47
8	13.39	14.90	15.54	11.75	11.50
9	11.84	13.43	14.94	15.43	11.77	11.53
10	a8.50	11.89	13.48	14.98	15.33	11.79	11.55
11	a5.97	a4.79	....	....	....	11.95	13.54	15.03	15.23	11.81	11.57
12	12.03	13.59	15.08	15.06	11.83	11.55
13	a4.91	....	12.12	13.62	15.12	14.78	11.83	11.51
14	a9.70	....	....	....	....	....	12.23	13.66	15.16	14.48	11.73	11.48
15	a4.25	....	....	12.34	13.70	15.20	14.17	11.62	11.46
16	12.45	13.74	15.24	13.87	11.53	11.45
17	a8.92	12.57	13.79	15.28	13.60	11.46	11.44
18	a2.99	a4.94	....	....	....	12.67	13.83	15.33	13.36	11.40	11.44
19	12.74	13.87	15.36	13.15	11.35	11.41
20	a5.78	....	12.83	13.93	15.39	12.97	11.31	11.38
21	a5.74	....	....	....	....	....	12.92	13.98	15.42	12.79	11.28	11.34
22	a4.34	....	....	13.00	14.04	15.45	12.64	11.27	11.23
23	13.04	14.10	15.47	12.46	11.26	10.85
24	a9.76	13.10	14.16	15.50	12.30	11.26	10.80
25	a3.92	a5.03	....	....	....	13.17	14.21	15.53	12.17	11.25	10.77
26	13.23	14.27	15.56	12.05	11.25	10.74
27	a6.16	....	13.29	14.32	15.58	11.96	11.25	10.56
28	a3.52	....	....	....	....	....	13.35	14.38	15.61	11.89	11.27	10.42
29	a4.35	....	....	13.42	14.42	15.64	11.83	11.28	10.36
30	13.48	14.47	15.67	11.78	11.29	10.32
31	13.44	14.52	....	11.74	....	10.29

a Tape measurement.

Morgan County

Morgan 3. State of Indiana. Morgan-Monroe State Forest. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 11 N., R. 1 E. Measurements made by Victor McGee, Morgan-Monroe State Forest. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	3.38	Feb. 15	2.40	Mar. 29	3.40	Apr. 28	6.10
14	3.27	22	2.85	Apr. 5	3.80	May 3	6.15
17	3.19	Mar. 1	3.10	12	3.50	10	6.54
25	2.82	8	3.60	13	6.38	17	6.70
Feb. 1	2.28	15	3.30	19	6.58	24	5.82
8	2.96	22	2.90	26	6.38	31	6.48

Morgan 3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 8	7.09	Aug. 2	6.26	Sept. 27	6.70	Nov. 15	6.78
14	5.77	9	7.10	Oct. 5	6.60	22	6.90
21	5.90	16	6.70	12	6.30	29	6.90
28	6.10	23	7.09	18	6.40	Dec. 6	5.90
July 6	6.42	30	6.24	25	6.03	13	5.99
12	6.20	Sept. 6	6.30	Nov. 2	6.30	20	5.85
19	6.85	13	6.60	8	6.96	27	5.80
26	6.95	20	6.40				

Noble County

Noble 5. Rolla Becker. $N\frac{1}{2}NW\frac{1}{4}NE\frac{1}{4}$ sec. 13, T. 34 N., R. 10 E., about 1 mile north of State Highway 8 and about 4 miles southwest of Kendallville. Measurements made by Keith Becker. Records available: 1942-49.

Jan. 3	4.53	Apr. 15	3.30	Aug. 1	5.63	Nov. 4	5.33
17	2.86	May 16	4.18	Sept. 17	6.53	Dec. 3	5.52
Feb. 2	3.32	June 1	4.48	Oct. 1	6.78	17	2.18
15	3.40	July 1	4.98				

Noble 6. City of Kendallville. At municipal water plant, about 73 feet west of west shore of Bixler Lake and 182 feet north of centerline of Diamond St., and about 68 feet west of Noble 1. Measurements made by Cecil Likens, chief engineer, Kendallville Water Dept. Records available: 1946-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.42	19.65	18.94	18.62	17.72	12.37	19.42	19.47	21.00	21.00	.....	.....
2	21.34	19.63	19.09	18.72	17.65	17.52	19.48	19.41	20.83	20.72	.....	.....
3	21.23	19.46	19.19	18.74	17.58	17.60	19.19	19.44	20.60	20.34	.....	21.33
4	21.30	19.43	19.10	18.75	17.82	17.67	18.62	19.45	20.38	20.70	.....	21.27
5	21.40	19.49	19.03	18.60	17.75	17.52	18.45	19.47	20.38	20.90	.....	21.20
6	21.35	19.43	19.14	18.48	17.92	17.41	19.50	19.48	20.11	20.29	20.97	21.24
7	21.32	19.40	19.27	18.62	18.10	17.46	19.19	19.34	20.93	.....	20.83	21.25
8	21.40	19.32	19.25	18.69	18.00	17.66	19.20	19.12	21.32	.....	20.77	21.33
9	21.27	19.67	19.10	18.58	17.98	17.71	18.76	19.89	20.97	.....	21.13	21.35
10	21.17	19.68	19.08	18.48	17.90	17.78	18.71	20.06	20.48	20.25	21.28	.....
11	21.08	19.80	18.98	18.26	17.88	17.80	18.66	19.92	20.45	20.84	21.28	.....
12	21.07	19.77	19.05	18.19	17.84	17.80	19.32	20.16	.....	20.30	20.95	21.30
13	20.95	19.69	18.98	18.14	18.12	17.69	19.16	20.38	20.48	20.60	20.40	21.35
14	20.78	19.62	18.89	18.10	18.42	17.80	19.25	20.87	20.09	20.78	20.56	21.40
15	20.63	19.65	18.83	18.00	18.01	17.82	19.36	20.65	20.79	20.83	21.01	21.41
16	20.56	19.74	19.01	18.15	17.86	17.80	20.05	20.50	20.03	20.25	21.06	21.39
17	20.45	19.65	19.13	18.25	17.77	17.65	20.03	20.43	20.28	20.06	21.15	21.45
18	20.33	19.50	19.16	18.15	17.82	.....	18.94	20.28	20.40	20.45	21.21	21.54
19	20.43	19.37	19.15	18.13	17.72	17.48	19.52	20.85	19.91	20.15	.....	21.44
20	20.36	19.25	.....	18.15	17.87	.....	19.81	.....	20.29	19.83	21.34	21.47
21	.....	19.12	.....	18.24	17.72	.....	19.25	19.82	20.15	19.80	21.32	21.60
22	20.35	19.10	19.05	18.11	17.52	.....	19.11	20.09	20.28	20.32	21.33	21.64
23	20.26	19.12	19.17	18.02	17.42	.....	.....	20.33	20.75	20.13	21.43	21.65
24	20.17	19.04	19.15	18.10	17.43	.....	19.27	20.86	20.32	19.69	21.45	21.56
25	20.13	19.08	18.97	18.28	17.45	18.25	19.06	20.96	.....	19.96	21.35	21.60
26	20.15	18.98	18.84	18.25	17.27	19.14	19.11	21.11	.....	20.42	21.31	21.35
27	20.17	18.90	18.66	18.06	17.43	19.17	19.17	21.35	.....	20.62	.....	21.40
28	20.03	18.89	18.64	17.91	17.50	19.50	19.39	21.14	.....	20.25	.....	21.36
29	19.93	.....	18.65	17.85	17.54	18.50	20.07	20.55	.....	20.63	.....	21.20
30	19.85	.....	18.66	17.83	17.54	19.61	20.53	20.85	21.01	.....	.....	.....
31	19.71	.....	18.62	.....	17.40	.....	19.73	20.63	.....	.....	.....	.....

a Estimated.

b Tape measurement.

Noble 7. Arthur McClellan. $NW\frac{1}{4}SE\frac{1}{4}$ sec. 23, T. 33 N., R. 9 E., about 1.1 mile northwest of Merriam, across road from former observation well Noble 3. Measurements made by Arthur McClellan. Records available: 1947-49.

Noble 7--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	21.67	Mar. 27	19.52	June 26	20.22	Oct. 16	21.75
9	21.46	Apr. 3	19.58	July 10	20.57	23	21.68
16	21.35	10	19.69	25	20.51	31	21.80
23	21.18	17	19.79	31	20.82	Nov. 6	21.81
30	20.97	24	19.92	Aug. 15	21.14	13	21.85
Feb. 6	20.72	May 8	20.02	22	21.26	20	21.85
13	20.57	15	20.08	Sept. 4	21.40	27	21.88
20	20.08	22	20.00	18	21.54	Dec. 5	21.90
27	19.66	29	20.08	25	21.61	11	21.95
Mar. 6	19.59	June 6	20.13	Oct. 2	21.68	18	21.95
13	19.45	13	20.12	10	21.70	25	21.93
20	19.42						

Ohio County

Ohio 1. Arthur H. Hannah. NW $\frac{1}{4}$ sec. 16, T. 3 N., R. 2 W., about 1.5 miles north and about 0.7 mile west of Aberdeen. Measurements made by Arthur H. Hannah. Records available: 1944-49.

Jan. 1	7.51	Apr. 2	5.62	June 25	11.64	Sept. 24	13.41
8	6.18	9	5.68	July 9	12.49	Oct. 1	13.52
15	4.89	16	5.23	16	12.54	15	13.71
22	3.57	23	5.11	23	12.06	22	13.98
29	2.87	30	5.36	30	11.79	Nov. 5	14.19
Feb. 12	2.92	May 7	5.73	Aug. 6	11.73	12	14.32
19	3.01	14	6.62	13	11.82	19	14.39
26	3.06	21	7.97	21	12.05	Dec. 3	14.46
Mar. 5	3.67	28	7.59	27	12.49	10	14.51
12	4.52	June 4	10.29	Sept. 3	13.08	17	14.57
19	5.07	11	11.36	10	13.29	31	14.62
26	4.79	18	11.98	17	13.39		

Orange County

Orange 1. Herman D. Winger. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 1 N., R. 2 E., at abandoned house, 1.25 miles south of Millersburg on west side of county road. Measurements made by Herschel Buchanan. Records available: 1944-49.

Feb. 25	1.20	May 7	4.10	Aug. 6	5.81	Oct. 31	8.90
Mar. 5	1.90	14	4.00	20	6.90	Nov. 5	7.90
12	1.87	21	4.27	27	6.50	12	7.20
19	.40	28	5.10	Sept. 3	7.01	19	7.50
26	.20	June 4	5.82	10	7.01	26	8.04
Apr. 2	1.10	11	4.82	17	7.05	Dec. 3	8.02
9	1.70	July 6	3.37	24	7.70	10	8.04
16	2.30	9	4.06	Oct. 1	8.09	19	7.90
23	2.70	16	4.88	10	8.01	24	7.90
28	2.97	23	5.01	15	8.02	31	5.01
30	3.35	30	5.90	22	7.02		

Owen County

Owen 2. Agnes Stuckey. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 12 N., R. 4 W., at Lower Cataract Falls, near Cataract. Measurements made by Agnes Stuckey and W. W. Coffman. Automatic water-stage recorder installed Apr. 22, 1949. Records available: 1946-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.32	18.47	16.48	20.81	20.08	20.74	19.74	20.43
2	bl7.43	bl8.26	.....	18.30	18.55	17.21	20.85	20.26	20.77	19.79	20.45
3	18.33	18.62	17.67	20.90	20.35	20.81	19.85	20.52
4	18.36	18.73	18.09	20.95	20.40	20.84	19.98	20.52

b Tape measurement.

Owen 2--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	bl7.70	18.38	18.82	18.38	20.99	.....	.....	19.39	20.53
6	bl1.80	.....	.....	.....	18.40	18.94	18.68	21.03	.....	.....	20.09	20.53
7	18.40	19.05	18.98	21.06	20.72	.....	20.11	20.46
8	18.42	19.19	19.23	21.09	20.79	.....	20.11	20.50
9	bl8.05	.....	.....	18.42	19.32	19.43	21.14	20.86	.....	20.13	20.76
10	bl8.25	.....	18.42	19.40	19.56	21.20	20.91	.....	20.16	.....
11	18.46	18.42	19.68	21.27	20.95	.....	20.16	.....
12	bl7.46	.....	.....	.....	18.48	18.55	19.79	21.29	20.98	.....	20.18	.....
13	bl8.36	18.51	18.59	19.85	21.25	20.98	.....	20.21	.....
14	18.52	18.43	19.93	21.22	20.97	.....	20.21	.....
15	18.54	18.46	19.99	21.21	20.98	.....	20.21	17.57
16	bl4.18	bl8.37	.....	18.56	13.45	20.07	18.28	20.95	.....	20.22	18.15
17	18.59	.....	20.15	18.45	20.91	.....	20.23	18.50
18	18.62	15.84	20.24	18.97	20.01	.....	20.27	18.69
19	bl3.01	.....	.....	.....	18.64	16.65	20.33	.....	19.91	.....	20.30	18.84
20	bl8.44	18.66	17.27	20.41	.....	19.99	.....	20.24	18.93
21	18.67	17.67	20.46	.....	20.11	.....	20.27	18.95
22	18.59	17.99	20.50	.....	20.23	.....	20.35	17.83
23	18.27	18.53	18.19	20.54	20.53	20.30	.....	20.34	15.76
24	bl8.26	18.27	16.23	18.30	20.57	20.62	20.41	.....	20.31	16.60
25	18.27	16.65	18.39	20.59	20.70	20.49	.....	20.25	17.33
26	18.31	17.23	18.51	20.62	20.75	20.55	.....	20.32	17.72
27	bl0.01	.....	.....	18.32	17.60	18.70	20.65	20.78	20.58	.....	20.29	17.03
28	18.32	17.92	18.90	20.68	19.31	20.59	19.45	20.34	17.18
29	18.31	18.15	14.70	20.70	19.46	20.61	19.52	20.32	17.60
30	bl8.33	18.29	15.65	20.72	19.66	20.67	19.56	20.38	17.94
31	bl5.88	.....	18.39	.....	20.76	19.91	.....	19.62	.....	18.20

a Estimated.

b Tape measurement.

Owen 3. Ben Lambert. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 12 N., R. 4 W., about 2 miles west of Cataract. Measurements made by Glendon C. Bandy. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	108.76	Apr. 7	108.50	July 14	108.79	Oct. 6	108.87
13	108.85	15	108.29	22	108.85	13	108.90
20	108.86	28	108.61	29	108.88	20	108.96
27	108.80	May 5	108.61	Aug. 5	108.90	27	108.91
Feb. 4	108.72	12	108.50	11	108.84	Nov. 3	108.93
10	108.61	19	108.65	18	108.84	10	108.80
17	108.66	26	108.57	25	108.92	17	108.79
24	108.70	June 2	108.61	Sept. 1	108.85	24	108.77
Mar. 3	108.76	9	108.80	8	108.84	Dec. 1	108.79
10	108.46	16	108.71	15	108.94	8	108.85
17	108.50	23	108.70	22	108.86	22	108.70
24	108.61	30	108.79	29	108.90	29	108.81
31	108.50	July 6	108.80				

Owen 4. Jackson Township School. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 12 N., R. 4 W., about 1 mile southwest of Cunot. Measurements made by Pauline P. Coffey. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	78.48	Apr. 4	81.20	July 5	81.06	Oct. 3	81.80
10	76.70	11	82.49	11	81.14	10	81.73
17	76.88	18	81.38	18	81.17	17	80.76
24	81.87	25	80.90	25	81.39	24	80.52
31	80.19	May 2	80.73	Aug. 1	81.68	31	78.79
Feb. 7	81.79	9	79.82	8	81.73	Nov. 7	78.63
14	82.35	16	81.09	15	81.80	14	80.70
21	81.67	23	80.88	22	81.39	21	80.38
28	81.49	31	80.49	29	81.32	28	80.29
Mar. 7	82.62	June 6	80.12	Sept. 6	81.58	Dec. 5	80.44
14	82.58	13	81.90	12	81.69	12	80.68
22	82.12	20	81.10	19	81.85	19	80.62
27	80.70	26	81.22	25	81.52	27	79.33

Owen 5. Ed Laudig. $W\frac{1}{2}SW\frac{1}{4}NW\frac{1}{4}$ sec. 30, T. 12 N., R. 4 W., about 2.5 miles west of Cunot. Measurements made by Ed Laudig. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	3.06	Apr. 9	3.91	July 9	8.68	Oct. 8	10.99
8	2.10	16	4.23	16	9.96	15	10.09
15	2.07	23	5.23	23	9.96	22	8.97
23	2.67	30	3.46	30	9.45	29	8.29
Feb. 5	2.96	May 7	6.93	Aug. 6	10.07	Nov. 5	9.47
11	3.42	14	7.59	13	10.07	12	6.77
19	2.78	21	8.05	20	9.98	20	9.55
26	1.93	28	8.96	27	9.85	26	8.97
Mar. 5	2.69	June 4	9.94	Sept. 6	10.67	Dec. 3	9.77
12	3.08	11	8.24	10	9.99	13	9.35
19	2.92	18	8.22	17	10.08	17	7.57
26	1.99	25	8.97	24	8.08	24	4.37
Apr. 2	1.91	July 2	9.53	Oct. 1	9.99		

Owen 6. Ed Laudig. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 24, T. 12 N., R. 5 W. Measurements made by Ed Laudig. Records available: 1946-49.

Jan. 1	3.49	Apr. 9	5.73	July 9	8.06	Oct. 8	5.49
8	2.45	16	5.56	16	8.08	15	5.57
15	3.41	23	7.76	23	7.83	22	4.17
23	3.99	30	5.91	30	8.14	29	6.29
Feb. 5	3.98	May 7	6.41	Aug. 6	8.23	Nov. 5	4.34
11	5.07	14	6.43	13	8.29	12	6.94
19	4.46	21	7.02	20	7.28	20	7.48
26	4.32	28	8.14	27	7.23	26	7.36
Mar. 5	5.58	June 4	7.82	Sept. 6	6.81	Dec. 3	7.49
12	5.71	11	7.57	10	7.45	13	5.39
19	4.49	18	9.34	17	6.89	17	4.95
26	1.72	25	7.46	24	6.59	24	4.37
Apr. 2	5.07	July 2	7.46	Oct. 1	7.35		

Parke County

Parke 1. Donald C. Stutler. $E\frac{1}{2}SE\frac{1}{4}$ sec. 3, T. 15 N., R. 8 W. Measurements made by Donald C. Stutler. Records available: 1945-49.

Jan. 6	4.78	Apr. 7	5.06	July 7	5.34	Oct. 6	5.50
13	4.78	14	5.21	14	5.32	13	5.10
20	4.72	21	5.22	21	5.44	20	4.60
27	4.60	28	5.10	Aug. 4	5.30	27	4.30
Feb. 3	4.82	May 6	5.06	11	5.08	Nov. 3	4.88
10	4.86	13	5.18	18	5.22	10	5.00
17	4.78	20	5.23	25	5.28	17	5.02
24	4.72	26	5.20	Sept. 1	5.52	Dec. 1	5.16
Mar. 3	4.80	June 2	5.26	8	5.64	8	5.18
10	4.88	9	5.32	15	5.80	15	5.12
17	4.92	16	5.08	22	5.88	22	5.04
24	4.97	23	5.14	29	6.02	29	4.88
31	4.98	30	5.30				

Perry County

Perry 1. Owner unknown. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 21, T. 5 S., R. 2 W., about 1.8 miles northeast of Gatchel along State Highway 37. Measurements made by Charles H. and Gertrude B. Goffinet. Records available: 1944-49.

Jan. 2	3.48	Feb. 20	2.80	Apr. 10	4.52	May 29	6.66
9	3.35	27	4.03	17	3.47	June 5	6.20
16	4.40	Mar. 6	4.80	24	5.01	12	7.51
23	2.40	13	3.27	May 1	5.52	19	2.69
30	3.16	20	3.02	9	6.17	26	4.19
Feb. 6	2.80	27	1.60	15	4.93	July 3	6.18
12	4.19	Apr. 3	3.68	22	5.80	10	6.79

Perry 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 14	7.78	Sept. 18	8.02	Oct. 23	7.98	Nov. 27	8.76
21	8.35	25	8.96	30	8.31	Dec. 4	8.79
28	8.59	Oct. 2	9.11	Nov. 6	8.58	11	1.79
Sept. 4	8.80	9	7.37	13	8.48	18	1.80
11	8.80	16	8.41	20	8.64	25	3.72

Pike County

Pike 1. A. J. Heuring. In Winslow, in front of residence at Lafayette and Main Sts. Measurements made by Luther Selby, Pike County State Forest. Records available: 1936-49.

Jan. 4	6.60	Apr. 5	4.80	June 28	7.50	Oct. 4	8.65
11	6.10	12	5.59	July 6	7.74	11	8.09
18	6.20	19	6.10	11	7.77	18	7.51
25	4.00	26	6.60	19	7.87	25	7.30
Feb. 1	4.50	29	6.50	26	8.08	Nov. 1	7.29
8	5.50	May 3	6.78	Aug. 2	8.34	7	7.51
15	4.70	10	7.00	9	8.54	14	7.61
22	5.10	17	7.07	16	8.47	22	7.89
Mar. 1	5.70	23	7.07	23	8.34	29	8.17
7	6.15	31	7.29	30	8.48	Dec. 6	8.40
15	5.05	June 6	7.55	Sept. 6	8.60	13	8.39
22	4.85	14	7.71	13	8.67	20	7.79
29	4.00	21	7.53	20	8.50	27	7.29

Porter County

Porter 1. Valparaiso Water Dept. test well. At well 1 pumphouse at Flint Lake, about 3 miles north of Valparaiso, along State Highway 49. Measurements made by J. F. Bradley, engineer, Valparaiso Water Dept. Records available: 1931-33; 1935-49.

Jan. 2	54.80	Apr. 10	57.05	July 3	59.03	Oct. 2	60.40
9	55.45	17	56.15	10	58.87	9	58.65
16	56.52	24	57.90	17	59.53	16	59.18
24	56.15	May 1	58.20	24	59.88	30	59.22
31	56.25	8	58.15	31	60.42	Nov. 6	59.55
Feb. 13	56.85	15	58.17	Aug. 7	61.32	13	59.04
20	55.45	22	58.55	21	61.30	20	59.00
27	54.75	29	58.73	28	61.16	27	59.08
Mar. 6	54.85	June 5	58.40	Sept. 3	61.38	Dec. 4	58.86
13	55.45	12	58.52	11	61.64	11	58.90
20	55.70	19	58.83	18	62.90	18	59.02
28	56.90	26	58.95	25	61.54	25	58.86
Apr. 3	57.20						

Porter 3. Indiana Dunes State Park. At Waverly Beach, near grocery store on picnic ground. Measurements made by Claude Beach and Lawrence Knoblock, Chesterton. Records available: 1935-46; 1948-49.

Jan. 14	15.99	Apr. 16	15.55	July 27	15.88	Oct. 5	16.66
28	16.47	May 4	15.20	Aug. 3	15.94	12	16.72
Feb. 4	16.28	11	15.38	10	16.08	19	16.77
11	16.23	20	13.94	17	16.15	26	16.80
18	15.94	27	15.00	24	16.28	Nov. 2	16.85
25	15.94	June 2	15.39	31	16.38	9	16.87
Mar. 4	15.99	8	15.06	Sept. 7	16.47	16	16.89
11	15.91	15	15.10	14	16.53	23	16.90
18	15.94	22	15.25	21	16.63	Dec. 21	16.39
25	15.94	29	15.45	28	16.69	28	16.00
Apr. 8	15.97	July 6	15.57				

Porter 6. Indiana Associated Telephone Corporation. In Wheeler, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 35 N., R. 7 W., between State Highway 130 and schoolhouse. Measurements made by Leslie E. Abraham, Wheeler. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	20.81	Apr. 9	4.10	July 9	11.09	Oct. 8	18.36
8	20.41	16	4.70	16	11.40	15	18.42
15	20.44	23	3.73	23	12.75	22	18.13
22	19.94	30	4.40	30	13.66	29	17.83
29	17.93	May 7	5.23	Aug. 6	14.30	Nov. 5	17.81
Feb. 5	17.30	14	6.10	13	14.69	12	17.80
12	16.08	21	3.30	20	16.03	19	18.71
19	11.06	28	3.76	27	16.96	26	18.99
26	7.23	June 4	4.92	Sept. 3	17.34	Dec. 3	18.70
Mar. 5	7.56	11	6.03	10	17.62	10	18.18
12	6.22	18	7.18	17	18.00	17	18.13
19	7.00	25	8.37	24	17.89	24	16.20
26	6.28	July 2	9.73	Oct. 1	18.18	31	5.27
Apr. 2	3.23						

Posey County

Posey 2. Warren Wade Estate. Porter Cox, trustee. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 5 S., R. 12 W., in Civilian Conservation Corps camp site near Wadesville. Measurements made by Kenneth O. Eisterhold, Poseyville. Records available: 1947-49.

Jan. 5	4.78	Apr. 20	3.78	July 6	5.04	Oct. 5	7.12
12	4.70	27	3.86	13	4.78	12	7.66
26	3.82	May 4	3.88	20	4.82	19	7.56
Feb. 2	3.82	11	3.62	27	4.86	26	7.78
9	3.92	20	3.18	Aug. 3	6.22	Nov. 9	6.78
16	3.78	25	3.36	10	6.18	16	6.56
23	3.72	June 1	4.32	17	6.34	23	6.54
Mar. 9	3.52	9	5.16	24	6.26	30	6.16
16	3.58	15	4.78	Sept. 7	6.18	Dec. 14	6.74
30	3.78	22	4.82	21	8.26	21	5.74
Apr. 6	3.70	29	4.98	28	7.22	28	5.88
13	3.88						

Pulaski County

Pulaski 1. Jasper-Pulaski State Game Preserve. In basement of superintendent's residence. Measurements made by Frank Shortz, superintendent, and Cecil H. Rowe, Jasper-Pulaski State Game Preserve. Records available: 1935-42, 1944-49.

Jan. 3	8.07	Mar. 28	6.18	July 11	6.98	Oct. 10	9.84
17	7.64	Apr. 29	6.48	Aug. 1	7.49	17	9.12
24	7.08	May 9	6.60	8	7.88	24	9.14
31	6.67	16	6.88	15	7.89	31	9.08
Feb. 7	6.83	23	6.59	22	8.40	Nov. 7	9.14
14	6.74	30	6.50	29	8.60	14	9.07
21	6.34	June 6	6.49	Sept. 5	8.90	21	9.17
Mar. 1	6.22	13	6.58	12	8.99	28	9.02
7	6.33	20	6.10	19	9.10	Dec. 12	9.16
14	6.31	27	6.13	26	9.34	19	9.02
22	6.18	July 4	6.60	Oct. 3	9.44	26	7.52

Putnam County

Putnam 2. W. W. Coffman. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 12 N., R. 4 W., old schoolhouse site, 3.5 miles west of Cloverdale. Unused drilled well, diameter 5-5/8 inches, depth 202 feet. Measuring point, hole in cap on 5-5/8 inch pipe, at land-surface datum. Measurements made by W. W. Coffman. Records available: 1949.

Putnam 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 1	129.89	June 12	127.60	Aug. 21	125.28	Oct. 30	118.45
10	127.60	19	127.21	28	124.80	Nov. 6	121.22
21	118.22	26	127.31	Sept. 4	124.43	13	124.04
22	118.25	July 3	125.17	11	127.78	20	127.30
30	119.60	10	124.50	18	126.35	27	128.62
May 8	125.21	17	127.87	25	125.55	Dec. 4	129.70
15	127.23	24	129.55	Oct. 3	128.47	11	118.90
22	124.00	31	129.47	9	127.78	18	117.80
29	124.61	Aug. 7	128.71	16	119.64	25	116.70
June 5	127.24	14	128.61	23	116.50		

Putnam 3. Frederic A. Danforth. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 12 N., R. 4 W., about 1 mile north of Cunot. Measurements made by Frederic A. Danforth and William W. Coffman. Records available: 1946-49.

Feb. 21	130.98	June 5	131.28	Aug. 14	131.49	Oct. 23	130.96
Mar. 2	130.97	12	131.24	21	131.40	30	131.10
15	131.03	19	131.21	28	130.70	Nov. 6	131.20
27	130.97	26	131.29	Sept. 4	131.65	13	131.10
Apr. 3	130.97	July 3	131.20	11	130.46	20	130.98
30	131.04	10	130.60	18	124.90	27	131.19
May 8	131.14	17	131.30	25	130.85	Dec. 4	130.90
15	130.50	24	131.37	Oct. 3	130.97	11	131.22
22	131.10	31	131.40	9	130.98	18	131.10
29	131.15	Aug. 7	131.50	16	130.98	25	131.36

Randolph County

Randolph 1. Artie V. Keys. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 20 N., R. 14 E., in rear of owner's residence, about 3 miles east and 1 mile south of Winchester. Measurements made by Artie V. Keys. Records available: 1942-49.

Jan. 15	12.43	Apr. 15	13.55	July 15	14.27	Oct. 15	16.08
31	12.08	30	13.37	31	14.34	31	15.89
Feb. 15	12.98	May 15	13.96	Aug. 15	14.98	Nov. 15	16.02
28	12.85	30	14.07	31	15.51	30	16.35
Mar. 15	13.22	June 15	14.41	Sept. 15	15.47	Dec. 15	16.46
31	12.51	30	13.74	30	16.08	31	15.55

Randolph 2. James A. Lane. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 19 N., R. 13 E., about 1 mile northeast of Huntsville. Measurements made by James A. Lane. Records available: 1946-49.

Jan. 2	2.15	Apr. 2	2.19	July 2	3.38	Oct. 8	9.50
11	1.52	9	1.82	9	2.93	15	10.00
15	2.47	16	2.60	16	3.59	22	9.80
22	2.20	23	2.30	23	4.87	29	9.95
29	1.91	30	2.89	30	5.79	Nov. 5	10.00
Feb. 3	2.48	May 7	3.17	Aug. 6	5.85	12	10.10
5	1.75	14	5.28	13	6.79	19	10.55
12	1.79	21	5.33	20	7.24	26	10.43
19	2.00	28	3.05	Sept. 3	7.76	Dec. 3	10.50
26	.79	June 4	4.20	10	7.91	10	10.00
Mar. 5	1.97	11	4.68	17	7.05	17	11.00
12	1.80	18	4.23	24	8.27	24	10.70
19	1.21	25	4.02	Oct. 1	9.20	31	8.60
26	1.79						

Ripley County

Ripley 1. Cleve Fagan. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 8 N., R. 11 E., 2.8 miles west of Osgood on county road. Measurements made by Cleve Fagan. Records available: 1944-49.

Ripley 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	11.70	Apr. 9	5.05	July 9	8.46	Oct. 8	8.94
8	10.70	16	5.00	16	8.90	15	8.88
15	10.70	23	4.91	23	8.77	22	8.99
22	9.21	30	6.24	30	8.97	29	8.39
29	6.48	May 7	6.37	Aug. 7	9.38	Nov. 5	8.44
Feb. 5	5.24	14	6.78	13	9.18	12	8.29
12	4.39	21	6.99	20	9.39	19	8.34
19	4.32	28	7.37	27	10.39	26	8.40
26	3.74	June 3	7.89	Sept. 3	10.24	Dec. 3	7.90
Mar. 12	4.29	11	7.68	10	10.22	10	8.00
19	3.80	18	8.00	17	10.33	17	7.97
26	4.41	25	9.33	24	9.30	24	8.39
Apr. 2	4.24	July 2	7.30	Oct. 1	9.23	31	7.87

Rush County

Rush 1. Wilbert H. Hahn. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 14 N., R. 10 E. Measurements made by Wilbert H. Hahn. Records available: 1945-49.

Jan. 7	3.00	Apr. 15	4.67	July 24	6.57	Oct. 26	6.21
14	1.77	22	4.58	31	6.74	Nov. 4	6.34
21	1.64	29	4.64	Aug. 7	7.06	11	6.69
30	3.96	May 9	4.93	16	7.13	18	6.65
Feb. 18	2.50	June 3	5.47	22	7.30	25	6.84
25	2.63	10	5.70	Sept. 12	7.26	Dec. 4	6.99
Mar. 4	4.47	17	5.24	19	7.30	9	7.08
18	3.21	July 1	5.70	Oct. 7	7.56	20	6.01
28	2.95	8	6.04	14	7.55	26	5.11
Apr. 3	3.63	15	6.49	21	7.59	30	4.74
8	4.11						

St. Joseph County

St. Joseph 1. Mishawaka Water & Light Dept. In Mishawaka, at pumping plant. Measurements made by A. R. Klein, superintendent, Mishawaka Light & Water Dept. Records available: 1935-49.

Jan. 15	10.17	Apr. 16	9.84	July 16	10.00	Oct. 16	11.50
Feb. 1	9.00	May 1	8.17	Aug. 1	11.50	Nov. 1	11.92
15	10.00	16	11.66	16	11.90	15	10.75
Mar. 1	10.50	June 1	14.33	Sept. 1	11.58	Dec. 2	11.08
16	8.92	16	12.25	16	11.17	16	11.00
Apr. 1	9.00	July 1	11.66	Oct. 1	12.00		

St. Joseph 4T-2. City of South Bend. On east curb line of Lombardy Drive, 1 block south of Sample St., 900 block. Measurements made by John J. Micinski. Records available: 1945-49.

Jan. 4	8.48	Apr. 5	7.59	July 19	8.56	Oct. 11	8.78
11	8.42	12	7.78	26	8.74	18	9.20
18	8.00	19	7.87	Aug. 2	9.00	25	9.27
26	8.00	26	7.95	11	9.00	Nov. 1	9.35
Feb. 1	7.97	May 3	7.97	16	8.50	8	9.38
8	7.95	10	8.24	23	9.25	15	9.38
15	7.59	17	8.35	31	9.27	22	9.45
22	7.48	24	7.93	Sept. 6	9.28	29	9.57
Mar. 1	7.52	31	8.04	13	9.38	Dec. 7	9.57
8	8.50	June 7	8.24	20	9.28	13	9.57
15	7.58	14	8.36	27	9.36	20	9.55
22	7.70	21	8.12	Oct. 4	9.28	27	9.54
29	7.89	July 12	8.31				

St. Joseph 10-2. City Dairy Co. In South Bend, 1225 South Main St., about 175 feet west of centerline of Main St. and 14 feet north of centerline of east-west alley, 4 feet inside building. Measurements made by Webster H. Gray. Records available: 1946-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	38.03	38.50	38.51	38.30	38.12	30.03	38.24	38.42	38.69	38.89	.....
2	.....	38.03	38.53	38.51	38.29	38.11	38.04	38.24	38.43	38.69	38.90	.....
3	.....	38.03	38.56	38.50	38.28	38.11	38.04	38.25	38.43	38.69	38.91	.....
4	.....	38.04	38.59	38.50	38.28	38.10	38.05	38.26	38.44	38.70	38.91	.....
5	.....	38.05	38.60	38.49	38.27	38.10	38.05	38.26	38.45	38.70	38.92	39.13
6	.....	38.05	38.63	38.48	38.26	38.09	38.06	38.27	38.46	38.71	38.92	39.13
7	.....	38.05	38.66	38.47	38.26	38.08	38.12	38.28	38.47	38.72	38.93	39.14
8	.....	38.06	38.68	38.46	38.25	38.08	.....	38.29	.....	38.73	38.93	39.14
9	.....	38.07	38.70	38.45	38.25	38.08	.....	38.29	.....	38.74	38.93	39.15
10	.....	38.07	38.70	38.44	38.24	38.07	.....	38.30	.....	38.74	38.93	39.15
11	37.80	38.08	38.70	38.43	38.24	38.06	38.15	38.31	.....	38.75	38.94	39.16
12	37.81	38.09	38.70	38.42	38.23	38.06	38.15	38.31	.....	38.76	38.95	39.17
13	37.82	38.09	38.70	38.41	38.22	38.06	38.15	38.32	38.52	38.76	38.96	39.18
14	37.84	38.10	38.70	38.40	38.21	38.05	38.16	38.32	38.53	38.77	38.96	39.18
15	37.85	38.10	38.69	38.39	38.20	38.03	38.16	38.33	38.54	38.77	38.97	39.19
16	37.86	38.11	38.68	38.39	38.20	38.03	38.17	38.33	38.55	38.78	38.98	39.19
17	37.88	38.13	38.67	38.38	38.20	38.03	38.17	38.34	38.56	38.79	38.98	39.19
18	37.92	38.15	38.66	38.37	38.19	38.03	38.15	38.34	38.56	38.80	38.99	39.20
19	37.94	38.18	.....	.....	38.18	38.03	38.17	38.35	38.57	38.80	38.99	39.21
20	37.95	38.20	.....	.....	38.17	38.02	38.18	38.35	38.58	38.81	39.00	39.21
21	37.96	38.23	38.63	.....	38.16	38.02	38.19	38.36	38.59	38.81	39.01	39.23
22	37.97	38.26	38.62	38.35	38.15	38.01	38.20	38.36	38.60	38.82	39.01	39.23
23	37.98	38.29	38.61	38.34	38.16	38.01	38.20	38.36	38.62	38.83	39.01	39.24
24	37.98	.....	38.60	38.34	38.17	38.01	38.21	38.36	38.63	38.83	39.02	39.24
25	37.98	.....	38.59	38.34	38.16	38.00	38.21	38.37	38.64	38.84	39.03	39.24
26	37.99	38.40	38.58	38.33	38.15	38.01	38.21	38.38	38.65	38.85	39.04	39.23
27	37.99	38.43	38.56	38.32	38.14	38.01	38.22	38.38	38.66	38.86	39.04	39.22
28	38.00	38.46	38.54	38.32	38.14	38.01	38.23	38.39	38.66	38.87	39.05	.....
29	38.01	.....	38.53	38.31	38.13	38.02	38.23	38.40	38.67	38.88	.....	39.22
30	38.02	.....	38.52	38.31	38.13	38.03	38.24	38.41	38.68	38.88	.....	39.22
31	38.02	.....	38.51	.....	38.12	.....	38.24	38.41	.....	38.89	.....	39.21

a Estimated.

b Tape measurement.

St. Joseph 16-1. Singer Manufacturing Co. In South Bend, at Olive St. and Western Ave. Measurements made by personnel of Singer Manufacturing Co., J. R. Kerr, chief engineer. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	29.47	May 2	30.24	June 20	31.20	Oct. 17	30.41
10	30.80	9	30.60	Sept. 5	31.76	24	31.10
17	30.85	16	34.00	12	30.70	31	30.30
Mar. 14	29.00	23	30.70	19	31.10	Nov. 7	30.50
Apr. 4	29.80	30	29.10	24	31.80	14	31.90
11	31.05	June 6	31.80	Oct. 3	31.00	Dec. 5	31.32
18	30.10	13	31.70	10	31.45	12	32.50
25	30.40	.....	.....	.....	.....	.....	.....

St. Joseph 22. Palace Theater. In South Bend, at Colfax Ave. and Michigan St., west well in basement of theater. Measurements made by O. A. Lambert, engineer, Palace Theater. Records available: 1944-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.42	31.87	32.27	30.60	36.97	37.70	44.49	40.04	.....	37.08	35.95	33.43
2	32.27	33.93	33.06	33.17	34.33	40.46	45.52	41.16	.....	36.33	37.10	32.93
3	30.58	34.07	33.48	34.00	35.53	42.18	46.00	42.03	.....	36.59	37.75	32.42
4	31.92	33.83	33.27	33.92	37.03	42.80	44.95	42.67	.....	37.27	37.78	31.63
5	33.21	35.05	33.77	34.52	38.75	41.95	44.55	42.87	.....	31.83	37.98	30.68
6	34.39	34.85	32.68	34.75	40.50	40.53	44.80	43.59	.....	38.35	35.63	30.73
7	34.68	33.19	31.74	34.95	41.85	41.15	44.62	43.55	.....	38.23	33.83	30.83

a Estimated.

St. Joseph 22--Continued.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	35.44	33.92	32.94	35.02	39.68	41.50	44.18	41.00	.....	38.59	34.60	31.20
9	35.50	34.07	33.43	35.00	37.55	41.34	43.60	43.02	.....	39.05	36.28	31.48
10	33.15	34.20	34.23	34.95	37.75	41.83	42.05	45.14	39.68	37.30	36.74	32.05
11	33.61	34.26	35.48	33.13	38.22	43.08	39.50	45.08	39.67	38.12	37.55	31.75
12	34.87	34.53	35.85	33.79	38.83	43.99	40.57	43.80	37.25	38.47	37.22	29.78
13	34.93	34.74	35.70	34.61	40.27	43.30	41.25	42.28	38.33	39.05	35.55	31.52
14	34.83	33.12	33.80	35.86	41.57	42.85	42.59	41.69	39.96	38.58	33.28	33.10
15	35.34	32.94	34.00	36.46	42.32	42.12	42.67	40.70	40.34	38.65	33.53	34.33
16	33.92	32.70	34.17	36.43	40.60	41.05	43.21	42.12	40.50	37.53	35.53	36.25
17	32.55	32.80	34.94	35.91	40.13	39.38	43.55	43.36	40.49	34.40	36.00	35.60
18	33.07	33.43	34.55	34.05	41.46	38.60	.....	44.39	40.99	35.58	35.45	34.33
19	33.12	33.17	34.68	34.40	41.70	37.73	.....	44.64	37.34	37.20	35.53	33.25
20	33.55	33.10	34.60	35.23	40.80	36.95	.....	43.53	38.13	38.10	34.00	33.00
21	33.60	31.78	33.49	36.28	39.45	39.30	46.18	42.22	39.29	38.50	32.18	33.80
22	33.37	32.52	33.55	36.38	38.00	40.33	44.90	40.43	40.03	38.75	32.27	32.50
23	33.43	33.45	33.80	35.75	36.68	40.83	44.32	42.05	39.44	37.27	33.07	34.32
24	32.17	33.60	33.45	35.63	36.15	41.16	43.22	.....	39.42	34.85	33.05	33.95
25	32.74	34.40	33.83	35.57	36.58	42.35	42.28	.....	39.13	35.92	30.25	31.25
26	33.05	34.09	33.69	36.10	36.23	41.95	43.57	45.12	36.25	37.09	30.65	29.65
27	34.15	32.95	33.48	36.52	36.55	39.34	44.53	45.83	37.20	37.85	29.84	29.00
28	34.08	31.97	31.98	32.00	36.10	40.44	44.78	.....	38.77	38.20	28.85	31.05
29	34.45		33.07	37.45	35.91	41.65	45.72	.....	39.06	39.00	31.53	32.18
30	32.74		33.85	37.32	34.50	43.40	43.68	.....	37.90	37.63	32.75	33.03
31	31.33		26.83		35.48		42.62	.....		35.88		33.70

a Estimated.

b Tape measurement.

St. Joseph 53. St. Mary's Convent, Holy Cross. About 0.5 mile west of U. S. Highway 31, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 38 N., R. 2 E., 3 feet south and 118.5 feet west of southwest corner of powerhouse. Measurements made by Thomas Bowland. Records available: 1945-49.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.80	6.20	6.25	6.05	5.15	5.30	5.25	.....	.....	9.60	5.85	7.55
2	6.65	6.00	6.00	5.90	5.10	5.30	5.40	8.20	.....	9.50	7.80	7.55
3	6.95	5.95	6.10	5.65	5.25	5.40	5.35	8.30	.....	9.20	7.75	7.60
4	6.95	6.35	6.30	5.80	5.20	5.50	5.45	8.35	.....	9.25	7.90	7.55
5	6.90	6.10	6.30	.....	5.25	5.25	8.55	8.30	.....	9.15	7.45	7.50
6	6.70	6.05	6.20	.....	5.30	5.40	8.70	8.50	.....	9.10	7.50	.....
7	6.65	6.30	6.55	.....	5.30	5.40	8.55	8.30	.....	9.20	7.50	.....
8	7.55	6.60	6.60	.....	5.25	5.40	8.55	9.15	.....	9.15	5.95	7.35
9	6.75	6.20	6.35	.....	5.40	5.45	8.45	9.40	.....	9.05	6.65	7.40
10	6.85	.....	6.55	.....	5.30	5.50	8.40	9.45	.....	9.30	6.80	7.90
11	7.35	.....	7.15	4.60	5.40	5.55	8.45	9.50	.....	9.30	8.10	7.60
12	6.65	.....	6.75	4.80	5.45	5.60	8.45	9.50	9.20	9.30	9.45	7.20
13	6.70	6.85	5.85	8.00	5.60	5.60	8.55	9.50	9.25	9.10	9.30	8.05
14	7.35	7.50	6.00	7.95	5.65	5.60	8.50	9.50	9.40	9.10	9.70	7.70
15	6.65	6.65	5.80	7.95	5.65	5.40	8.50	.....	9.40	9.15	9.65	8.05
16	6.75	6.20	5.90	6.05	5.70	5.40	8.70	.....	9.40	9.10	9.65	8.10
17	7.25	6.65	6.50	5.70	5.65	5.10	8.65	.....	9.60	9.10	9.65	7.65
18	6.80	6.10	5.95	5.75	5.65	5.10	8.80	.....	9.35	9.15	9.60	7.75
19	6.35	6.00	5.80	6.00	5.55	5.00	9.80	.....	10.10	9.30	9.85	7.80
20	6.60	5.80	.....	5.80	5.45	5.10	8.70	.....	9.90	9.20	9.65	8.00
21	6.20	6.15	6.40	4.95	5.40	5.00	8.75	.....	9.85	6.05	9.50	7.30
22	5.80	6.10	6.45	5.05	5.25	5.05	8.75	.....	9.85	6.10	7.50	6.40
23	5.65	6.00	6.20	.....	5.25	5.05	.....	.....	9.85	6.00	7.50	5.80
24	6.00	6.15	6.30	.....	.....	5.05	.....	.....	10.15	6.00	7.45	5.70
25	6.00	6.20	6.40	5.35	.....	5.10	9.60	.....	.....	5.85	7.95	5.70
26	6.00	6.05	6.15	5.30	5.20	5.00	9.60	.....	.....	5.90	8.10	5.70
27	5.85	5.90	6.15	5.30	5.10	5.10	5.50	.....	.....	5.85	7.90	8.00
28	5.75	6.10	.....	5.20	5.20	6.90	8.85	.....	.....	5.90	8.20	7.70
29	5.65	.....	6.85	5.25	5.20	5.15	8.70	.....	.....	5.95	8.10	8.10
30	5.65	.....	6.35	5.25	5.20	5.10	5.50	.....	9.55	5.95	7.65	8.00
31	6.10	.....	6.50	.....	5.30	.....	.....	.....	.....	5.85	.....	7.70

St. Joseph 85. New Jersey, Indiana & Illinois Railroad. In South Bend, near intersection of Indiana Ave. and Olive Sts., in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 37 N., R. 2 E. Measurements made by Don L. Henry. Records available: 1945-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	14.40	13.87	13.87	13.80	14.15	14.75	15.26	15.68	.....	15.52	.....
2	.....	14.38	13.86	13.87	.....	14.24	14.84	15.28	15.67	.....	15.53	16.26
3	15.00	14.37	13.84	13.85	13.83	14.34	14.89	15.26	15.65	15.61	.....	16.29
4	14.99	14.36	13.83	13.83	13.85	14.41	14.92	15.24	15.63	15.58	.....	16.31
5	14.99	14.34	13.81	13.81	13.87	14.44	14.93	15.23	15.61	15.56	.....	16.35
6	14.97	14.33	13.80	13.80	13.90	14.44	14.94	15.23	15.59	15.54	.....	16.37
7	14.94	14.32	13.80	13.80	13.93	14.47	14.92	15.25	15.56	15.53	15.55	16.40
8	14.92	.....	13.78	13.81	13.97	14.51	14.88	15.23	15.54	15.53	15.56	16.43
9	14.91	.....	.....	13.83	13.94	14.55	14.86	15.28	15.53	15.53	15.57	16.45
10	14.89	.....	.....	13.82	14.00	14.61	14.84	15.32	15.52	15.53	15.58	.....
11	14.87	.....	13.77	13.81	14.02	14.64	14.82	15.35	15.52	15.53	15.59	16.50
12	14.85	.....	13.76	13.81	14.04	14.72	14.82	15.38	15.51	15.53	15.59	16.52
13	14.84	.....	13.77	13.83	14.08	14.76	14.80	15.39	15.50	15.52	15.60	16.55
14	14.84	14.29	13.77	13.83	14.16	14.80	14.84	15.39	.....	15.51	15.60	16.57
15	14.84	14.27	13.76	13.85	14.22	14.83	14.92	15.37	.....	15.50	15.60	16.59
16	14.83	14.24	13.76	13.85	14.25	14.81	14.97	15.36	15.50	15.51	15.61	16.62
17	14.83	14.19	13.75	.....	14.27	14.78	15.00	15.38	15.51	15.51	15.62	16.64
18	14.83	14.13	13.75	13.86	14.30	14.75	15.03	15.39	15.49	15.50	15.63	16.66
19	14.81	14.09	13.76	13.87	14.34	14.72	15.07	15.39	15.51	15.51	15.67	16.69
20	14.76	14.05	13.77	13.88	14.35	14.68	15.10	15.39	15.59	15.54	15.72	16.71
21	14.72	14.02	13.75	.....	14.34	14.70	15.14	15.41	15.62	15.54	15.77	16.73
22	14.67	.....	13.75	.....	14.33	14.72	15.17	15.41	15.59	15.54	15.83	16.75
23	14.63	13.96	13.76	.....	14.31	14.70	15.16	15.43	15.56	15.53	15.87	16.71
24	14.59	13.94	13.77	13.88	14.30	14.74	15.16	15.46	15.54	15.51	15.92	16.67
25	14.54	13.92	13.77	13.84	14.26	14.80	15.15	15.50	15.53	15.49	15.96	.....
26	14.51	13.91	13.80	13.78	14.22	14.81	15.17	15.54	15.53	15.49	16.00	16.58
27	14.49	13.90	13.79	13.76	14.19	14.77	15.20	15.59	15.53	15.50	16.05	16.54
28	14.46	13.88	13.82	13.76	14.17	14.73	15.23	15.64	15.54	15.51	16.08	16.52
29	14.45	.....	13.84	13.77	14.14	14.70	15.27	15.68	15.55	15.52	.....	16.51
30	14.43	.....	13.85	13.78	14.11	14.69	15.29	15.68	15.60	15.52	.....	16.50
31	14.42	.....	13.86	.....	14.08	.....	15.28	15.68	.....	15.52	.....	16.48

a Estimated.

St. Joseph 89. Mr. Morgan. In South Bend, about $1\frac{1}{2}$ blocks west of Ironwood Drive and half a block south of U. S. Highway 20. Measurements made by Ved D. Morgan. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	45.15	Apr. 7	46.30	July 7	46.50	Oct. 7	47.65
13	45.65	14	45.20	14	47.75	13	47.80
21	45.30	21	45.20	21	47.30	21	47.75
27	45.25	28	45.33	28	47.70	27	47.80
Feb. 3	45.40	May 5	45.50	Aug. 4	47.45	Nov. 3	47.80
10	44.90	12	45.75	11	48.90	10	47.69
17	45.22	19	45.75	18	47.95	17	47.40
24	45.20	26	45.35	25	48.35	24	46.48
Mar. 3	45.18	June 2	46.00	Sept. 1	47.64	Dec. 1	47.15
10	45.24	8	46.29	8	47.59	8	46.80
17	45.14	16	46.10	15	47.70	15	47.20
24	44.91	23	46.30	22	47.80	22	47.00
31	45.27	30	46.50	29	47.70	29	46.65

Scott County

Scott 1. Scottsburg Water Dept. well 3. Near northeast corner of intersection of Hyland and Thomas Sts. Measurements made by John A. Robbins, superintendent, Scottsburg Water Dept. Records available: 1942-49.

Scott 1--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.80	18.81	19.68	17.88	20.90	22.17	23.38	.....	24.41	25.02	25.12	.....
2	21.90	.....	19.65	18.28	22.05	22.88	23.57	.....	24.80	25.60	.....	.....
3	22.04	20.18	19.66	18.33	21.66	23.17	23.67	.....	24.82	25.40	.....	.....
4	22.34	19.86	19.66	18.61	22.15	23.40	23.74	25.84	24.67	25.41	.....	.....
5	21.45	20.05	20.55	18.60	21.72	23.65	23.81	25.86	24.76	25.25	.....	.....
6	21.50	19.87	21.19	18.36	22.13	23.80	.....	25.89	24.74	25.02	.....	.....
7	21.48	19.33	21.45	18.57	22.28	24.22	.....	25.66	24.23	25.25	.....	.....
8	20.92	18.40	20.12	18.90	22.43	24.85	.....	25.67	24.16	25.19	.....	.....
9	21.68	19.40	20.84	20.04	21.77	24.35	.....	25.63	24.40	25.23	.....	.....
10	21.77	19.99	19.41	20.94	22.16	23.95	.....	.....	24.28	25.02	.....	.....
11	22.25	20.13	18.85	20.95	22.22	24.12	.....	.....	24.22	25.11	.....	.....
12	22.28	.....	19.50	.....	22.12	23.47	25.10	.....	24.14	25.23	.....	.....
13	22.37	.....	19.46	19.26	22.12	23.04	25.27	.....	23.98	25.46	.....	.....
14	22.38	.....	19.53	19.51	22.15	23.23	24.58	.....	24.58	25.23	.....	.....
15	22.54	18.68	18.90	20.41	22.49	22.98	24.45	.....	24.60	25.07	.....	.....
16	22.54	18.45	18.89	21.19	22.93	20.67	24.45	.....	25.15	25.06	.....	.....
17	22.53	18.60	18.76	21.37	22.54	22.19	24.40	26.10	25.38	25.31	.....	.....
18	22.08	18.64	18.64	21.22	22.75	21.28	24.41	26.07	25.40	25.41	.....	.....
19	21.49	18.58	18.88	22.15	22.87	24.34	24.35	26.12	25.48	25.29	.....	.....
20	21.79	18.65	18.88	22.42	22.95	20.32	.....	26.23	25.49	25.15	.....	.....
21	21.54	18.97	18.65	22.08	22.93	.....	.....	26.04	25.20	25.02	.....	.....
22	21.73	18.74	18.45	21.84	22.72	.....	.....	25.76	25.39	25.00	.....	.....
23	21.67	.....	18.25	21.80	22.92	23.68	.....	25.82	25.52	25.05	.....	24.04
24	21.26	.....	18.13	21.75	22.33	22.60	.....	.....	25.58	24.98	.....	24.10
25	19.58	18.97	18.10	22.02	22.72	22.31	.....	.....	25.43	25.04	.....	24.20
26	18.53	19.25	18.29	22.87	21.75	22.68	.....	.....	25.21	25.15	.....	23.95
27	18.05	19.23	18.50	22.27	22.18	22.90	.....	.....	25.35	25.25	.....	.....
28	17.25	19.35	17.41	22.19	22.56	23.30	.....	.....	25.53	25.05	.....	21.80
29	17.86	.....	17.60	21.93	22.75	22.66	.....	.....	25.75	25.08	.....	21.65
30	18.25	.....	17.71	20.63	22.40	23.13	.....	25.15	25.99	25.08	.....	22.10
31	18.03	.....	17.57	.....	21.80	.....	.....	24.68	.....	25.04	.....	22.15

a Estimated.

b Tape measurement.

Shelby County

Shelby 1. Clarence Milner. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, T. 13 N., R. 6 E., about 0.5 mile south of Fairland. Measurements made by Clarence C. Milner. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	8.00	Apr. 10	6.45	July 10	8.83	Oct. 8	9.85
9	5.80	17	7.08	17	9.09	16	9.88
16	6.08	23	7.45	24	9.19	23	9.73
23	5.39	May 1	7.78	31	9.10	30	9.69
30	4.72	8	8.09	Aug. 7	9.15	Nov. 6	9.78
Feb. 4	5.62	15	8.33	14	9.33	13	9.85
13	6.53	22	8.55	28	9.57	20	9.91
20	5.69	29	8.74	Sept. 4	9.64	27	9.96
Mar. 7	6.82	June 5	8.87	11	9.57	Dec. 3	9.99
13	6.97	12	9.04	18	9.67	11	10.03
20	6.70	19	8.89	25	9.74	18	9.82
27	6.79	July 3	8.75	Oct. 2	9.80	25	9.57
Apr. 2	5.65						

Spencer County

Spencer 4. Andrew Wetzel. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 5 S., R. 5 W., 0.5 mile east of Buffaloville and about 100 feet north of road. Measurements made by Raymond J. F. Meier. Records available: 1944-49.

Spencer 4--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	3.06	Apr. 16	3.21	July 16	3.02	Oct. 15	4.71
8	3.02	23	4.30	23	3.04	22	4.64
15	2.18	20	5.06	30	3.06	29	4.70
22	1.94	May 7	5.23	Aug. 6	4.04	Nov. 5	4.76
Feb. 12	3.12	14	4.42	13	3.12	12	3.50
19	1.92	21	4.52	23	3.24	19	3.50
26	1.92	28	5.04	28	3.63	26	3.31
Mar. 5	3.23	June 7	5.14	Sept. 3	5.70	Dec. 3	3.31
12	3.18	11	5.22	10	6.67	10	1.72
19	3.40	22	2.85	17	5.72	17	2.06
26	2.43	25	3.18	24	5.76	24	1.98
Apr. 2	2.86	July 2	4.62	Oct. 8	4.72	31	1.92
9	3.17	9	2.82				

Spencer 5. Lincoln State Park. In Lincoln City, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 4 S., R. 5 W., at caretaker's house. Measurements made by J. P. Kennedy. Records available: 1944-49.

Jan. 12	29.03	Apr. 20	28.10	July 12	30.35	Oct. 5	30.98
19	26.97	27	28.58	20	29.63	12	30.92
26	24.40	May 4	28.90	27	30.40	19	30.94
Feb. 2	27.53	11	28.60	Aug. 3	30.36	26	30.84
9	27.08	18	29.26	10	30.45	Nov. 2	30.79
16	24.75	26	29.48	17	30.60	9	31.00
Mar. 2	28.48	June 1	29.80	24	30.58	16	30.80
9	28.72	9	30.04	31	30.68	23	30.88
16	27.27	16	29.86	Sept. 7	30.58	30	31.12
23	26.71	23	29.51	14	30.84	Dec. 7	31.14
30	25.05	28	29.80	21	30.96	14	30.88
Apr. 6	27.05	July 6	29.80	28	30.20	21	30.78
13	27.74						

Spencer 6. Lincoln State Park. In Lincoln City, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 5 S., R. 5 W., about 300 feet southwest of memorial building, in pump-house. Measurements made by J. P. Kennedy. Records available: 1944-49.

Jan. 12	24.04	Apr. 20	22.40	July 12	25.56	Oct. 5	28.11
19	23.78	27	22.40	20	25.20	12	27.53
26	23.09	May 4	22.63	27	25.13	19	26.95
Feb. 2	22.83	11	23.12	Aug. 3	25.65	26	26.27
9	22.72	18	23.20	10	26.17	Nov. 2	25.97
16	22.52	26	23.62	17	26.58	9	26.05
Mar. 2	22.63	June 1	24.12	24	26.98	16	26.08
9	23.45	9	25.04	31	27.22	23	26.07
16	22.51	16	25.20	Sept. 7	27.53	30	26.08
23	22.32	23	24.35	14	27.84	Dec. 7	26.12
30	22.10	28	24.50	21	28.00	14	25.67
Apr. 6	21.96	July 6	25.04	28	28.08	21	24.68
13	22.36						

Spencer 7. Lincoln State Park. In Lincoln City, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 5 S., R. 5 W., about 2,500 feet northeast of fire tower, 75 feet southwest of Spencer 8, near east boundary of park. Measurements made by Raymond J. F. Meier. Records available: 1944-49.

Jan. 1	3.52	Apr. 16	3.40	July 16	6.77	Oct. 15	7.32
8	7.51	23	3.31	23	6.77	22	7.36
15	5.38	30	3.40	30	6.78	29	7.36
22	5.36	May 7	3.31	Aug. 6	6.90	Nov. 5	7.36
Feb. 12	6.52	14	3.34	13	7.02	12	7.19
19	3.14	21	1.52	23	7.10	19	7.20
26	3.11	28	1.60	30	7.24	26	7.29
Mar. 5	4.67	June 7	1.64	Sept. 3	7.20	Dec. 3	8.29
12	2.87	11	3.35	10	7.24	10	7.08
19	2.31	22	2.66	17	7.20	17	6.80
26	1.74	25	6.22	24	6.78	24	6.78
Apr. 2	2.66	July 2	6.23	Oct. 8	7.42	31	6.76
9	2.65	9	6.26				

Spencer 8. Lincoln State Park. In Lincoln City, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 5 S., R. 5 W., about 2,500 feet northeast of fire tower, 75 feet northeast of Spencer 7, near east boundary of park. Measurements made by Raymond J. F. Meier. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	6.86	Apr. 16	2.52	July 16	2.59	Oct. 15	4.69
8	6.84	23	2.52	23	2.59	22	4.60
15	3.60	30	2.53	30	2.59	29	4.60
22	3.58	May 7	2.52	Aug. 6	2.62	Nov. 5	4.60
Feb. 12	6.81	14	2.52	13	2.64	12	3.97
19	2.17	21	2.55	23	2.66	19	4.00
26	2.14	28	2.88	28	2.70	26	4.97
Mar. 5	2.58	June 7	2.91	Sept. 3	2.67	Dec. 3	5.97
12	2.21	11	3.42	10	2.83	10	5.88
19	2.18	22	3.41	17	2.67	17	5.82
26	1.98	25	2.58	24	2.67	24	5.81
Apr. 2	2.44	July 2	2.58	Oct. 8	4.71	31	4.84
9	2.42	9	2.59				

Starke County

Starke 2. S. A. Craigmile. At mint still about 0.25 mile northeast of owner's residence, near junction of State Highways 10 and 29. Measurements made by Robert L. Lemke and Sam Sellars Jr., Bass Lake State Fish Hatchery. Records available: 1935-49.

Jan. 6	3.09	Apr. 8	3.27	July 2	3.69	Sept. 24	5.49
13	2.97	15	3.21	8	3.95	Oct. 1	5.51
20	.97	22	3.26	15	4.13	8	5.09
28	2.26	29	3.07	22	4.29	31	4.87
Feb. 4	3.12	May 7	3.55	30	4.08	Nov. 12	4.85
11	3.15	14	3.65	Aug. 7	4.29	18	4.69
18	2.43	21	3.25	12	4.47	25	4.65
25	2.23	28	3.25	20	4.73	Dec. 2	4.65
Mar. 4	2.55	June 4	2.82	27	4.92	9	4.29
11	2.68	11	2.65	Sept. 3	5.03	19	4.67
18	2.99	17	.83	10	5.03	31	2.79
25	3.05	24	3.43	17	5.29		

Starke 11. David Bergstrom. In Groverton, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 34 N., R. 1 W. Records available: 1948. Measurement discontinued Nov. 7, 1948.

Steuben County

Steuben 1. Pokagon State Park. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 38 N., R. 13 E., near superintendent's residence, on south side of area formerly used for buffalo pen. Measurements made by R. N. Sprague and M. C. Cooper, Pokagon State Park. Records available: 1935-49.

Jan. 8	1.92	Apr. 9	0.37	July 9	1.05	Oct. 8	3.39
15	1.83	16	.16	16	1.46	15	2.59
22	.82	23	.27	24	1.74	22	2.52
29	.85	30	.45	30	2.00	29	2.63
Feb. 3	.85	May 7	.74	Aug. 6	2.20	Nov. 5	2.84
6	1.06	14	1.00	13	2.42	12	2.90
12	1.11	21	.64	20	2.70	19	2.77
19	.23	28	.68	27	2.98	26	2.82
26	.15	June 4	1.10	Sept. 3	3.20	Dec. 3	2.81
Mar. 5	.50	11	1.40	10	3.36	10	2.34
12	+.01	18	+.17	17	3.57	17	2.33
19	.75	25	.26	24	3.50	24	.97
26	.46	July 2	.74	Oct. 1	3.63	31	.82
Apr. 2	.08						

Steuben 2. Pokagon State Park. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 38 N., R. 13 E., on north side of area formerly used for buffalo pen, north of Steuben 1. Measurements made by M. B. Cooper and R. N. Sprague, Pokagon State Park. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	4.92	Apr. 9	1.30	July 9	3.17	Oct. 8	5.80
15	4.88	16	1.10	16	3.68	15	5.18
22	3.36	23	1.25	24	4.08	22	5.23
29	3.40	30	1.55	30	4.37	29	5.25
Feb. 3	2.76	May 7	1.96	Aug. 6	4.60	Nov. 5	5.40
5	2.87	14	2.44	13	4.84	12	5.47
12	2.80	21	2.00	20	5.10	19	5.47
19	1.21	28	2.05	27	5.39	26	5.54
26	1.11	June 4	2.86	Sept. 3	5.55	Dec. 3	5.59
Mar. 5	1.25	11	3.39	10	5.70	10	5.29
12	1.57	18	.86	17	5.83	17	5.06
19	1.90	25	1.53	24	5.85	24	3.20
26	1.60	July 2	2.45	Oct. 1	5.95	31	2.79
Apr. 2	1.00						

Sullivan County

Sullivan 1. William Koenig. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 6 N., R. 8 W., east side of county road, about 3.8 miles southeast of Carlisle. Measurements made by John R. Howard, Nila Nolting, and Mary F. Monroe. Records available: 1944-49.

Jan. 2	0.96	May 26	7.45	June 30	7.28	Oct. 21	9.10
16	3.64	June 2	7.94	July 7	7.32	Nov. 16	7.94
23	3.54	9	7.49	22	7.17	28	7.54
May 12	6.85	16	7.22	Sept. 14	10.31	Dec. 5	6.94
19	7.08	23	7.41	24	10.48	12	1.94

Switzerland County

Switzerland 1. Nellie M. Walker. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 2 N., R. 1 W., 1.0 mile east of Posey Township school on north side of State Highway 250. Measurements made by Nellie M. Walker. Records available: 1944-49.

Jan. 8	6.62	Apr. 9	10.29	July 9	18.56	Oct. 15	18.63
15	9.36	16	12.40	16	18.87	22	17.89
22	6.38	23	14.22	23	19.07	29	18.87
29	3.24	30	15.19	30	19.22	Nov. 5	19.15
Feb. 5	7.44	May 7	15.87	Aug. 6	19.83	12	19.66
12	9.73	14	16.43	13	20.66	19	20.08
19	6.90	21	16.84	20	18.63	26	20.57
26	8.10	28	17.16	27	18.59	Dec. 3	20.74
Mar. 5	10.87	June 4	17.77	Sept. 3	18.39	10	21.42
12	6.43	11	18.12	10	18.57	17	19.32
19	9.19	18	16.89	17	18.72	24	18.09
26	9.82	25	17.07	Oct. 1	18.82	31	17.76
Apr. 2	7.30	July 2	17.67	8	18.71		

Tippecanoe County

Tippecanoe 4. Lafayette Water Dept. well 7 at city well field, Canal St. at Tippecanoe St. (extended), on east bank of Wabash River. Measurements made by Norman Todd. Records available: 1944-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	5.50	8.60	10.75	12.60	15.10	13.00	15.60	....	13.95	....
2	7.00	....	6.30	8.70	11.10	13.15	15.75	13.30	15.45	15.25	17.70	....
3	8.25	4.90	7.00	8.90	11.45	12.90	11.40	13.00	15.10	15.20	13.90	....
4	9.65	5.70	7.30	9.25	11.65	13.60	14.90	16.30	15.20	14.95	14.00	....

Tippecanoe 4--Continued.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	3.80	6.40	7.80	9.75	12.00	11.90	12.20	13.75	14.90	15.10	14.05	.....
6	1.00	6.95	8.00	10.05	12.30	11.55	12.95	14.10	14.60	15.10	13.80	.....
7	.45	7.40	8.35	10.30	12.60	13.80	12.00	14.15	14.15	14.20	13.80	.....
8	.50	7.80	8.75	10.60	12.30	12.30	11.90	14.10	.....	14.70	14.10	.....
9	1.45	7.90	8.90	10.90	12.50	12.90	16.75	17.70	.....	14.40	14.15	.....
10	3.30	8.00	9.05	11.00	12.70	12.85	14.00	17.85	14.85	14.40	14.25	.....
11	3.60	8.20	9.20	11.15	12.80	13.20	11.70	18.20	14.65	14.40	14.35	.....
12	....	8.70	9.60	11.40	12.90	12.85	13.70	16.80	14.70	15.85	14.30	.....
13	....	8.80	9.80	11.60	14.80	12.80	12.15	16.25	15.30	10.70	14.00	.....
14	....	8.80	9.85	11.70	13.40	13.25	14.65	14.75	15.05	9.00	13.80	.....
15	....	6.70	10.00	11.80	13.00	13.70	13.00	14.50	15.30	10.15	13.95	.....
16	6.60	....	10.35	....	13.10	12.30	15.30	16.90	15.05	10.90	14.10	.....
17	6.05	....	10.30	....	13.40	12.00	13.30	16.80	15.30	11.35	14.10	.....
18	5.30	....	10.55	11.60	13.65	10.20	13.35	16.40	15.00	12.15	14.10	.....
19	2.95	+1.30	10.65	11.85	13.60	11.80	16.40	16.30	14.90	12.95	14.10	.....
20	....	.15	10.65	11.55	12.80	10.05	14.20	15.00	17.20	12.60	13.80	.....
21	....	2.00	10.75	11.35	14.70	11.40	14.15	14.80	15.20	12.80	14.00	.....
22	....	3.20	10.70	11.50	7.25	11.00	13.90	14.75	.....	12.80	14.25	.....
23	+1.80	3.30	10.45	11.55	6.00	11.30	13.30	18.35	.....	12.30	14.30	.....
24	.80	3.25	16.00	11.60	5.80	13.70	13.30	18.15	.....	12.10	14.10	7.10
25	2.30	....	14.45	11.50	5.00	12.20	13.30	17.50	.....	12.10	13.90	.....
26	2.70	3.60	11.00	11.80	6.10	12.20	17.20	17.50	.....	12.40	....	.....
27	1.60	4.10	10.25	11.85	7.30	10.15	13.90	17.60	.....	12.50	....	.....
28	.00	4.80	9.80	11.50	8.20	13.50	14.10	15.50	15.60	12.70	....	.....
29	+2.05	....	8.30	10.90	8.80	10.30	17.05	15.30	18.60	12.65	....	.....
30	....	....	8.00	10.70	9.40	14.70	13.75	15.40	15.30	16.80	....	11.62
31	....	....	8.40	....	9.90	....	13.00	15.45	....	14.00	....	7.30

b Tape measurement.

Tippecanoe 5. Fairfield Manufacturing Co. In Lafayette, in main building, at Earl Ave. and Wallace St. Measurements made by personnel of Fairfield Manufacturing Co., C. C. Crook and R. E. Hellwig. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	88.57	Apr. 12	88.50	July 5	88.33	Oct. 3	88.38
11	88.81	18	88.42	11	88.50	10	88.34
18	88.55	24	88.66	18	88.56	17	88.41
24	88.42	May 2	88.48	25	88.44	24	88.65
Feb. 8	88.59	9	88.34	Aug. 15	88.40	31	88.37
15	88.41	16	88.50	22	88.59	Nov. 7	88.23
22	88.51	23	88.59	29	88.51	14	88.46
Mar. 2	88.64	31	88.43	Sept. 6	88.52	21	88.60
15	88.61	June 6	88.39	12	88.42	Dec. 12	88.54
22	88.06	13	88.23	19	88.48	19	88.52
29	88.65	21	88.42	26	88.48	27	88.27
Apr. 5	88.51	27	88.54				

Tippecanoe 7. State of Indiana, Purdue University. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 23 N., R. 5 W., at research housing pumphouse. Measurements made by Norman Todd, West Lafayette. Records available: 1945-49.

From recorder charts						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	165.65	164.99	164.06	163.38	163.22	163.63
2	165.60	165.05	163.96	163.51	163.33	163.68
3	165.66	164.74	163.98	163.47	163.40	163.73
4	165.64	164.63	163.88	163.53	163.42	163.75
5	165.57	164.80	163.69	163.36	163.38	163.69
6	165.56	164.69	163.79	163.23	163.37	163.60
7	165.60	164.71	163.96	163.30	163.39	163.70
8	165.62	164.55	163.72	163.36	163.38	163.83
9	165.63	164.68	163.63	163.50	163.31	163.84
10	165.79	164.48	163.63	163.48	163.40	163.80

Tippecanoe 7--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
11	165.75	164.73	163.73	163.37	163.49	163.76
12	165.57	164.40	163.70	163.29	.....	163.68
13	165.53	164.29	163.73	163.16	.....	163.62
14	165.51	164.46	163.66	163.24	163.42	163.67
15	165.46	164.20	163.68	163.12	163.46	163.64
16	165.47	164.41	163.65	.....	163.44	163.71
17	165.58	164.51	163.59	.....	163.47	163.67
18	165.41	164.34	163.50	163.27	163.44	163.70
19	165.61	164.29	163.70	163.45	163.43	163.73
20	165.62	164.35	163.65	163.47	163.50	163.68
21	165.25	164.36	163.46	163.37	163.38	163.64
22	165.48	164.15	163.28	163.19	163.24	163.66
23	165.34	164.27	163.56	163.26	163.52	163.66
24	165.18	164.06	163.53	163.32	163.48	163.59
25	165.34	164.14	163.40	163.41	163.61	163.53
26	165.13	164.17	163.50	163.28	163.48	163.69
27	165.12	163.96	163.18	163.31	163.52	163.67
28	.....	164.03	163.49	163.42	163.56	163.68
29	.....		163.56	163.35	163.57	163.69
30	165.22		163.44	163.25	163.55	163.79
31	164.86		163.18		163.58	

From recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	163.84	163.99	164.24	164.67	164.74	164.74
2	163.85	164.00	164.30	164.57	164.60	164.83
3	163.82	164.07	164.23	164.52	164.79	164.77
4	163.77	164.14	164.18	164.57	164.70	164.60
5	163.72	164.16	164.17	164.61	164.94	164.75
6	163.79	164.16	164.28	.....	164.80	164.66
7	163.82	164.08	164.22	.....	164.67	164.62
8	163.88	164.04	164.27	164.72	164.66	164.80
9	163.89	164.08	164.26	164.70	164.72	164.83
10	163.87	164.13	164.31	164.58	164.62	164.64
11	163.87	164.19	164.28	164.67	164.59	164.60
12	163.84	164.12	164.26	164.68	164.63	164.74
13	163.87	164.16	164.17	164.84	164.48	164.88
14	163.85	164.13	164.34	164.82	164.62	164.86
15	163.90	164.12	164.28	164.81	164.56	164.84
16	163.96	164.17	164.26	164.73	164.63	.....
17	163.87	164.17	164.23	164.73	164.62	164.72
18	163.84	164.16	164.18	164.82	164.70	164.69
19	163.90	164.20	164.28	164.81	164.54	164.77
20	163.95	164.31	164.35	164.77	164.58	164.68
21	163.98	164.30	164.30	164.72	164.70	164.62
22	164.03	164.22	164.30	164.81	164.82	164.67
23	164.11	164.19	164.34	164.80	164.49	164.96
24	164.05	164.20	164.49	164.86	164.52	164.90
25	163.97	164.27	164.46	164.80	164.64	164.84
26	163.98	164.23	164.43	164.82	164.68	164.70
27	164.04	164.21	164.37	164.89	164.52	164.64
28	.....	164.15	164.40	164.80	164.60	164.84
29	.....	164.18	164.52	164.78	164.58	164.76
30	.....	164.20	164.62	164.62	164.63	164.75
31	164.06	164.15		164.65		164.67

Tippecanoe 8. West Lafayette Water Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 23 N., R. 4 W., at West Lafayette Water Works. Measurements made by Norman Todd. Records available: 1945-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.98	....	3.76	7.78	9.34	8.91	9.71	10.95	12.31	12.97	11.88	12.50
2	10.66	....	3.89	7.78	9.34	8.96	9.70	10.96	12.33	13.02	11.90	12.55
3	10.44	3.06	4.03	7.80	9.37	9.02	9.72	10.98	12.34	13.05	11.93	12.59

Tippecanoe 8--Continued.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	10.31	3.19	4.20	7.82	9.41	9.09	9.75	10.99	12.36	13.07	11.96	12.62
5	10.22	3.36	4.37	7.85	9.46	9.16	9.79	11.02	12.37	13.08	11.98	12.64
6	10.00	3.54	4.55	7.90	9.51	9.21	9.86	11.06	12.38	13.10	12.02	12.67
7	9.49	3.72	4.72	7.97	9.55	9.28	9.92	11.10	12.38	13.10	12.04	12.69
8	8.84	3.91	4.90	8.04	9.60	9.36	9.97	11.14	12.36	13.10	12.08	12.71
9	8.29	4.11	5.08	8.13	9.65	9.45	10.03	11.20	12.35	13.10	12.11	12.74
10	7.37	4.30	5.25	8.21	9.71	9.55	10.08	11.27	12.35	13.09	12.15	12.76
11	7.59	4.48	5.42	8.27	....	9.65	10.09	11.34	12.37	13.09	12.19	12.78
12	7.35	4.68	5.59	8.34	....	9.74	10.09	11.41	12.38	13.07	12.23	12.80
13	7.15	4.87	5.76	8.42	....	9.83	10.09	11.45	12.40	13.00	12.27	12.81
14	7.00	5.05	5.93	8.50	10.00	9.92	10.10	11.50	12.42	12.77	12.29	12.81
15	6.93	5.23	6.09	8.56	10.07	10.00	10.14	11.54	12.44	12.49	12.31	12.79
16	6.90	5.17	6.26	8.63	10.13	10.05	10.20	11.59	12.46	12.31	12.32	12.78
17	6.91	5.72	6.40	....	10.20	10.09	10.26	11.64	12.49	12.17	12.33	12.78
18	6.91	5.20	6.57	8.74	10.27	10.10	10.32	11.69	12.52	12.08	12.35	12.77
19	6.83	....	6.73	8.81	10.33	10.05	10.32	11.74	12.55	12.02	12.38	12.76
20	6.43	....	6.88	8.88	10.39	9.97	10.45	11.80	12.58	11.98	12.39	12.75
21	5.74	....	7.01	8.93	10.42	9.91	10.52	11.85	12.62	11.95	12.40	12.73
22	5.07	....	7.14	8.97	10.47	9.87	10.57	11.89	12.65	11.93	12.42	12.67
23	4.57	....	7.28	9.03	10.37	9.85	10.63	11.94	12.69	11.92	12.44	12.35
24	4.33	....	7.41	9.08	10.06	9.84	10.67	11.99	12.72	11.89	12.44	11.92
25	4.21	b3.50	7.53	9.13	9.70	9.85	10.70	12.05	12.76	11.87	12.45	11.18
26	4.18	3.53	7.65	9.19	9.40	9.87	10.75	12.11	12.79	11.85	12.45	10.68
27	4.16	3.58	7.74	9.24	9.18	9.90	10.79	12.18	12.82	11.83	12.45	10.31
28	4.07	3.66	7.80	9.29	9.03	9.82	10.83	12.22	12.86	11.83	12.45	9.97
29	3.84	....	7.83	9.32	8.95	9.78	10.87	12.24	12.90	11.84	12.47	9.60
30	3.47	....	7.81	9.33	8.90	9.74	10.92	12.27	12.93	11.85	12.50	9.28
31	a3.17	....	7.79	....	8.88	....	10.94	12.29	....	11.86	....	....

a Estimated.

b Tape measurement.

Tippecanoe 9. Aluminum Co. of America well 1. At Lafayette, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 23 N., R. 4 W., near intersection of Earl Ave. and U. S. Highway 52. Measurements made by M. M. Ross, Aluminum Co. of America. Records available: 1946-49.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	70.94	74.30	75.20	74.27	70.78	75.50	74.98	72.95	71.80	71.00	72.21	72.82
2	70.68	74.87	75.00	74.09	71.70	76.27	74.25	75.94	71.91	70.75	73.28	72.51
3	71.16	.....	75.13	70.89	76.85	75.29	70.70	75.86	71.22	71.62	72.42	71.94
4	73.57	.....	74.60	74.12	74.27	74.95	70.60	73.22	70.97	70.95	72.17	71.75
5	74.29	.....	74.97	74.36	74.70	71.07	75.41	73.47	70.70	71.17	71.45	72.37
6	74.30	.....	71.00	74.42	75.97	74.40	74.78	73.12	72.00	71.25	70.95	72.20
7	74.80	.....	74.15	73.84	73.87	74.85	75.93	70.76	71.37	73.30	71.08	72.75
8	72.11	74.29	74.83	75.06	70.85	75.34	76.19	71.15	72.98	71.10	71.54	72.72
9	71.14	74.93	74.53	74.80	74.90	75.17	74.74	73.94	72.16	70.98	72.10	72.95
10	75.09	73.26	73.96	71.72	74.95	74.80	70.84	73.75	74.21	71.47	72.50	71.88
11	72.80	73.91	73.66	73.92	75.46	72.80	72.55	74.27	71.48	72.55	72.14	71.22
12	72.74	74.99	72.42	75.17	75.99	70.38	74.19	73.97	71.49	72.04	71.50	72.60
13	71.97	70.79	70.76	75.89	75.68	73.38	76.00	71.09	71.22	72.42	71.10	72.95
14	72.90	73.74	73.30	72.91	73.80	75.06	75.49	70.84	71.76	72.23	72.23	72.77
15	71.23	73.90	74.34	73.18	72.72	75.24	76.34	73.17	73.75	71.69	74.01	72.81
16	71.70	75.54	74.23	72.00	74.89	74.87	74.30	73.66	71.26	70.88	73.41	72.47
17	72.42	75.54	73.81	71.83	75.96	74.70	71.49	71.20	71.24	71.12	73.90	71.46
18	72.24	74.70	73.58	76.07	74.95	72.54	75.00	72.23	70.73	74.25	72.82	70.92
19	72.42	74.42	72.34	74.78	74.99	71.15	75.81	72.70	71.65	72.02	71.56	72.30
20	73.03	71.33	72.00	74.98	74.98	74.80	75.35	72.24	71.65	71.67	71.16	72.38
21	72.32	73.78	73.39	74.30	74.94	73.94	75.78	72.20	71.47	71.89	73.54	72.28
22	72.59	74.55	73.40	74.33	70.92	74.66	74.30	72.22	71.35	72.12	74.59	72.57
23	72.42	75.04	74.07	72.68	74.53	74.52	74.00	71.78	71.93	71.84	74.15	72.62
24	72.95	74.63	73.94	71.63	76.42	75.43	71.09	72.18	71.89	72.01	74.09	72.60
25	72.55	73.40	74.28	74.09	75.42	74.40	74.85	72.21	71.25	72.13	74.62	71.88
26	72.99	72.35	74.22	74.52	75.15	71.00	73.57	72.70	71.45	73.00	74.40	71.41
27	72.35	71.07	71.81	74.60	75.48	72.69	74.38	73.27	71.10	72.14	71.86	71.82

Tippecanoe 9--Continued.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
28	72.36	73.03	74.20	74.52	75.08	74.68	76.41	72.47	71.49	71.64	72.34	72.80
29	72.02		74.90	74.42	71.00	76.13	74.19	71.93	71.28	71.02	72.58	72.80
30	75.12		75.32	73.24	70.68	75.06	72.55	72.60	71.32	70.33	71.93	72.95
31	71.56		74.72		72.45		71.25	72.22		73.40		71.42

Tippecanoe 11. Purdue University. In West Lafayette, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 23 N., R. 4 W., in Russell Field near west end of 3d St., extended. Measurements made by Norman Todd, West Lafayette. Records available: 1948-49.

From recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	97.12	95.81	95.27	95.28	96.31	96.38	96.53	96.79	97.62	97.53	97.21
2	98.25	97.09	95.76	95.31	95.33	96.40	96.45	96.68	96.82	97.35	97.53	97.24
3	98.25	96.99	95.72	95.30	95.34	96.34	96.28	96.75	96.81	97.28	97.61	97.28
4	98.20	96.91	95.63	95.32	95.37	96.34	96.20	96.82	96.81	97.46	97.62	97.22
5	98.17	96.87	95.57	95.29	95.39	96.13	96.15	96.88	96.80	97.53	97.67	97.28
6	98.15	96.81	95.56	95.26	95.41	95.99	96.40	96.87	96.83	97.50	97.46	97.25
7	98.13	96.75	95.60	95.22	95.45	96.17	96.50	96.68	96.82	97.58	97.36	97.23
8	98.13	96.67	95.50	95.23	95.46	96.24	96.50	96.60	96.84	97.70	97.50	97.30
9	98.13	96.64	95.45	95.29	95.45	96.27	96.56	96.83	96.85	97.50	97.42	97.32
10	98.15	96.61	95.46	95.30	95.48	96.32	96.38	96.91	96.85	97.42	97.31	97.32
11	98.11	96.56	95.46	95.26	95.51	96.31	96.31	97.04	96.84	97.60	97.25	97.30
12	98.06	96.51	95.43	95.21	95.51	96.10	96.43	96.96	96.85	97.68	97.24	97.33
13	98.02	96.41	95.43	95.16	95.51	96.01	96.49	97.00	96.80	97.78	97.19	97.39
14	.....	.....	95.42	95.16	95.56	96.14	96.52	96.79	96.87	97.78	97.19	97.40
15	.....	.....	95.41	95.12	95.58	96.20	96.57	96.71	96.86	97.78	97.18	97.41
16	97.92	.....	95.41	.....	95.59	96.10	96.64	96.90	96.90	97.59	97.19	97.42
17	97.92	.....	95.37	.....	95.61	96.05	96.44	96.95	96.87	97.50	97.20	97.42
18	97.86	.....	95.34	95.18	95.61	96.03	96.40	97.05	96.86	97.65	97.20	97.36
19	97.87	96.21	95.38	95.25	95.64	96.03	96.56	97.04	96.89	97.71	97.18	97.41
20	97.86	.....	95.38	95.27	95.69	96.00	96.67	97.10	96.91	97.71	97.17	97.37
21	97.75	.....	95.31	95.25	95.66	95.99	96.72	96.92	96.92	97.69	97.22	97.34
22	97.73	.....	95.25	95.17	95.58	96.05	96.74	96.82	96.93	97.75	97.26	97.30
23	97.63	.....	95.34	95.22	95.58	96.00	96.80	96.85	97.13	97.55	97.16	97.41
24	97.53	95.98	95.33	95.24	95.67	95.99	96.58	96.78	97.25	97.50	97.16	97.45
25	97.48	95.95	95.27	95.30	95.73	95.96	96.47	96.94	97.13	97.64	97.19	97.40
26	97.39	95.92	95.34	95.25	95.70	96.01	96.65	96.86	97.10	97.67	97.22	97.32
27	97.31	95.33	95.21	95.28	95.73	96.01	96.72	96.82	97.25	97.71	97.15	97.25
28	.....	95.81	95.30	95.32	95.75	96.02	96.76	96.80	97.33	97.72	97.18	97.27
29	.....		95.33	95.32	95.75	96.03	96.79	96.78	97.40	97.68	97.15	97.22
30	.....		95.29	95.29	95.80	96.28	96.72	96.77	97.48	97.44	97.17	97.19
31	97.16		95.22		96.24		96.63	96.76		97.37		97.17

a Estimated.

Tippecanoe 12. Curinen Leaming. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 21 N., R. 4 W., southeast corner of intersection of State Highways 43 and 28. Unused dug well, diameter 30 inches, depth 27.5 feet. Measuring point, edge of concrete ring on east side. Measurements made by Marion Wolfe. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 3	19.53	Sept. 10	20.25	Oct. 22	20.65	Dec. 3	20.99
6	19.58	17	20.37	29	20.68	10	21.01
13	19.61	24	20.47	Nov. 5	20.82	19	21.07
20	19.86	Oct. 1	20.57	12	20.89	27	20.81
26	20.06	8	20.69	19	20.91	31	20.68
Sept. 3	20.13	15	20.61	26	20.92		

Tipton County

Tipton 1. William B. Richardson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 22 N., R. 4 E. Measurements made by Harold F. McClellan. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	1.61	Apr. 2	1.48	July 2	4.16	Oct. 1	4.19
8	.31	9	1.89	9	4.34	8	1.66
15	.62	16	1.82	16	4.48	15	.70
22	1.67	23	1.39	23	4.63	22	.38
29	.72	30	1.89	29	4.71	Nov. 12	2.03
Feb. 5	1.78	May 7	2.15	Aug. 6	2.62	19	2.04
12	1.87	14	2.54	13	3.11	26	2.05
19	.34	21	2.75	20	1.32	Dec. 3	2.10
26	.80	28	2.89	26	3.61	10	2.16
Mar. 5	1.74	June 4	3.23	Sept. 3	3.71	17	2.02
12	1.63	11	3.73	8	3.82	24	.61
19	1.88	18	3.89	17	4.02	31	.22
26	1.78	25	4.01				

Union County

Union 3. Joe Cannell. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 11 N., R. 2 W., 1.5 miles south of Liberty and about 0.5 mile east of State Highway 101. Measurements made by Henry Carnes and Charles Swafford. Records available: 1946-49.

Feb. 3	5.23	May 1	5.59	July 24	9.57	Oct. 9	13.78
13	5.50	8	5.70	31	10.15	16	13.88
20	4.79	15	6.04	Aug. 7	10.65	23	13.85
27	4.70	22	6.42	14	11.25	Nov. 6	13.90
Mar. 6	5.30	29	6.88	21	11.89	13	13.84
13	4.64	June 5	7.58	28	12.39	20	13.85
20	5.10	12	8.10	Sept. 4	12.54	27	13.85
27	4.32	19	6.77	11	13.14	Dec. 4	13.85
Apr. 3	4.89	26	7.56	18	13.34	11	13.88
10	5.34	July 3	8.13	25	13.50	18	13.89
17	5.46	10	8.56	Oct. 2	13.67	25	13.84
24	5.37	17	8.85				

Union 4. Charles R. Swafford. In Liberty, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 11 N., R. 1 W., about 250 feet east of intersection of State Highway 44 and U. S. Highway 27, in southeast part of town, at 306 Eaton St. Unused dug well, diameter 36 inches, depth 26.5 feet. Measuring point, top of stone covering, 0.4 foot above land-surface datum. Measurements made by Charles R. Swafford, Liberty. Records available: 1949.

Feb. 3	22.94	May 1	22.53	July 24	24.14	Oct. 16	25.26
13	23.17	8	22.75	31	24.20	23	25.42
20	22.70	15	23.02	Aug. 7	24.25	30	25.30
27	21.94	22	23.65	14	24.40	Nov. 6	25.27
Mar. 6	22.60	29	23.50	21	24.49	13	25.28
13	22.25	June 5	23.48	28	24.66	20	25.33
20	21.85	12	23.71	Sept. 4	24.72	27	24.84
27	19.71	19	23.79	11	24.41	Dec. 4	25.38
Apr. 3	22.10	26	23.65	18	24.83	11	25.42
10	22.41	July 3	23.82	25	24.82	18	25.40
17	22.62	10	23.90	Oct. 2	24.68	25	25.37
24	22.74	17	23.97	9	24.80		

Union 5. Union County Commissioners. In Liberty, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 11 N., R. 1 W., extreme northeast corner of courthouse square. Unused drilled well, diameter 4 inches, depth 71.75 feet. Measuring point, edge of cap, at land-surface datum. Measurements made by Charles R. Swafford, Liberty. Records available: 1949.

Union 5--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 29	21.10	July 24	22.18	Sept. 18	22.82	Nov. 13	23.17
June 5	21.25	31	22.25	25	22.89	20	23.24
12	21.43	Aug. 7	22.38	Oct. 2	23.34	27	23.32
19	21.41	14	22.55	9	23.01	Dec. 3	23.45
26	21.52	21	22.62	16	23.10	11	23.44
July 3	21.53	28	22.57	23	23.06	18	23.47
10	21.80	Sept. 4	22.72	30	23.08	25	23.53
17	21.87	11	22.81	Nov. 6	23.16		

Vanderburgh County

Vanderburgh 1. Flora Buente. E $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 8, T. 5 S., R. 11 W., 0.75 mile west of Armstrong. Measurements made by Gilbert Fehrenbacher, R. R. 7, Evansville. Records available: 1947-49.

Jan. 2	10.24	Apr. 3	1.57	July 10	8.32	Oct. 2	8.78
9	9.72	10	2.52	17	8.38	9	8.76
16	9.48	17	3.05	24	8.37	16	8.91
30	8.28	May 1	3.75	31	8.50	23	8.87
Feb. 6	6.98	8	4.20	Aug. 7	8.58	30	8.86
13	7.48	15	3.73	14	8.60	Nov. 13	8.93
20	4.14	22	4.18	21	8.65	20	8.95
27	4.08	27	5.62	28	8.75	27	9.00
Mar. 6	4.34	June 5	6.63	Sept. 4	8.82	Dec. 11	8.93
13	1.97	19	7.82	11	8.90	21	9.03
20	1.22	26	8.01	18	8.92	25	9.08
27	.22	July 3	8.13	25	8.90		

Vigo County

Vigo 2. Commercial Solvents Corporation test hole 1. In Terre Haute, on Washington Ave. at First St., 156 feet west of centerline of South First St. and 177 feet south of centerline of Washington Ave. extended. Measurements made by personnel of Commercial Solvents Corporation, A. C. Miller, plant engineer. Records available: 1946-49.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	59.78	.....	51.08	53.64	55.22	54.33	55.43	54.66	55.80	58.54	54.84	56.64
2	59.37	.....	51.21	53.35	54.96	54.65	55.44	54.62	55.97	58.31	54.83	56.87
3	58.87	52.10	51.30	53.10	55.08	54.92	55.20	54.65	56.26	58.12	54.87	57.00
4	58.68	52.08	51.50	53.29	55.17	55.17	55.07	54.63	56.24	58.16	54.88	56.83
5	58.67	52.15	51.80	.....	55.42	55.04	55.08	54.59	56.12	58.40	54.93	56.67
6	58.61	52.35	52.03	.....	55.55	54.82	55.25	54.59	56.34	58.50	54.97	56.93
7	58.40	52.39	52.11	53.55	55.64	55.00	55.50	54.51	56.55	58.49	54.95	57.01
8	58.16	52.64	52.26	53.77	55.35	55.20	55.73	54.53	56.80	58.43	55.00	57.15
9	57.83	53.03	52.44	53.90	55.11	55.47	55.89	54.50	56.97	58.26	55.05	57.33
10	57.37	53.30	52.67	53.79	55.29	55.66	55.79	54.57	57.20	57.92	55.05	57.45
11	57.00	53.53	52.80	53.65	55.51	55.75	55.62	54.65	57.04	57.88	55.07	57.31
12	56.83	53.66	52.99	53.80	55.74	55.59	55.70	54.70	56.95	57.80	55.10	57.17
13	56.60	53.76	53.10	54.05	55.92	55.39	55.72	54.77	57.09	57.43	55.07	57.26
14	56.37	53.69	53.00	54.32	56.05	55.52	55.72	54.84	57.23	56.92	55.03	57.33
15	56.17	53.74	53.16	54.54	55.80	55.75	55.74	54.74	57.46	56.46	54.95	57.43
16	55.95	53.56	.....	54.75	55.58	56.00	55.63	54.73	57.62	56.06	54.88	57.47
17	55.58	53.26	.....	54.65	55.73	56.01	55.58	54.77	57.79	55.64	54.95	57.53
18	55.50	52.92	53.50	54.54	55.97	55.96	55.55	54.86	57.58	55.53	55.07	57.37
19	55.54	52.55	.....	54.72	56.22	55.80	55.56	54.96	57.36	55.54	55.26	57.18
20	.....	52.15	.....	54.88	56.40	55.45	55.51	55.03	57.50	55.59	55.24	57.26
21	.....	51.64	.....	55.08	56.58	55.21	55.55	55.07	57.67	55.61	55.25	57.41
22	.....	51.30	.....	55.22	56.30	55.26	55.58	55.10	57.84	55.55	55.32	57.55
23	.....	51.22	.....	55.28	55.97	55.31	55.49	55.15	57.97	55.36	55.46	57.38
24	.....	51.24	54.40	55.08	55.86	55.40	55.36	55.18	58.12	55.15	55.73	57.05
25	.....	51.26	54.44	54.86	55.65	55.45	55.21	55.26	58.00	55.02	56.02	56.50
26	.....	51.36	.....	55.05	55.39	55.40	55.04	55.31	57.83	54.92	56.23	55.85

a Estimated.

Vigo 2--Continued.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	53.10	51.25	.....	55.26	55.05	55.24	54.97	55.41	57.94	54.90	56.19	55.37
28	52.99	51.05	.....	55.37	54.82	55.41	54.95	55.35	58.12	54.89	56.10	55.01
29	52.95		.....	55.51	54.39	55.46	54.82	55.38	58.27	54.85	56.24	54.70
30	.....		.....	55.50	53.91	55.43	54.77	55.55	58.42	54.85	56.42	54.42
31	.....		53.75		54.00		54.70	55.65		54.82		54.20

Vigo 3. Emma F. Newlan. SW $\frac{1}{4}$ sec. 29, T. 12 N., R. 8 W. Measurements made by Robert May, George Hein, and Emma F. Newlan. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.21	Feb. 15	0.93	Mar. 28	1.30	Dec. 1	3.40
10	1.00	21	2.29	Apr. 4	2.26	8	3.64
18	.54	28	2.29	11	3.15	15	2.52
24	.96	Mar. 8	2.95	25	1.90	22	1.88
31	2.68	14	2.55	Nov. 17	2.55	29	1.24
Feb. 7	2.92	21	3.08	24	3.14		

Wabash County

Wabash 2. Mrs. Robert S. Gearhart. NW $\frac{1}{4}$ sec. 25, T. 27 N., R. 6 E. Measurements made by Robert S. Gearhart. Records available: 1945-49.

Jan. 6	5.63	Apr. 7	2.61	July 7	6.70	Oct. 6	12.15
13	2.87	14	3.38	14	7.44	13	10.87
20	2.10	21	2.86	21	8.30	20	10.70
27	1.70	28	2.56	28	8.60	27	10.70
Feb. 3	2.90	May 5	3.60	Aug. 4	9.02	Nov. 3	10.50
10	3.46	12	4.62	11	9.74	10	10.46
17	2.11	19	5.38	18	9.79	17	10.22
24	1.87	26	3.40	25	10.30	24	10.10
Mar. 3	2.01	June 2	5.01	Sept. 1	10.70	Dec. 1	9.88
10	2.50	9	6.19	8	10.50	8	10.10
17	2.87	16	6.46	15	11.01	15	9.71
24	2.81	23	6.68	22	11.35	22	6.82
31	1.88	30	5.30	29	12.07	29	2.80

Warren County

Warren 1. City of Williamsport. In Williamsport, on Market St., 200 feet east of Main St. Measurements made by Oscar D. George. Records available: 1944-49.

Jan. 1	9.67	Apr. 9	7.99	July 9	15.15	Oct. 8	13.70
8	7.02	16	9.11	16	15.47	15	8.68
15	6.64	23	9.77	23	15.88	22	8.57
22	6.55	30	9.41	30	12.80	29	8.75
29	6.42	May 7	10.21	Aug. 6	13.42	Nov. 5	9.49
Feb. 5	7.44	14	11.55	13	14.57	12	10.72
12	8.20	21	9.88	20	15.18	19	9.60
19	6.57	28	6.84	27	16.39	26	10.48
26	6.51	June 4	8.60	Sept. 3	17.29	Dec. 3	11.28
Mar. 5	7.45	11	11.02	10	17.80	10	12.46
12	8.44	18	11.01	17	17.97	17	8.42
19	9.78	25	13.02	24	18.22	24	6.49
26	9.85	July 2	14.41	Oct. 1	17.78	31	6.85
Apr. 1	6.71						

Warrick County

Warrick 1. Sunlight Stripper Co. On east side of railroad tracks about 0.7 mile north of Boonville, along Folsomville road, and about 0.1 mile east of road north of Scales Lake State Forest. Measurements made by R. C. Bruner and Marvin Blackford, Scales Lake State Forest. Records available: 1936-38, 1942-45, 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	15.22	May 2	15.43	Aug. 8	14.92	Oct. 10	13.66
28	15.18	9	15.11	15	14.38	17	13.64
Mar. 7	15.16	16	14.80	22	14.39	Nov. 17	13.70
14	15.27	23	14.55	30	14.18	21	13.68
21	15.49	June 6	14.80	Sept. 6	14.17	28	13.58
28	15.59	July 8	14.38	13	14.32	Dec. 5	13.66
Apr. 4	16.08	11	14.41	19	14.33	12	12.37
11	15.87	18	14.91	28	14.29	19	13.60
18	16.00	25	14.32	Oct. 3	14.30	26	13.30
25	15.59	Aug. 1	14.94				

Warrick 2. Scales Lake State Forest. About 0.45 mile east of entrance to Scales Lake State Forest, and about 60 feet north of Old Tennyson Road. Measurements made by R. C. Bruner and Marvin Blackford, Scales Lake State Forest. Records available: 1944-49.

Feb. 25	2.53	May 2	3.86	Aug. 8	8.51	Oct. 10	12.45
28	2.57	9	4.26	15	9.42	17	12.43
Mar. 7	3.30	16	4.65	22	9.40	Nov. 17	11.06
14	2.36	23	5.38	30	10.53	21	11.10
21	2.35	June 6	5.65	Sept. 6	10.55	28	11.22
28	2.57	July 8	6.66	13	11.36	Dec. 5	11.59
Apr. 4	2.72	11	6.76	19	11.35	12	10.82
11	3.22	18	7.10	28	12.18	19	8.06
18	3.32	25	8.04	Oct. 3	12.17	26	2.34
25	3.85	Aug. 1	8.48				

Wayne County

Wayne 1. C. E. Rodenberg. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 16 N., R. 12 E. Measurements made by Marshall B. Rodenberg. Records available: 1945-49.

Jan. 4	31.06	Apr. 11	26.16	July 5	28.85	Oct. 26	30.50
12	29.23	25	26.58	24	29.55	Nov. 3	30.91
18	28.65	May 3	26.80	Aug. 8	29.70	8	31.00
27	27.80	9	27.08	22	30.00	14	31.03
Feb. 9	26.42	16	27.35	Sept. 6	30.27	22	31.09
14	26.40	24	27.66	13	30.38	Dec. 1	31.17
21	26.27	June 7	28.14	19	30.45	6	31.21
Mar. 16	26.50	13	28.30	Oct. 4	30.68	14	31.28
21	26.62	20	28.47	10	30.76	20	31.30
28	26.68	27	28.64	18	30.85	28	31.32

Wayne 2.. Lewis W. Hormel. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 14 N., R. 1 W., about 2 miles north of Chester. Measurements made by Lewis W. Hormel. Records available: 1946-49.

Jan. 3	7.85	Apr. 10	8.86	July 11	13.78	Oct. 10	13.47
10	4.43	18	8.87	18	13.83	17	13.34
17	4.54	25	9.75	25	13.85	24	13.17
24	3.28	May 2	9.88	Aug. 1	13.54	31	12.88
Feb. 7	6.54	9	10.77	8	13.76	Nov. 7	12.88
14	9.03	16	11.28	15	13.84	14	13.03
21	4.77	23	11.89	22	14.18	21	13.43
28	5.18	30	12.35	29	14.12	28	13.52
Mar. 7	7.70	June 6	12.71	Sept. 5	14.43	Dec. 5	13.88
14	6.13	13	13.46	12	13.88	12	14.28
21	6.06	20	13.55	19	13.79	19	14.82
28	2.66	27	13.53	26	13.85	26	13.80
Apr. 4	5.19	July 4	13.72	Oct. 3	13.88		

Wayne 3. State Hospital for Insane. In Richmond, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 14 N., R. 1 W., between pumphouses. Unused drilled well, diameter 3 inches, depth 45.75 feet. Measuring point, top of 3-inch pipe, 0.3 foot above land-surface datum. Measurements made by O. A. Ried, East Haven. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 12	15.96	June 9	17.69	Aug. 28	26.18	Nov. 10	28.30
18	18.10	22	16.90	Sept. 7	26.00	19	28.10
25	18.00	July 12	21.30	14	25.90	28	28.30
May 2	15.69	19	22.50	22	25.80	Dec. 6	30.50
11	17.35	27	23.63	30	27.70	12	30.50
19	16.65	Aug. 6	24.59	Oct. 12	28.10	17	30.60
25	16.60	14	23.82	25	28.00	26	30.50
June 1	16.70	20	25.58	Nov. 2	27.70	30	30.40

White County

White 1. Town of Monon. In basement of municipal building. Measurements made by John M. Winkley. Records available: 1935-36, 1941-49.

Jan. 3	15.36	Apr. 4	11.10	July 4	12.70	Oct. 3	16.46
10	14.85	11	11.59	11	13.83	10	16.11
17	13.22	18	11.70	18	13.86	17	14.74
24	12.69	25	12.12	25	14.81	24	14.29
31	12.24	May 2	12.10	Aug. 1	14.40	31	14.16
Feb. 7	14.42	9	12.33	8	15.84	Nov. * 7	14.11
14	14.28	16	12.43	15	15.79	14	14.10
21	13.11	23	10.86	22	14.78	21	14.85
28	10.84	31	12.10	29	15.67	28	13.88
Mar. 7	11.59	June 6	10.83	Sept. 4	16.08	Dec. 5	14.84
14	11.83	13	12.34	12	16.30	12	14.62
21	12.24	20	10.86	19	16.23	19	14.42
28	11.26	27	11.36	26	16.32	27	11.16

White 3. Archie Compton. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 26 N., R. 4 W., 1.75 miles west of Chalmers, 200 feet north of road, 150 feet west of ditch. Measurements made by Harold Watkins, Chalmers. Records available: 1948-49. Measurement discontinued Aug. 4, 1949.

Mar. 4	32.70	Apr. 1	32.79	May 6	31.80	Aug. 4	32.42
15	33.02	19	33.72	26	32.40		

MAINE

By H. L. Pree, Jr.

PROGRAM OF WORK

The program of periodic measurements of water levels was continued in 1949 at five observation wells in Maine. Three of the wells are in the southern part of the State, at Amherst, Cornish, and Mercer; two are in the northern part of the State, at Portage and Sherman Mills. Readings were made about once a week totaling 246 measurements during the year.

FLUCTUATIONS OF WATER LEVELS

The water levels in water-table wells in Maine, as in the rest of northern New England, usually show a definite seasonal pattern different from that found in southern New England. Water levels fall steadily during the winter, when the ground is frozen and covered with snow. A sharp rise usually occurs in March or April as a result of ground-water recharge when temperatures are high enough to melt the snow cover and to partially thaw out the ground. During the growing season, when the water needs of crops are greatest, the water table drops. A rise in water levels begins in September or October and continues until the onset of cold weather which causes a decline lasting the rest of the winter.

Water levels in all the wells which, at the end of 1948, were at or near their highest stages for that time of year, followed, in general, the usual seasonal pattern of fluctuations throughout 1949. The rise in water levels in all the observation wells, except Ar 1, which began on December 26, 1948, continued during the first few days of 1949 as a result of mild weather and considerable rain during that period. Cold weather contributed to the drop in water levels at all the wells which followed this rise at the beginning of the year and continued until the beginning of spring weather in March. Although precipitation during March was deficient, water levels in all the wells began to rise with the arrival of warm weather as a result of snow melt. At the beginning of the growing season, at or near the end of March, water levels were relatively high for this time of year.

The fairly steady drop in water levels in all the wells, starting late in March or early in April, at the onset of the growing season, continued with few interruptions until the end of October or the early part of November. Occasional brief rises during this period reflected short periods of rainfall. Although water levels in the observation wells were high at the end of March for that time of year, they were at or near their lowest stages from April through the end of October. The rises in water level in wells H 1, Y 1, and Sm 1 near the end of April and May, in well Ar 1 near the end of May, and in well Sm 1 near the end of June, correspond to periods of considerable precipitation. Even though there were occasional short periods during the spring, summer, and fall when rainfall in various parts of the State was heavy, precipitation generally was below normal from April through the end of August. In spite of above-normal rainfall in September, water levels in all wells, except Ar 2, continued to decline because of very dry antecedent conditions. During the month there was a 10-foot rise in water level in Ar 2, which seems to be much more sensitive to water-table fluctuations than the rest of the wells. Many private wells throughout the State dried up during August and remained dry until late fall. The water levels in all observation wells during October, when the precipitation in most of the State was below normal, continued to drop. Above-normal precipitation during November resulted in considerable rises in water levels in four of the five observation wells. The water table recovered only slightly, however, in well Sm 1, and at the end of November was at its lowest stage for that time of year. Water levels in all wells rose during December, some of them appreciably, because most of the below-normal precipitation was rain. The highest end-of-December stages were reached in wells Ar 1 and Ar 2 in the northern part of the State. They were above average at well H 1 in the southeastern part of the State, but elsewhere they were still below average at the end of the month.

At the end of 1949 water levels in wells Ar 1 and Ar 2 indicated a large increase in ground-water storage during the year, but those in the other wells indicated a large decrease.

All measurements are in feet below land-surface datum.

PRECIPITATION

Precipitation for the State as a whole during 1949 was 35.89 inches, or 4.15 inches below normal which is 40.04 inches. The total for the preceding year was 37.45 inches, or 1.56 inches more than for 1949. During the months February to August inclusive, October, and December, precipitation for the State as a whole was below normal.

Summary of water levels in observation wells in Maine

Well	First measured	Lowest observed water level		Highest observed water level		Water level on last date of record, 1949
		Water level	Date	Water level	Date	
US 103 - Ar 1	Nov. 4, 1942	(a)	(a)	0.68	Apr. 1, 1945	2.68
US 105 - Ar 2	July 14, 1939	16.00	Nov. 10, 1946	.68	May 6, 1940	1.46
US 158 - H 1	Nov. 5, 1943	(b)	(b)	3.40	Jan. 1, 1945	5.17
US 102 - Sm 1	Nov. 5, 1942	12.42	Nov. 13, 1949	4.30	Mar. 24, 1946	7.14
US 159 - Y 1	Nov. 6, 1943	18.40	Nov. 14, 1948	8.10	May 6, 1945	13.40

a Dry Sept. 21 to Nov. 2, 1947, Feb. 15 to Mar. 7, 1948. Water level below 10.5 feet. No records available from Sept. 12 to Dec. 18, 1949.

b Dry Sept. 10, 17, 1944, Sept. 26 to Oct. 31, 1948, Sept. 11 to Nov. 6, 1949. Water level below 14.0 feet.

Net change, in feet, in water levels in observation wells in Maine, 1949

Well	Net change
US 103 - Ar 1	+2.10
US 105 - Ar 2	+2.74
US 158 - H 1	-.91
US 102 - Sm 1	-1.69
US 159 - Y 1	a-4.50

a Net change to Jan. 1, 1950.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Aroostook County

US 103. Ar 1. H. L. Stevens. On west side of State Route 11, about 1.0 mile north of Portage Lake post office, in Portage Lake. Penetrates sand. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	4.78	Mar. 28	1.54	May 31	2.50	Aug. 1	7.34
30	6.79	Apr. 4	1.24	June 6	3.12	8	7.64
Feb. 6	6.30	11	1.26	14	4.23	15	7.53
19	6.96	19	1.85	20	5.15	22	8.61
23	6.17	25	2.04	27	4.07	29	9.22
Mar. 1	7.40	May 2	2.52	July 4	4.92	Sept. 5	9.17
7	7.62	9	3.08	11	5.93	12	9.57
14	7.66	16	3.81	18	6.39	Dec. 18	2.92
21	8.03	23	4.59	25	6.92	29	2.68

US 105. Ar 2. C. C. Young. On west side of U. S. Route 2, about 6 miles south of Island Falls, in Sherman Mills. Penetrates sand and rock. Records available: 1939-49.

Jan. 2	4.20	Feb. 6	11.50	Mar. 13	14.10	Apr. 17	0.95
9	3.80	13	12.75	20	14.57	24	1.10
16	3.95	20	13.25	27	1.15	May 1	2.00
23	5.50	27	13.85	Apr. 3	1.00	8	3.70
30	9.70	Mar. 6	13.95	10	.85	15	7.95

US 105--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 22	10.05	July 24	13.20	Sept. 18	2.00	Nov. 13	4.10
29	10.45	31	13.55	25	2.10	20	2.37
June 5	11.70	Aug. 7	13.73	2	4.80	27	1.66
12	12.60	14	13.92	9	7.70	Dec. 4	2.88
19	13.12	21	13.15	16	9.90	11	4.53
26	13.05	28	13.90	23	11.42	18	2.28
July 3	13.15	Sept. 4	3.10	30	10.20	25	1.73
10	13.30	11	8.25	Nov. 6	4.10	30	1.46
17	13.25						

Hancock County

US 158. H L. George C. Orcutt. On south side of State Route 9, about 0.3 mile west of junction with State Route 181, in Amherst. Penetrates overburden. Records available: 1943-49.

Jan. 2	4.26	Mar. 20	6.71	June 5	6.89	Aug. 21	12.79
9	4.13	27	4.27	12	7.52	28	13.33
16	4.94	Apr. 3	4.97	19	8.29	Sept. 4	13.81
23	5.42	11	5.20	26	8.51	Nov. 13	13.48
30	6.10	17	5.43	July 3	9.13	20	11.00
Feb. 6	6.58	24	5.05	13	10.00	27	7.99
13	6.73	May 1	5.52	17	10.24	Dec. 4	5.93
20	6.87	8	5.96	24	10.78	11	6.20
27	6.33	15	6.55	31	11.28	18	5.27
Mar. 6	6.61	22	7.05	Aug. 7	11.79	25	5.60
13	6.12	30	6.60	14	12.32	30	5.17

Dry on Sept. 11, 18, 25, Oct. 2, 9, 23, 30 and Nov. 6. Water level below 14.0 feet.

Somerset County

US 102. Sm l. J. Harrison Farrand. On northwest side of Bog Stream Road, about 2.2 miles north of Mercer. Penetrates sand. Records available: 1942-49.

Jan. 1	5.45	Apr. 10	4.90	July 10	7.10	Oct. 9	11.30
9	5.25	18	5.05	17	7.35	16	11.70
16	5.77	24	4.87	24	7.58	23	11.97
23	6.05	May 1	5.37	30	7.86	30	12.16
30	6.25	8	5.33	Aug. 7	8.14	Nov. 6	12.21
Feb. 6	6.40	15	6.01	14	8.55	13	12.42
14	6.51	22	6.23	20	8.86	20	12.10
21	6.58	28	6.20	28	9.35	27	11.87
28	6.57	June 5	6.33	Sept. 4	9.73	Dec. 3	11.05
Mar. 7	6.51	12	6.63	11	10.18	11	10.15
13	6.42	19	7.00	17	10.46	17	9.28
21	6.38	26	6.62	25	10.80	25	8.02
28	5.40	July 3	6.76	30	11.02	29	7.14
Apr. 4	4.90						

York County

US159. Y l. J. P. Small. On south side of Main Street, about 0.2 mile west of Little River Crossing, in Cornish. Penetrates sandy overburden. Records available: 1943-49.

Jan. 2	8.70	Apr. 3	8.40	July 3	13.20	Oct. 2	17.30
9	9.10	10	8.90	10	13.80	9	17.20
16	10.10	17	9.60	17	14.20	16	17.50
23	11.10	24	9.40	24	14.40	23	17.70
30	11.40	May 1	9.70	31	14.50	30	18.10
Feb. 6	11.90	8	10.20	Aug. 7	15.10	Nov. 6	18.20
13	12.40	15	10.80	14	15.40	13	17.80
20	12.70	22	11.30	21	15.80	21	16.65
27	12.30	29	11.20	28	16.10	27	15.40
Mar. 6	13.60	June 5	11.25	Sept. 4	16.30	Dec. 4	14.05
13	11.20	12	11.80	11	16.70	11	13.45
20	11.10	19	12.20	18	16.80	18	13.05
27	9.40	26	12.80	25	17.10	25	13.40

MASSACHUSETTS

By H. N. Halberg

PROGRAM OF WORK

Investigations of the ground-water resources of Massachusetts, begun in 1938, were continued in 1949 in cooperation with the Massachusetts Department of Public Works. Periodic observations of water levels were continued in 31 wells in Middlesex County, in the vicinity of Lowell, in the Aberjona Valley, and in the vicinity of Fresh Pond, Cambridge; in 2 wells each in Berkshire, Hampden, and Essex Counties; in 1 each in Bristol and Franklin Counties, and in 3 in Worcester County. Water-stage recorders were operated throughout the year on 3 wells, at Wilmington, in Middlesex County, and at Leominster and Winchendon, in Worcester County. Water-level measurements were made weekly in 10 wells and monthly in the remaining wells except in 3 wells on which automatic water-stage recorders are in use and 4 in Woburn in which measurements were made once during the year.

FLUCTUATIONS OF WATER LEVELS

Summary of water levels in observation wells in Massachusetts

Well	First measured	Lowest observed water level		Highest observed water level		Water level on last date of record, 1949
		Water level	Date	Water level	Date	
Arlington 174	July 29, 1944	14.06	Dec. 30, 1949	5.82	Mar. 12, 1945	14.06
Brimfield 12	Feb. 6, 1936	(a)	(a)	4.35	Mar. 30, 1948	(b)
Cambridge 667	Oct. 30, 1944	22.40	Oct. 30, 1944	5.71	May 18, 1945	21.61
Cambridge 798	Aug. 7, 1944	17.46	Jan. 31, 1948	.93	May 18, 1945	16.46
Chelmsford 68	July 27, 1939	10.98	Oct. 2, 1948	5.69	Apr. 23, 1940	9.09
Chelmsford 69	Aug. 22, 1939	6.05	Aug. 23, 1941	.11	Feb. 24, 1943	2.57
Cheshire 1	Apr. 1, 1947	13.2	Sept. 11, 1949	7.20	May 2, 1947	.....
Fall River 67	Apr. 27, 1948	12.14	Oct. 17, 1949	6.42	June 7, 1948	11.61
Great Barrington 1	Mar. 4, 1936	22.89	Sept. 29, 1947	15.51	Aug. 1, 1945	21.49
Ipswich 1	Oct. 15, 1947	17.42	Nov. 10, 1947	7.98	Mar. 22, 1948	15.01
Ipswich 2	Oct. 15, 1947	11.85	Aug. 29, 1943	5.07	Mar. 22, 1948	9.03
Leominster 11	July 13, 1939	9.35	Oct. 28-30, 1949	.81	May 22, 1943	6.45
Lowell 4	May 26, 1939	12.55	Oct. 31, 1947	7.56	May 7, 1940	.....
Lowell 14	May 29, 1939	22.46	Nov. 7, 1939	8.80	Apr. 3, 1948	17.86
Lowell 26	Aug. 9, 1939	12.80	Oct. 1, 1949	1.97	Apr. 2, 1940	.....
Lowell 33	May 29, 1939	11.33	Oct. 4, 1941	6.29	Mar. 1, 1945	.....
Lowell 41	Aug. 22, 1939	20.86	Aug. 1, 1949	4.66	Feb. 15, 1941	9.35
Lowell 43	May 28, 1940	25.76	Dec. 30, 1948	10.62	June 4, 1940	25.31

* See footnotes at end of table.

Summary of water levels in observation wells in Massachusetts--Continued

Well	First measured	Lowest observed water level		Highest observed water level		Water level on last date of record, 1949
		Water level	Date	Water level	Date	
Montague 5	Jan. 16, 1936	5.88	Sept. 12, 1949	2.00	May 31, 1948	4.16
Reading 1	Aug. 25, 1939 (c)		Dec. 26, 1941	13.02	Apr. 3, 1948	21.06
Reading 3	June 20, 1940	5.63	Nov. 1, 1941	1.14	Nov. 30, 1944	2.46
Springfield 4028	July 14, 1948	11.81	Dec. 27, 1949	8.98	Aug. 16, 1948	11.81
Sterling 1	Apr. 3, 1947	13.01	Oct. 21, 1949	2.64	Feb. 20, 1948	7.19
Wilmington 10	July 18, 1940 (d)		Dec. 13, 1941	.73	Nov. 30, 1944	3.92
Wilmington 29	July 24, 1940	11.70	Sept. 27, 1941	8.40	Mar. 28, 1942	10.52
			Aug. 30, 1949			
Wilmington 44	July 26, 1940	7.61	Oct. 11, 1941	.24	Mar. 17, 1948	4.55
Wilmington 56	Aug. 12, 1940	8.11	Aug. 30, 1949	2.06	Mar. 1, 1945	4.53
Wilmington 58	July 27, 1940	12.65	Nov. 1, 1941	2.77	Mar. 23, 1942	8.81
Winchendon 13	July 18, 1939	12.76	Nov. 21-23, 1947	1.97	Mar. 9, 1946	9.88
Winchester 4	Aug. 22, 1939 (e)		Dec. 27, 1941	6.67	Apr. 3, 1948	20.49
Winchester 14	June 13, 1940	14.99	Dec. 14, 1941	5.62	Mar. 23, 1942	10.38
Winchester 18	July 15, 1940 (f)			1.15	Mar. 23, 1942	9.34
Woburn 1	Aug. 14, 1939	9.73	Sept. 29, 1943	4.47	Nov. 30, 1944	6.82
Woburn 3	Aug. 18, 1939	2.41	Aug. 16, 1941	+ .93	Oct. 31, 1947	.....
Woburn 4	Sept. 12, 1939	2.57	Sept. 26, 1939	+ .73	Feb. 28, 1948	1.49
Woburn 5	Sept. 12, 1939	1.00	Sept. 19, 1939	+ .22	Dec. 24, 1942	.....
Woburn 17	July 15, 1940 (g)		Dec. 26, 1941	4.13	Nov. 30, 1944	6.49
Woburn 19	June 20, 1940	14.85	Oct. 18, 1941	4.71	Feb. 28, 1948	5.84
Woburn 21	June 21, 1940	9.69	Oct. 25, 1941	4.97	Apr. 3, 1948	8.43
Woburn 23	July 15, 1940	3.10	Sept. 27, 1941	.53	Mar. 1, 1945	.....
Woburn 38	June 28, 1940	18.15	Dec. 14, 1941	7.62	Mar. 2, 1945	14.83
Woburn 49	July 10, 1940	4.25	Dec. 5, 1941	11.97	Apr. 3, 1948	1.54
Woburn 53	July 13, 1940	10.69	Sept. 27, 1941	7.93	Mar. 23, 1942	.....

a Dry Nov. 6, Dec. 4, 1944, Oct. 31, 1947, Feb. 5, 1948, and from Sept. 26 to Dec. 30, 1949. Water level below 16.3 feet.

b Dry Dec. 30.

c Dry. Water level below 21.9 feet.

d Dry. Water level below 9.0 feet.

e Dry. Water level below 22.6 feet.

f Dry Dec. 26, 1941, Nov. 28, 1942, Oct. 30, 1943, Aug. 31, 1944, Sept. 28, Oct. 30, 1945, Aug. 29, Sept. 30, Oct. 31, 1947, Oct. 2, Oct. 30, 1948, Aug. 30, Oct. 1, Oct. 29, 1949. Water level below 14.1 feet.

g Dry. Water level below 12 feet.

Net change, in feet, in water levels in observation wells in Massachusetts, 1949

Well	Net change	Well	Net change	Well	Net change
Arlington 174	-2.21	Lowell 14	-1.66	Wilmington 58	-0.37
Brimfield 12	a-2.8	Lowell 41	+9.13	Winchendon 13	-2.35
Cambridge 667	-5.07	Lowell 43	+ .45	Winchester 4	-9.22
Cambridge 798	-5.52	Montague 5	+ .13	Winchester 14	-.04
Chelmsford 68	+1.29	Reading 1	-.27	Winchester 18	-.49
Chelmsford 69	-.25	Reading 3	+ .17	Woburn 1	-1.11
Fall River 67	-2.15	Springfield 4028	-2.43	Woburn 4	-.12
Great Barrington 1	-3.02	Sterling 1	-3.94	Woburn 17	-.51
Ipswich 1	+ .18	Wilmington 10	+ .08	Woburn 19	+ .28
Ipswich 2	+ .71	Wilmington 29	+ .05	Woburn 21	-.51
Leominster 11	-3.55	Wilmington 44	+ .01	Woburn 38	-3.11
		Wilmington 56	+ .08	Woburn 49	-1.73

a Dry Dec. 30.

As indicated by the preceding table, there was a net drop in 23 of the wells in the State in which readings were made throughout the year, and a net rise in 12 of them. The net drop in one of the wells and the net rise in four of the wells were less than 0.1 foot, so that the net change during the year in these five wells can be considered negligible. At the end of the year water levels were, in general, lower than at the end of 1948, indicating a net loss in ground-water storage in the State.

Precipitation for the State as a whole during the year was 34.94 inches, according to records of the U. S. Weather Bureau, or 10.64 inches less than in 1948 and 7.95 inches below normal. At Boston, total precipitation during the year was 31.45 inches, 9.06 inches less than in 1948 and 8.69 inches, below the normal for the 50-year period 1878-1927. At Amherst, precipitation was 34.25 inches or 5.78 inches less than in 1948 and 9.77 inches below normal. The greatest monthly total for the State was 4.53 inches in September. Precipitation for the State as a whole was above normal only for the months of January, April, May, and September. In September precipitation was only 0.80 inch above normal. Precipitation was below normal for the other 8 months. The lowest monthly total occurred in June, 0.91 inch, which is 2.64 inches below normal.

Drought conditions began in June and continued for most of the rest of the year, relieved somewhat in September, November, and December. During the summer and fall, rural domestic and farm wells went dry, and many small communities found it necessary to search for additional water supplies. Ground-water levels throughout most of this period were very low, starting to decline abnormally in June with transpiration and evaporation increased by continuing above-normal temperatures.

At the beginning of the year, water levels in the western part of the State rose sharply to far-above-average levels as the result of very heavy rains at the end of December 1948 and in the first part of January 1949. Elsewhere in the State the water table was above average, except in northeastern Massachusetts, where it was slightly below average. Water levels declined thereafter until the middle of February when warm weather and moderate rain caused them to rise abruptly. Water levels were at high seasonal stages throughout the State at the end of January except in northeastern Massachusetts, where they were about at average. By the end of

February all water levels reached high seasonal stages except for a few wells in the central part of the State where the water levels, although well above average, were not relatively as high as elsewhere. Water levels in eastern Middlesex County and in the well at Winchendon rose to their highest stages of record for February.

Water levels declined during March and April due to deficient precipitation and the absence of appreciable snow cover in March and in spite of above-normal rainfall in April. However, at the end of April, the water table ranged from seasonally high in the northeast to about average in central Massachusetts and to below average in the western sections of the State.

In May the water table declined further when plant needs became heavy and precipitation was but slightly above normal. The first part of the month was lacking in rainfall, but frequent rains during the latter part of the month, beginning on the 18th and the 19th, temporarily interrupted the decline. At the end of the month, water levels ranged from about average in the eastern and central sections of the State to low stages in the Connecticut Valley and a little below average in the western part.

Beginning in June, the rest of the year, excepting September, was deficient in precipitation.

An average for the State of only 0.91 inch of rain fell in June, and during the month the deficiency in precipitation since January 1 increased from 0.34 inch to 2.98 inches, and by the end of the year totaled 7.95 inches. This deficiency, coupled with abnormally hot weather, caused a serious loss of ground-water storage throughout the State. By the end of July water levels were as low as average end-of-September levels, with the decline continuing. By the end of August some water levels reached new low August stages with others close to previous seasonal minima.

Rains in September somewhat above normal for the month brought some relief from the drought conditions, but only in northeastern Massachusetts where rainfall was excessive (8.82 inches at Middleton) was there a net rise in the water table during the month. At the end of the month, in this part of the State, water levels ranged from above average in the lowlands of the Aberjona Valley to close to previous minimum stages of record in the vicinity of Lowell. In the rest of the State water levels declined during September

to stages far below average and were close to previous minimum stages for their periods of records in a few wells in the central part of the State.

During October the decline continued at a slow rate as the result of a further lack of precipitation so that water levels were extremely low throughout the State at the end of the month.

Ground-water conditions improved a little during November with the reduction of evaporation and transpiration losses although precipitation was in general below normal. Water levels were at their lowest seasonal stages at the end of the month except in the northeast where they were still far below average. Ground-water storage increased during December, with all water levels rising appreciably. In spite of the rises, all water levels were at low seasonal stages at the end of the year and there was a net loss in ground-water storage for the year throughout the State.

As a result of the deficient precipitation, water levels in 11 wells declined to new minimum stages for their periods of record during the latter part of the summer and in the autumn or early winter, but were only slightly lower than previous minima. The water levels in seven other wells reached stages very close to previous lows. These wells are situated throughout the State so that, in general, the water table declined to as low stages as it had ever been previously during the periods of observation, and in some places was even slightly lower.

In one well, Lowell 41, at the Cook well field of the Lowell water works, a new minimum stage was measured on August 1, slightly lower than the previous minimum. During the rest of the year the water level in this well rose as the result of cessation of pumping in the nearby municipal wells.

A net decline in water levels during the year in wells Arlington 174, Cambridge 667, and Cambridge 798 indicates a loss in ground-water storage during the year in the glacial deposits in the vicinity of Fresh Pond, Cambridge. These glacial deposits are utilized to store water to supply the water in the pond itself. The pond is artificially controlled as part of the water-supply system of the city of Cambridge and fluctuations of pond level are reflected in the three nearby wells.

All measurements are in feet below land-surface datum.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Berkshire County

Cheshire 1. Adams Fire District. About 0.25 mile southeast of State Highway 8, about 2.25 miles south of Adams. Penetrates glacial drift. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 4	8.55	May 15	8.6	June 25	12.2	Aug. 21	12.5
10	8.6	21	8.8	July 3	11.3	28	13.4
17	8.6	29	8.7	10	11.7	Sept. 4	13.1
24	8.5	June 5	8.8	24	11.6	11	13.2
May 1	8.5	12	9.4	Aug. 6	12.6	18	13.2
8	8.6	19	10.6	14	11.9	25	10.8

Great Barrington 1. US 96. Mrs. Dora A. Campbell. On northwest corner of North Plains Road and Division Street (State Highway 41). Penetrates glacial drift. Records available: 1936-49.

Jan. 1	18.47	Apr. 24	18.95	July 17	20.59	Oct. 9	21.76
Feb. 2	17.00	May 2	19.07	25	20.71	16	21.79
11	18.79	8	19.22	Aug. 2	20.88	22	21.86
13	18.89	15	19.37	9	21.04	30	21.88
20	18.47	20	19.34	15	21.18	Nov. 6	21.89
27	18.	30	19.36	23	21.42	13	21.89
Mar. 6	18.	June 5	19.54	29	21.49	20	21.70
13	18.08	13	19.90	Sept. 5	21.60	29	22.00
21	18.34	19	20.09	12	21.65	Dec. 12	22.04
27	18.37	28	20.12	20	21.65	20	21.77
Apr. 3	18.60	July 4	20.03	25	21.66	26	21.50
10	18.73	12	20.43	Oct. 3	21.67	31	21.49
18	18.88						

Bristol County

Fall River 67. Bristol County Superior courthouse. About 200 feet east of North Main Street and about 50 feet north of Walnut Street. Penetrates glacial drift. Records available: 1948-49.

Jan. 3	9.93	Apr. 4	8.39	July 4	8.68	Oct. 3	11.57
10	9.00	11	8.92	11	9.20	10	11.85
17	8.67	18	8.06	18	9.75	17	12.14
25	8.94	25	7.99	Aug. 1	9.69	24	11.89
31	8.19	May 2	8.32	8	8.98	31	11.90
Feb. 7	8.06	9	8.67	15	10.03	Nov. 7	11.88
14	8.96	16	8.00	22	10.17	15	11.90
21	8.61	23	9.08	29	10.48	28	11.89
28	8.24	30	9.55	Sept. 5	10.74	Dec. 6	11.59
Mar. 7	8.09	June 6	9.93	11	11.15	12	11.63
14	7.98	13	9.40	17	11.37	19	11.73
21	8.89	20	9.47	26	11.55	27	11.61
29	8.18	27	9.46				

Essex County

Ipswich 1. Massachusetts Department of Conservation. About 60 feet south of south side of Linebrook Road, about 3.5 miles west of Ipswich. Penetrates gravel. Records available: 1947-49.

Jan. 3	15.16	Mar. 14	12.09	May 16	13.02	July 18	14.86
10	14.54	21	12.42	23	13.16	25	15.11
17	14.24	28	12.41	30	13.17	Aug. 1	15.46
24	14.21	Apr. 4	12.61	June 6	13.26	8	15.77
Feb. 7	14.20	11	12.43	13	13.54	15	16.01
14	13.76	18	12.42	20	13.88	22	16.26
21	13.19	25	12.13	27	14.07	29	16.36
28	11.59	May 2	12.45	July 5	14.33	Sept. 6	15.91
Mar. 7	12.02	9	12.69	11	14.68	12	16.17

Ipswich 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 19	16.17	Oct. 17	16.59	Nov. 14	16.15	Dec. 12	15.76
26	16.19	24	16.82	21	16.01	19	15.21
Oct. 3	16.22	31	16.87	28	16.02	26	15.01
10	16.39	Nov. 7	16.49	Dec. 5	15.91		

Ipswich 2. Massachusetts Department of Conservation. About 18 feet north of north side of Gravelly Brook Road, about 0.6 mile west of junction with Topsfield-Ipswich road, and about 4.0 miles southwest of Ipswich. Penetrates gravel. Records available: 1947-49.

Jan. 3	9.42	Apr. 11	7.86	July 11	10.45	Oct. 10	11.08
10	8.82	18	7.87	18	10.61	17	11.17
17	8.94	25	7.82	25	10.78	24	11.28
24	9.01	May 2	8.22	Aug. 1	11.04	31	11.17
Feb. 7	8.87	9	8.51	8	11.31	Nov. 7	10.49
14	8.54	16	8.81	15	11.45	14	10.38
21	7.42	23	8.77	22	11.61	21	10.27
28	7.12	30	8.68	29	11.85	28	10.02
Mar. 7	7.42	June 6	9.08	Sept. 6	11.76	Dec. 5	9.87
14	7.80	13	9.37	12	11.78	12	9.76
21	8.16	20	9.67	19	11.53	19	9.20
28	8.02	27	9.99	26	11.18	26	9.03
Apr. 4	8.32	July 5	10.21	Oct. 3	11.09		

Franklin County

Montague 5. US 114. C. A. Kurtyka. On west side of Turners Falls-Montague road, about 1.3 miles north of Montague. Penetrates glacial drift. Records available: 1936-49.

Jan. 3	2.90	Apr. 11	3.37	July 11	4.90	Oct. 10	5.80
10	2.46	18	2.70	18	5.08	17	5.59
17	2.88	25	3.42	25	5.26	24	5.79
25	3.16	May 2	3.79	Aug. 1	5.44	31	5.20
31	3.11	9	3.82	8	5.64	Nov. 7	4.89
Feb. 7	3.36	16	4.06	15	5.14	14	5.10
14	4.16	23	3.44	22	5.21	21	5.10
21	2.48	30	3.88	29	5.43	28	5.20
28	2.48	June 6	4.24	Sept. 5	5.55	Dec. 5	4.76
Mar. 7	3.04	13	4.42	12	5.88	12	5.00
14	2.44	20	4.62	19	5.44	19	4.44
21	2.64	27	4.00	26	5.34	26	4.46
28	2.84	July 4	4.64	Oct. 3	5.56	30	4.16
Apr. 4	3.27						

Hampden County

Brimfield 12. US 95. Norman Goodrich. On south side of Palmer-Brimfield road (U.S. Highway 20), about 30 feet south of abandoned section of old Highway 20, 2.3 miles west of Brimfield. Penetrates glacial drift. Records available: 1936-49.

Jan. 4	13.51	Feb. 24	12.36	Aug. 1	14.31	Aug. 29	15.01
10	10.32	Mar. 3	11.98	8	14.39	Sept. 5	15.15
17	11.92	June 6	12.67	15	14.65	12	15.34
24	11.20	July 5	13.54	22	14.82	19	15.45
31	12.16	14	13.83	25	14.89		

Dry on Sept. 26, Oct. 4, 10, 17, 24, 31, Nov. 9, 17, 21, 26, Dec. 4, 11, 18, 25, 30. Water level below 16.3 feet.

Springfield 4028. Chapman Valve Co. About 150 feet east of Pinevale Street and about 280 feet north of Essex Street. Penetrates glacial drift. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	9.49	Apr. 4	9.45	June 27	9.33	Sept. 26	9.60
10	9.46	11	9.43	July 5	9.34	Oct. 3	9.65
17	9.50	18	9.40	11	9.34	10	9.77
24	9.51	25	9.40	18	9.33	17	9.82
31	9.46	May 2	9.38	25	9.25	24	9.98
Feb. 8	9.43	9	9.35	Aug. 1	9.34	Nov. 7	10.91
14	9.43	16	9.36	8	9.39	14	10.22
21	9.48	23	9.36	15	9.44	21	10.28
28	9.54	31	9.35	22	9.47	28	10.34
Mar. 6	9.52	June 6	9.33	29	9.49	Dec. 5	11.15
14	9.44	13	9.32	Sept. 6	9.53	12	11.49
21	9.43	20	9.33	19	9.55	27	11.81

Middlesex County

Arlington 174. Massachusetts Department of Public Health. At northwest corner of Margaret and Dorothy Roads. Penetrates coarse gravel and sand. Records available: 1944-49.

Feb. 1	11.44	Apr. 29	8.65	Aug. 1	9.98	Oct. 29	13.59
26	9.64	May 29	8.29	30	11.94	Dec. 3	13.76
Mar. 20	9.55	June 30	9.11	Oct. 1	12.39	30	14.06

Cambridge 667. Cambridge Water Department. On Fresh Pond golf course, 270 feet east of Blanchard Road and 950 feet south of Concord Avenue. Penetrates sand and gravel. Records available: 1944-49.

Feb. 1	16.10	Apr. 29	7.17	Aug. 1	12.34	Oct. 29	20.75
26	12.66	May 29	6.39	30	16.31	Dec. 3	21.08
Mar. 30	12.63	June 30	7.89	Oct. 1	19.23	30	21.61

Cambridge 798. Massachusetts Department of Public Health. On Fresh Pond golf course, 450 feet south of Concord Avenue, 970 feet east of Blanchard Road. Penetrates sand and gravel. Records available: 1944-49.

Feb. 1	10.68	Apr. 29	2.50	Aug. 1	7.49	Oct. 29	15.64
26	7.76	May 29	1.75	30	11.31	Dec. 3	15.98
Mar. 30	7.79	June 30	3.53	Oct. 1	14.13	30	16.46

Chelmsford 68. Wannalancit Trotting Park. In northeast corner of abandoned trotting track, 2,100 feet east of Middlesex Street (U. S. Highway 3), 1,300 feet north of intersection of Trotting Park Lane and Boston & Maine Railroad tracks, 0.5 mile north of Vinal Square, North Chelmsford. Penetrates glacial drift. Records available: 1939-49.

Jan. 31	9.72	Apr. 20	7.56	Aug. 1	10.13	Oct. 29	10.49
Feb. 26	7.79	May 29	8.09	30	10.77	Dec. 3	9.53
Mar. 31	7.82	June 29	9.19	Oct. 1	10.58	30	9.09

Chelmsford 69. City of Lowell, Washington test well 2. About 2,100 feet southeast of Chelmsford Street, 300 feet southwest of Ecuador Road, and 1.7 miles northeast of Chelmsford Center, Chelmsford. Penetrates glacial drift. Records available: 1939-49.

Jan. 31	1.88	Apr. 30	1.72	Aug. 1	3.83	Oct. 29	2.89
Feb. 26	.80	May 29	1.57	30	3.94	Dec. 3	2.64
Mar. 31	1.14	June 29	3.07	Oct. 1	2.99	30	2.57

Lowell 4. U. S. Rubber Co. About 135 feet north of Marginal Street, and about 1,000 feet east of Pawtucket Street bridge over Boston & Maine Railroad tracks, Lowell. Penetrates glacial drift. Records available: 1939-49. July 29, 11.40; Oct. 1, 11.49; Oct. 14, 10.88.

Lowell 14. Rogers Hall School. About 90 feet north of Rogers Street and 2,000 feet east of Fort Hill Ave., Lowell. Penetrates glacial drift. Records available: 1939-49.

Lowell 14--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	15.74	Apr. 30	10.28	Aug. 1	14.92	Oct. 29	17.95
Feb. 26	13.07	May 29	11.70	30	16.28	Dec. 3	18.33
Mar. 31	14.37	June 29	12.22	Oct. 1	17.32	30	17.86

Lowell 26. Alfred Cimon (well 1). About 55 feet northeast of Pawtucket Boulevard Extension and 4,500 feet west of East Avenue, Lowell. Penetrates glacial drift. Records available: 1939-49. Oct. 1, 12.80.

Lowell 33. Thomas Varnum. About 400 feet south and 50 feet west of intersection of Varnum Avenue and West Meadow Road, Lowell. Penetrates glacial drift. Records available: 1939-49. Oct. 1, 10.47.

Lowell 41. City of Lowell (Cook test well 3). About 50 feet north and 75 feet east of northeast corner of owner's Cook well field pump house which is about 1,300 feet southwest of intersection of Plain and Manufacturers Streets, Lowell. Penetrates glacial drift. Records available: 1939-49.

Jan. 31	18.05	Apr. 30	15.91	Aug. 1	20.86	Oct. 29	10.85
Feb. 26	14.78	May 29	16.43	30	14.70	Dec. 3	9.79
Mar. 31	15.21	June 29	19.15	Oct. 1	11.40	30	9.35

Lowell 43. City of Lowell test well 26. About 230 feet south of Pawtucket Boulevard, about 415 feet east of Boulevard Avenue, 30 feet southwest of southeast corner of Pawtucket Boulevard pump house, Lowell. Penetrates sand and gravel. Records available: 1940-49.

Jan. 31	25.11	Apr. 30	21.92	Aug. 1	24.20	Oct. 29	23.98
Feb. 26	24.92	May 29	21.64	30	24.00	Dec. 3	24.77
Mar. 31	25.06	June 29	22.95	Oct. 1	24.13	30	25.31

Reading 1. William Kelch. About 50 feet northwest of West Street, 1,000 feet northwest of intersection of West and Willow Streets, and about 1.4 miles northwest of Reading. Penetrates glacial drift. Records available: 1939-49.

Jan. 31	19.85	Apr. 30	16.24	Aug. 1	20.52	Oct. 29	21.75
Feb. 25	17.01	May 29	18.25	30	21.20	Dec. 3	21.65
Mar. 30	16.99	June 29	19.36	Oct. 1	21.48	30	21.06

Reading 3. Merle W. Farr. About 500 feet southeast of intersection of West Street and County Road and about 1.2 miles southwest of Reading. Penetrates gravel. Records available: 1940-49.

Jan. 31	2.25	Apr. 30	1.87	Aug. 1	4.89	Oct. 29	3.36
Feb. 25	1.64	May 29	1.78	30	5.33	Dec. 3	2.62
Mar. 30	1.87	June 29	3.31	Oct. 1	3.13	30	2.46

Wilmington 10. L. Chisholm. About 75 feet southeast of Hopkins Street, 1,100 feet southwest of Shawsheen Avenue, and 2.1 miles west of Wilmington Center. Penetrates sand. Records available: 1940-49.

Jan. 31	3.44	Apr. 30	1.80	Aug. 1	6.83	Oct. 29	7.34
Feb. 25	1.08	May 29	1.65	30	7.70	Dec. 3	4.94
Mar. 31	1.51	June 29	5.15	Oct. 1	7.18	30	3.92

Wilmington 29. Oliver R. Surette. About 40 feet east of Andover Street, 2,700 feet northeast of intersection of Andover and Woburn Streets, and 2.5 miles northeast of Wilmington Center. Penetrates coarse gravelly sand. Records available: 1940-49.

Jan. 31	10.04	Apr. 30	9.87	Aug. 1	11.44	Oct. 29	10.92
Feb. 25	9.68	May 29	10.18	30	11.70	Dec. 3	10.68
Mar. 30	10.04	June 29	10.85	Oct. 1	10.89	30	10.52

Wilmington 44. US 1. Mrs. Anne M. McMahon. About 700 feet northwest of intersection of Federal Street and Middlesex Avenue and 0.4 mile northeast of Wilmington Center. Penetrates gravel and sand. Records available: 1940-49.

Water level at noon, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.33	4.07	3.12	3.99	3.97	4.09	5.90	6.91	7.06	6.10	6.07	5.09
2	4.18	4.03	3.27	4.05	4.02	4.18	5.93	6.95	6.62	6.05	5.99	5.03
3	4.17	4.05	3.36	4.08	4.04	4.28	5.98	6.98	6.48	6.04	5.92	5.00
4	4.24	4.08	3.43	4.10	4.03	4.36	6.04	7.01	6.47	6.05	5.83	5.00
5	4.29	4.12	3.46	4.07	4.07	4.42	6.09	7.03	6.51	6.09	5.69	5.00
6	4.13	....	2.71	3.69	4.13	4.50	6.15	7.06	6.59	6.15	5.50	5.00
7	3.69	....	2.77	3.17	4.17	4.57	6.20	7.09	6.56	6.20	5.39	5.01
8	3.66	....	2.99	3.12	4.22	4.67	6.26	7.12	6.71	6.24	5.36	5.05
9	3.78	....	3.17	3.07	4.27	4.75	6.31	7.16	6.76	6.21	5.39	5.10
10	3.88	....	3.30	3.30	4.33	4.81	6.35	7.19	6.81	6.17	5.43	5.15
11	3.95	....	3.38	3.47	4.38	4.85	6.37	7.23	6.85	6.17	5.46	5.17
12	4.00	3.89	3.37	3.62	4.42	4.90	6.38	7.21	6.90	6.16	5.51	5.17
13	4.07	3.92	3.38	3.71	4.46	4.95	6.43	7.09	6.94	6.20	5.53	5.98
14	4.14	3.80	3.49	3.62	4.46	5.01	6.42	7.04	6.95	6.23	5.49	4.64
15	4.23	2.98	3.56	3.29	4.49	5.06	6.41	7.01	6.54	6.25	5.39	4.46
16	4.27	2.44	3.65	3.27	4.52	5.12	6.45	7.03	6.15	6.28	5.29	4.48
17	4.31	2.64	3.72	3.36	4.55	5.18	6.48	7.07	6.00	6.29	5.26	4.56
18	4.35	2.87	3.77	3.56	4.59	5.23	6.52	7.11	6.00	6.31	5.25	4.63
19	4.34	3.00	3.83	3.13	4.62	5.26	6.54	7.15	6.03	6.32	5.27	4.68
20	4.36	2.90	3.88	2.74	4.65	5.30	6.58	7.21	6.12	6.34	5.27	4.70
21	4.39	2.80	3.90	2.97	4.54	5.36	6.43	7.22	6.20	6.35	5.32	4.67
22	4.36	2.99	3.75	3.22	4.50	5.41	6.37	7.24	6.27	6.37	5.35	4.66
23	4.32	2.68	3.66	3.35	4.28	5.44	6.38	7.25	6.31	6.39	5.39	4.66
24	4.24	2.58	3.43	3.43	4.13	5.50	6.47	7.26	6.27	6.42	5.42	4.68
25	4.22	2.75	3.48	3.57	4.05	5.56	6.54	7.27	6.18	6.45	5.43	4.67
26	4.21	a2.77	3.58	3.66	3.92	5.63	6.59	7.30	6.13	6.42	5.40	4.67
27	4.21	2.90	3.67	3.74	3.96	5.70	6.65	7.32	6.11	6.33	5.36	4.65
28	4.22	3.02	3.75	3.81	3.81	5.76	6.69	7.37	6.14	6.23	5.33	4.54
29	4.18		3.86	3.86	3.83	5.80	6.74	7.44	6.15	6.16	5.32	4.48
30	4.17		3.93	3.92	3.90	5.86	6.84	7.50	6.15	6.13	5.23	4.49
31	4.16		3.96		3.98		6.87	7.52		6.10		4.55

a Estimated.

Wilmington 56. D. P. Falkner. East side of Woburn Street, about 700 feet north of Lowell Street and 1.4 miles southeast of Wilmington Center, Wilmington. Penetrates sand and gravel. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	4.16	Apr. 30	4.03	Aug. 1	7.56	Oct. 29	5.66
Feb. 25	2.79	May 29	4.03	30	8.11	Dec. 3	4.86
Mar. 30	3.96	June 29	6.53	Oct. 1	5.74	30	4.53

Wilmington 58. Mrs. R. Malatesta. About 3 feet south of Butters Row, 1,600 feet west of Main Street, and 1.5 miles south of Wilmington Center. Penetrates bedrock. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	7.56	Apr. 30	6.55	Aug. 1	11.46	Oct. 29	11.60
Feb. 25	4.70	May 29	7.65	30	12.47	Dec. 3	10.27
Mar. 30	6.80	June 29	9.79	Oct. 1	11.84	30	8.81

Winchester 4. Town of Winchester (test well AA). About 60 feet south of Royal Street, 800 feet east of Pond Street, and 1,000 feet west of Sylvester Avenue, Winchester. Penetrates glacial drift. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	10.93	Apr. 30	8.92	Aug. 1	20.52	Oct. 29	19.65
Feb. 26	8.33	May 29	9.70	30	21.57	Dec. 3	19.71
Mar. 31	8.51	June 29	12.66	Oct. 1	18.24	30	20.49

Winchester 14. K. W. B. Cox. About 105 feet north of Forest Street, 360 feet northeast of west intersection of Forest Street and Forest Circle, and 1.7 miles northeast of Winchester. Penetrates glacial drift. Records available: 1940-49.

Winchester 14--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	9.43	Apr. 30	9.05	Aug. 1	13.00	Oct. 29	13.35
Feb. 25	6.86	May 29	10.77	30	13.71	Dec. 2	12.12
Mar. 30	9.16	June 29	11.82	Oct. 1	13.49	30	10.38

Winchester 18. Thomas N. Vinson. About 60 feet east of Ridge Street, 40 feet north of High Street, about 1.9 miles west of Winchester. Penetrates gravel. Records available: 1940-49.

Feb. 1	8.48	Apr. 30	7.40	Aug. 1	12.80	Oct. 29	(a)
26	3.50	May 29	9.34	30	(a)	Dec. 3	12.17
Mar. 30	3.84	June 30	11.61	Oct. 1	(a)	30	9.34

a Dry. Water level below 14.1 feet.

Woburn 1. E. P. Fox. About 225 feet south of Green Street, 250 feet west of Highland Street, 0.5 mile south of Woburn. Penetrates glacial drift. Records available: 1939-49.

Jan. 31	4.95	Apr. 30	6.52	Aug. 1	8.10	Oct. 29	7.50
Feb. 26	5.37	May 29	6.57	30	8.28	Dec. 3	7.31
Mar. 30	5.50	June 30	7.99	Oct. 1	7.18	30	6.82

Woburn 3. New England Dressed Poultry Co. About 70 feet north of Lord Tannery well field concrete pump pit, 670 feet north of Ashburton Avenue, 200 feet east of Boston & Maine Railroad tracks, 2.7 miles north of Woburn. Penetrates glacial drift. Records available: 1939-49. Oct. 1, 0.62.

Woburn 4. Consolidated Chemical Industries, Inc. well 10. About 800 feet north of intersection of Merrimac and New Boston Streets, 350 feet west of New Boston Street, 3 miles north of Woburn. Penetrates glacial drift. Records available: 1939-49.

Jan. 31	1.47	Apr. 30	1.35	Aug. 1	2.20	Oct. 29	1.56
Feb. 25	1.04	May 29	1.29	30	2.10	Dec. 3	1.52
Mar. 30	1.40	June 29	1.86	Oct. 1	1.45	30	1.49

Woburn 5. Consolidated Chemical Industries, Inc. About 1,000 feet south of intersection of Merrimac and New Boston Streets, 350 feet east of New Boston Street, 2.6 miles north of Woburn. Penetrates glacial drift. Records available: 1939-49. Oct. 1, -0.04.

Woburn 17. J. D. Coakley. About 70 feet north of north end of Ingalls Street, 370 feet north of intersection of Montvale Avenue and Ingalls Street, and 0.8 mile east of Woburn. Penetrates fine gravelly sand. Records available: 1940-49.

Jan. 31	5.70	Apr. 30	5.60	Aug. 1	8.65	Oct. 29	8.90
Feb. 25	4.70	May 29	6.70	30	9.22	Dec. 2	7.87
Mar. 30	5.48	June 29	7.48	Oct. 1	8.94	30	6.49

Woburn 19. Tanner's Degreasing Co., Inc. About 230 feet north of Montvale Avenue and 300 feet west of Albany Street, East Woburn. Penetrates sand, hardpan, gravel. Records available: 1940-49.

Jan. 31	5.85	Apr. 30	5.34	Aug. 1	8.78	Oct. 29	7.80
Feb. 25	5.07	May 29	5.56	30	8.89	Dec. 2	6.04
Mar. 30	5.52	June 29	7.09	Oct. 1	7.45	30	5.84

Woburn 21. Morris Kaplan. About 150 feet south of Webster Street, 1,100 feet west of Kimball Lane, North Woburn. Penetrates sand. Records available: 1940-49.

Jan. 31	7.52	Apr. 30	6.24	Aug. 1	8.53	Oct. 29	9.10
Feb. 25	6.46	May 29	6.80	30	9.07	Dec. 3	8.82
Mar. 30	6.50	June 29	7.69	Oct. 1	8.96	30	8.43

Woburn 23. F. H. Bowser. About 490 feet southwest of intersection of Main and Elm Streets, 0.6 mile south of North Woburn. Penetrates sand and gravel. Records available: 1940-49. Oct. 1, 1.96.

Woburn 36. Town of Woburn test well 12-A. About 100 feet east of Willow Street, 365 feet south of Lexington Street, 320 feet west of owner's Unit E pump, 1.2 miles southwest of Woburn. Penetrates sand and gravel. Records available: 1940-49. No measurement made in 1949.

Woburn 38. Town of Woburn. On Woburn Country Club golf course, about 300 feet northwest of owner's Unit D pump house, which is about 60 feet west of Woburn Parkway and 1.1 miles southwest of Woburn. Penetrates glacial drift. Records available: 1940-49.

Jan. 31	11.27	Apr. 30	8.94	Aug. 1	12.68	Oct. 29	16.18
Feb. 26	9.36	May 29	9.25	30	15.27	Dec. 3	16.26
Mar. 31	9.66	June 29	9.69	Oct. 1	15.24	30	14.83

Woburn 49. Leo Pias. About 260 feet south of Locust Street, 560 feet east of Cambridge Road, and 1.3 miles west of Woburn. Penetrates gravel. Records available: 1940-49.

Jan. 31	+0.61	Apr. 30	+1.23	Aug. 1	1.25	Oct. 29	2.80
Feb. 26	+1.27	May 29	+0.97	30	2.80	Dec. 3	2.46
Mar. 31	+1.08	June 29	+0.30	Oct. 1	2.00	30	1.54

Woburn 53. P. Flowers. About 240 feet north of Kilby Street, 550 feet west of Hart Street, about 0.6 mile north of Woburn. Penetrates glacial drift. Records available: 1940-49. Oct. 1, 9.40.

Worcester County

Leominster 11. US 128. C. S. Pierce. About 100 feet east of Nashua Street, 300 feet west of Boston & Maine Railroad tracks, 0.7 mile south of North Leominster, 1.2 miles east of Leominster. Penetrates glacial drift. Records available: 1939-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.03	2.81	2.04	2.95	3.31	3.84	6.91	8.28	9.17	9.30	9.31	8.75
2	2.10	2.88	2.17	3.05	3.42	3.98	6.96	8.32	9.18	9.31	9.31	8.72
3	2.32	2.95	2.23	3.11	3.26	4.15	7.02	8.35	9.20	9.32	9.30	8.68
4	2.47	2.95	2.27	3.10	3.02	4.28	7.08	8.37	9.20	9.31	9.28	8.63
5	2.53	3.00	2.00	2.88	3.21	4.41	7.14	8.39	9.21	9.31	9.26	8.58
6	1.87	3.07	1.65	1.99	3.36	4.52	7.21	8.44	9.21	9.31	9.23	8.53
7	1.79	3.04	1.74	1.76	3.44	4.66	7.27	8.48	9.22	9.32	9.21	8.47
8	1.93	2.92	1.99	1.68	3.58	4.79	7.33	8.54	9.23	9.32	9.18	8.42
9	2.04	2.81	2.16	1.95	3.70	4.90	7.39	8.58	9.23	9.32	9.16	8.38
10	2.15	2.38	2.23	2.20	3.84	5.00	7.44	8.63	9.23	9.32	9.14	8.33
11	2.26	2.41	2.16	2.39	3.93	5.08	7.48	8.67	9.24	9.32	9.13	8.30
12	2.38	2.53	1.89	2.57	4.02	5.19	7.53	8.70	9.25	9.33	9.12	8.26
13	2.49	2.54	2.00	2.69	4.06	5.31	7.57	8.71	9.26	9.32	9.12	8.22
14	2.54	1.98	2.22	1.73	4.14	5.43	7.60	8.72	9.26	9.32	9.10	8.19
15	2.72	1.67	2.29	1.80	4.24	5.54	7.63	8.76	9.26	9.32	9.10	8.09
16	2.80	1.67	2.44	1.84	4.31	5.64	7.65	8.78	9.26	9.32	9.10	7.92
17	2.78	1.68	2.53	2.08	4.37	5.75	7.67	8.81	9.28	9.32	9.08	7.75
18	2.84	1.73	2.60	2.29	4.45	5.86	7.70	8.84	9.29	9.32	9.05	7.59
19	2.77	1.70	2.71	1.61	4.52	5.96	7.73	8.86	9.30	9.32	9.02	7.44
20	2.80	1.65	2.81	1.69	4.48	6.06	7.78	8.88	9.31	9.32	8.98	7.35
21	2.97	1.72	2.73	1.95	3.85	6.14	7.81	8.92	9.32	9.32	8.95	7.25
22	2.82	1.77	2.42	2.21	3.97	6.21	7.87	8.95	9.33	9.33	8.92	7.16
23	2.72	1.62	2.06	2.24	3.60	6.31	7.90	8.98	9.31	9.33	8.90	7.09
24	2.70	1.70	2.05	2.30	3.61	6.40	7.95	9.01	9.28	9.34	8.88	7.07
25	2.70	1.75	2.25	2.56	3.33	6.47	7.99	9.03	9.29	9.34	8.85	7.05
26	2.69	1.70	2.35	2.69	3.43	6.53	8.00	9.06	9.30	9.34	8.83	7.00
27	2.75	1.89	2.43	2.78	3.56	6.61	8.06	9.09	9.30	9.34	8.82	6.93
28	2.75	1.98	2.53	2.92	3.24	6.70	8.10	9.12	9.30	9.35	8.81	6.87
29	2.59		2.70	3.07	3.33	6.77	8.15	9.13	9.31	9.35	8.79	6.75
30	2.71		2.80	3.17	3.50	6.85	8.20	9.14	9.30	9.35	8.77	6.59
31	2.78		2.86		3.66		8.23	9.18		9.33		6.45

Sterling 1. Nunzio Lanciani. About 45 feet north of north side of Justice Hill Road, about 0.8 mile northwest of junction with South Nelson Road, and about 3 miles northwest of Sterling. Penetrates till. Records available: 1947-49.

Jan. 7	2.87	Apr. 8	2.98	July 8	9.17	Oct. 14	12.82
14	3.33	15	3.20	15	9.74	21	13.01
21	3.39	22	3.31	22	10.01	28	12.98
28	3.28	29	3.43	29	10.39	Nov. 4	12.96
Feb. 4	3.35	May 6	3.46	Aug. 5	10.88	11	12.67
11	3.33	13	4.05	12	11.38	18	12.42
18	3.26	20	4.36	19	11.78	25	12.04
25	3.19	27	3.32	26	12.14	Dec. 2	11.64
Mar. 4	3.29	June 3	4.28	Sept. 2	12.39	9	10.78
11	3.23	10	5.48	9	12.45	16	9.59
18	3.31	17	6.49	16	12.61	23	8.19
25	3.28	24	7.40	23	12.69	30	7.19
Apr. 1	3.35	July 1	8.33	30	12.81		

Winchendon 13. W. B. Hart. About 10 feet east of Forristall Road, 800 feet south of intersection of Forristall and Crosby Roads and 1.5 miles northeast of Winchendon. Penetrates glacial drift. Records available: 1939-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.12	4.31	3.08	3.38	4.14	5.14	7.17	9.27	10.90	11.78	12.33	12.55
2	4.96	4.42	3.26	3.55	4.20	5.26	7.27	9.34	10.94	11.80	12.34	12.55
3	4.73	4.50	3.35	3.65	3.78	5.41	7.37	9.40	10.97	11.82	12.35	12.56
4	4.74	4.51	3.43	3.74	3.37	5.52	7.49	9.46	11.00	11.85	12.36	12.56
5	4.71	4.60	3.47	3.80	3.56	5.64	7.61	9.52	11.03	11.86	12.38	12.56
6	2.85	4.70	2.88	3.52	3.67	5.76	7.73	9.57	11.08	11.89	12.39	12.56
7	2.87	4.68	2.75	3.06	3.76	5.91	7.83	9.63	11.11	11.91	12.40	12.57
8	3.11	4.77	2.87	3.11	3.95	6.08	7.95	9.69	11.15	11.93	12.41	12.57
9	3.25	4.75	3.00	3.29	4.08	6.22	8.05	9.75	11.18	11.95	12.43	12.57
10	3.27	4.70	2.92	3.51	4.23	6.32	8.15	9.81	11.23	11.96	12.44	12.56
11	3.31	4.70	2.94	3.64	4.37	6.41	8.25	9.87	11.27	11.98	12.45	12.55
12	3.31	4.78	3.04	3.76	4.46	6.52	8.35	9.93	11.30	12.01	12.45	12.53
13	3.41	4.77	a3.15	3.84	4.55	6.67	8.43	9.98	11.33	12.02	12.46	12.52
14	3.49	4.55	3.34	2.84	4.63	6.80	8.51	10.04	11.35	12.05	12.46	12.51
15	3.69	3.81	3.36	2.76	4.75	6.93	8.55	10.11	11.38	12.06	12.47	12.48
16	3.76	2.84	a3.39	2.70	4.84	7.06	8.55	10.14	11.42	12.08	12.48	12.43
17	3.79	3.88	3.44	3.03	4.92	7.19	8.52	10.18	11.44	12.10	12.49	12.37
18	3.90	3.10	3.51	3.30	5.01	7.30	8.49	10.23	11.47	12.11	12.50	12.29
19	3.79	3.17	a3.64	2.93	5.08	7.40	8.48	10.28	11.50	12.14	12.50	12.19
20	3.84	2.67	a3.80	2.97	a5.09	7.51	8.50	10.33	11.52	12.15	12.51	12.08
21	3.93	2.77	3.92	3.17	4.66	7.55	8.56	10.38	11.55	12.16	12.52	11.97
22	3.90	2.87	3.79	3.34	4.62	7.43	8.63	10.43	11.57	12.18	12.53	11.82
23	4.03	2.72	2.79	3.40	4.54	7.37	8.69	10.48	11.60	12.20	12.54	11.68
24	4.01	2.80	2.68	3.36	4.55	7.38	8.76	10.53	11.62	12.20	12.54	11.56
25	4.04	2.81	2.83	3.60	4.47	7.44	8.83	10.58	11.65	12.22	12.54	11.43
26	4.03	2.88	2.86	3.68	4.45	7.35	8.89	10.63	11.67	12.23	12.55	11.28
27	4.05	3.02	2.85	3.78	4.53	7.16	8.95	10.68	11.70	12.25	12.55	11.11
28	4.05	2.96	2.90	3.88	4.58	7.10	9.02	10.73	11.71	12.27	12.55	10.92
29	4.06		3.08	3.98	4.73	7.06	9.08	10.77	11.74	12.28	12.55	10.70
30	4.18		3.18	4.04	4.86	7.09	9.15	10.82	11.75	12.30	12.55	10.34
31	4.24		3.26		4.99		9.20	10.86		12.30		3.88

a Estimated.

MICHIGAN

By J. G. Ferris, E. Derragon, and Norman Billings

PROGRAM OF WORK

The State-wide inventory of the ground-water resources of Michigan was continued during 1949 in cooperation with the Geological Survey Division of the Michigan Department of Conservation. This program includes the maintenance of a network of observation wells to provide data on the trends in storage of principal ground-water reservoirs. More than 5,000 individual measurements of water levels were made in 240 observation wells in 1949. Continuous records of water level were obtained for 43 of these wells through the operation of recording gages.

Studies on the effect of agricultural drains on regional water tables were continued during 1949. Field work was completed in the Gun Lake area, in Barry County, and the methods developed were applied to determine the influence of existing drains on the stabilization of lake levels at Lee Lake, in Calhoun County. The results of this research and its application to the Lee Lake problem were summarized in a technical paper presented before the annual meeting of the American Society of Agricultural Engineers at East Lansing in June 1949. Reprints of this paper titled "A quantitative method for determining ground-water characteristics for drainage design" are available for distribution through the cooperating agency, the Michigan Department of Conservation.

PRECIPITATION

The records of the U. S. Weather Bureau show the State-wide average of total precipitation in 1949 as 32.37 inches or 2.09 inches above normal. On a State-wide basis above-normal precipitation occurred during January, February, March, June, July, and December. Months with precipitation departures 1 inch or more above normal included June and July at 1 inch and 1.34 inches, respectively. Precipitation deficiencies occurred in April and May and in the period August through November. During the April-May

drought a total deficiency of 1.31 inches accumulated and during the August-November period a total of 1.44 inches.

The State-wide average temperature for 1949 was 56.3°F. or 2.6°F. above normal. Average temperatures were above normal in all months except September and November. Among the months of greatest departure above normal were January, February, June, and August with departures ranging from 4.3 to as much as 5.2° above normal. The principal month of departure below normal temperature was September at 3.3°F. below normal.

Months most favorable for ground-water recharge were January, February, March, June, and December. April and May, normally favorable for ground-water recharge, were unseasonably warm and deficient in precipitation. Although above-average precipitation occurred in both June and July, the large evapotranspiration demands by vegetation in this period, particularly in the month of July, limited the recharge benefits.

FLUCTUATIONS OF WATER LEVELS

For areas in the southern part of the Southern Peninsula where intensive studies are in progress, detailed discussions on water-level fluctuations, pumpage, and precipitation are included with the tabulation of water-level measurements for each area. In the northern part of the Southern Peninsula, recorder well Cr Gr6 near Grayling is used as an index of the trends of ground-water level in shallow water-table aquifers. Its water level was 6.91 feet below land-surface datum at the start of the year and declined gradually to 6.94 feet by January 16. On this date the highest temperature of the month occurred and the resultant thaw permitted appreciable recharge to the ground-water reservoir with a rise in stage to 6.33 feet on January 22. A general decline of water level followed through January and most of February to 6.76 feet on February 24. Above-freezing temperatures, accompanied by rain on the 24th and 25th, resulted in recharge to the water table and a rise in water level to 6.16 feet on February 27. Water levels declined to 6.53 feet March 21. Above-normal temperatures coupled with rain on March 22, 27, and 29 resulted in further recharge and raised ground-water levels to 5.36 feet on March 31. Water levels declined by April 26 to 5.95 feet. Heavy precipitation on April 25 and 26, accompanied by unseasonably warm weather, resulted in a sharp rise in stage to 5.39 feet on April 27. There followed a steady decline in water level through June 14 to 6.53 feet. Heavy

precipitation during the period June 13 through 15 brought a sharp rise in water level to 5.50 feet by June 16. Water levels in general declined after this date to reach the low for the year of 8.23 feet on October 4. The highest stage recorded during the year was 5.36 feet on March 31 with secondary highs of 5.95 feet on April 26 and June 16, respectively.

With the close of the growing season and near-normal precipitation in October and November, ground-water levels steadily rose to a stage of 7.43 feet by December 11. Unseasonably warm weather on December 11 and 12 accompanied by moderate precipitation and followed by the warm period of December 16 through 22 and the rain of December 22 recharged the water table and brought a rapid rise in stage to 6.53 feet at the end of the year or a net rise of water level during the calendar year of 0.38 foot.

Average water levels, as determined from the records of 44 shallow wells which are finished in the drift deposits of the north-central part of the Southern Peninsula, reached successively lower record-breaking low stages in September, October, and November. The record-breaking low stage of mid-November was 0.93 foot below the lowest stage recorded for any month since measurements started in 1934. This record November low was 0.43 foot lower than the previous November low of 1948 and 1.33 feet lower than the November average for the prior 10 years of record.

WELL-NUMBERING SYSTEM

The well-numbering system used in the following tabulation of water-level data was adapted by mutual agreement with the Michigan Department of Conservation. This system uses a 4-letter prefix followed by the well number. The first letter pair consists of an upper- and lower-case letter that indicates the county in which the well is situated. The letters are selected to be suggestive of the county name.

The second pair of letters indicate the city or the civil township in which the well is situated. Upper-case letters are used for cities, villages, or towns and an upper-case followed by a lower-case letter is used for the township designation. Again the letters are chosen to suggest the name involved. The use of civil townships, in preference to the township and range system, was considered desirable because of greater familiarity and more general use of the civil designation by the majority who will use these data.

All measurements are in feet below land-surface datum.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Alpena County

Green Township

Ap Gn 1. Julius E. Maxfield. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 30 N., R. 6 E. 90 feet south of north section line and 310 feet east of quarter section line. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.47	8.01	6.74	4.19	3.64	4.94	5.80	6.66	7.41	8.12	8.72	....
2	9.48	7.98	6.68	4.15	3.65	4.97	5.83	6.69	7.43	8.14	8.74	....
3	9.49	7.95	6.63	4.11	3.66	5.01	5.86	6.72	7.46	8.16	8.76	....
4	....	7.88	6.59	4.09	3.67	5.03	5.87	6.75	7.49	8.18	8.78	....
5	....	7.84	6.54	4.08	3.73	b5.07	5.90	6.78	7.51	8.21	8.81	a9.44
6	a9.48	7.81	6.46	4.06	3.79	5.08	5.92	6.81	b7.54	8.24	8.83	9.44
7	9.48	7.77	6.41	4.07	3.86	5.13	5.95	6.83	b7.57	8.26	8.85	9.46
8	9.47	7.74	6.36	4.09	3.94	5.19	5.98	....	7.61	8.28	8.87	9.47
9	9.46	7.70	6.29	4.13	4.00	5.24	6.01	....	7.64	8.30	8.89	9.49
10	9.45	7.69	b6.25	4.17	4.10	5.27	....	....	7.67	8.31	8.92	9.50
11	9.45	7.68	b6.22	4.20	4.18	5.30	6.07	....	7.69	8.33	8.94	9.52
12	9.44	7.66	6.18	4.22	4.24	5.32	6.09	....	7.72	8.35	8.96	9.52
13	9.43	7.64	5.99	4.23	4.30	5.35	6.11	....	7.74	8.38	8.98	9.52
14	9.42	7.63	5.98	4.26	b4.35	5.39	6.14	....	7.77	8.40	9.00	9.52
15	9.41	7.61	5.96	4.31	4.42	5.41	6.17	....	7.79	8.42	9.02	9.52
16	9.36	7.60	5.92	....	4.46	5.45	6.20	....	7.81	8.44	9.05	9.50
17	9.27	7.59	5.90	....	4.51	5.48	6.23	a7.10	7.83	8.45	9.07	9.48
18	9.22	7.59	5.90	....	4.54	5.50	6.26	7.11	7.85	8.47	9.09	9.46
19	9.10	7.47	5.88	....	4.50	5.55	6.28	7.14	7.87	8.49	9.11	9.43
20	8.90	7.46	5.89	....	4.54	5.56	6.32	7.16	7.89	8.51	9.13	9.41
21	8.82	7.45	5.87	....	4.56	5.57	6.35	7.19	7.92	8.52	9.15	9.38
22	8.73	7.43	5.61	....	....	5.58	6.38	7.21	7.93	8.54	9.18	9.35
23	8.66	7.40	5.24	....	....	5.60	6.42	7.24	7.95	8.55	9.19	9.31
24	8.58	7.35	5.22	4.02	....	5.62	6.45	7.26	7.97	8.57	9.21	9.27
25	8.51	6.99	5.15	4.02	....	5.64	6.48	7.27	7.99	8.59	9.23	9.23
26	8.44	6.93	4.92	3.99	....	5.65	6.50	7.29	8.01	8.61	9.25	9.19
27	8.36	6.86	4.78	3.72	....	5.68	6.53	7.31	8.03	8.63	9.27	9.14
28	8.27	6.79	4.55	3.61	....	5.72	6.56	7.32	8.05	8.65	9.29	9.09
29	8.15	....	4.50	3.58	4.82	5.75	6.59	7.34	8.08	8.67	9.32	9.05
30	8.10	....	4.40	3.59	4.86	5.78	6.62	7.37	8.10	8.68	....	9.01
31	8.06	....	4.29	....	4.90	....	6.64	7.39	....	8.70	....	8.97

a Tape measurement.

b Estimated.

Long Rapids Township

Ap Lr 1. Harlo Mellon. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 32 N., R. 6 E. 240 feet east of west section line and 440 feet south of one-quarter section line. Drilled stock well, diameter 6 inches, depth 52.5 feet. Records available: 1948-49. Aug. 30, 1948, 13.41; Sept. 17, 14.36; Oct. 25, 15.83; Nov. 12, 16.67; Dec. 20, 16.35.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	15.89	Apr. 15	8.75	July 20	11.47	Oct. 14	15.38
Feb. 17	15.98	May 18	8.87	Aug. 17	11.84	Nov. 11	14.84
Mar. 16	11.47	June 15	9.32	Sept. 27	12.38	Dec. 15	16.34

Branch County

City of Coldwater

Br CW 3. City of Coldwater well 3. 330 feet south of Park Ave., 100 feet east of Bennett St. Drilled public-supply well, diameter 8 inches to 6 inches, reported depth 150 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 5	13.97	Nov. 26	13.30	Dec. 12	13.72	Dec. 24	12.79
12	13.76	Dec. 3	14.02	17	13.64	31	12.48
19	13.76						

Calhoun County

Total precipitation in the Battle Creek area during 1949 was 38.73 inches or 5.25 inches above normal. Months of above-normal precipitation included January, February, March, August, October, and December. An extended period of precipitation deficiency occurred from April through July with a total accumulated deficiency for this period of 2.49 inches. Excepting wells influenced by adjustments in pumping, observation wells in the Battle Creek area generally reached the highest water level for the year between February 23 and June 22, with the greatest number of peak stages occurring in the month of April. For this same group of wells, the lowest recorded stage during the year occurred between July 20 and November 30 with the greatest number of lows falling in the month of August.

The net change of ground-water level during 1949, as indicated by measurements of 18 observation wells within the Battle Creek area, ranged from declines as great as 0.6 foot to rises as great as 3.4 feet and, for the group, averaged a net rise of 1.1 feet. Of this group 16 wells showed net rises in water level during the year.

City of Battle Creek

Ch BC 140. Oliver Farm Implement Co., 423 E. Michigan Ave. About 150 feet northeast of Michigan Ave. and about 470 feet southeast of Union St. Unused industrial well, diameter 6 inches, depth 73.6 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	19.78	Mar. 16	19.62	May 25	20.78	Sept. 28	22.21
19	20.14	30	20.03	June 29	21.29	Oct. 26	21.72
Feb. 2	19.62	Apr. 13	18.51	July 27	21.98	Nov. 30	20.51
16	18.42	27	19.28	Aug. 31	21.98	Dec. 28	18.14
Mar. 2	18.48	May 11	20.45				

Ch BC 150. H. B. Sherman Manufacturing Co., 22 Barney St. About 430 feet southeast of Washington Ave. and 80 feet northeast of Kalamazoo St. Unused industrial well, diameter 2 inches, depth 21.8 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	16.54	Mar. 16	15.69	May 25	15.99	Sept. 28	17.13
19	15.99	Mar. 30	15.83	June 29	16.80	Oct. 26	16.86
Feb. 2	15.74	Apr. 13	15.26	July 27	17.56	Nov. 30	17.05
16	14.41	27	15.81	Aug. 31	17.18	Dec. 28	14.06
Mar. 2	15.20	May 11	16.59				

Ch BC 160. Post Cereals Division, General Foods Corp. About 400 feet northwest of Angell St. and 240 feet southwest of Lafayette St. Unused industrial well, diameter 10 inches, depth 91.9 feet. Records available: 1946-49.

Ch BC 160--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.42	7.45	7.09	6.73	7.32	7.70	7.93	8.50	8.68	8.73	8.45	8.53
2	8.40	7.55	7.12	6.61	7.34	7.78	7.95	8.59	8.67	8.67	8.47	8.52
3	8.38	7.58	7.18	6.50	7.44	7.89	7.92	8.61	8.66	8.63	8.53	8.52
4	8.54	7.62	7.21	6.44	7.51	7.87	7.92	8.66	8.59	8.67	8.53	8.34
5	8.44	7.71	7.20	6.48	7.57	7.84	7.95	8.67	8.51	8.72	8.59	8.23
6	8.36	7.62	7.16	6.50	7.63	7.81	8.05	8.72	8.48	8.76	8.47	8.33
7	8.38	7.62	7.21	6.58	7.69	7.98	8.09	8.66	8.54	8.48	8.44	8.32
8	8.34	7.74	7.31	6.66	7.66	8.02	8.15	8.64	8.55	8.45	8.54	8.37
9	8.25	7.76	7.36	6.75	7.67	8.02	8.16	8.74	8.59	8.37	8.62	8.43
10	8.21	7.75	7.39	6.73	7.78	8.08	8.09	8.80	8.64	8.33	8.61	8.42
11	8.33	7.84	7.45	6.73	7.83	8.08	8.08	8.83	8.59	8.45	8.67	8.31
12	8.35	7.82	7.49	6.86	7.87	8.05	8.18	8.28	8.52	8.30	8.69	8.10
13	8.40	7.52	7.43	6.91	7.92	8.03	8.20	8.23	8.63	8.26	8.55	8.16
14	8.46	6.88	7.39	7.01	7.98	8.10	8.25	8.23	8.68	8.23	8.48	8.11
15	8.50	6.73	7.51	6.87	7.96	8.07	8.24	8.25	8.69	8.25	8.56	8.14
16	8.35	6.60	7.57	6.90	7.91	7.78	8.24	8.40	8.75	8.17	8.60	8.20
17	8.25	6.65	7.65	6.89	8.01	7.55	8.20	8.43	8.77	8.14	8.64	8.17
18	8.36	6.61	7.66	6.82	8.05	7.46	8.18	8.53	8.69	8.26	8.62	8.12
19	7.57	6.59	7.74	6.92	7.99	7.36	8.26	8.57	8.43	8.30	8.59	8.05
20	7.36	6.57	7.66	6.98	7.51	7.30	8.35	8.59	8.46	8.34	8.50	8.18
21	7.37	6.61	7.61	7.02	7.47	7.39	8.39	8.52	8.47	8.35	8.47	7.80
22	7.44	6.71	7.72	7.04	7.39	7.44	8.39	8.50	8.50	8.29	8.56	7.26
23	7.33	6.82	7.72	7.07	7.40	7.51	8.48	8.60	8.55	8.24	8.54	6.91
24	7.29	6.87	7.75	7.08	7.45	7.53	8.40	8.65	8.56	8.21	8.59	6.81
25	7.40	6.85	7.69	7.08	7.51	7.58	8.37	8.72	8.49	8.31	8.49	6.72
26	7.42	6.89	7.76	7.14	7.56	7.56	8.47	8.76	8.46	8.37	8.56	6.68
27	7.49	6.82	7.58	7.23	7.61	7.57	8.54	8.76	8.58	8.42	8.43	6.59
28	7.28	6.90	7.59	7.29	7.59	7.70	8.58	8.70	8.64	8.42	8.40	6.66
29	7.29		7.67	7.31	7.55	7.79	8.63	8.64	8.69	8.48	8.49	6.75
30	7.23		7.71	7.35	7.54	7.85	8.60	8.74	8.70	8.39	8.48	6.80
31	7.24		7.37		7.56		8.53	8.70		8.34		6.81

Ch BC 170. Honer Brewing Co. 39 feet north of Hamblin St. and 290 feet west of McCambly St. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	9.18	Mar. 16	8.04	May 25	9.15	Sept. 28	10.09
19	8.63	30	8.85	June 29	10.22	Oct. 26	9.17
Feb. 2	7.98	Apr. 13	7.74	July 27	11.16	Nov. 30	9.82
16	6.96	27	8.93	Aug. 31	10.65	Dec. 28	6.11
Mar. 2	7.60	May 11	9.50				

Ch BC 172. Kellogg Cereal Food Co. 90 feet north of Porter St. and 110 feet east of Stiles St. Records available: 1945-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.97	38.46	37.71	41.94	40.38	40.84	42.97	40.15	43.80	45.80	41.72	39.64
2	34.75	39.30	37.96	41.79	37.90	42.32	43.09	41.10	44.18	....	42.03	40.95
3	34.73	39.52	38.20	36.82	39.78	42.83	42.99	43.10	44.12	....	42.31	41.00
4	37.30	39.65	38.34	36.52	40.16	43.13	39.11	43.46	39.50	....	42.23	37.57
5	38.62	39.84	38.56	39.82	40.45	42.95	38.48	43.85	38.70	44.98	42.00	37.24
6	39.04	39.75	35.99	38.87	40.70	39.25	39.78	44.12	38.32	44.31	38.40	39.61
7	39.31	36.68	36.17	39.01	40.83	42.70	42.14	44.04	38.82	44.74	38.00	40.00
8	39.73	39.10	38.20	39.14	37.37	43.20	42.62	41.55	42.56	44.98	40.25	39.11
9	39.99	39.66	38.53	39.28	37.90	43.59	42.85	43.48	43.03	45.07	40.55	39.06
10	36.42	39.80	38.88	39.70	41.65	43.83	42.96	43.94	43.41	....	40.75	39.04
11	39.75	39.55	39.11	39.14	42.37	43.92	40.80	44.20	43.45	....	40.87	36.64
12	40.05	39.37	39.30	40.63	42.88	44.04	42.26	43.96	39.00	44.14	40.83	37.87
13	40.17	39.41	39.28	38.15	43.15	42.21	42.93	43.85	42.92	44.82	38.30	39.10
14	40.47	37.11	37.20	38.56	43.46	43.78	43.24	43.78	43.45	44.85	37.78	39.41
15	40.52	38.72	39.34	38.80	43.32	44.33	43.40	41.30	44.52	43.74	38.37	40.65
16	40.31	38.40	39.63	39.13	38.65	44.66	43.56	42.99	44.65	39.35	38.60	41.05
17	36.90	38.25	39.76	39.15	43.07	44.91	43.52	43.51	44.91	38.58	38.63	40.71

Ch BC 172--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
18	38.30	38.06	39.86	35.48	43.55	44.91	43.20	43.71	41.31	38.35	39.50	37.59
19	39.50	37.95	40.10	39.04	44.04	44.69	43.65	43.91	40.49	42.25	39.59	37.22
20	39.74	35.20	40.06	39.56	44.06	40.07	43.77	44.03	43.93	42.80	36.96	38.74
21	39.66	34.81	37.38	39.76	43.84	43.88	43.84	44.24	44.49	43.18	37.10	39.11
22	39.68	37.42	39.45	39.95	43.20	44.04	43.85	41.84	44.85	43.59	39.37	39.18
23	39.20	37.75	40.05	40.13	39.35	44.18	44.00	43.35	44.95	42.87	39.22	39.26
24	36.45	37.85	40.28	39.75	43.25	44.27	43.97	43.75	44.98	38.88	39.24	38.78
25	38.79	38.00	40.36	36.85	43.65	44.37	43.55	44.13	44.75	39.32	37.22	35.18
26	38.77	38.17	40.46	39.24	43.95	43.90	43.88	44.21	40.79	41.60	37.09	34.35
27	38.80	35.35	37.25	39.65	44.09	40.16	43.97	44.35	44.44	41.89	36.70a	34.07
28	38.76	34.95	37.49	40.03	44.00	42.26	44.06	40.04	45.38	42.06	37.21b	35.20
29	39.50		39.67	40.12	43.50	42.61	44.15	40.16	45.64	42.33	38.81	35.78
30	39.27		40.05	40.30	37.30	42.81	44.23	43.19	45.61	42.20	39.48	36.14
31	36.10		41.58		37.45		43.89	43.68		39.85		36.56

a Estimated.

b Tape measurement.

Battle Creek Township

Ch Bc 2. City of Battle Creek. Armstrong test well 3, at Goguac pumping station of city waterworks. In NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T 2 S., R. 8 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 23	12.37	Apr. 20	13.61	July 20	20.13	Oct. 19	12.61
Mar. 9	12.31	May 4	14.20	Aug. 24	18.09	Nov. 23	12.70
23	12.55	18	15.05	Sept. 21	13.07	Dec. 21	12.97
Apr. 6	12.53	June 22	13.70				

The Goguac pumping station of the city of Battle Creek withdraws ground water for public supply from wells finished in the glacial drift and is used largely as a supplementary source of supply during the months of peak demand. While minor withdrawals were made in all months of the year except January, March, and November, for the most part pumping from this station was limited to the period May through August. In August, the month of maximum use, the total pumpage was 31.4 million gallons or an average daily use of 1 million gallons. Total pumpage from the station during the year was 80.5 million gallons.

Ch Bc 50. E. H. Arnett. 447 N. Twenty-second St. In SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 2 S., R. 8 W., about 400 feet south of Upton Ave. and about 700 feet west of Twenty-second St. Records available: 1946-49.

Jan. 12	5.02	Mar. 23	4.14	May 18	4.73	Sept. 21	6.30
26	3.82	Apr. 6	2.94	June 22	4.65	Oct. 19	5.73
Feb. 9	4.31	20	3.29	July 20	6.04	Nov. 23	5.02
23	3.23	May 4	4.04	Aug. 24	6.47	Dec. 21	3.39
Mar. 9	3.72						

Ch Bc 55. Dominic Conto. 630 Upton Ave. In SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 2 S., R. 8 W., about 200 feet north of Upton Ave. and 30 feet west of Twentieth St. Unused drilled well, diameter 2 inches, depth 11.6 feet. Records available: 1946-49.

Jan. 12	4.32	Mar. 9	3.32	May 4	3.38	Oct. 19	4.62
26	3.86	23	3.40	18	3.66	Nov. 23	4.61
Feb. 9	3.73	Apr. 6	3.17	June 22	2.80	Dec. 21	3.58
23	3.22	20	3.10				

Ch Bc 60. Eaton Manufacturing Co. In SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 2 S., R. 8 W., about 490 feet north of Ave. C and 30 feet west of Twentieth St. Records available: 1946-49.

Jan. 12	18.69	Mar. 23	17.51	May 18	17.67	Sept. 21	18.84
26	17.88	Apr. 6	16.27	June 22	17.47	Oct. 19	17.81
Feb. 9	17.62	20	16.33	July 20	17.81	Nov. 23	16.30
23	17.21	May 4	17.14	Aug. 24	18.14	Dec. 21	17.12
Mar. 9	17.59						

Ch Bc 137. City of Battle Creek. In SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 2 S., R. 8 W., about 530 feet west of Capital Ave. S. W., and 70 feet north of George B. Place. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	9.98	Mar. 23	9.38	May 18	8.91	Sept. 21	9.51
26	9.77	Apr. 6	8.99	June 22	8.42	Oct. 19	9.28
Feb. 9	9.74	20	8.85	July 20	9.21	Nov. 23	9.36
23	9.41	May 4	8.79	Aug. 24	9.60	Dec. 21	9.19
Mar. 9	9.30						

Ch Bc 169. Philip E. Slayton. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 2 S., R. 8 W., about 70 feet west of Twentieth St. and about 100 feet south of Avenue A. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	5.34	Mar. 23	3.32	May 18	3.95	Sept. 21	5.09
26	4.55	Apr. 6	2.61	June 22	3.68	Oct. 19	4.90
Feb. 9	4.45	20	2.73	July 20	5.19	Nov. 23	5.03
23	3.51	May 4	2.97	Aug. 24	5.78	Dec. 21	4.38
Mar. 9	3.77						

Emmet Township

Ch Em 10. C. W. Cronkhite, 1302 East Michigan Ave. In NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 2 S., R. 7 W., about 150 feet south of East Michigan Ave. (U.S. Highway 12) and about 1.3 miles east of Raymond Ave. Unused farm well, diameter 6 inches, depth 90 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	14.30	Mar. 16	13.72	May 25	13.49	Sept. 28	14.38
19	14.29	30	13.83	June 29	13.70	Oct. 26	14.47
Feb. 2	14.09	Apr. 13	13.43	July 27	13.98	Nov. 30	14.63
16	13.73	27	13.36	Aug. 31	14.22	Dec. 28	14.27
Mar. 2	13.63						

Ch Em 60. City of Battle Creek test well. In SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 2 S., R. 7 W. 58 feet south of Golden Ave. and about 530 feet west of Union City Road. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	1.46	Mar. 23	1.07	May 18	1.47	Sept. 21	3.24
26	.94	Apr. 6	.38	June 22	1.26	Oct. 19	1.84
Feb. 9	1.26	20	.66	July 20	2.30	Nov. 23	2.05
23	.57	May 4	1.10	Aug. 24	2.71	Dec. 21	1.11
Mar. 9	.87						

Ch Em 64. City of Battle Creek test well. In NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 2 S., R. 7 W., about 350 feet east of Overton St. and about 1060 feet north of Golden Ave. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	10.10	Mar. 23	9.43	May 18	9.76	Sept. 21	10.56
26	9.31	Apr. 6	8.13	June 22	9.49	Oct. 19	10.41
Feb. 9	8.87	20	8.82	July 20	10.43	Nov. 23	10.55
23	8.05	May 4	9.25	Aug. 24	10.73	Dec. 21	9.97
Mar. 9	8.86						

Pennfield Township

Ch Pf 1. City of Battle Creek. Well 22 at Verona pumping station of city waterworks in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 1 S., R. 7 W. Records available: 1939-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.55	5.96	3.40	3.63	4.55	b6.10	5.90	6.59	6.48	5.60	5.18	4.99
2	6.50	4.72	4.30	3.95	4.30	5.00	6.95	6.45	6.32	5.90	5.46	4.74
3	6.82	4.91	3.80	3.85	3.86	5.09	6.95	6.70	6.60	5.51	4.81	5.40
4	6.89	5.59	4.80	4.00	4.76	4.90	6.05	6.64	5.99	5.77	5.36	5.05
5	7.73	5.58	4.42	3.75	4.94	5.08	6.05	6.80	6.20	5.68	5.24	5.56
6	6.70	5.26	4.46	3.47	5.52	4.39	6.95	7.72	5.80	5.17	5.39	4.93
7	6.67	4.80	3.82	4.07	4.70	....	6.55	7.20	b7.23	5.80	4.70	5.09
8	....	5.10	4.34	3.98	4.85	b6.57	7.10	7.45	5.63	5.68	5.13	5.09
9	....	5.40	4.87	4.27	4.12	4.38	7.31	7.45	6.65	5.80	5.00	5.08
10	....	4.69	3.74	4.37	4.10	5.04	5.97	8.25	5.85	5.07	5.94	4.70

Ch Pf 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	a6.89	5.59	4.80	4.00	4.76	4.90	6.05	6.64	5.99	5.77	5.36	5.05
5	b7.73	5.38	4.42	3.75	4.94	5.08	6.05	6.80	6.20	5.68	5.24	5.56
6	6.70	5.26	4.46	3.47	5.52	4.39	6.95	7.72	5.80	5.10	5.39	4.93
7	6.67	4.80	3.82	4.07	4.70	....	6.55	7.20	b7.23	5.80	4.70	5.09
8	....	5.10	4.34	3.98	4.85	b6.57	7.10	7.45	5.63	5.68	5.13	5.09
9	....	5.40	4.87	4.27	4.12	4.38	7.31	7.45	6.65	5.80	5.00	5.08
10	....	4.69	3.74	4.37	4.10	5.04	5.97	8.25	5.85	5.07	5.94	4.70
11	6.04	5.09	4.46	4.00	4.25	5.18	6.45	7.65	6.98	6.20	5.42	5.34
12	5.72	4.95	4.83	3.81	5.14	6.00	6.68	7.38	....	5.31	5.63	4.70
13	5.50	5.33	3.78	4.40	4.40	4.70	6.73	7.30	6.28	5.55	5.09	5.15
14	6.45	4.27	4.81	4.25	5.40	5.43	6.45	6.49	5.74	5.50	4.59	5.00
15	6.30	4.41	5.09	4.01	5.06	4.99	6.40	6.60	6.05	5.68	5.25	4.60
16	....	5.59	5.22	4.40	5.15	5.16	6.48	7.05	5.70	5.60	5.76	4.81
17	....	4.78	4.02	4.31	4.07	5.40	6.40	7.31	5.80	4.89	4.73	4.61
18	....	5.45	5.12	3.83	4.93	4.94	7.50	7.38	6.38	6.13	5.24	5.17
19	b6.42	5.54	4.91	4.65	4.38	5.00	6.92	6.90	5.62	5.06	6.04	5.04
20	6.49	3.97	5.10	3.70	4.60	4.05	7.30	7.60	5.62	5.56	4.90	4.76
21	6.17	3.89	4.48	4.43	a4.10	4.40	7.69	6.95	5.76	5.32	4.80	4.72
22	6.10	3.81	5.23	4.05	4.66	4.30	7.09	7.52	5.45	5.50	5.38	3.90
23	5.62	5.40	4.80	4.53	....	5.68	6.69	7.90	5.63	5.51	4.70	4.20
24	5.74	3.81	4.10	3.87	....	4.72	6.87	7.17	5.70	5.15	5.63	4.00
25	4.94	4.25	4.43	3.32	b5.38	6.10	5.20	7.51	6.00	5.18	4.57	3.80
26	5.00	4.38	4.78	4.02	4.43	4.65	7.21	7.41	5.02	5.30	4.82	4.08
27	6.18	4.24	3.95	4.95	4.76	5.28	7.22	7.72	5.38	5.27	4.64	3.58
28	5.99	3.58	4.30	4.80	4.60	5.01	7.28	....	6.20	5.53	5.30	b5.10
29	5.81	....	4.25	5.02	4.95	6.20	7.53	6.49	5.60	5.35	4.88	3.48
30	5.01	....	3.95	4.25	4.57	5.58	6.95	7.10	6.35	5.58	5.27	3.55
31	5.17	....	4.80	....	....	....	6.86	6.41	....	5.12	....	3.59

a Estimated.

b Tape measurement.

Wells at the Verona pumping station of the city of Battle Creek are finished in the Marshall sandstone and form the principal source of municipal supply. The average daily withdrawal of ground water from these wells during 1949 ranged from 4.6 million gallons in December to 8.3 million gallons in July and averaged 6.3 million gallons for the year.

Ch Pf 58. City of Battle Creek test well. In NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 1 S., R. 7 W., about 5,300 feet west of Capital Ave. NE., and 42 feet north of Roosevelt Ave. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.86	Mar. 16	2.01	May 25	1.82	Sept. 28	2.94
19	2.79	30	2.08	June 29	2.17	Oct. 26	2.77
Feb. 2	2.62	Apr. 13	1.79	July 27	2.73	Nov. 30	2.72
16	2.22	27	1.78	Aug. 31	2.67	Dec. 28	2.34
Mar. 2	2.12	May 11	1.99				

Ch Pf 102. Kenneth N. Sabin. In NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 1 S., R. 7 W., about 200 feet south of State Highway M-78 and about 730 feet east of State Highway M-66. Unused dug well, diameter 15 inches, depth 7.7 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	4.16	Mar. 23	3.69	May 18	3.66	Sept. 21	4.43
26	3.51	Apr. 6	2.98	June 22	3.90	Oct. 19	4.61
Feb. 9	3.63	20	3.29	July 20	4.17	Nov. 23	4.81
23	2.96	May 4	3.49	Aug. 24	4.42	Dec. 21	4.02
Mar. 9	3.39						

Ch Pf 105. Mrs. Harriet Rice, 1601 Capital Ave. NE. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T. 1 S., R. 7 W. about 120 feet east of Capital Ave. and 1,500 feet north of Bridge St. Unused drilled well, diameter 2 inches, depth 43.2 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	13.59	Mar. 23	12.07	May 18	12.10	Sept. 21	13.67
26	12.93	Apr. 6	10.89	June 22	12.26	Oct. 19	13.46
Feb. 9	12.54	20	11.21	July 20	13.05	Nov. 23	13.35
23	11.69	May 4	11.78	Aug. 24	13.75	Dec. 21	13.08
Mar. 9	11.78						

Cass County

City of Dowagiac

Cs DW 1. City of Dowagiac well 1. 21 feet southwest of Chestnut St. and 38 feet southeast of Pennsylvania Ave. Drilled unused well, diameter 10 inches, depth 159.40 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 21	+3.8	Nov. 11	+2.00	Dec. 2	+2.40	Dec. 23	+2.22
28	+1.9	18	+2.40	9	+1.28	30	+2.45
Nov. 4	+2.31	24	+2.10	16	+2.20		

Mason Township

Cs Ma 1. Vernie Allen. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 8 S., R. 14 W. Records available: 1945-49.

Jan. 2	50.15	May 30	50.32	Aug. 14	50.72	Oct. 30	51.25
9	50.80	June 5	50.45	21	50.69	Nov. 6	51.28
16	50.62	12	50.48	28	50.69	13	51.29
23	50.85	19	50.52	Sept. 4	50.77	17	51.35
30	51.17	26	50.60	11	50.80	20	51.38
Feb. 6	51.20	July 3	50.62	18	50.97	27	51.74
13	51.18	10	50.65	25	51.00	Dec. 4	51.48
20	50.87	17	50.67	Oct. 2	50.95	11	51.52
27	50.82	24	50.75	9	51.04	18	51.62
May 15	50.32	31	50.77	16	51.06	25	51.60
22	50.29	Aug. 7	50.65	23	51.20		

Charlevoix County

Chandler Township

Cv Ch 1. Michigan Dept. of Conservation. In SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 33 N., R. 4 W., 230 feet east of one-quarter section line and 2,220 feet south of county line. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Dec.
1	.....	74.92	74.59	74.19	74.05	73.98	73.87	73.93	.....
2	.....	74.92	74.57	74.18	74.05	73.97	73.88	73.91	.....
3	.....	74.93	74.58	74.18	74.04	73.98	73.87	73.90	.....
4	.....	74.94	74.55	74.17	74.04	73.97	73.86	73.90	.....
5	.....	74.94	74.50	74.16	74.04	73.96	73.85	73.94	.....
6	.....	74.94	74.48	74.14	74.04	73.96	74.89	a 73.91	.....
7	.....	74.95	74.48	74.16	74.04	74.95	73.88	73.89	.....
8	.....	74.95	74.46	74.16	74.03	73.95	73.88	73.94	.....
9	.....	74.96	74.45	74.14	74.02	73.94	73.88	73.94	.....
10	.....	74.97	74.44	74.13	74.03	73.94	73.87	73.96	.....
11	.....	74.95	74.42	74.11	74.03	73.94	73.88	73.91	.....
12	.....	74.93	74.40	74.11	74.01	73.94	73.87	73.94	74.41
13	.....	74.91	74.38	74.10	74.01	73.94	73.85	73.99	74.41
14	.....	74.91	74.38	74.09	74.01	73.93	73.87	73.99	74.42
15	.....	74.88	74.37	74.08	74.01	73.93	73.87	74.01	74.43
16	.....	74.88	74.35	74.10	74.01	74.93	73.85	74.00	74.42
17	.....	74.86	74.34	74.08	74.01	73.91	73.85	74.02	74.42
18	.....	74.84	74.31	74.08	74.00	73.91	73.85	74.03	74.43
19	.....	74.83	74.30	74.08	74.00	73.91	73.85	74.04	74.45
20	.....	74.82	74.31	74.06	74.02	73.91	73.88	74.03	74.45
21	.....	74.79	74.30	74.05	74.01	73.90	73.84	.....	74.45
22	74.80	74.75	74.27	74.06	74.00	73.90	73.86	.....	.....
23	74.84	74.73	74.27	74.05	74.03	73.89	73.86	.....	.....
24	74.85	74.74	74.26	74.05	74.01	73.90	73.89	.....	.....
25	74.82	74.72	74.25	74.04	74.00	73.89	73.89	.....	.....
26	74.87	74.68	74.24	74.05	73.99	73.89	73.89	.....	.....
27	74.83	74.68	74.23	74.05	74.00	73.88	73.87	.....	.....
28	74.88	74.67	74.23	74.04	73.99	73.88	73.89	.....	.....
29	74.89	74.63	74.22	74.05	73.97	73.88	73.90	.....	.....
30	74.90	74.62	74.20	74.05	73.99	73.87	73.89	.....	.....
31	74.91	.....	74.20	.....	73.99	73.87	.....	.....	.....

a Estimated.

Cv Ch 31. Michigan Dept. of Conservation. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 33 N.,
R. 4 W. Records available: 1937-41, 1948-49. Oct. 17, 13.57.

Hudson Township

Cv Hu 1. Michigan Dept. of Conservation. Measurement discontinued.

Cv Hu 33. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 32 N.,
R. 4 W. Records available: 1934-49. Oct. 17, 5.20.

Cv Hu 34. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 32 N.,
R. 4 W. Records available: 1934-49. Oct. 17, 1.52.

Melrose Township

Cv Mr 12. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 33, N., R. 5 W. Records available:
1937-41, 1948. Measurement discontinued.

Cheboygan County

Nunda Township

Cb Nd 2. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 33 N.,
R. 1 W. Records available: 1935-41, 1948-49. Oct. 18, 7.44.

Cb Nd 4. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 33 N.,
R. 1 W. Records available: 1935-41, 1948-49. Oct. 18, 7.70.

Cb Nd 5. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 33 N.,
R. 1 E. Records available: 1935-41, 1948-49. Oct. 18, 5.21.

Cb Nd 7. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 33 N.,
R. 1 E. Records available: 1935-41, 1948-49. Oct. 18, 4.29.

Cb Nd 8. Michigan Dept. of Conservation. Records available: 1935-44.
Measurement discontinued.

Cb Nd 11. Michigan Dept. of Conservation. Records available: 1935-41.
Measurement discontinued.

Cb Nd 17. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 33 N.,
R. 1 E. Records available: 1935-41, 1948-49. Oct. 18, 9.42.

Walker Township

Cb Wk 11. Michigan Dept. of Conservation. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 34 N.,
R. 1 W. Records available: 1935-41, 1948-49. Oct. 17, 5.32.

Cb Wk 33. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 34 N.,
R. 1 W. Records available: 1935-41, 1948-49. Oct. 18, 7.37.

Clinton County

Village of Elsie

Ct Es 1. Village of Elsie. About 70 feet north of northeast corner of
bridge over Baker Creek and 230 feet east of Ovid St. Records available:
1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.13	+0.57	+1.38	+2.15	+1.57	0.05	+0.52	a+2.44	b+1.46	....	2.47
217	+ .49	+1.30	+2.26	+1.70	+ .38	+ .78	b+2.40	+1.43	....	3.16
302	+ .45	+1.41	+2.15	+1.80	+ .62	+ .90	+2.42	+1.41	....	3.12
4	+ .39	+ .56	+1.47	+2.14	+1.88	+ .40	+1.01	+2.10	+1.43	....	+2.80
5	+ .35	+ .94	+1.46	+1.53	+1.90	2.67	+1.15	+2.13	+1.37	b0.83	3.04
6	+ .35	+1.05	+1.55	+1.14	+1.90	6.07	+1.27	+2.13	+1.32	.70	3.51
7	+ .52	+ .93	+1.57	+ .81	+1.89	6.67	+1.43	+2.20	+1.62	.20	4.00
8	+ .38	+1.11	+1.64	+ .86	+1.80	6.02	+1.54	+2.35	+1.31	.36	4.71

Ct Es 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	....	+0.15	+1.09	+1.58	+0.98	+1.86	4.92	+1.21	+2.39	+0.92	0.61	5.19
10	b0.49	+ .18	+ .99	+1.57	+ .90	+1.86	5.22	+1.15	+2.42	+ .31	....	5.49
11	.43	+ .20	+ .90	+1.66	....	+1.97	....	+1.32	+2.39	.55	....	5.80
12	.29	+ .56	+ .44	+1.73b	.66	+1.94	....	+1.50	+2.41	1.33a	.43	4.60
13	.21	+ .15	+ .26	+1.86	+ .67	+2.05	....	+1.61	+2.50	1.00	....	4.00
14	.16	.07	+ .67	+1.76	+ .38	+2.03	b9.66	+1.71	+2.30	.42	....	3.18
15	.21	+ .47	+ .66	+1.81	.04	+2.16	9.83	+1.81	+2.12	+ .02	....	2.64
16	.03	+ .01	+ .92	+1.24	+ .14	+2.26	8.28	+1.87	.04	+ .12	....	2.56
17	.11	.15	+1.19	+1.29	+ .02	+2.40	6.69	+1.98	2.61	.41	....	2.59
18	....	+ .23	+1.26	+1.55	.80	+2.44	5.41	+2.07	1.70	.44	.77	2.33
19	....	+ .41	+1.12	+1.60	1.24	+2.46	4.33	+2.09	.83	.00	1.21	2.40
20	....	+ .40	+1.28	+1.62	1.12	+2.50	3.56	+2.09	.27	.02	a.78	2.71
21	....	+ .41	+1.56	+1.72	.90	....	2.89	+2.12	+ .17	.18	1.11	3.56
22	....	+ .42	+1.45	+1.87	.48	....	2.23a	+2.16	+ .56	+ .35	.86	3.18
23	....	+ .16	+1.45	+1.97	.33	b1.41	1.86a	+2.24	+ .88	+ .58	.86	2.52
24	....	+ .32	+1.35	+1.95	.27	2.05	1.44a	+2.24	....	+ .28	.88	2.03
25	....	+ .56	+1.50	+1.88	.14	1.44	1.00b	+2.34	b+1.21	.29	....	....
26	....	+ .48	+1.45	+2.03	+ .33	.65	.69	+2.32	+1.21	1.22b	.59	2.00
27	+ .14	+ .70	+1.65	+2.01	+ .67	.08	.87	+1.99	+1.37	1.28	1.20	1.94
28	+ .23	+ .75	+1.62	+1.93	+ .88	+ .35	.57	+1.95	....	.61	1.36	2.20
29	.14		+1.52	+1.99	+1.08	.16	.23	+2.10	....	.15	1.59	2.40
30	.61		+1.54	+2.08	+1.27	.38	+ .08	+2.18	....	+ .24	1.93	2.61
31	.32		+1.66		+1.44		+ .29	+2.25	....			1.95

a Estimated.

b Tape measurement.

Ct ES 2. Village of Elsie. About 40 feet east of First St. and 120 feet south of Maple St. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.36	29.14	28.42	28.15	26.90	27.72	29.59	28.88	27.13	27.79	30.24	33.95
2	30.06	29.12	29.22	27.85	26.77	27.62	29.09	28.55	27.21	28.00	30.52	34.38
3	29.97	28.95	28.68	27.66	26.94	27.53	29.15	28.45	27.20	27.80	29.62	33.70
4	29.89	28.58	28.35	27.60	26.94	27.47	31.05	28.38	28.24	27.72	29.16	32.07
5	29.63	28.61	28.04	28.06	28.50	27.89	32.00	28.77	27.55	27.78	31.27	33.02
6	29.47	28.58	27.95	27.53	28.79	27.54	....	28.17	27.53	27.84	29.90	34.27
7	29.41	28.36	28.09	27.46	29.32	27.78	37.45	28.02	27.40	27.64	29.33	34.95
8	29.46	28.99	27.91	27.40	28.36	27.70	36.71	27.92	27.25	28.76	30.73	35.98
9	29.45	29.03	27.85	27.49	28.36	27.93	35.00	29.06	27.25	28.78	29.79	36.45
10	29.65	28.75	29.08	27.53	28.57	27.65	37.55	28.45	27.21	30.21	29.21	37.33
11	29.66	28.81	28.35	27.42	28.65	27.96	....	28.23	27.19	31.79	28.87	36.05
12	....	28.53	29.77	27.33	28.91	27.58	....	28.05	27.15	31.59	28.74	33.59
13	....	29.84	28.93	27.18	29.02	27.78	....	27.95	27.04	30.35	28.39	32.68
14	....	29.17	28.52	27.62	30.35	37.50	43.08	27.85	27.79	29.65	28.21	31.94
15	....	28.57	28.83	27.25	29.65	27.31	41.50	27.80	28.79	29.21	28.09	31.64
16	....	29.83	28.20	28.30	29.33	27.28	37.74	27.74	35.72	29.78	30.43	31.42
17	....	29.22	27.98	27.88	30.60	27.13	35.64	27.65	34.27	30.56	31.69	31.70
18	....	28.86	27.85	27.53	31.95	27.10	34.21	27.52	31.75	29.60	32.45	31.53
19	....	28.68	27.92	27.54	31.17	27.10	33.09	27.45	30.44	29.15	32.77	31.74
20	....	28.55	27.91	27.53	30.90	27.01	32.37	27.49	29.75	30.27	31.52	32.76
21	....	28.61	27.65	27.40	30.35	26.92	31.74	27.48	29.24	29.28	32.17	33.06
22	....	29.47	27.85	27.26	29.75	....	31.10	27.38	28.83	28.76	31.00	32.17
23	....	29.37	27.69	27.14	29.57	34.50	....	27.30	28.52	28.66	32.40	31.45
24	....	28.80	27.79	27.15	29.52	33.80	....	27.31	....	29.18	30.98	30.97
25	....	28.44	27.54	27.27	29.05	31.40	....	27.34	28.27	31.02	30.88	31.25
26	....	28.57	27.62	27.08	28.65	30.21	30.05	27.23	28.13	31.72	31.70	31.40
27	28.98	28.31	27.33	27.10	28.41	29.50	30.40	28.35	27.87	30.44	30.25	31.57
28	28.72	28.60	27.43	27.19	28.24	29.04	29.80	27.73	27.75	29.71	31.96	31.83
29	29.61		27.50	27.09	28.09	32.00	29.43	27.50	27.72	29.25	31.89	32.92
30	30.16		27.50	26.99	27.95	30.32	29.16	27.40	27.70	28.85	32.25	31.85
31	29.47		27.29		27.80		28.99	27.27		28.62		30.89

Ct ES 3. Village of Elsie. About 60 feet east of Ovid St. and about 110 feet north of south corporate limits. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.1	18.8	14.2	22.6	22.3	11.8	11.8	11.3	11.5	25.6	23.3	21.4
2	11.8	17.6	21.7	22.6	22.3	11.9	11.9	11.1	11.5	25.5	25.0	13.8
3	11.6	16.4	22.7	22.6	22.6	11.9	11.9	11.1	11.5	25.4	14.3	21.0
4	17.8	19.8	17.0	22.8	22.6	11.9	11.9	11.2	11.2	25.8	12.6	23.9
5	21.5	18.3	22.1	22.6	22.6	11.9	11.3	11.2	11.4	25.71	23.6	24.4
6	20.3	17.4	21.3	22.7	22.8	11.9	11.2	11.4	11.5	14.5	13.9	23.3
7	21.7	17.7	22.6	22.8	22.9	12.0	11.5	11.4	11.4	12.7	12.5	24.5
8	22.0	20.1	21.3	22.8	22.9	12.0	11.8	11.4	11.3	23.9	22.6	23.5
9	19.7	18.7	13.9	22.8	22.8	12.0	11.9	11.4	11.4	25.7	13.8	23.1
10	20.7	16.7	11.7	23.0	22.9	12.1	11.1	11.6	11.7	25.9	12.4	23.2
11	21.3	18.2	21.6	22.9	23.0	12.0	10.9	11.6	13.3	26.3	12.0	14.3
12	....	20.7	22.5	22.9	23.0	12.0	10.8	11.6	11.8	16.3	11.9	23.3
13	....	19.2	13.3	22.9	22.9	12.1	10.7	11.6	14.3	13.5	11.6	15.3
14	....	16.8	21.2	22.9	22.9	12.2	10.8	11.5	12.1	12.7	11.7	13.1
15	....	18.5	17.2	22.8	22.9	11.8	10.9	11.5	12.0	12.3	11.5	12.5
16	....	21.1	12.6	22.8	23.2	11.7	11.3	11.6	10.9	23.5	21.5	21.9
17	....	16.2	21.4	22.7	23.2	11.8	11.4	11.7	11.3	25.3	23.2	23.8
18	....	20.9	22.5	22.7	23.1	11.7	11.3	11.6	11.4	14.1	23.8	24.0
19	....	20.5	15.5	22.6	23.2	11.7	11.5	11.6	11.3	12.7	22.8	24.5
20	....	16.9	12.5	22.5	23.4	11.6	11.4	11.6	11.4	23.7	13.8	24.6
21	....	20.2	21.4	22.5	23.3	11.7	11.3	11.5	11.4	14.8	23.5	24.7
22	....	18.0	22.3	22.5	23.0	11.1	11.3	11.6	11.3	12.6	14.0	14.3
23	....	21.0	22.8	22.3	23.1	11.2	11.3	11.6	11.3	22.4	23.0	12.7
24	....	22.0	22.9	22.1	23.2	11.4	11.4	11.6	11.4	24.9	13.8	12.0
25	....	22.6	22.6	22.2	15.2	11.6	11.4	11.6	11.4	25.8	23.4	22.3
26	....	22.5	22.7	22.2	12.8	11.6	11.5	11.6	11.3	25.9	23.2	....
27	20.0	22.1	22.6	22.5	12.1	11.7	11.5	11.6	11.3	14.8	14.1	....
28	20.4	22.6	22.6	22.5	11.8	11.8	11.5	11.6	11.3	12.9	23.2	....
29	20.6		22.7	22.4	11.8	11.6	11.6	11.4	23.2	12.4	22.7	....
30	18.9		22.7	22.4	11.6	11.7	11.5	11.5	25.0	12.1	14.3	14.5
31	21.5		22.7		11.7		11.3	11.6		11.8		12.5

a Estimated.

Ct ES 10. Village of Elsie. In SE $\frac{1}{4}$ sec. 13, T. 8 N., R. 1 W., about 1,500 feet east of Ovid St. and 150 feet north of one-quarter section line. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	15.47	Apr. 28	10.37	June 27	15.16	Sept. 30	14.70
Feb. 10	12.51	May 26	14.32	July 27	15.29	Oct. 29	16.51
24	12.10	June 23	15.39	Aug. 30	15.88	Nov. 30	12.25
Mar. 31	12.32						

Ct ES 11. Village of Elsie. In SE $\frac{1}{4}$ sec. 13, T. 8 N., R. 1 W., about 1,500 feet east of Ovid St. and 150 feet north of one-quarter section line. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	10.40	Apr. 28	10.97	June 27	11.57	Sept. 30	12.60
Feb. 10	10.58	May 26	10.98	July 5	11.48	Oct. 29	13.01
24	10.62	June 23	11.26	Aug. 29	12.03	Nov. 30	12.85
Mar. 31	11.00						

De Witt Township

Ct Dw 159. Michigan Dept. of Health, Quarantine Farm. In SW $\frac{1}{4}$ sec. 32, T. 5 N., R. 2 W., about 220 feet west of De Witt Road and 670 feet north of Sheridan Road. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	52.58	Apr. 25	53.92	July 28	57.53	Oct. 27	57.57
Feb. 28	53.58	May 27	55.37	Aug. 25	57.59	Nov. 25	57.10
Mar. 28	53.97	June 24	58.25	Sept. 29	57.39	Dec. 29	55.30

Olive Township

Ct Oe 1. Michigan State Highway Dept. In SE $\frac{1}{4}$ sec. 16, T. 6 N., R. 2 W., on right-of-way of U. S. Highway 27. Records available: 1948-49.

Ct Oe 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.35	18.27	18.02	17.71	17.26	17.50	17.41	.....	17.59	17.97	18.09	18.28
2	18.33	18.34	18.01	17.71	17.22	17.50	17.43	.....	17.66	17.97	18.02	18.30
3	18.38	18.33	18.03	17.68	17.29	17.51	17.43	.....	17.68	17.96	18.09	18.35
4	18.41	18.25	17.99	17.67	17.31	17.53	17.42	.....	17.67	17.95	18.08	18.25
5	18.33	18.29	17.92	17.63	17.32	17.52	17.43	17.41	17.63	17.98	18.15	18.28
6	18.30	18.30	17.93	17.54	17.31	17.51	17.40	17.42	17.71	17.96	18.13	18.31
7	18.29	18.26	18.00	17.55	17.34	17.55	.....	17.41	17.72	17.92	18.12	18.19
8	18.32	18.27	17.96	17.55	17.35	17.61	17.48	17.40	17.71	17.98	18.09	18.32
9	18.34	18.30	17.96	17.61	17.32	17.64	17.46	17.41	17.74	17.98	18.14	18.36
10	18.43	18.30	17.93	17.66	17.36	17.63	17.36	17.42	17.75	17.98	18.11	18.34
11	18.45	18.38	17.94	17.63	17.40	17.61	17.35	17.45	17.75	17.97	18.12	18.32
12	18.39	18.32	17.93	17.61	17.37	17.60	17.29	17.42	17.76	17.94	18.15	18.25
13	18.36	18.30	17.96	17.55	17.38	17.59	17.25	17.44	17.73	18.02	18.10	18.33
14	18.35	18.26	17.95	17.57	17.37	17.55	.....	17.46	17.75	18.03	18.10	18.35
15	18.39	18.11	17.99	17.47	17.43	17.53	17.21	17.48	17.77	18.05	18.10	18.35
16	18.33	18.19	18.00	17.53	17.43	17.53	17.21	17.49	17.76	18.03	18.14	18.35
17	18.39	18.21	17.97	17.51	17.45	17.45	17.20	17.50	17.76	18.04	18.16	18.33
18	18.40	18.16	17.96	17.41	17.43	17.41	17.19	17.48	17.76	18.06	18.18	18.31
19	18.17	18.15	18.03	17.43	17.40	17.40	17.18	17.49	17.75	18.07	18.17	18.33
20	18.41	18.14	18.07	17.42	17.40	17.36	17.21	17.52	17.80	18.05	18.14	18.32
21	18.37	18.20	18.00	17.37	17.40	17.32	17.22	17.55	17.82	18.04	18.21	18.22
22	18.35	18.11	17.96	17.31	17.30	17.30	17.20	17.56	17.81	17.95	18.26	18.09
23	18.38	18.13	17.98	17.26	17.36	17.31	17.29	17.55	17.81	18.02	18.16	18.15
24	18.29	18.08	18.02	17.27	17.38	17.28	17.30	17.57	17.87	18.08	18.22	18.19
25	18.33	18.02	17.93	17.32	17.43	17.25	17.28	17.60	17.90	18.09	18.19	18.19
26	18.32	18.10	17.97	17.25	17.42	17.28	17.28	17.60	17.91	18.06	18.25	18.12
27	18.30	18.03	17.83	17.28	17.43	17.32	17.29	17.59	17.87	18.11	18.16	18.06
28	18.11	17.99	17.88	17.33	17.46	17.35	17.29	17.58	17.86	18.09	18.25	18.05
29	18.24		17.90	17.32	17.48	17.37	17.27	17.58	17.90	18.08	18.21	18.01
30	18.32		17.89	17.29	17.49	17.39	.....	17.60	17.92	18.05	18.23	18.07
31	18.28		17.83		17.49		.....	17.60		18.05		18.05

a Estimated.

Crawford CountyCity of Grayling

Cr Gr 3. State Fish Hatchery. In NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 26 N., R. 3 W., 332 feet south and 562 feet east of northwest corner. Driven observation well, diameter 1 $\frac{1}{2}$ inches, depth 7.90 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 25	3.03	June 16	3.28	Aug. 16	3.39	Nov. 8	3.32
May 19	3.21	July 20	3.22	Oct. 13	3.44	Dec. 15	3.12

Beaver Creek Township

Cr Bc 1. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 25 N., R. 3 W. Records available: 1937-49.

Jan. 13	10.74	Apr. 14	10.01	July 18	10.41	Oct. 12	10.78
Feb. 14	10.22	May 17	10.07	Aug. 15	10.55	Nov. 11	10.85
Mar. 15	10.77	June 13	10.38	Sept. 15	10.71	Dec. 14	10.74

Frederic Township

Cr Fr 1. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 27 N., R. 4 W. Records available: 1937-49.

Jan. 14	5.88	Apr. 14	5.08	July 19	5.79	Oct. 13	6.40
Feb. 15	5.83	May 17	5.41	Aug. 16	6.14	Nov. 11	6.48
Mar. 15	5.79	June 14	5.68	Sept. 15	6.32	Dec. 14	6.19

Cr Fr 2. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 14, T. 27 N., R. 4 W. Records available: 1939-49.

Jan. 14	13.42	Apr. 14	12.68	July 19	13.12	Oct. 13	13.89
Feb. 15	13.51	May 17	12.81	Aug. 16	13.47	Nov. 7	14.07
Mar. 15	13.49	June 14	13.11	Sept. 15	13.72	Dec. 14	14.00

Cr Fr 3. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 28 N., R. 4 W. Records available: 1938-41. Measurement discontinued.

Cr Fr 4. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 27 N., R. 4 W. Drilled unused well, diameter 2 inches, depth 174.0 feet. Records available: 1948-49. Dec. 14, 1948, 67.04.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	66.90	May 17	66.95	Aug. 16	66.95	Oct. 13	66.94
Feb. 15	67.57	July 19	66.88	Sept. 15	66.98	Dec. 14	67.32
Apr. 14	66.86						

Cr Fr 5. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 19, T. 27 N., R. 4 W. Drilled observation well, diameter 2 inches, depth 19 feet. Records available: 1949.

June 2	16.07	July 19	16.16	Sept. 15	16.95	Nov. 8	17.37
14	16.19	Aug. 16	16.50	Oct. 13	17.16	Dec. 14	17.59

Grayling Township

Cr Gr 1. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 26 N., R. 2 W. Records available: 1934-49.

Jan. 14	2.08	Apr. 14	2.01	July 19	1.90	Oct. 13	1.67
Feb. 15	2.07	May 17	2.03	Aug. 16	1.76	Nov. 11	1.64
Mar. 15	2.06	June 14	2.09	Sept. 15	1.67	Dec. 14	1.62

Cr Gr 2. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 26 N., R. 3 W. Records available: 1934-49.

Jan. 13	10.49	Apr. 14	9.53	July 18	9.93	Oct. 12	10.69
Feb. 14	10.52	May 16	9.80	Aug. 15	9.80	Nov. 11	10.83
Mar. 15	10.45	June 13	10.19	Sept. 15	10.43	Dec. 14	10.74

Cr Gr 3. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 26 N., R. 3 W. Records available: 1934-49.

Jan. 14	8.67	Apr. 14	7.85	July 19	8.44	Oct. 13	9.16
Feb. 15	8.76	May 17	8.03	Aug. 16	8.69	Nov. 11	9.32
Mar. 15	8.73	June 14	8.35	Sept. 15	8.98	Dec. 14	9.38

Cr Gr 4. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 26 N., R. 4 W. Records available: 1934-49.

Jan. 14	3.17	Apr. 14	1.66	July 19	2.61	Oct. 13	4.08
Feb. 15	3.08	May 17	1.95	Aug. 16	3.33	Nov. 11	4.25
Mar. 15	2.84	June 14	2.24	Sept. 15	3.80	Dec. 14	3.71

Cr Gr 5. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 26 N., R. 4 W. Records available: 1934-49.

Jan. 14	5.44	Apr. 14	4.49	July 19	5.35	Oct. 13	6.56
Feb. 15	5.31	May 17	4.72	Aug. 16	6.10	Nov. 11	6.45
Mar. 15	5.11	June 14	4.96	Sept. 15	6.73	Dec. 14	5.41

Cr Gr 6. Michigan Dept. of Conservation Game Refuge Tile well. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 26 N., R. 4 W. Records available: 1942-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.91	6.43	6.19	5.37	5.47	6.23	6.16	7.14	7.95	8.22	7.87	7.50
2	6.92	6.45	6.21	5.39	5.50	6.25	6.21	7.15	7.97	8.22	7.87	7.48
3	6.93	6.46	6.23	5.41	5.51	6.27	6.28	7.19	8.00	8.23	7.86	7.47
4	6.94	6.48	6.25	5.43	5.53	6.29	6.33	7.22	8.02	8.23	7.85	7.46
5	6.95	6.50	6.27	5.46	5.56	6.31	6.37	7.25	8.05	8.20	7.85	7.46
6	6.95	6.52	6.28	5.49	5.58	6.32	6.42	7.29	8.06	8.19	7.84	7.45
7	6.95	6.53	6.30	5.51	5.60	6.34	6.32	7.28	8.07	8.14	7.83	7.44
8	6.96	6.55	6.32	5.54	5.64	6.35	6.41	7.29	8.05	8.07	7.82	7.44
9	6.96	6.56	6.33	5.57	5.68	6.37	6.47	7.33	8.05	8.04	7.82	7.44
10	6.96	6.58	6.35	5.60	5.71	6.38	6.28	7.37	8.08	8.00	7.81	7.44
11	6.97	6.60	6.36	5.64	5.75	6.42	6.31	7.38	8.09	7.97	7.81	7.43
12	6.95	6.62	6.38	5.66	5.79	6.46	6.40	7.33	8.10	7.95	7.81	7.29
13	6.94	6.63	6.39	5.69	5.83	6.50	6.49	7.36	8.12	7.93	7.81	6.85
14	6.94	6.65	6.41	5.71	5.85	6.53	6.54	7.40	8.10	7.92	7.78	6.78
15	6.95	6.66	6.43	5.74	5.88	6.07	6.58	7.43	8.09	7.92	7.75	6.77

Cr Gr 6--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	6.94	6.67	6.44	5.77	a5.91	5.50	6.64	a7.46	8.12	7.92	7.72	6.78
17	6.49	6.69	6.46	5.79	a5.93	5.51	6.69	a7.48	8.13	7.92	7.69	6.80
18	6.42	6.70	6.48	5.81	a5.96	5.52	6.75	a7.51	8.14	7.92	7.66	6.82
19	6.39	6.75	6.49	5.84	a5.99	5.54	6.80	7.56	8.16	7.93	7.64	6.83
20	6.36	6.75	6.51	5.86	6.01	5.57	6.85	7.58	8.17	7.93	7.61	6.84
21	6.34	6.75	6.53	5.89	6.04	5.60	6.91	7.62	8.17	7.93	7.59	6.79
22	6.33	6.75	6.44	5.91	6.07	5.65	6.95	7.65	8.18	7.93	7.58	6.71
23	6.33	6.75	5.96	5.92	6.09	5.70	7.01	7.69	8.19	7.91	7.56	6.56
24	6.34	6.76	5.88	5.93	6.10	5.75	7.06	7.73	8.19	7.91	7.55	6.52
25	6.34	6.36	5.80	5.94	6.11	5.78	6.99	7.77	8.19	7.90	7.54	6.51
26	6.35	6.18	5.66	5.95	6.12	5.79	6.97	7.81	8.20	7.89	7.53	6.50
27	6.36	6.16	5.58	5.39	6.14	5.80	6.97	7.85	8.21	7.88	7.53	6.49
28	6.37	6.17	5.43	5.40	6.15	5.82	6.98	7.88	8.21	7.88	7.53	6.49
29	6.38		5.42	5.41	6.17	5.85	7.03	7.90	8.21	7.88	7.52	6.51
30	6.40		5.38	5.44	6.19	5.89	7.08	7.92	8.21	7.88	7.51	6.53
31	6.41		5.36		6.21		7.10	7.94		7.88		6.53

a Estimated.

Cr Gr 7. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 26 N.,

R. 4 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	5.74	Apr. 14	4.28	July 19	5.05	Oct. 13	6.63
Feb. 15	5.62	May 17	4.46	Aug. 16	5.82	Nov. 11	6.76
Mar. 15	5.40	June 14	4.92	Sept. 15	6.39	Dec. 14	6.18

Cr Gr 11. State of Michigan National Guard Camp. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28,

T. 26 N., R. 4 W. Drilled unused well, diameter 3 inches, depth 31 feet. Records available: 1949.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	21.54	21.45	21.15	21.24	21.45	21.29	a21.99	21.18	21.35	21.58	.....
2	.....	a21.57	21.45	21.15	21.24	21.45	a21.34	21.95	21.17	21.35	21.58	21.76
3	.....	a21.59	21.46	21.15	21.25	21.46	a21.40	a21.90	21.17	21.35	21.59	21.77
4	.....	a21.59	21.46	21.15	21.26	21.48	a21.46	a21.85	21.16	21.36	21.60	21.77
5	.....	21.60	.....	21.15	21.26	21.48	21.52	a21.81	21.16	21.37	21.61	21.78
6	.....	21.60	.....	21.15	21.27	21.48	a21.59	a21.77	21.16	21.39	21.61	21.78
7	.....	21.61	.....	21.17	21.29	21.49	a21.66	a21.73	21.17	21.38	21.61	21.78
8	.....	21.62	21.57	21.17	21.30	21.50	a21.74	a21.70	21.16	21.42	21.61	21.79
9	.....	21.62	21.58	21.19	21.30	21.50	a21.80	a21.68	21.16	21.42	21.62	21.81
10	.....	21.63	21.60	21.20	21.31	21.51	a21.85	a21.65	21.16	21.43	21.62	21.81
11	.....	21.64	21.61	21.20	21.32	21.52	a21.90	a21.63	21.16	21.43	21.63	21.81
12	.....	21.65	21.61	21.21	21.32	21.52	a21.96	a21.61	21.17	21.43	21.64	21.80
13	.....	21.65	21.62	21.21	21.33	21.52	22.02	21.56	21.16	21.44	21.64	21.77
14	.....	21.66	21.63	21.22	21.34	21.52	22.08	21.51	21.17	21.45	a21.65	21.74
15	.....	21.66	21.65	21.22	21.35	21.52	a22.12	21.47	21.18	21.47	a21.65	21.71
16	.....	21.67	21.66	21.24	21.35	21.49	22.18	21.43	21.18	21.47	a21.66	21.70
17	.....	21.68	21.67	21.26	21.36	21.42	a22.22	a21.40	21.18	21.47	a21.67	21.68
18	.....	21.68	21.68	21.27	21.37	21.38	22.25	a21.37	21.19	21.48	a21.67	21.68
19	.....	21.70	21.71	21.28	21.37	21.36	22.28	a21.34	21.20	21.49	21.70	21.69
20	21.42	21.70	21.71	21.28	21.38	21.35	a22.30	21.32	21.21	21.49	21.70	21.69
21	21.42	21.70	21.71	21.28	21.38	21.35	22.33	21.30	21.22	21.49	21.70	21.69
22	21.40	21.70	21.71	21.28	21.38	21.35	a22.35	21.29	21.22	21.51	21.71	21.68
23	21.42	21.71	21.55	21.28	21.39	21.34	22.39	21.27	21.23	21.53	a21.72	21.69
24	21.43	21.71	21.41	21.28	21.39	a21.32	22.35	a21.25	21.27	21.54	21.72	21.70
25	21.45	21.70	21.35	21.28	21.40	21.30	22.31	21.24	21.28	21.55	21.74	21.70
26	21.46	21.55	21.31	21.28	21.40	21.30	22.26	21.23	21.28	21.55	.....	21.68
27	21.47	21.47	21.25	21.27	21.40	21.30	22.21	21.22	21.29	21.56	.....	21.68
28	21.48	21.45	21.20	21.26	21.43	21.29	22.16	21.21	21.29	a21.57	.....	21.69
29	a21.51		21.18	21.25	21.43	21.29	22.12	21.20	a21.30	21.57	.....	21.70
30	a21.52		21.18	21.25	21.44	21.29	22.09	21.19	21.32	21.57	.....	21.71
31	a21.53		21.17		21.44		22.04	21.18		21.57		21.73

a Estimated.

Cr Gr 12. Michigan Dept. of Conservation. Hartwick Pines Park warehouse well. In SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 27 N., R. 3 W., 1010 feet north of south line and 700 feet west of east section line. Drilled unused well, diameter 4 inches, depth 172.4 feet. Records available: 1949.

Water level at 2:00 a.m., from recorder graph

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	15.40	15.85	16.22	16.40	16.44	16.42
2	.....	15.42	a15.87	16.23	16.40	16.44	16.42
3	.....	15.44	15.88	16.24	16.40	16.44	16.42
4	.....	15.46	a15.90	16.25	16.40	16.44	16.42
5	.....	15.47	a15.91	16.25	16.40	16.45	16.42
6	15.57	15.49	15.92	16.26	16.41	16.45	16.42
7	15.57	15.49	a15.94	16.27	16.41	16.45	16.42
8	15.57	15.51	a15.95	16.27	a16.41	16.45	16.42
9	15.58	a15.54	15.97	16.27	a16.41	16.46	16.42
10	15.59	15.55	15.98	16.28	16.40	16.46	16.42
11	15.60	15.55	16.00	16.29	16.39	16.46	16.42
12	a15.61	15.56	16.00	16.29	16.39	16.46	16.36
13	15.62	15.58	16.01	16.30	16.39	16.46	16.22
14	a15.60	15.60	16.02	16.30	16.39	16.46	16.17
15	15.46	15.60	16.03	16.30	16.39	16.45	16.15
16	15.32	15.62	16.04	16.31	16.39	16.44	16.13
17	a15.28	15.64	16.06	16.32	16.40	a16.43	16.13
18	15.24	15.65	16.08	16.32	16.41	a16.42	16.13
19	15.24	a15.67	16.09	16.33	16.41	16.42	16.14
20	15.23	15.69	16.11	16.33	16.41	16.42	16.14
21	15.23	15.70	16.12	16.34	16.42	16.42	16.14
22	15.24	15.72	16.13	16.34	16.43	16.42	16.12
23	a15.26	15.74	16.14	16.35	16.43	16.42	16.09
24	a15.28	15.75	16.16	16.36	16.43	16.42	16.07
25	15.29	a15.76	16.17	16.36	16.43	16.42	16.06
26	15.30	a15.78	16.18	16.37	16.43	16.42	16.05
27	15.32	a15.79	16.19	16.37	16.43	16.41	16.04
28	15.34	a15.80	16.19	16.37	16.43	16.42	16.04
29	15.35	15.82	16.20	16.38	16.43	16.42	16.04
30	15.39	15.83	16.21	16.38	16.43	16.42	16.04
31		15.84	16.21		16.44		16.05

a Estimated.

Cr Gr 13. Michigan Dept. of Conservation. Hartwick Pines Park roadside well. In NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 27 N., R. 3 W., 100 feet south of north section line and 25 feet west of State Highway M-93. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	9.09	Apr. 14	8.22	July 19	8.92	Oct. 13	9.80
Feb. 15	8.93	May 17	8.50	Aug. 16	9.45	Nov. 8	9.86
Mar. 15	8.86	June 14	8.83	Sept. 15	9.76	Dec. 14	9.47

Cr Gr 14. Michigan Dept. of Conservation. Hartwick Pines Park, Pines well. In NW $\frac{1}{4}$ sec. 15, T. 27 N., R. 3 W., 1,150 feet south of north section line and 610 feet northwest of State Highway M-93. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	2.97	Apr. 14	2.36	July 19	3.05	Oct. 13	3.78
Feb. 15	2.91	May 17	2.58	Aug. 16	3.55	Nov. 8	3.84
Mar. 15	2.86	June 14	2.48	Sept. 15	3.76	Dec. 14	3.32

Lowells Township

Cr Lv 1. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 27 N., R. 1 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	4.85	Apr. 14	3.45	July 19	4.10	Oct. 13	5.26
Feb. 15	4.90	May 17	3.47	Aug. 16	4.59	Nov. 11	5.51
Mar. 15	4.74	June 13	3.81	Sept. 15	4.96	Dec. 14	5.48

Cr Lv 2. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 27 N., R. 1 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	5.53	Apr. 14	4.43	July 19	5.19	Oct. 13	5.83
Feb. 15	5.59	May 17	4.51	Aug. 16	5.44	Nov. 11	5.99
Mar. 15	5.43	June 14	4.89	Sept. 15	5.66	Dec. 14	5.85

Cr Lv 3. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 27 N., R. 1 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	4.18	Apr. 14	3.68	July 19	3.97	Oct. 13	4.17
Feb. 15	4.16	May 17	3.77	Aug. 16	4.14	Nov. 11	4.23
Mar. 15	4.16	June 14	3.94	Sept. 15	4.15	Dec. 14	4.09

Cr Lv 4. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 28 N., R. 1 W. Records available: 1934-49.

Jan. 14	8.17	Apr. 14	6.53	July 19	6.69	Oct. 13	7.91
Feb. 15	9.11	May 17	6.71	Aug. 16	7.19	Nov. 11	8.21
Mar. 15	7.99	June 14	7.00	Sept. 15	7.59	Dec. 14	8.36

Cr Lv 5. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 28 N., R. 1 W. Records available: 1934-49.

Jan. 14	6.80	Apr. 14	5.17	July 19	5.44	Oct. 13	6.62
Feb. 15	6.58	May 17	5.40	Aug. 16	5.93	Nov. 11	6.94
Mar. 15	6.35	June 14	5.55	Sept. 15	6.34	Dec. 14	6.88

Cr Lv 6. Michigan Dept. of Conservation. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30 T. 28 N., R. 2 W. Records available: 1933-49.

Jan. 14	3.68	Apr. 14	2.67	July 19	3.70	Oct. 13	4.92
Feb. 15	3.53	May 17	3.06	Aug. 16	4.27	Nov. 11	4.48
Mar. 15	3.44	June 14	3.32	Sept. 15	4.75	Dec. 14	3.80

Cr Lv 7. Michigan Dept. of Conservation, former Civilian Conservation Corps well. In NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 27 N., R. 1 W., 435 feet north of county road and 1,320 feet west of east section line. Drilled unused well, diameter 3 inches, depth 50.9 feet. Records available: 1948-49. May 18, 1948, 21.30; July 17, 22.19; Aug. 17, 21.58; Sept. 16, 22.04; Oct. 15, 22.37; Nov. 11, 22.62; Dec. 14, 22.80.

Jan. 14	22.93	Apr. 14	21.77	July 19	22.63	Oct. 13	23.26
Feb. 15	23.04	May 17	22.15	Aug. 16	22.84	Nov. 11	23.44
Mar. 15	23.13	June 14	22.29	Sept. 15	23.06	Dec. 14	23.61

South Branch Township

Cr Sb 1. Michigan Dept. of Conservation. Huron National Forest. In SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 25 N., R. 1 W., 740 feet west and 160 feet north of south-east section corner. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.46	.....	34.07	34.17	33.98	33.81	33.62	33.72	33.90	34.14	34.37	34.60
2	33.47	33.83	34.07	34.17	33.96	33.80	33.62	33.68	33.91	34.15	34.37	34.62
3	33.48	.....	34.08	34.17	33.98	33.79	33.62	33.69	33.92	34.16	34.38	34.63
4	33.51	.....	34.08	34.17	33.97	33.78	33.61	33.70	33.92	34.16	34.39	34.64
5	33.51	33.85	34.09	34.16	33.96	33.77	33.61	33.71	33.92	34.18	34.40	34.65
6	33.51	33.85	34.11	34.15	33.96	33.76	33.61	33.71	33.93	34.18	34.41	34.66
7	33.53	33.86	34.13	34.15	33.96	33.75	33.61	33.72	33.95	34.18	34.42	34.66
8	33.54	33.89	34.13	34.15	33.95	33.75	33.61	33.73	33.95	34.20	34.42	34.68
9	33.56	.....	34.14	34.15	33.94	33.75	33.61	33.74	33.96	34.21	34.43	34.69
10	33.58	.....	34.15	34.14	33.94	33.74	33.61	33.74	33.96	34.21	34.44	34.69
11	33.59	33.92	34.16	34.13	33.94	33.73	33.61	33.74	33.98	34.21	34.44	34.70
12	33.59	33.93	34.16	34.12	33.93	33.72	33.61	33.75	33.98	34.23	34.45	34.70
13	33.60	33.94	34.18	34.10	33.92	33.71	33.61	33.75	33.98	34.25	34.46	34.71
14	33.61	33.95	34.19	34.11	33.91	33.70	33.61	33.76	33.99	34.26	34.46	34.72
15	33.63	33.95	34.20	34.09	33.91	33.68	33.61	33.77	34.00	34.26	34.47	34.73
16	.....	33.97	34.21	34.09	33.90	33.69	33.61	33.78	34.01	34.26	34.48	34.74
17	.....	33.98	34.22	34.09	33.90	33.68	33.61	33.79	34.01	34.27	34.49	34.75
18	.....	33.99	34.23	34.08	33.89	33.68	33.61	33.80	34.03	34.28	34.50	34.76
19	.....	33.99	34.25	34.08	33.88	33.68	.....	33.81	34.03	34.28	34.50	34.77
20	.....	34.00	34.25	34.08	33.88	33.67	.....	33.82	34.05	34.29	34.51	34.78
21	.....	34.02	34.26	34.06	33.87	33.66	.....	33.83	34.05	34.29	34.52	34.79
22	33.73	34.02	34.26	34.05	33.86	33.66	.....	33.84	34.06	34.29	34.53	34.79
23	.....	34.03	34.26	34.03	33.86	33.66	33.63	33.85	34.06	34.31	34.53	34.81
24	.....	34.04	34.23	34.03	33.85	33.65	.....	33.85	31.08	34.32	34.54	34.82
25	.....	34.05	34.20	34.04	33.85	33.64	.....	33.86	34.10	34.33	34.55	34.83

Cr Sb 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	34.05	34.19	34.02	33.84	33.63	.....	33.86	34.10	34.33	34.56	34.84
27	34.05	34.18	34.01	33.84	33.63	.....	33.86	34.10	34.34	34.56	34.85
28	34.06	34.17	34.01	33.84	33.63	.....	33.87	34.11	34.35	34.58	34.86
29	33.79		34.18	34.00	33.83	33.63	.....	33.88	34.12	34.35	34.58	34.87
30		34.18	33.99	33.83	33.63	33.67	33.89	34.13	34.35	34.59	34.88
31		34.17		33.82		.....	33.90		34.36		34.89

a Estimated.

Eaton County

City of Charlotte

Ea CH 1. City of Charlotte. About 250 feet east of U. S. Highway 27 and 320 feet south of Territorial Road. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.93	12.52	11.38	11.59	12.79	11.69	11.91	13.71	14.46	14.74	14.75	14.90
2	14.95	12.49	11.45	11.13	12.84	11.82	12.03	13.74	14.44	14.76	14.75	14.89
3	14.97	12.47	11.52	10.81	12.74	11.95	12.15	13.77	14.46	14.78	14.77	14.88
4	15.00	12.49	11.58	10.65	12.72	12.06	12.26	13.80	14.49	14.79	14.79	14.88
5	15.02	12.52	11.63	10.63	12.79	12.16	12.36	13.84	14.50	14.78	14.81	14.85
6	14.83	12.62	11.65	10.66	12.87	12.24	12.49	13.88	14.48	14.78	14.83	14.77
7	14.47	12.75	11.66	10.72	12.96	12.36	12.58	13.92	14.48	14.73	14.83	14.69
8	14.30	12.90	11.70	10.79	13.06	12.47	12.65	13.95	14.48	14.66	14.84	14.64
9	14.28	13.00	11.73	10.96	13.17	12.58	12.72	14.00	14.48	14.62	14.85	14.61
10	14.29	13.10	11.74	11.25	13.29	12.69	12.76	14.08	14.50	14.60	14.84	14.60
11	14.34	13.15	11.77	11.43	13.42	12.80	12.77	14.16	14.53	14.62	14.85	14.61
12	14.38	14.23	11.80	11.60	13.53	12.91	12.84	14.12	14.54	14.62	14.86	14.57
13	14.45	13.24	11.83	11.73	13.50	12.99	12.91	14.07	14.56	14.59	14.85	14.32
14	14.51	12.64	11.86	11.86	13.47	13.01	12.98	14.04	14.55	14.56	14.81	14.07
15	14.57	12.01	11.91	11.98	13.45	12.88	13.01	14.01	14.56	14.56	14.78	13.93
16	14.63	11.44	11.95	12.05	13.38	12.44	13.03	14.05	14.58	14.56	14.77	13.92
17	14.59	11.00	12.00	12.11	13.35	11.91	13.09	14.11	14.59	14.58	14.76	13.97
18	14.52	10.80	12.06	12.17	13.36	11.49	13.11	14.18	14.61	14.61	14.77	14.02
19	14.42	10.78	12.12	12.12	13.33	11.24	13.19	14.21	14.57	14.62	14.78	14.04
20	13.79	10.80	12.18	12.05	13.07	11.15	13.27	14.23	14.56	14.63	14.79	14.04
21	13.19	10.87	12.23	12.07	12.51	11.20	13.35	14.24	14.56	14.65	14.79	13.98
22	12.83	10.96	12.29	12.13	12.16	11.23	13.41	14.27	14.51	14.65	14.80	13.49
23	12.67	11.04	12.28	12.18	11.89	11.24	13.45	14.32	14.59	14.66	14.82	12.78
24	12.63	11.12	12.21	12.25	11.48	11.31	13.52	14.39	14.60	14.67	14.84	12.11
25	12.66	11.18	12.15	12.32	11.27	11.39	13.55	14.44	14.63	14.69	14.85	11.70
26	12.65	11.21	12.11	12.41	11.24	11.46	13.60	14.51	14.65	14.70	14.87	11.49
27	12.70	11.26	12.08	12.49	11.30	11.51	13.62	14.56	14.67	14.71	14.88	11.41
28	12.76	11.31	11.99	12.56	11.37	11.60	13.65	14.57	14.69	14.73	14.88	11.35
29	12.68		11.97	12.64	11.45	11.69	13.68	14.52	14.70	14.75	14.89	11.40
30	12.58		11.95	12.71	11.51	11.80	13.69	14.50	14.72	14.75	14.90	11.51
31	12.55		11.92		11.58		13.70	14.48		14.74		11.62

a Estimated.

City of Grand Ledge

Ea GL 1. Layne Northern Co., Grand Ledge chair factory, 365 feet west of Perry St., and 310 feet north of Jefferson St. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.64	27.54	27.15	27.13	27.07	27.29	27.93	27.99	28.13	28.26	.....	28.63
2	27.66	27.69	27.14	27.27	26.99	27.32	27.94	27.91	28.27	28.20	28.16	28.66
3	27.85	27.62	27.19	27.21	27.22	27.40	27.93	27.96	28.20	28.13	28.35	28.77
4	27.86	27.35	27.09	27.25	27.22	27.48	27.93	28.00	28.11	28.10	28.34	28.49
5	27.65	27.52	26.92	27.15	27.21	27.50	27.96	27.99	27.99	28.19	28.49	28.60

Ea GL 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
6	27.56	27.57	26.98	26.95	27.22	27.54	27.94	28.00	28.23	28.17	28.42	28.64
7	27.60	27.41	27.27	27.04	27.30	27.69	27.96	27.98	28.20	28.09	28.37	28.32
8	27.75	27.51	27.11	27.06	27.33	27.82	28.01	28.02	.....	28.28	28.28	28.63
9	27.79	27.55	27.10	27.23	27.25	27.85	27.98	28.05	28.14	28.24	28.51	28.69
10	28.05	27.57	27.11	27.32	27.35	27.78	27.95	28.07	28.14	28.21	28.39	28.59
11	28.08	27.79	27.13	27.23	27.41	27.65	28.00	28.11	28.13	28.20	28.39	28.52
12	27.86	27.55	27.14	27.16	27.28	27.63	27.88	28.06	28.12	28.15	28.48	28.39
13	27.80	27.50	27.24	27.01	27.26	27.67	27.82	28.11	28.01	28.34	28.31	28.60
14	27.80	27.52	27.23	27.07	27.25	27.75	27.83	28.12	28.08	28.34	28.33	28.64
15	27.94	27.09	27.28	26.87	27.37	27.70	27.79	28.17	28.10	28.35	28.35	28.64
16	27.77	27.29	27.29	27.14	27.35	27.80	27.76	28.21	28.07	28.28	28.45	28.61
17	27.99	27.38	27.21	27.17	27.41	27.68	27.73	28.17	28.07	.....	28.55	28.57
18	28.04	27.25	27.16	27.02	27.35	27.68	.....	28.11	28.00	28.42	28.58	28.54
19a	27.82	27.21	27.34	27.25	27.28	27.73	.....	28.16	.....	28.39	28.49	28.60
20	28.05	27.20	27.39	27.30	27.38	27.72	27.81	28.29	28.04	28.34	28.46	28.57
21	27.80	27.37	27.16	27.21	27.31	27.71	27.81	28.26	28.03	28.33	28.64	28.35
22	27.77	27.13	27.08	27.09	27.07	.....	27.77	28.21	28.00	28.20	28.75	28.17
23	27.85	27.21	27.22	27.06	27.24	27.77	27.99	28.13	27.99	28.37	28.36	28.34
24	27.57	27.10	27.37	27.15	27.23	27.68	28.00	28.18	28.17	28.53	28.52	28.42
25	27.76	26.96	27.15	27.31	27.33	27.66	27.94	28.25	28.19	28.50	28.43	28.41
26	27.71	27.24	27.33	27.09	27.25	27.74	27.98	28.24	28.19	28.39	28.57	28.20
27	27.68	27.05	27.01	27.19	.....	27.84a	27.96	28.23	28.02	.....	28.37	28.14
28	27.17	27.00	27.21	27.31	.....	27.89	27.96	28.22	27.97	.....	28.61	28.19
29	27.64		27.36	27.24	.....	27.92	27.98	28.28	28.08	.....	28.45	28.20
30	27.79		27.20	27.15	.....	27.90	27.95	28.31	28.14	.....	28.52	28.27
31	27.57		27.20		27.30		28.01a	28.20		.....		28.21

a Estimated.

Delta Township

Ea Dt 214. John Schneeberger. In SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 4 N., R. 3 W., 160 feet west of Creitz Road and 0.5 mile north of Saginaw St. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	33.66	Apr. 25	33.72	July 28	33.94	Oct. 27	34.71
Feb. 28	33.60	May 27	33.88	Aug. 25	34.24	Nov. 29	34.62
Mar. 28	33.86	June 24	33.80	Sept. 29	34.42	Dec. 29	34.78

Ea Dt 215. Bernard B. Bosworth. In SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 4 N., R. 3 W., about 90 feet north of Saginaw St. and about 500 feet east of Broadbent Road. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	15.45	Apr. 25	12.90	July 28	12.05	Oct. 27	14.74
Feb. 28	14.82	May 27	13.28	Aug. 25	13.11	Nov. 29	15.10
Mar. 28	14.46	June 24	12.64	Sept. 29	14.17	Dec. 29	14.47

Ea Dt 217. F. B. Marsh. In SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 4 N., R. 3 W., 250 feet northwest of U. S. Highway 27 and 300 feet southwest of Waverly Road along highway. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	14.27	Apr. 25	2.15	July 28	19.67	Oct. 27	20.30
Feb. 28	8.03	May 27	15.37	Aug. 25	19.97	Nov. 25	20.17
Mar. 28	3.54	June 24	19.04	Sept. 29	20.21	Dec. 27	1.44

Genesee County

Total precipitation as recorded at Flint during 1949 was 36.99 inches or 8.42 inches above normal. All months showed above-normal precipitation except May, August, September, and November.

With the exception of a single well which reached its highest stage for the year on December 22, all observation wells in the Flint area reached

their peak stage for the year within the period March 30 through April 26. This time of occurrence of peak stage corresponds with the close of the winter-spring period of above-normal precipitation and precedes the start of the growing season. Lowest observed water-level stages in this group of wells occurred in the period July 25 through October 24 with the majority of low stages recorded during the latter part of August and in September. This time of occurrence of low water level corresponds closely with the close of the summer season with peak pumping demand and peak evapotranspiration demand. With the exception of a decline of 0.36 foot indicated by one observation well, all observation wells in the Flint area showed net rises of water level during the year ranging from 0.15 foot to as much as 2.83 feet.

City of Flint

Ge FL 352. City of Flint. About 325 feet north of Atherton Road and 30 feet west of intersection with Bay St. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	3.63	Mar. 30	3.30	May 26	3.12	Nov. 21	3.99
Feb. 21	3.40	Apr. 26	2.68	Oct. 24	4.34	Dec. 22	3.10

Ge FL 353. City of Flint, community well. 23 feet south of Brandon St. and 25 feet west of Barney Ave. Records available: 1946-49.

Jan. 25	55.75	Apr. 26	54.65	July 25	56.60	Oct. 24	56.35
Feb. 21	55.02	May 26	55.17	Aug. 29	56.94	Nov. 21	56.29
Mar. 30	55.05	June 27	56.19	Sept. 27	56.27	Dec. 22	55.49

Ge FL 354. City of Flint. About 100 feet north of Atherton Road and 30 feet west of intersection with Bay St. Records available: 1947-49.

Jan. 25	2.84	Apr. 26	1.98	July 25	4.82	Oct. 24	3.55
Feb. 21	2.67	May 26	2.26	Aug. 29	5.10	Nov. 21	3.23
Mar. 30	2.68	June 27	3.45	Sept. 27	4.34	Dec. 22	2.40

Ge FL 491. Consumers Power Co. 130 feet south of Sunnyside Ave. and 140 feet east of Franklin Ave. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.02	27.39	27.39	26.99	26.68	27.13	29.85	31.14	31.59	30.00	27.80	26.79
2	27.03	27.52	27.40	27.07	26.58	27.24	30.00	30.98	31.75	29.76	27.61	26.79
3	27.18	27.51	27.44	27.02	26.73	27.42	30.13	30.99	31.68	29.47	.....	26.89
4	27.18	27.31	27.40	27.05	26.72	27.61	30.14	31.12	31.51	29.31	.....	26.66
5	26.92	27.42	27.29	26.97	26.77	27.79	30.09	31.12	31.39	29.43	.....	26.67
6	26.79	27.48	27.35	26.78	26.92	27.82	30.10	31.12	.....	29.47	.....	26.67
7	.....	27.33	27.57	26.93	27.13	27.91	30.25	31.06	.....	29.36	27.49	26.43
8	.....	27.34	27.47	27.00	27.17	28.06	30.38	30.90	.....	29.32	27.31	26.74
9	.....	27.34	27.36	27.09	27.12	28.15	30.43	30.98	.....	29.14	27.44	26.80
10	.....	27.51	27.34	27.13	27.28	28.12	30.49	31.18	.....	28.99	27.36	26.70
11	27.32	27.60	27.37	27.04	27.38	28.07	30.52	31.33	.....	29.03	27.37	26.58
12	27.13	27.49	27.40	26.97	27.33	28.19	30.38	31.41	31.12	28.97	27.51	.....
13	27.04	27.37	27.50	26.80	27.41	.....	30.37	31.59	31.04	28.98	27.34	.....
14	26.95	27.35	27.51	26.69	27.46	28.42	30.45	31.61	31.09	28.85	.....	.....
15	27.07	27.05	27.45	26.47	27.63	28.59	30.40	31.59	31.09	28.78	.....	.....
16	26.98	27.19	27.50	26.36	27.63	28.65	30.35	31.57	30.94	28.63	.....	.....
17	27.25	27.28	27.44	26.29	27.74	28.60	30.39	31.59	30.82	28.43	.....	.....
18	27.31	27.27	27.44	26.09	27.73	28.70	30.32	31.61	30.75	28.29	.....	.....
19	26.76	27.26	27.53	26.06	27.74	28.86	30.33	31.73	30.59	28.22	.....	.....
20	27.19	27.26	27.58	26.07	27.87	28.85	30.57	31.89	30.55	28.14	.....	.....

Ge FL 491 --Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	27.10	27.48	27.40	26.05	27.94	28.88	30.71	31.88	30.50	28.09	27.27	.....
22	27.08	27.33	27.26	25.97	27.70	28.97	30.69	31.74	30.38	27.92	27.32	25.88
23	27.21	27.39	27.35	26.08	27.74	.....	30.96	31.65	30.23	28.16	26.99	26.07
24	27.16	27.38	27.47	26.25	27.63	.....	30.97	31.70	30.27	28.22	27.13	26.33
25	27.26	27.23	27.33	26.47	27.65	29.19	30.87	31.79	30.24	28.14	26.93	26.30
26	27.25	27.45	27.38	26.36	27.47	29.32	30.95	31.77	30.15	28.04	27.05	26.23
27	27.21	27.34	27.15	26.45	27.47	29.43	31.07	31.82	29.96	28.15	26.80	26.14
28	26.92	27.27	27.21	26.58	27.46	29.51	31.16	31.78	29.89	28.05	26.88	26.24
29	27.32		27.33	.....	27.54	29.59	31.27	31.77	29.90	27.95	26.65	26.37
30	27.53		27.21	.....	27.25	29.71	31.36	31.78	29.96	27.85	26.68	26.53
31	27.45		.....		27.13		31.31	31.71		27.76		26.52

a Estimated.

Ge FL 500. Consumers Power Co. About 2,500 feet east of Dort Highway and 540 feet north of Court St. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.14	20.52	20.22	19.80	19.14	20.60	22.58	24.67	25.17	24.24	23.79	22.15
2	21.08	20.60	20.22	19.82	19.04	20.64	22.70	24.63	25.34	24.18	23.65	22.14
3	21.10	20.60	20.25	19.77	19.14	20.78	22.78	24.70	25.40	24.08	23.69	22.21
4	21.13	20.44	20.20	19.74	19.21	20.93	22.72	24.80	25.39	24.06	23.65	22.11
5	21.04	20.51	20.11	19.68	19.26	21.02	22.74	24.85	25.22	24.17	23.69	22.10
6	20.92	20.53	20.11	19.54	19.30	21.03	22.90	24.87	.....	24.29	23.64	22.10
7	20.90	20.42	20.22	19.56	19.42	21.12	23.16	24.84	.....	24.31	23.50	21.90
8	20.93	20.50	20.18	19.52	19.47	21.26	23.43	24.57	.....	24.46	23.34	21.99
9	20.95	20.50	20.20	19.56	19.44	21.40	23.41	24.51	.....	24.45	23.41	21.99
10	21.05	20.54	20.19	19.58	19.55	21.49	.....	24.58	.....	24.32	23.43	21.93
11	21.10	20.61	20.20	19.52	19.70	21.52	23.46	24.74	25.17	24.26	23.41	21.87
12	21.01	20.54	20.21	19.49	19.80	21.58	23.53	24.82	25.08	24.21	23.47	21.73
13	21.00	20.50	20.24	19.43	19.92	21.58	23.69	24.94	24.95	24.34	23.35	21.75
14	20.96	20.47	20.23	19.44	20.02	21.59	23.89	24.95	24.97	24.36	23.18	21.75
15	21.03	20.28	20.25	19.38	20.17	21.67	23.97	24.84	25.02	24.39	23.08	21.73
16	20.90	20.35	20.26	19.31	20.20	.....	24.02	24.87	25.00	24.32	23.06	.....
17	20.94	20.34	20.22	19.30	20.32	.....	23.97	24.98	25.01	24.18	23.05	.....
18	20.95	20.30	20.19	19.16	20.40	.....	23.87	25.05	24.99	24.12	23.04	21.52
19	20.60	20.31	20.29	19.16	20.46	.....	23.84	25.18	24.84	24.12	23.01	21.53
20	20.88	20.30	20.34	19.20	20.50	.....	23.99	25.30	24.80	24.15	22.90	21.46
21	20.80	20.38	20.23	19.18	20.57	21.83	24.17	25.35	24.82	24.16	22.90	21.29
22	20.74	20.29	20.22	19.15	20.48	21.88	24.23	25.16	24.79	24.06	22.89	21.17
23	20.79	20.31	20.21	19.07	20.43	22.00	24.39	25.03	24.75	24.12	22.69	21.18
24	20.65	20.27	20.29	19.06	20.46	22.10	24.43	25.07	24.82	24.10	22.77	21.22
25	20.71	20.17	20.20	19.11	20.55	22.16	24.23	25.18	24.79	24.05	22.50	21.21
26	20.70	20.31	20.22	19.03	20.57	22.21	24.19	25.24	24.65	24.00	22.48	21.08
27	20.65	20.27	20.04	19.07	20.68	22.23	24.32	25.31	24.48	24.11	22.32	.....
28	20.41	20.16	20.01	19.16	20.74	22.31	24.47	25.33	24.38	24.09	22.30	.....
29	20.56		20.08	19.18	20.73	22.39	24.57	25.18	24.32	24.08	22.11	.....
30	20.65		20.06	19.17	20.68	22.45	24.65	25.18	24.27	24.00	22.10	.....
31	20.57		19.96		20.59		24.68	25.20		23.84		.....

a Estimated.

Burton Township

Ge Bu 300. William F. Brooks, Jr., 3505 Columbine Ave. About 280 feet north of Bristol Road and 75 feet east of Columbine Ave. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	3.31	Apr. 26	3.18	July 25	3.69	Oct. 24	4.06
Feb. 21	4.34	May 26	3.20	Aug. 29	4.54	Nov. 21	4.07
Mar. 31	2.06	June 27	3.50	Sept. 27	4.60	Dec. 22	1.69

Ge Bu 301. City of Flint. In NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 7 N., R. 7 E., 140 feet south of Hemphill Road and 260 feet east of Saginaw St. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	22.86	Apr. 26	21.71	July 25	25.60	Oct. 24	24.77
Feb. 21	22.68	May 26	22.37	Aug. 29	25.49	Nov. 21	23.42
Mar. 30	22.68	June 27	23.67	Sept. 27	24.53		

Ge Bu 303. Clifford Clute. In SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 7 N., R. 7 E., about 360 feet east of Fern Avenue and 80 feet north of Bristol Road. Records available: 1946-49.

Jan. 25	2.46	Apr. 26	2.00	July 25	2.88	Oct. 24	3.14
Feb. 21	2.20	May 26	2.25	Aug. 29	3.60	Nov. 21	3.26
Mar. 30	.28	June 27	2.83	Sept. 27	3.81	Dec. 22	.65

Ge Bu 492. Arthur W. Arndt. In SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 7 N., R. 7 E., 710 feet west of Saginaw St. and 120 feet north of Maple Rd. Records available: 1946-49.

Jan. 25	20.79	May 26	20.23	Aug. 29	22.46	Nov. 21	21.27
Feb. 21	20.63	June 27	21.95	Sept. 27	22.66	Dec. 22	20.90
Apr. 26	19.75	July 25	22.37	Oct. 24	21.60		

Grand Traverse County

Blair Township

Gv BR 2. Michigan Dept. of Conservation. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 26 N., R. 11 W. Records available: 1935-37, 1941-44, 1948-49. Oct. 11, 3.26.

Gv Br 4. Michigan Dept. of Conservation. Records available: 1935-37, 1941-44. Measurement discontinued.

Gv Br 7. Michigan Dept. of Conservation. Records available: 1935-37. Measurement discontinued.

Gv Br 14. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 26 N., R. 11 W. Records available: 1935-44, 1948-49. Oct. 11, 3.18.

Fife Lake Township

Gv Ff 6. Michigan Dept. of Conservation. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 25 N., R. 9 W. Drilled observation well, diameter 2 inches, depth 16.91 feet. Records available: 1934-37, 1941-44, 1948-49. Oct. 29, 1948, 4.11.

Jan. 10	4.12	Apr. 25	3.68	July 25	3.41	Oct. 24	3.86
24	4.04	May 24	3.64	Aug. 29	3.76	Nov. 28	3.88
Feb. 22	4.09	June 27	3.61	Sept. 26	3.80	Dec. 19	3.91
Mar. 29	3.71						

Gv Ff 24. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 25 N., R. 9 W. Drilled observation well, diameter 2 inches, depth 18.46 feet. Records available: 1934-37, 1941-44, 1948-49. Oct. 29, 1948, 7.35.

Jan. 24	7.63	May 24	6.12	Aug. 29	5.95	Nov. 28	6.83
Mar. 29	7.27	June 27	5.97	Sept. 26	6.33	Dec. 19	6.93
Apr. 25	6.30	July 25	5.42	Oct. 24	6.62		

Gv Ff 27. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 25 N., R. 9 W. Observation well, diameter 2 inches, reported depth 16.9 feet. Records available: 1934-37, 1941-44. Oct. 29, 1948, 3.46.

Jan. 24	14.23	Apr. 25	14.23	July 25	13.34	Nov. 28	13.02
Feb. 22	14.38	May 24	14.07	Aug. 29	12.74	Dec. 19	13.18
Mar. 29	14.34	June 27	13.86	Oct. 24	12.74		

Mayfield Township

Gv My 19. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 25 N., R. 11 W. Records available: 1935-44, 1948-49. Oct. 11, 5.80.

Paradise Township

Gv Pr 25. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 25 N.,
R. 10 W. Records available: 1936-44, 1948-49. Jan. 10, 1.43; Apr. 25,
1.16; Oct. 11, 1.31.

Gv Pr 26. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 25 N.,
R. 10 W. Records available: 1936-44, 1948-49. Jan. 10, 0.45; Apr. 25,
0.26; Oct. 11, 0.71.

Union Township

Gv Un 2. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 26 N.,
R. 9 W. Records available: 1936-44, 1948-49. Oct. 11, 7.87.

Whitewater Township

Gv Ww 1. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 27 N.,
R. 9 W. Records available: 1934-44, 1948-49. Oct. 11, 12.21.

Gv Ww 6. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 27 N.,
R. 9 W. Records available: 1934-44, 1948-49. Oct. 11, 3.88.

Gv Ww 15. Michigan Dept. of Conservation. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 27 N.,
R. 9 W. Records available: 1934-44, 1948-49. Oct. 11, 16.10.

Gv Ww 18. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 27 N.,
R. 9 W. Records available: 1934-44, 1948-49. Oct. 11, 1.26.

Gv Ww 25. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 27 N.,
R. 9 W. Records available: 1935-44, 1948-49. Oct. 11, 17.56.

Gratiot County

Total precipitation recorded at Alma during 1949 was 32.04 inches or
1.20 inches above normal. Months of above-normal precipitation included
January, February, July, August, and December. Two periods of drought
occurred, the first from March through June, and the second from September
through November.

Municipal and industrial wells in the Alma area are finished in glacial
sand and gravel. The average daily withdrawals of ground water range from
1.40 million gallons in April to 1.94 million gallons in June and average
1.69 million gallons per day for the year.

The highest observed water-level stages recorded by observation wells
in the Alma area occurred within the period February 24 through May 24, with
the greatest number of peaks occurring about the end of April. While this
time of peak occurrence follows the close of a period of two successive
months of deficient precipitation, the precipitation deficiency in March and
April was small and was preceded by the somewhat above-normal precipitation
of January and February. The latter part of April marks the close of the
non-growing season, a period of minimum evapotranspiration demand; the close
of the period of minimum withdrawal by municipal and industrial supply; and
a period of thawing and intake from winter and early spring snows. Lowest

ground-water stages occurred within the period June 28 through November 28, with the greatest number of low stages observed in the latter part of November. This time of occurrence is in good agreement with the close of the extended drought period of September through November which, in turn, followed the season of peak evapotranspiration demand and peak pumping by industrial and municipal supplies. Net changes in ground-water level during the year range from declines as great as 5.40 feet to net rises as great as 2.95 feet. The average net decline for 15 observation wells within this area was 1.79 feet.

City of Alma

Gr AL 5. City of Alma. 50 feet east of River Ave. and 125 feet north of Chatterton St. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.70	.....	24.12	22.76	21.78	22.36	23.18	23.39	22.69	22.74	22.00	23.15
2	24.61	25.17	24.15	22.90	21.45	22.34	23.24	23.24	23.08	22.61	21.52	23.18
3	24.88	25.04	24.34	22.74	21.80	22.34	23.33	23.41	23.02	22.38	21.93	23.36
4	24.99	24.54	24.20	22.69	21.82	22.37	23.57	23.51	22.84	22.24	21.90	22.66
5	24.50	24.76	23.89	22.45	21.80	22.25	23.96	23.52	22.55	22.38	22.24	22.74
6	24.26	24.91	24.06	21.97	21.72	22.03	24.25	23.51	22.91	22.23	22.09	22.72
7	24.30	24.44	24.62	22.10	21.85	22.19	24.60	23.37	22.82	21.93	21.96	22.08
8	24.58	24.75	24.35	22.14	21.87	22.41	24.91	23.28	22.69	22.31	21.64	22.64
9	24.69	24.61	24.37	22.49	21.80	22.37	24.92	23.19	22.77	22.25	22.04	22.83
10	25.30	24.84	24.41	22.65	22.08	22.24	24.86	23.15	22.79	22.20	21.81	22.62
11	25.35	25.26	24.41	22.42	22.21	22.02	24.77	23.17	22.82	22.06	21.81	22.39
12	24.80	24.80	24.39	22.20	22.00	21.96	24.35	23.04	22.73	21.94	22.08	22.05
13	24.59	24.70	24.56	21.89	21.95	21.90	24.04	23.05	22.49	22.36	21.81	22.57
14	24.46	24.85	24.47	22.00	21.80	21.95	23.87	22.96	22.66	22.38	21.69	22.68
15	24.75	24.15	24.57	21.75	22.06	21.98	23.70	22.92	22.70	22.45	21.78	22.63
16	24.37	24.68	24.55	22.15	21.93	22.23	23.55	22.83	22.62	22.28	22.04	22.42
17	24.80	25.04	24.39	22.24	21.94	22.18	23.44	22.69	22.60	22.25	22.26	22.24
18	24.96	24.59	24.30	21.95	21.77	22.34	23.37	22.61	22.55	22.27	22.41	22.06
19	23.95	24.35	24.56	22.24	21.60	22.54	23.17	22.80	22.56	22.26	22.36	22.21
20	25.44	24.21	24.51	22.35	21.86	22.49	23.37	23.07	22.75	22.09	22.17	22.16
21	25.16	24.54	24.05	22.23	21.82	22.43	23.43	23.14	22.71	21.99	22.65	21.75
22	25.07	24.06	23.87	21.95	21.35	22.54	23.28	23.03	22.63	21.56	22.74	21.45
23	25.26	24.30	24.09	21.77	21.58	22.65	23.67	22.84	22.52	21.95	22.42	21.92
24	24.67	24.15	24.50	21.99	21.68	22.50	23.64	22.86	22.80	22.28	22.88	22.32
25	25.03	23.75	24.12	22.29	21.95	22.43	23.41	22.97	22.81	22.27	22.77	22.42
26	24.90	24.27	24.35	21.84	21.90	22.60	23.30	22.91	22.68	22.05	23.18	21.93
27	24.60	23.88	23.52	22.01	22.04	22.78	23.23	22.86	22.37	22.35	22.73	21.91
28	23.84	23.74	23.53	22.30	22.20	22.88	23.22	22.81	22.32	22.15	23.29	22.08
29	24.76		23.57	22.18	22.28	23.03	23.18	22.87	22.48	22.05	22.90	22.17
30	25.18		23.45	21.98	22.34	23.12	23.27	22.89	22.49	21.82	22.93	22.34
31	.....		23.00		22.30		23.42	22.83		21.81		22.10

a Estimated.

Gr AL 23. City of Alma. About 380 feet east of Lincoln Ave. and 65 feet south of Elizabeth St. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	26.26	Apr. 26	27.74	July 26	29.03	Oct. 25	57.96
Feb. 24	29.66	May 24	29.03	Aug. 30	59.65	Nov. 28	57.57
Mar. 29	28.17	June 28	54.87	Sept. 26	54.97	Dec. 30	57.02

Gr AL 42. Layne-Northern Co. About 490 feet east of Elmwood Ave. and 480 feet south of Eastward St. extended. Records available: 1947-49. Jan. 27, 63.74; Feb. 24, 64.84.

Gr AL 45. Layne-Northern Co. About 700 feet east of Elmwood Ave. and 300 feet south of Eastward St. extended. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	64.66	Apr. 26	62.80	July 26	67.22	Oct. 25	66.66
Feb. 24	64.20	May 24	64.96	Aug. 30	69.04	Nov. 28	65.98
Mar. 29	67.32	June 28	67.57	Sept. 26	68.97	Dec. 30	68.17

Gr AL 54. Layne-Northern Co. About 260 feet east of Elmwood Ave. and 90 feet south of Eastward St. extended. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	65.9	67.4	68.4	58.7	68.9	67.6	a70.4	71.5	69.7	70.5	69.9
2	....	66.4	66.5	68.6	57.9	68.8	68.2	a70.4	71.9	70.0	70.2	70.2
3	....	66.4	67.6	68.7	58.5	69.0	68.3	a70.8	71.8	69.8	70.6	69.6
4	....	66.0	67.5	68.7	60.3	69.1	68.4	70.8	71.7	69.4	70.3	68.8
5	....	66.5	67.2	68.4	61.9	69.0	67.5	a70.7	70.9	69.5	70.5	68.8
6	....	66.7	67.4	68.2	62.5	68.9	69.1	a70.6	71.3	68.8	70.1	68.8
7	....	66.4	67.8	68.5	63.7	69.2	....	a70.5	71.0	68.3	69.9	68.1
8	....	66.7	67.4	68.6	64.3	69.4	70.0	a70.6	70.6	69.8	69.7	68.7
9	....	a66.9	67.5	68.9	64.3	69.4	68.8	a70.5	70.8	70.0	70.1	68.8
10	....	66.7	68.0	69.0	65.2	69.0	69.0	a70.6	71.2	70.1	69.9	68.8
11	....	67.1	68.0	68.8	65.4	68.9	69.2	a70.7	71.6	70.2	69.9	68.6
12	a65.0	66.6	67.9	68.5	65.3	69.0	69.1	a70.7	71.4	69.8	70.0	68.4
13	65.1	66.6	68.2	68.2	65.4	69.0	68.7	a70.7	71.3	70.2	69.7	70.0
14	65.2	66.7	68.1	68.4	65.8	69.2	a68.4	a70.6	71.5	70.4	69.8	69.2
15	65.5	66.3	68.2	68.2	65.9	69.1	a67.8	a70.6	71.3	70.1	69.8	69.3
16	65.3	66.9	68.2	68.7	65.8	69.5	a67.6	a70.6	71.5	69.6	70.2	69.4
17	....	67.4	68.2	68.8	65.4	69.3	a67.7	a70.9	71.7	70.3	70.4	69.5
18	65.5	66.4	68.3	68.5	62.3	69.5	a67.2	a70.6	71.6	70.6	70.4	69.5
19	65.0	66.4	68.4	65.5	61.3	69.6	a67.3	a70.8	71.4	70.7	70.3	69.8
20	a66.0	66.6	68.3	64.7	61.1	69.5	a68.2	a71.4	71.7	70.6	69.9	69.8
21	65.5	67.2	67.7	62.8	64.5	69.8	a68.7	a71.5	71.5	70.4	70.4	69.3
22	65.4	66.8	67.6	62.9	64.8	70.1	a68.8	a71.0	71.4	69.9	70.7	69.1
23	65.5	67.2	67.8	61.8	66.0	70.4	a68.9	a71.2	71.2	70.1	a69.9	70.2
24	65.2	67.1	68.3	61.1	67.0	70.3	a69.3	a71.4	71.5	70.3	70.1	70.6
25	65.6	67.2	68.0	60.7	67.5	70.4	a69.3	71.3	71.6	70.2	69.9	70.6
26	65.4	67.9	68.4	60.1	67.5	70.6	a69.4	a71.5	71.8	69.8	70.2	70.2
27	65.4	67.3	68.0	60.3	68.1	70.8	a69.2	a71.4	70.7	70.2	69.4	70.3
28	64.7	67.2	68.2	60.5	68.4	69.0	a69.4	a71.4	70.2	70.2	69.7	70.4
29	65.7	....	68.6	60.2	68.5	69.1	a69.5	a71.5	a70.1	70.0	69.4	70.6
30	66.1	....	68.6	58.9	68.7	67.9	a69.6	a71.6	70.1	69.8	68.6	70.7
31	65.9	....	68.5	....	68.7	....	a69.9	a71.6	....	70.2	....	70.6

a Estimated.

Gr AL 95. Robert Mc Kee. 115 feet west of Gratiot Ave. and 220 feet south of Hastings St. Records available: 1946-49. Measurement discontinued after July 26.

Jan. 27	15.87	Mar. 29	14.31	May 24	13.20	July 26	14.40
Feb. 24	15.56	Apr. 26	12.92	June 28	14.51		

Gr AL 98. Marshall Dallas, Superior Sign Shop. 190 feet south of Superior St. and 100 feet east of State St. Records available: 1946-49.

Jan. 27	25.28	Apr. 26	26.95	July 26	28.25	Nov. 28	26.42
Feb. 24	30.20	May 24	28.23	Aug. 30	27.00	Dec. 30	21.89
Mar. 29	26.86	June 28	31.71	Sept. 26	23.27		

Gr AL 99. Stanley J. Brown. 85 feet west of Court Ave. and 140 feet north of Downie St. Records available: 1947-49.

Jan. 27	40.63	Apr. 26	17.88	July 26	20.75	Oct. 25	16.08
Feb. 24	25.84	May 24	19.89	Aug. 30	19.44	Nov. 28	20.46
Mar. 29	19.93	June 28	24.20	Sept. 26	16.47	Dec. 30	13.94

Gr AL 103. Vane Mills. 95 feet north of Chatterton St. and 115 feet east of Pine Ave. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	7.00	Apr. 26	6.51	July 26	7.83	Oct. 25	8.07
Feb. 24	6.51	May 24	6.94	Aug. 30	8.22	Nov. 28	8.00
Mar. 29	6.34	June 28	7.60	Sept. 26	8.32	Dec. 30	6.98

Gr AL 106. Harold J. Farwell. 90 feet west of Euclid Ave. and 140 feet north of Walnut St. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	22.53	Apr. 26	14.86	July 26	16.69	Oct. 25	14.30
Feb. 24	19.65	May 24	15.23	Aug. 30	16.15	Nov. 28	17.18
Mar. 29	16.18	June 28	18.08	Sept. 26	14.65	Dec. 30	14.01

Gr AL 135. Thomas Thompson. About 350 feet north of Ely St. and 70 feet west of Wheeler Ave. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	40.25	Apr. 26	39.71	July 26	42.41	Oct. 25	40.30
Feb. 24	43.96	May 24	40.69	Aug. 30	43.34	Nov. 28	42.80
Mar. 29	40.60	June 28	45.46	Sept. 26	40.27	Dec. 30	39.23

Gr AL 148. Alvin F. Tennant. About 300 feet south of Michigan Ave. and 65 feet west of Hayes Ave. Records available: 1947-49. Jan. 27, 12.56; Feb. 24, 12.53; Mar. 29, 12.50; Apr. 25, 12.32; Aug. 30, 12.93; Dec. 30, 12.62.

Gr AL 174. Leo D. Dalrymple. About 230 feet north of Ely St. and 80 feet west of Grover Ave. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	11.28	Apr. 26	10.63	July 26	11.65	Oct. 25	12.24
Feb. 24	11.16	May 24	10.91	Aug. 30	12.02	Nov. 28	12.29
Mar. 29	10.95	June 28	11.36	Sept. 26	12.27	Dec. 30	11.69

Gr AL 230. Fred M. Taylor. 290 feet south of Eastward St. and 65 feet east of Linwood Ave. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 24	7.81	May 24	8.18	Aug. 30	8.80	Nov. 28	9.16
Mar. 29	7.98	June 28	8.44	Sept. 26	8.94	Dec. 30	8.48
Apr. 26	7.75	July 26	8.63	Oct. 25	9.03		

Gr AL 240. C. V. Peet. 100 feet south of Superior St. and 65 feet west of Pleasant Ave. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	10.33	Apr. 26	9.78	July 26	10.63	Oct. 25	11.28
Feb. 24	10.20	May 24	10.05	Aug. 30	10.89	Nov. 28	11.37
Mar. 29	10.12	June 28	10.38	Sept. 26	11.14	Dec. 30	10.79

Gr AL 249. Mary J. Patterson. 140 feet east of Grove Ave. and 90 feet south of Eastward St. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	9.19	Apr. 26	8.64	July 26	9.07	Oct. 25	9.77
Feb. 24	9.02	May 24	8.64	Aug. 30	9.35	Nov. 28	9.91
Mar. 29	8.90	June 28	8.85	Sept. 26	9.59	Dec. 30	9.91

Gr AL 252. Elwin E. Peterson. 120 feet west of Wright Ave. and 50 feet north of Virginia St. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	13.05	Apr. 26	12.33	July 26	12.84	Oct. 25	13.54
Feb. 24	12.87	May 24	12.25	Aug. 30	13.09	Nov. 28	13.63
Mar. 29	12.73	June 28	12.45	Sept. 26	13.37	Dec. 30	13.03

Gr AL 255. Mattie J. Patterson. 130 feet south of Hastings St. and 85 feet west of River Ave. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	29.84	Apr. 26	17.30	July 26	18.78	Oct. 25	14.07
Feb. 24	22.60	May 24	18.44	Aug. 30	17.39	Nov. 28	17.53
Mar. 29	17.72	June 28	22.11	Sept. 26	14.65	Dec. 30	12.62

Gr AL 256. L. A. Halker. About 500 feet north of Michigan Ave. and 100 feet east of Bridge Ave. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	19.30	Apr. 25	17.06	July 26	18.93	Oct. 25	17.44
Feb. 24	19.47	May 24	17.45	Aug. 30	18.89	Nov. 28	19.64
Mar. 29	17.93	June 28	19.53	Sept. 26	18.02	Dec. 30	16.95

Gr AL 258. Joel R. Mc Cartey. 100 feet west of Prospect Ave. and 50 feet north of north tract of Ann Arbor Railroad. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	21.16	May 24	24.00	Aug. 30	25.97	Nov. 28	22.57
Mar. 29	21.12	June 28	25.66	Sept. 26	24.59	Dec. 30	21.13
Apr. 26	22.80	July 26	26.61	Oct. 25	22.63		

Gr AL 260. R. V. Brown. About 300 feet south of Hastings St. and 115 feet west of River Ave. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	25.04	Apr. 26	3.10	July 26	19.18	Oct. 25	13.82
Feb. 24	4.52	May 24	4.58	Aug. 30	17.35	Nov. 28	18.48
Mar. 29	2.90	June 28	12.76	Sept. 26	14.27	Dec. 30	3.66

City of St. Louis

Gr ST 1. City of St. Louis. 290 feet north of North St. and 45 feet east of Mill St. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.4	....	24.8	25.4	28.0	....	38.6	....	38.8	41.4	36.1	41.0
2	26.2	24.8	25.8	24.2	26.2	....	39.0	35.1	33.0	42.8	38.3	41.6
3	26.2	24.9	27.2	23.6	26.4	39.6	42.0	a34.5	32.2	39.6	40.9	41.2
4	27.6	24.6	26.8	23.6	26.9	34.4	40.9	a37.0	34.0	36.5	40.2	40.4
5	27.6	24.6	26.6	29.1	28.2	34.0	43.1	a39.1	32.9	40.1	43.4	38.8
6	....	25.5	26.7	24.4	29.4	33.4	39.4	a35.7	....	41.0	40.2	....
7	....	22.9	25.3	25.8	28.2	37.6	36.2	a40.8	30.0	39.1	40.6	....
8	....	23.7	27.6	25.3	27.4	37.6	38.5	a40.7	30.5	40.6	37.3	....
9	....	....	26.2	25.9	28.6	38.4	....	....	30.8	35.1	38.4	....
10	....	....	27.2	24.8	27.0	39.0	....	a33.4	33.0	39.4	41.8	....
11	....	....	26.6	23.9	27.6	40.2	37.8	a38.7	34.7	35.9	41.8	....
12	....	33.2	31.5	24.4	28.0	41.0	35.6	a32.6	31.5	39.6	42.8	....
13	....	24.9	26.0	24.6	28.0	41.6	....	a38.1	33.0	39.2	39.2	....
14	....	23.0	25.0	25.2	29.0	42.9	....	a37.0	36.9	38.7	38.0	....
15	26.3	24.8	25.6	24.8	28.7	39.4	....	a35.5	39.0	40.2	....	....
16	....	25.4	26.8	25.0	26.6	40.5	....	a36.9	39.6	38.0	....	....
17	....	25.6	32.2	24.8	....	39.3	....	a37.5	38.7	37.1	....	....
18	29.9	26.2	26.2	23.8	....	38.0	41.7	a39.2	33.4	37.3	....	....
19	23.1	25.0	30.6	24.2	....	38.8	36.6	a35.1	32.7	38.2	....	....
20	24.0	25.9	25.8	24.2	....	35.2	37.0	a42.2	32.2	38.2	....	....
21	24.0	23.2	24.8	25.2	....	34.6	37.4	a41.6	31.9	32.8	....	....
22	23.4	24.8	25.0	25.0	....	a33.0	36.5	a42.4	39.8	38.3	36.6	....
23	23.2	25.7	24.6	25.2	....	a35.0	34.8	38.9	36.4	41.3	38.6	....
24	21.2	25.1	25.8	25.2	32.0	33.7	34.9	a40.8	32.5	40.8	40.0	....
25	23.2	25.2	25.1	24.4	31.4	32.6	33.6	a39.8	36.0	36.0	39.4	....
26	23.0	25.6	....	25.2	32.0	33.3	38.0	a39.5	31.6	35.7	41.5	....
27	23.8	24.9	....	25.6	32.6	36.0	37.2	a41.8	32.8	37.4	40.6	....
28	23.4	24.4	34.2	27.0	32.4	35.2	37.8	a40.8	39.4	38.0	39.8	....
29	24.2	....	25.4	27.2	33.0	36.0	38.4	a38.6	39.4	38.0	41.2	....
30	24.0	....	25.6	28.0	34.4	39.1	36.0	39.0	39.9	37.6	40.8	44.8
31	23.6	....	25.2	....	37.9	....	36.0	38.1	....	39.4	....	....

a Estimated.

Village of Ithaca

Gr IH 1. Village of Ithaca. 180 feet north of Center St. and 45 feet east of Maple St. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	81.21	81.10	81.06	80.57	80.57	81.23	82.02	81.34	83.21	81.59	81.57	81.65
2	81.11	81.35	81.02	80.76	80.61	81.30	82.02	80.95	82.01	81.56	81.28	81.72
3	81.28	81.29	81.07	80.76	80.66	81.32	82.43	81.33	82.32	81.44	81.54	81.93
4	81.41	80.92	80.93	80.80	80.72	81.42	82.00	81.45	83.51	81.39	81.52	81.57
5	81.14	81.05	80.65	80.67	81.27	81.70	81.85	81.23	82.35	81.48	81.73	81.66
6	80.94	81.14	80.70	80.37	81.41	81.45	81.66	81.51	82.12	81.48	81.66	81.71
7	80.95	80.85	81.02	80.45	81.39	81.30	81.84	82.65	81.92	81.31	81.57	81.33
8	81.10	80.99	80.85	80.47	81.36	81.17	81.96	82.29	81.76	81.55	81.37	81.72
9	81.20	80.94	80.87	80.68	80.99	81.18	81.87	82.02	81.77	81.52	81.62	81.87
10	81.56	81.08	80.87	80.81	80.92	82.24	81.94	82.35	81.74	81.97	81.44	81.77
11	81.68	81.31	80.82	80.67	80.67	81.75	81.93	82.00	81.73	81.54	81.44	81.68
12	81.38	81.08	....	80.56	80.70	82.05	81.42	81.78	81.64	81.45	81.57	81.38
13	81.26	80.98	....	80.37	80.68	82.18	81.26	81.71	81.57	81.69	81.32	81.68
14	81.22	81.05	....	a80.39	80.95	81.78	81.24	82.11	81.56	81.70	81.27	81.79
15	81.41	80.72	....	80.27	80.84	81.82	81.12	82.20	81.56	81.74	81.24	81.79

Gr IH 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	81.13	81.09	.....	80.47	80.72	81.94	81.10	81.95	81.43	81.64	81.33	81.72
17	81.38	81.20	80.75	80.53	81.25	81.80	81.05	81.89	81.37	81.63	81.44	81.64
18	81.47	81.09	80.73	.....	80.95	82.00	80.99	81.90	81.32	81.66	81.49	81.65
19	80.76	81.11	80.93	.....	81.10	82.50	80.92	81.68	81.28	81.66	81.42	81.67
20	81.62	81.13	81.02	.....	80.83	82.29	80.99	81.67	81.39	81.59	81.28	81.65
21	81.47	81.35	80.70	.....	80.78	82.15	81.01	81.84	81.44	81.53	81.54	81.34
22	81.32	81.09	80.59	.....	80.80	81.97	80.88	82.40	81.38	81.28	81.72	81.16
23	81.51	81.17	80.58	.....	81.06	82.05	82.05	81.09	81.32	81.51	81.24	81.45
24	81.15	81.05	80.86	.....	80.78	81.91	81.11	81.89	81.52	81.72	81.45	81.72
25	81.38	80.82	80.61	.....	80.87	81.81	80.94	81.76	81.58	81.69	81.28	81.80
26	81.37	81.26	80.77	80.55	80.73	82.35	80.91	82.22	81.58	81.56	81.59	81.49
27	81.33	81.06	80.50	80.64	80.75	82.37	80.88	81.93	81.34	81.78	81.25	81.45
28	80.75	80.87	80.57	80.85	80.78	81.77	80.97	82.35	81.32	81.63	81.58	81.48
29	81.24		80.82	80.78	80.78	81.91	80.99	82.02	81.41	81.57	81.34	81.53
30	81.48		80.85	80.65	80.76	82.01	80.98	81.82	81.43	81.43	81.44	81.73
31	81.28		80.66		80.77		81.06	81.95		81.43		.....

a Estimated.

Village of Perrinton

Gr PE 1. Glenn Corson. 100 feet east of Robinson St. and 70 feet north of South St. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	20.25	19.36	17.78	14.33	16.72	17.31	17.66	.....	19.63	20.32	20.91
2	.....	20.22	19.33	17.53	14.35	16.77	17.35	17.67	.....	19.70	20.31	20.97
3	.....	20.20	19.29	17.54	14.43	16.81	17.39	17.67	.....	19.73	20.32	21.04
4	.....	20.13	19.23	17.21	14.54	16.86	17.40	17.70	.....	19.74	20.36	21.05
5	.....	20.09	19.13	17.10	14.64	16.90	17.42	17.72	.....	19.77	20.40	21.04
6	20.74	20.08	19.04	16.96	14.74	16.94	17.43	17.76	.....	19.81	20.46	21.06
7	.....	20.02	19.04	16.83	14.81	16.97	17.45	17.80	.....	19.78	20.47	21.03
8	.....	20.01	19.04	16.75	14.92	17.05	17.48	17.82	18.89	19.82	20.46	21.06
9	.....	19.95	19.00	16.74	15.01	17.15	17.52	17.84	.....	19.85	20.47	21.11
10	.....	19.97	18.97	16.75	15.10	17.21	17.51	17.85	.....	19.87	20.49	21.15
11	.....	19.99	18.95	16.76	15.23	17.25	17.55	17.87	.....	19.87	20.48	21.16
12	20.78	20.02	18.91	16.74	15.32	17.27	17.58	17.90	.....	19.87	20.52	21.11
13	20.76	19.94	18.89	16.70	15.41	17.28	17.59	17.92	.....	19.91	20.53	21.14
14	20.71	19.86	18.88	16.64	15.47	17.28	17.60	17.95	19.12	19.97	20.51	21.19
15	20.73	19.82	18.86	16.60	15.57	17.29	17.59	17.98	19.14	20.01	20.52	21.22
16	20.70	19.78	18.86	16.53	15.67	17.29	17.60	18.01	19.16	20.04	20.54	21.23
17	20.71	19.77	18.82	16.40	15.76	17.32	17.60	18.05	19.17	20.06	20.60	21.23
18	20.74	19.80	18.79	16.20	15.89	17.34	17.58	18.08	19.19	20.09	20.64	21.20
19	20.55	19.77	18.77	15.44	15.91	17.35	17.55	18.09	19.19	20.12	20.67	21.18
20	20.61	19.75	18.80	14.82	15.98	17.34	17.54	18.11	19.22	20.13	20.65	21.19
21	20.68	19.76	18.78	14.57	16.06	17.31	17.54	18.15	19.27	20.13	20.69	21.13
22	20.62	19.74	18.74	14.39	16.09	17.27	17.53	18.20	19.29	20.10	20.77	20.91
23	20.62	19.68	18.66	14.21	16.11	17.25	17.55	18.26	19.30	20.12	20.77	20.41
24	20.57	19.64	18.66	14.07	16.18	17.22	17.59	18.29	19.35	20.16	20.78	20.38
25	20.51	19.54	18.65	14.07	16.26	17.19	17.60	18.33	19.41	20.22	20.77	20.38
26	20.50	19.53	18.61	14.07	16.33	17.18	17.60	18.39	19.47	20.25	20.82	20.28
27	20.44	19.51	18.55	14.07	16.39	17.17	17.60	18.43	19.49	20.28	20.82	20.15
28	20.32	19.41	18.40	14.13	16.47	17.20	17.60	18.47	19.50	20.30	20.85	19.93
29	20.24		18.32	14.22	16.55	17.23	17.61	18.50	19.53	20.31	20.84	19.80
30	20.26		18.24	14.28	16.62	17.27	17.62	18.54	19.56	20.30	20.86	19.73
31	20.28		18.16		16.68		17.63	18.56		20.29		19.63

a Estimated.

Pine River Township

Gr Pr 16. Thomas Thompson. In SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 12 N., R. 3 W., 330 feet south of Ann Arbor Railroad crossing and 90 feet west of Smith Road. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	23.40	Apr. 26	23.52	July 26	23.73	Oct. 25	24.18
Feb. 24	23.47	May 24	23.53	Aug. 30	23.89	Nov. 28	24.31
Mar. 29	23.59	June 28	23.63	Sept. 26	24.00	Dec. 30	24.36

Ingham County

Total precipitation in the Lansing area during 1949 was 34.63 inches or 3.19 inches above normal. Months of above-normal precipitation were January, February, March, June, July, and December. Periods of deficient precipitation were April through May and August through November.

For the most part, municipal and industrial water supplies in the Lansing area are pumped from wells finished in the Saginaw formation and Parma sandstone. Available records from municipal well supplies in this area indicate that average daily withdrawals range from 13.7 million gallons in November to 18.6 million gallons in July or an average of 15.8 million gallons per day during the year. Peak water-level stages indicated by observation wells in the Lansing area occurred during the period January 2 through April 25 with the number of peaks about equally distributed in January and April. The January group of peak stages correspond, in general, with the period of minimum municipal and industrial pumping, while the April peak stages mark the close of a winter-spring period of above-normal precipitation and occurred prior to the start of the summer pumping season. Low stages for the year occurred within the period June 24 through September 29, with the greatest number of lows occurring during the month of August. The time of occurrence of these low stages corresponds closely with the close of the summer season of peak pumping demand.

Ingham County

City of Lansing

Ig LS 3. City of Lansing well P-5. Northwest corner of crossing of Pennsylvania Ave. and Grand Trunk-Western Railway tracts. Records available: 1930-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	33.11	Apr. 25	30.84	July 28	37.61	Oct. 27	36.44
Feb. 28	29.44	May 27	33.22	Aug. 25	38.20	Nov. 25	32.94
Mar. 28	30.90	June 24	35.38	Sept. 29	36.79	Dec. 27	31.39

Ig LS 4. City of Lansing well P-9. About 500 feet east of Pennsylvania Ave. and just north of Grand Trunk Western Railway tracts. Records available: 1930-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	41.13	Apr. 25	37.39	July 28	46.43	Oct. 27	44.36
Feb. 28	37.95	May 27	39.79	Aug. 25	47.79	Nov. 25	41.91
Mar. 28	38.07	June 24	43.31	Sept. 29	45.12	Dec. 27	39.65

Ig LS 5. City of Lansing well RS-7. North of Red Cedar River, on approximate line of Mifflin Ave. Records available: 1930, 1932, 1936-49. Jan. 2, 39.06; Mar. 1, 39.03; Apr. 9, 38.36; Sept. 9, 68.11; Oct. 10, 45.95; Nov. 8, 45.70; Dec. 2, 39.11.

Ig LS 6. City of Lansing Logan well. Lapeer and Logan Sts. Records available: 1929, 1931, 1933-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	119.75	Apr. 25	124.54	July 28	134.03	Oct. 27	130.92
Feb. 28	120.93	May 27	128.98	Aug. 25	133.74	Nov. 29	124.34
Mar. 28	121.40	June 24	131.66	Sept. 29	131.78	Dec. 29	124.12

Ig LS 7. City of Lansing Seymour well. About 500 feet east of Grand River Ave. and on north side of Josephine St. Records available: 1919, 1929-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	96.20	Apr. 25	103.41	July 28	120.28	Oct. 27	112.63
Feb. 28	99.51	May 27	114.27	Aug. 25	118.58	Nov. 25	100.11
Mar. 28	100.79	June 24	117.04	Sept. 29	116.14	Dec. 29	98.09

Ig LS 8. City of Lansing Townsend St. well. 110 feet east of Townsend St. and 14 feet north of Olds Ave. extended. Records available: 1919, 1929-49.

Jan. 24	38.08	Apr. 25	36.97	July 28	44.27	Oct. 27	39.92
Feb. 28	37.27	May 27	38.33	Aug. 25	43.09	Nov. 29	38.44
Mar. 28	36.54	June 24	42.53	Sept. 29	40.68	Dec. 29	38.44

Ig LS 9. City of Lansing. 280 feet west of Cedar St. and 250 feet south of Jay St. Records available: 1945-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	55.36	55.36	54.35	55.95	54.03	55.40	60.82	61.2	63.6	62.8	61.77	55.06
2	54.65	55.80	54.60	54.34	53.33	55.10	61.24	62.0	63.5	61.9	61.90	55.01
3	54.28	55.85	54.65	53.36	54.48	59.78	61.16	62.1	63.5	61.9	62.13	55.04
4	54.87	55.85	54.75	52.60	54.90	58.07	60.97	62.2	63.4	62.8	62.15	54.63
5	55.09	55.59	54.75	53.25	55.40	58.17	61.74	62.3	62.8	63.2	61.87	56.55
6	55.45	54.81	54.09	53.48	55.74	58.12	62.41	62.4	62.4	63.2	61.52	55.54
7	55.74	54.96	53.72	54.00	56.12	58.46	62.01	62.1	62.9	63.3	61.50	54.84
8	55.96	55.50	54.20	54.27	55.62	58.06	62.57	61.06	63.2	63.0	61.74	56.07
9	55.05	55.86	54.70	54.51	54.57	58.04	62.9	64.1	63.4	62.6	61.93	56.76
10	55.05	56.05	54.91	53.27	54.90	58.12	62.6	63.6	63.4	62.4	61.95	56.03
11	55.50	56.40	55.03	51.98	55.03	58.45	62.7	63.4	63.2	63.4	63.16	54.58
12	55.60	55.63	54.99	52.89	54.67	58.93	62.8	63.4	62.5	63.1	62.03	53.95
13	55.82	54.95	54.01	53.40	54.90	58.77	61.8	63.4	63.0	63.2	61.44	55.54
14	56.12	54.50	53.76	54.00	55.57	58.91	61.7	63.3	63.3	63.1	61.18	58.26
15	55.87	54.83	54.20	54.21	55.92	58.91	61.5	63.2	63.3	62.76	61.56	59.27
16	55.44	55.42	54.47	53.75	55.96	58.89	61.7	64.3	63.4	62.12	61.76	59.67
17	55.20	55.65	54.70	52.53	56.40	58.78	61.4	63.7	63.1	62.08	61.88	57.82
18	55.81	55.57	54.75	51.66	56.65	58.87	62.5	63.7	62.5	62.73	61.97	55.43
19	55.67	55.00	54.97	52.70	57.03	59.04	63.4	63.7	62.4	63.48	61.51	55.28
20	56.79	54.18	53.93	53.47	57.11	58.30	63.2	63.5	62.9	63.60	60.92	57.75
21	56.67	54.02	53.15	53.96	56.97	58.96	63.2	63.0	63.1	63.70	60.71	58.88
22	55.76	54.26	53.76	54.20	55.54	58.99	61.8	63.4	63.2	.....	60.95	59.43
23	55.05	54.63	54.52	54.47	54.80	58.90	61.7	63.3	63.3	.....	56.96	60.10
24	54.45	54.62	54.79	53.68	56.00	58.89	61.9	64.4	62.7	62.45	55.70	59.25
25	55.45	54.78	54.54	53.18	55.28	59.02	61.4	63.7	61.9	.....	54.91	55.94
26	55.70	55.10	54.64	53.72	56.38	58.18	63.4	63.7	61.9	.....	54.29	54.44
27	55.97	53.95	52.95	54.38	56.43	57.96	63.3	63.6	62.8	.....	53.49	54.24
28	55.80	53.73	52.20	54.67	55.42	58.72	63.2	64.6	63.3	61.93	53.18	56.83
29	55.01	.....	52.77	54.58	55.29	58.73	63.2	62.9	63.2	61.85	54.50	57.95
30	55.21	.....	53.10	53.53	54.15	60.30	63.2	63.5	63.2	61.55	54.90	58.73
31	54.54	.....	53.53	.....	54.25	.....	61.8	63.4	.....	61.49	.....	56.87

a Estimated.

Ig LS 51. General Motors Corp. Oldsmobile Drop Forge. 65 feet west of Verlinden Ave. and 30 feet south of Osborn Road. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	124.4	123.6	126.1	123.2	126.9	130.7	126.7	130.3	129.5	.....	122.1
2	124.2	122.0	125.6	122.3	126.6	129.3	128.5	129.4	125.9	.....	122.6
3	120.6	124.5	123.1	.....	126.2	127.3	126.2	130.0	129.3	124.9	.....	123.2
4	123.2	123.8	123.6	127.3	127.7	124.8	130.0	126.0	128.5	128.6	122.3
5	124.9	123.4	.....	125.7	124.6	124.6	130.5	125.1	128.7	128.5	122.3
6	120.3	120.9	.....	126.5	123.7	127.9	129.6	125.1	128.9	125.1	125.3
7	119.6	120.3	.....	127.9	126.8	128.4	126.7	128.3	128.9	.....	125.5
8	124.0	122.4	.....	125.5	127.6	128.9	125.3	128.5	.....	127.8	126.0
9	123.6	123.6	.....	126.3	127.4	128.8	128.5	128.7	.....	128.0	.....
10	122.2	124.0	123.8	.....	128.0	128.1	128.7	129.4	128.7	.....	127.8	.....

Ig IS 51--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	121.4	124.4	123.8	123.7	127.5	127.8	125.5	129.7	125.6	.....	127.4	.....
12	121.8	124.1	124.2	125.1	127.7	125.0	127.3	129.9	125.7	.....	128.2	.....
13	122.3	120.5	120.6	127.5	126.9	124.2	128.7	129.6	128.0	.....	124.7	125.7
14	121.2	120.0	120.0	127.6	126.7	126.7	129.1	126.7	128.7	128.6	125.1	126.3
15	112.3	120.3	122.3	126.6	126.6	127.1	129.1	126.0	128.6	128.3	126.4	.....
16	109.0	123.7	122.4	126.9	127.5	127.6	129.1	129.7	128.6	126.2	127.6	.....
17	114.8	124.1	119.5	123.0	128.0	128.8	125.8	131.5	128.7	125.5	127.8	.....
18	116.4	123.7	119.7	122.6	128.0	128.9	124.9	131.3	126.1	128.5	127.7	.....
19	117.2	124.2	118.4	125.7	128.6	126.5	128.8	131.4	125.4	128.4	127.7	.....
20	118.7	120.5	115.6	127.1	128.7	125.0	130.0	130.9	128.7	129.0	125.5	125.9
21	119.3	120.1	114.9	126.7	127.7	127.6	130.8	126.9	129.0	128.8	124.8	124.4
22	121.8	122.3	117.3	126.5	.....	128.3	130.8	125.7	130.0	.....	123.5	124.2
23	120.2	122.8	118.3	126.7	126.7	128.2	131.1	129.9	129.9	.....	123.1	125.6
24	119.9	121.9	119.0	127.7	.....	128.7	130.3	130.7	130.2	.....	123.0	125.9
25	123.5	123.7	123.6	124.4	.....	.....	126.5	131.1	126.9	.....	122.4	122.8
26	124.9	124.7	125.4	126.1	.....	.....	130.8	131.4	125.3	.....	122.8	122.0
27	125.0	120.9	121.6	127.1	128.5	128.2	131.4	131.0	129.3	.....	122.0	124.9
28	125.2	120.3	121.8	127.8	128.7	128.4	132.3	127.8	129.5	129.7	122.2	125.7
29	125.1		125.2	127.8	125.0	129.4	132.1	126.4	129.3	.....	121.6	.....
30	122.8		125.5	128.3	123.2	130.1	131.7	129.8	129.5	.....	121.9	.....
31	121.4		125.6		122.9		130.4	130.2		.....		.....

a Estimated.

Ig IS 60. Consumers Power Co. gas plant. About 480 feet west of Chestnut St. and 15 feet south of Grand River. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	95.50	Apr. 25	102.38	July 28	115.08	Oct. 27	108.01
Feb. 28	98.08	May 27	110.91	Aug. 25	113.61	Nov. 25	100.89
Mar. 28	98.64	June 24	113.35	Sept. 29	111.34	Dec. 29	96.78

Ig IS 75. Motor Wheel Corp. On northwest corner of Saginaw and Summit Sts. Records available: 1944-46. Measurement discontinued.

Ig IS 76. Lansing Co. About 230 feet west of Cedar St. and 255 feet south of Saginaw St. Records available: 1944-49.

Jan. 24	103.04	Apr. 25	103.66	July 28	106.04	Oct. 27	103.69
Feb. 28	102.40	May 31	104.42	Aug. 25	103.62	Nov. 25	102.27
Mar. 28	101.87	June 24	106.39	Sept. 29	103.59	Dec. 27	99.68

Ig IS 110. City of Lansing. About 150 feet west of Cedar St. and 50 feet south of Jay St. Records available: 1944-49.

Jan. 24	65.76	Apr. 25	62.98	July 28	102.51	Oct. 27	77.88
Feb. 28	64.44	May 27	67.97	Aug. 25	101.34	Nov. 25	62.81
Mar. 28	61.36	June 24	89.27	Sept. 29	83.86	Dec. 27	65.42

Ig IS 157. City of Lansing Well PM-12. 145 feet north of Main St. and 36 feet west of Fairview St. Records available: 1944-49. Jan. 21, 52.99.

Ig IS 182. Atlas Drop Forge Co. Well 2 in southwest quadrant of intersection of Davis Ave. extended and Mount Hope Ave. Records available: 1944-46, 1948-49.

Jan. 24	34.99	Apr. 25	34.04	July 28	36.25	Oct. 27	35.44
Feb. 28	34.35	May 27	34.46	Aug. 25	37.14	Nov. 25	34.86
Mar. 28	35.60	June 24	36.85	Sept. 29	38.15	Dec. 27	34.64

City of Mason

Ig MS 30. City of Mason. 40 feet west of Jefferson Ave. and 675 feet north of intersection with Okemos St. Unused supply well, diameter 6 inches, reported depth 150 feet. Records available: 1948-49.

Ig MS 30--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.28	Apr. 6	2.78	July 6	1.09	Oct. 5	3.28
12	2.49	13	2.17	15	1.02	12	3.23
19	2.87	21	1.96	20	1.09	19	3.17
26	2.69	27	1.66	27	1.37	26	3.00
Feb. 2	2.28	May 4	2.99	Aug. 3	1.30	Nov. 2	4.67
9	2.15	11	3.07	10	2.95	9	3.09
16	2.18	18	2.86	17	3.73	16	2.27
23	1.62	25	2.85	24	3.78	23	3.01
Mar. 2	1.95	June 1	2.29	31	3.63	30	3.24
9	2.18	8	2.48	Sept. 7	3.43	Dec. 7	3.05
16	2.42	15	3.18	14	3.34	14	2.79
23	2.78	22	1.04	21	3.38	21	2.40
30	2.34	29	1.08	28	3.36	28	2.23

Ig WM 1. City of Williamston. In NW $\frac{1}{4}$ sec. 2, T. 3 N., R. 1 E., 55 feet north of Pere Marquette Railway and 290 feet east of Corwin Road. Unused test well, diameter 8 inches, depth 167.6 feet. Records available: 1948-49. Measurement discontinued after May 16.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May
1	4.74	4.09	a3.40	3.23	3.01
2	4.73	4.15	3.46	3.25	2.99
3	4.77	4.13	3.47	3.19	3.10
4	4.77	4.00	3.45	3.17	3.07
5	4.67	4.04	3.36	3.09	3.10
6	4.60	4.06	3.35	2.97	3.15
7	4.57	3.95	3.48	3.00	3.23
8	4.58	3.99	3.44	3.02	3.33
9	4.59	3.99	3.41	3.08	3.40
10	4.67	4.06	3.40	3.12	3.48
11	4.70	4.11	3.41	3.10	3.53
12	3.60	4.05	3.41	3.07	3.50
13	4.55	3.97	3.47	3.02	3.51
14	4.51	3.95	3.48	3.05	3.48
15	3.55	a3.70	3.47	2.99	3.61
16	4.47	3.78	3.49	3.07	3.62
17	4.55	3.76	3.45	3.12	....
18	4.54	a3.70	3.43	3.03	....
19	4.26	3.63	3.51	....	....
20	4.47	3.59	3.57	3.11	....
21	4.38	3.66	3.50	3.12	....
22	....	3.54	3.45	3.07	....
23	....	3.55	3.42	3.03	....
24	4.21	3.53	3.53	3.00	....
25	4.25	3.42	3.47	3.10	....
26	4.15	3.51	3.49	3.03	....
27	4.10	3.46	3.36	3.04	....
28	3.99	a3.39	3.36	3.09	....
29	4.12		3.44	3.09	....
30	4.15		3.45	3.01	....
31	4.08		3.37		....

a Estimated.

Lansing Township

Ig Ls 10. Glen A. Ballans. In NE $\frac{1}{4}$ sec. 18, T. 4 N., R. 2 W., 86 feet south of Washtenaw St. and 70 feet east of Hungerford St. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	87.66	Apr. 25	89.99	July 28	94.76	Oct. 27	93.43
Feb. 28	88.17	May 27	91.94	Aug. 25	94.20	Nov. 25	90.48
Mar. 28	88.85	June 24	92.68	Sept. 29	92.44	Dec. 29	93.16

Ig Ls 35. Tank Bros. Dairy. In SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 4 N., R. 2 W., about 0.5 mile east of Waverly Road and 280 feet north of Willow St. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	66.02	Apr. 25	66.80	July 28	66.94	Oct. 27	67.57
Feb. 28	66.21	May 27	66.67	Aug. 25	67.16	Nov. 29	67.35
Mar. 28	66.56	June 24	66.54	Sept. 29	67.27	Dec. 29	67.77

Ig Ls 265. Frank Clever. In NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 4 N., R. 2 W., about 900 feet west of Harrison Road, 350 feet south of main line of Grand Trunk Western Railway and about 1.2 miles south of East Lansing. Records available: 1945-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.50	42.38	41.35	41.10	46.33	47.19	54.20	51.95	.....	49.35	.....	44.94
2	39.45	42.47	41.42	41.27	44.04	49.26	54.22	.....	49.95	48.48	.....	45.14
3	39.45	42.36	41.55	41.40	44.46	51.30	52.55	.....	49.51	47.51	.....	45.49
4	39.65	42.13	41.56	40.61	44.75	52.34	50.85	.....	48.35	47.56	47.52	44.70
5	39.80	42.21	41.46	41.47	45.55	52.89	49.33	53.09	47.35	48.01	47.29	43.44
6	40.15	42.15	41.41	42.08	46.02	50.97	51.04	54.95	46.88	48.56	47.25	44.39
7	40.47	41.68	41.43	42.16	47.58	51.48	52.17	52.89	46.45	49.31	45.74	44.44
8	40.98	41.68	41.17	42.62	47.48	52.74	53.08	51.15	46.72	49.80	46.47	45.08
9	41.37	41.76	41.18	42.69	46.08	53.30	53.37	52.70	45.75	49.10	47.31	46.06
10	41.45	41.90	41.26	43.55	46.20	55.05	51.23	52.66	46.43	48.49	46.98	45.61
11	41.56	42.24	41.32	41.67	46.50	56.19	49.61	55.30	45.44	48.71	47.34	44.46
12	41.56	42.16	41.46	42.36	46.68	56.54	50.11	55.72	44.84	48.55	46.98	43.74
13	41.64	42.26	41.56	42.65	47.35	55.79	51.26	54.90	44.49	49.40	45.34	44.84
14	41.89	41.90	41.18	43.65	48.16	55.36	50.38	.....	45.38	49.39	44.49	45.67
15	43.10	41.51	41.08	43.45	49.10	54.85	50.08	.....	44.70	.....	45.61	45.24
16	44.3	41.70	41.15	43.34	48.57	52.80	49.64	.....	44.76	.....	46.39	45.08
17	44.90	41.81	41.11	42.63	49.16	50.86	50.10	.....	45.79	.....	46.74	43.85
18	44.93	41.83	41.09	41.25	50.57	50.13	49.28	.....	44.95	.....	47.04	42.98
19	44.20	42.80	41.22	42.17	52.30	49.15	49.08	53.84	44.19	.....	46.93	42.30
20	44.58	42.30	41.16	43.08	52.65	48.05	50.79	53.47	45.24	.....	45.35	41.65
21	44.39	41.95	40.60	43.38	51.80	48.51	52.27	52.04	46.98	49.14	44.70	41.01
22	44.25	41.63	40.43	43.43	50.65	50.00	53.28	55.95	47.95	.....	46.25	40.60
23	44.16	41.70	40.30	43.30	47.88	50.44	53.35	.....	48.14	.....	46.47	40.51
24	43.38	41.72	40.28	42.85	48.26	51.20	52.66	.....	48.26	46.45	46.29	40.53
25	44.18	41.64	40.00	41.90	48.21	52.10	50.55	.....	47.12	47.40	44.39	40.41
26	43.55	41.97	40.43	42.93	48.01	50.70	51.55	54.72	46.30	47.61	43.49	40.03
27	43.47	41.82	39.50	43.13	48.06	49.17	53.29	.....	47.23	48.40	.....	39.66
28	42.98	41.36	39.17	43.30	47.84	50.78	55.40	.....	47.78	48.79	.....	39.58
29	43.20	.....	40.18	44.22	48.30	52.63	56.33	.....	48.14	48.80	43.59	39.41
30	43.19	.....	40.85	45.55	47.06	52.84	56.18	.....	48.65	47.39	44.59	39.48
31	42.28	.....	40.85	45.51	.....	54.00	.....	.....	46.10	.....	39.38	.....

a Estimated.

Ig Ls 266. Michigan State College. In NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 4 N., R. 2 W., about 360 feet south of Mount Hope Ave. 190 feet east of Harrison Road. Records available: 1944-49. May 27, 32.28; Sept. 29, 32.90; Oct. 27, 33.18; Nov. 29, 32.13; Dec. 27, 31.27.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	June	July	Aug.
1	30.32	.....	.....	.....	.....	.....	33.44
2	30.31	.....	.....	.....	.....	.....	.....
3	30.38	.....	.....	.....	.....	32.67	.....
4	.....	.....	.....	.....	30.44	.....	.....
5	.....	.....	.....	.....	.....	.....	33.35
6	.....	.....	.....	.....	.....	.....	33.46
7	.....	30.91	30.67	.....	.....	.....	.....
8	.....	30.88	.....	.....	.....	.....	.....
9	.....	a30.85	.....	.....	.....	.....	.....
10	31.03	a30.89	.....	.....	.....	33.51	.....
11	.....	a31.02	.....	.....	30.69	.....	.....
12	.....	a31.05	.....	.....	.....	.....	34.01
13	.....	a30.98	.....	.....	.....	.....	a34.08
14	.....	31.00	30.60	.....	.....	.....	.....
15	.....	30.83	30.62	.....	.....	33.36	.....

Ig Ls 266--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	June	July	Aug.
16	.....	30.82	30.59	.....	.....	.....	.....
17	31.37	30.84	30.50	.....	32.88	.....	.....
18	.....	30.87	.....	30.47	.....	.....	.....
19	.....	30.86	.....	.....	.....	.....	33.78
20	.....	30.91	.....	.....	.....	.....	.....
21	.....	31.00	30.50	.....	.....	.....	.....
22	.....	.....	.....	.....	.....	32.70	.....
23	.....	.....	.....	.....	.....	32.78	.....
24	31.27	.....	.....	.....	31.87	32.86	.....
25	31.34	.....	.....	30.67	.....	32.68	.....
26	31.41	.....	.....	.....	.....	32.73	33.76
27	31.32	.....	.....	.....	.....	32.95	.....
28	31.07	30.61	.....	.....	.....	33.26	.....
29	31.11	.....	.....	.....	.....	33.55	.....
30	31.31	.....	.....	.....	.....	33.71	.....
31	31.31	.....	.....	.....	.....	a33.72	.....

a Estimated.

Ig Ls 270. Harris L. Fleming. In NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 4 N., R. 2 W., about 90 feet north of Irvington St. and 100 feet west of Pennsylvania Ave. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	23.38	Apr. 25	22.69	July 28	24.25	Oct. 27	24.73
Feb. 28	23.02	May 27	23.15	Aug. 25	24.78	Nov. 25	24.70
Mar. 28	23.15	June 24	23.62	Sept. 29	24.81	Dec. 27	23.21

Ig Ls 271. Harry De Laere. In SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 4 N., R. 2 W., about 305 feet east of Waverly Road and 25 feet north of Maybel St. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	23.46	Apr. 25	22.06	July 28	22.42	Oct. 27	23.58
Feb. 28	22.55	May 27	22.15	Aug. 25	23.02	Nov. 25	23.71
Mar. 28	22.57	June 24	22.13	Sept. 29	23.36	Dec. 27	23.28

Ig Ls 805. Waverly Hills Association. In SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 4 N., R. 2 W., about 500 feet east of Waverly Road and 20 feet north of bank of Grand River Ave. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	1.70	Apr. 25	1.29	July 28	1.84	Oct. 27	1.79
Feb. 28	1.36	May 27	1.43	Aug. 25	2.18	Nov. 29	1.69
Mar. 28	1.52	June 24	1.52	Sept. 29	1.86	Dec. 27	1.88

Meridian Township

Ig Mr 3. Fuller Real Estate. In NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8 T. 4 N., R. 1 W., 660 feet south of Lake Lansing Road. 125 feet east of Hagadorn Road. Unused domestic well, diameter 3 inches, reported depth 220 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 23	62.96	Aug. 12	64.14	Oct. 7	63.25	Nov. 22	66.38
July 1	64.56	19	64.45	14	64.57	29	65.49
8	63.45	25	65.11	21	65.43	Dec. 6	66.01
15	62.85	Sept. 9	63.48	27	65.98	13	64.46
22	63.16	16	63.30	Nov. 8	65.92	20	63.81
28	63.58	23	63.09	15	66.03	27	64.24
Aug. 5	63.82	29	63.54				

Iosco County

Ic Wr 1. U. S. Forest Service. In NE $\frac{1}{4}$ sec. 7, T. 23 N., R. 7 E. 610 feet west of east section line and 302 feet north of Gordon Creek. Records available: 1948-49.

Ic Wr 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.26	27.29	27.39	27.44	27.46	27.51	27.49	27.52	27.43	27.68	27.73	27.76
2	26.24	27.38	27.39	27.49	27.33	27.49	27.51	27.48	27.54	27.68	27.64	27.78
3	27.33	27.39	27.42	27.50	27.43	27.48	27.51	27.49	27.55	27.64	27.73	27.86
4	27.38	27.26	.....	27.52	27.44	27.49	27.47a	27.52	27.52	27.61	27.73	27.73
5	27.28	27.30	.....	27.50	27.45	27.48	27.49a	27.55	27.40	27.66	27.81	27.76
6	27.16	27.33	.....	27.39	27.44	27.43	27.50a	27.55	27.52	27.65	27.78	27.81
7	27.15	27.19	.....	27.42	27.47	27.48	27.48a	27.53	27.53	27.53	27.76	27.69
8	27.22	27.28	.....	27.42	27.47	27.57	27.52a	27.52	27.47	27.64	27.69	27.80
9	27.27	27.25	.....	27.52	27.44	27.60	27.50	27.54	27.51	27.62	27.80	27.85
10	27.42	27.33	.....	27.58	27.50	27.58	27.41	27.55	27.53	27.63	27.73	27.84
11	27.48	27.43	27.37	27.55	27.55	27.53	27.47	27.55	27.56	27.57	27.73	27.81
12	27.37	27.36	27.37	27.51	27.49	27.49	27.44	27.54	27.54	27.56	27.80	27.66
13	27.33	27.33	27.42	27.46	27.49	27.47	27.43	27.56	27.49	27.67	27.69	27.78
14	27.31	27.34	27.42	27.48	27.46	27.46	27.44	27.57	27.47	27.68	27.62	27.82
15	27.41	27.17	27.45	27.44	27.54	27.42	27.45	27.59	27.49	27.71	27.62	27.63
16	27.29	27.27	27.46	27.41	27.52	27.44	27.45	27.61	27.46	27.68	27.67	27.81
17	27.39	.....	27.43	27.46	27.53	27.43	27.46	27.57	27.46	27.69	27.73	27.80
18	27.43	.....	27.42	27.43	27.50	27.44	27.45	27.53	27.44	27.71	27.75	27.79
19	27.12	.....	27.50	27.48	27.43	27.47	27.41	27.56	27.43	27.73	27.71	27.81
20	27.45	.....	27.55	27.52	27.51	27.44	27.47	27.60	27.49	27.70	27.64	27.83
21	27.42	.....	27.43	27.50	27.50	27.39	27.49	27.63	27.52	27.69	27.76	27.70
22	27.56	.....	27.40	27.47	27.41	27.42	27.44	27.62	27.50	27.56	27.84	27.63
23	27.46	27.40	27.40	27.40	27.41	27.43	27.55	27.59	27.48	27.67	26.67	27.72
24	27.33	27.38	27.52	27.44	27.45	27.39	27.56	27.60	27.58	27.76	27.76	27.83
25	27.42	27.26	27.45	27.55	27.43	27.36	27.51	27.63	27.61	27.78	27.71	27.90
26	27.42	27.44	27.49	27.46	27.48	27.35	27.51	27.62	27.63	27.72	27.80	27.78
27	27.39	27.39	27.39	27.45	27.44	27.39	27.47	27.60	27.55	27.81	27.64	27.77
28	27.14	27.31	27.38	27.54	27.46	27.43	27.47	27.59	27.55	27.76	27.74	27.78
29	27.29		27.50	27.53	27.49	27.45	27.47	27.58	27.59	27.74	27.63	27.82
30	27.39		27.50	27.49	27.50	27.47	27.49	27.58	27.59	27.68	27.65	27.92
31	27.35		27.46		27.52		27.52	27.55		27.69		27.88

a Estimated.

Kalamazoo County

Total precipitation in the Kalamazoo area for 1949 was 33.50 inches or 1.71 inches below normal. Months of above-normal rainfall included January, February, March, September, and December. An extended drought period occurred from April through August, with an accumulated total deficiency for the period of 5.03 inches.

Withdrawals of ground water for municipal supply in Kalamazoo ranged from 8 million gallons per day in February to 13.7 million gallons per day in August and averaged 10.1 million gallons per day for the year.

Peak water-level stages in observation wells in the Kalamazoo area during 1949 were reached during the period February 16 through May 3, with the greatest number of occurrences about mid-April. Minimum stages for the year occurred within the period August 26 through December 19, with the greatest number in the month of November. Net changes of water level in 17 observation wells in the Kalamazoo area ranged from declines as great as 1.10 feet to rises as great as 1.92 feet, with an average net change for this group of wells reflecting a rise of 0.13 foot.

City of Kalamazoo

Ko KO 1. City of Kalamazoo. Well B at pumping station, about 400 feet north of Lake St. and 110 feet east of Burdick St. Records available: 1939-46. Measurement discontinued.

Ko KO 2. City of Kalamazoo. Well C at pumping station, about 410 feet south of Born Court and 170 feet west of Burdick St. Records available: 1939-46. Measurement discontinued.

Ko KO 114. City of Kalamazoo, Burdick St. Station. 165 feet east of Burdick St. and 40 feet south of Wall St. extended. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	21.3	20.4	19.6	19.7	20.9	22.6	23.2	23.8	23.0	22.6	21.8
2	....	21.3	20.4	19.6	19.7	21.4	23.1	23.0	23.8	23.0	22.6	21.8
3	22.0	21.3	20.3	19.4	19.7	21.8	a23.5	23.0	a23.8	22.9	22.7	21.8
4	22.0	21.2	20.2	19.2	19.7	21.7	22.8	23.0	23.7	22.8	22.8	21.9
5	22.0	21.3	20.1	19.7	19.7	21.2	22.7	22.9	23.6	22.9	22.9	21.9
6	21.8	21.2	20.2	19.2	20.6	21.0	23.1	22.9	23.5	22.9	22.9	21.8
7	22.0	21.2	20.2	19.2	21.1	20.9	22.7	22.8	23.4	22.8	22.8	21.8
8	22.1	21.1	20.1	19.2	20.4	21.2	23.2	22.8	23.3	22.9	22.6	21.9
9	22.1	21.1	20.1	19.2	20.2	21.3	a23.0	22.9	23.2	22.9	22.7	22.0
10	22.1	21.2	20.1	19.3	20.1	21.6	22.7	23.2	23.2	22.8	22.7	22.0
11	22.1	21.2	20.2	19.2	20.0	21.8	22.5	23.9	23.2	22.8	22.8	21.6
12	22.0	21.2	20.1	19.1	20.1	21.8	22.5	23.9	23.1	22.8	22.8	21.7
13	22.1	21.2	20.0	19.2	20.1	21.9	22.7	23.5	23.1	22.8	22.7	21.7
14	22.1	20.8	20.0	19.2	20.8	21.6	22.8	23.4	23.1	22.8	22.7	21.8
15	22.1	20.6	20.0	19.3	20.7	21.5	22.5	23.2	23.1	22.9	22.6	21.8
16	22.2	20.4	20.0	19.4	20.5	21.4	a22.4	23.4	23.1	22.9	22.5	21.8
17	22.3	20.4	20.0	19.5	20.4	21.3	22.3	23.6	23.5	22.9	21.9	21.9
18	22.3	20.3	20.0	19.4	20.4	21.2	22.1	23.7	23.2	22.8	21.7	21.8
19	22.2	20.3	19.9	19.3	20.3	21.3	22.4	23.8	23.1	22.8	21.7	21.8
20	22.0	20.2	20.0	19.3	20.2	21.2	22.6	23.8	23.0	22.8	22.1	21.5
21	21.9	20.2	19.8	19.3	20.2	21.1	22.7	23.7	23.0	22.8	22.1	21.4
22	21.8	20.2	19.8	19.4	20.2	21.1	22.8	23.6	23.0	22.8	21.8	21.2
23	21.8	20.3	19.9	19.4	20.1	21.1	22.6	23.7	23.0	22.8	21.6	21.0
24	21.8	20.3	19.9	19.4	20.1	21.1	22.5	24.0	23.1	22.8	21.9	20.8
25	21.7	20.5	19.9	19.4	20.1	21.5	22.5	24.6	23.1	22.7	21.8	20.8
26	21.6	20.4	20.0	19.3	20.1	21.6	22.8	25.0	23.0	22.6	21.9	20.8
27	21.5	20.5	19.9	19.3	20.2	21.4	23.5	24.7	22.9	22.7	21.8	20.7
28	21.5	20.3	19.9	19.5	20.2	21.3	24.0	24.5	22.9	22.6	21.7	20.6
29	21.5		19.9	19.5	20.2	21.6	24.1	24.2	23.0	22.7	21.7	20.6
30	21.5		19.9	19.6	20.2	21.8	23.6	24.0	22.9	22.7	21.7	20.6
31	21.4		19.9		20.3		23.4	23.9		22.6		20.6

a Estimated.

Ko KO 136. Sutherland Paper Co. About 1,900 feet west of Pitcher St. and 640 feet north of Patterson St. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	9.78	Mar. 16	7.36	May 25	11.84	Sept. 28	19.12
19	9.11	30	7.22	June 29	13.60	Oct. 26	19.43
Feb. 2	9.11	Apr. 13	9.59	July 27	16.69	Nov. 30	20.36
16	17.03	27	9.61	Aug. 31	19.07	Dec. 28	8.52
Mar. 2	8.37	May 11	11.95				

Ko KO 186. Sutherland Paper Co. 540 feet south of Michigan Ave. and 130 feet west of Wallace Ave. extended. Records available: 1946-49. Jan. 5, 15.29; Jan. 19, 15.30. Measurement discontinued.

Ko KO 211. Consumers Power Co. 150 feet east of King's Highway extended and 65 feet north of Michigan Ave. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	13.16	Mar. 16	12.22	May 25	12.37	Sept. 28	14.45
19	12.34	30	12.37	June 29	13.25	Oct. 26	14.57
Feb. 2	12.50	Apr. 13	11.56	July 27	14.04	Nov. 30	14.34
16	10.75	27	12.13	Aug. 31	14.59	Dec. 28	11.48
Mar. 2	11.40	May 11	13.00				

Ko KO 222. Eck-Rich Sausage Co. 360 feet east of Portage St. and 130 feet north of Second St. Records available: 1946-49. Measurement discontinued. Jan. 12, 57.20; Jan. 26, 17.60.

Ko KO 227. Hanselman Building Corp. 100 feet north of Michigan Ave. and 25 feet west of Burdick St. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	24.26	Mar. 23	23.70	May 18	23.17	Sept. 21	24.95
26	23.96	Apr. 6	23.53	June 22	23.83	Oct. 19	24.96
Feb. 9	23.94	20	23.46	July 20	24.51	Nov. 23	26.11
23	23.24	May 4	23.10	Aug. 24	23.81	Dec. 21	25.07
Mar. 9	22.30						

Ko KO 228. Wiggington Co. 275 feet north of Kalamazoo Ave. and 140 feet east of Church St. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.19	21.96	20.73	21.47	20.98	22.13	21.94	21.86	22.26	22.29	22.46	22.74
2	22.12	21.47	20.76	21.36	20.94	21.30	21.82	22.06	22.30	22.25	22.58	22.71
3	22.08	21.41	20.70	21.23	21.08	21.37	21.56	22.06	22.30	22.09	22.57	22.74
4	22.24	21.42	20.70	21.14	21.14	21.40	21.53	22.12	22.14	22.51	22.61	22.71
5	22.29	21.45	20.70	21.22	21.20	21.26	21.64	22.23	22.17	22.61	22.61	22.62
6	22.31	21.26	20.78	21.00	21.21	21.20	21.73	22.28	22.16	22.61	22.60	23.24
7	22.29	21.21	20.74	21.22	21.20	21.18	21.74	22.16	22.16	22.78	22.19	23.17
8	22.31	21.30	21.44	21.26	21.15	21.44	21.77	22.12	22.19	22.72	22.55	23.33
9	22.27	21.33	21.41	21.03	21.12	21.47	21.82	22.40	22.21	22.42	22.15	23.36
10	22.18	21.31	21.51	21.12	21.27	21.50	21.76	22.46	22.32	22.33	22.18	23.35
11	22.33	21.27	21.54	21.07	21.36	21.57	21.73	22.30	22.13	22.53	22.23	23.27
12	22.29	21.27	21.56	21.15	21.38	21.45	21.86	22.20	22.09	22.50	22.39	23.11
13	22.32	21.12	20.97	21.19	21.17	21.46	21.82	22.18	22.12	22.50	22.13	23.36
14	22.27	21.02	21.31	21.16	21.31	21.60	21.72	22.10	22.22	22.53	21.99	23.43
15	22.42	21.08	21.46	21.11	20.98	21.85	21.87	22.01	22.17	22.52	22.55	23.32
16	22.23	21.15	21.50	21.14	20.87	21.56	21.95	22.23	22.32	22.43	22.51	23.26
17	22.27	21.11	21.42	21.04	21.25	21.62	21.86	22.30	22.33	22.29	22.52	23.47
18	22.34	21.03	21.53	20.99	21.27	21.60	21.62	22.32	22.22	22.42	22.60	23.31
19	22.33	20.96	21.54	21.12	21.36	21.54	21.97	22.32	22.12	22.46	22.61	23.25
20	22.33	20.87	20.87	21.14	21.38	21.56	22.07	22.28	22.21	22.50	22.47	23.41
21	22.27	20.76	21.25	21.12	21.38	21.78	22.02	22.06	22.21	22.50	22.36	23.38
22	22.26	20.81	21.52	21.12	21.24	21.83	22.02	22.19	22.58	22.48	22.66	23.35
23	21.64	20.88	21.60	21.05	21.13	21.73	22.10	22.27	22.34	22.51	22.72	23.27
24	21.57	20.84	21.49	20.95	21.31	21.81	21.84	22.28	22.57	22.38	22.73	23.18
25	22.21	20.93	21.54	20.97	21.40	21.70	21.90	22.27	22.41	22.56	22.54	22.61
26	22.10	20.85	21.66	21.06	21.42	21.58	22.18	22.31	22.17	22.56	22.63	22.88
27	22.04	20.66	21.32	21.07	21.42	21.49	22.24	22.43	22.24	22.63	22.55	22.85
28	22.10	20.65	21.22	21.10	21.33	21.59	22.25	22.28	22.49	22.64	22.50	22.92
29	22.06		21.45	21.10	21.19	21.80	22.27	22.06	22.50	22.67	22.62	22.99
30	21.58		21.63	21.03	.....	21.55	22.21	22.29	22.35	22.48	22.77	22.92
31	21.48		21.53	.....	.....	.....	21.86	22.17		22.35		22.88

a Estimated.

Ko KO 240. Reed Land Co. About 300 feet east of Factory St. and 280 feet north of Lane Court extended. Records available: 1947-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.28	7.43	.....	5.96	6.93	7.23	7.52	8.15	8.65	8.64	8.54	8.45
2	8.28	7.52	7.03	6.00	6.93	.....	7.55	8.11	8.65	8.63	8.55	8.43
3	8.28	7.54	7.06	6.08	6.98	.....	7.57	8.16	8.66	8.63	8.58	8.42
4	8.30	7.54	.....	6.19	7.02	.....	7.59	8.20	8.66	8.64	8.60	8.37
5	8.28	7.58	.....	6.26	7.06	.....	7.62	8.22	8.65	8.65	8.64	8.28
6	8.23	7.59	.....	6.30	7.09	.....	7.65	8.24	8.62	8.64	8.61	8.26
7	8.22	7.60	.....	6.42	7.12	.....	7.67	8.25	8.65	8.45	8.58	8.23
8	8.22	7.63	a7.18	6.49	7.13	7.52	7.70	8.25	8.62	8.43	8.62	8.25
9	8.21	7.64	7.22	6.59	7.14	7.52	7.71	8.28	8.61	8.42	8.64	8.27
10	8.20	7.62	7.24	6.61	8.20	7.55	7.65	8.31	8.64	8.41	8.65	8.27
11	8.22	7.69	7.27	6.62	7.24	7.57	7.69	8.34	8.63	8.43	8.66	8.24
12	8.23	7.68	7.27	6.67	7.25	7.59	7.73	8.36	8.64	8.39	8.66	8.12
13	8.22	7.55	7.28	6.70	7.28	7.60	7.76	8.37	8.66	8.37	8.62	8.04
14	8.24	7.00	7.29	6.77	7.31	7.52	7.80	8.37	8.63	8.38	8.57	8.01
15	8.28	6.83	7.35	6.74	7.33	7.09	7.81	8.39	8.63	8.40	8.58	8.01

Ko KO 240--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	8.24	6.71	7.39	6.76	7.33	6.98	7.82	8.41	....	8.38	8.57	7.99
17	8.19	6.79	7.42	6.76	7.36	6.93	7.84	8.43	....	8.37	8.57	8.01
18	8.20	6.85	7.43	6.69	7.38	6.92	7.85	8.44	....	8.40	8.57	8.00
19	7.93	6.89	7.44	6.72	7.29	6.96	7.89	8.46	....	8.43	8.57	7.97
20	7.57	6.91	7.47	6.74	6.88	6.99	7.93	8.48	....	8.44	8.54	8.00
21	7.51	6.97	7.46	6.78	6.80	7.08	7.95	8.49	8.38	8.47	8.54	7.83
22	7.53	6.96	7.43	6.81	6.80	7.20	7.98	8.51	8.39	8.46	8.57	7.15
23	7.55	6.95	7.43	6.75	6.82	7.22	8.00	8.54	8.45	8.42	8.60	6.66
24	7.53	6.93	7.43	6.75	6.87	7.26	8.01	8.56	8.49	8.41	8.58	6.71
25	7.56	....	7.40	6.77	6.96	7.31	8.02	8.58	8.48	8.43	8.55	6.78
26	7.57	....	7.41	6.79	6.99	7.30	8.05	8.60	8.48	8.46	8.54	6.81
27	7.58	....	7.28	6.85	7.06	7.33	8.07	8.61	8.51	8.50	8.51	6.69
28	....	....	7.18	6.90	7.07	7.39	8.11	8.61	8.55	8.52	8.50	6.72
29	....	....	7.17	6.92	7.13	7.44	8.13	8.61	8.59	8.53	8.51	6.82
30	....	....	7.19	6.93	7.15	7.48	8.13	8.63	8.62	8.51	8.51	6.88
31	7.58	....	....	....	7.17	....	8.14	8.65	....	8.51	....	6.91

a Estimated.

Ko KO 242. Kalamazoo Creamery. 200 feet east of Portage St. and 180 feet south of Lake St. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.57	21.77	20.27	20.07	19.40	20.17	20.88	21.95	23.20	....	23.44	23.55
2	22.55	21.73	20.24	19.95	19.42	20.19	20.91	21.98	23.23	....	23.42	23.54
3	22.57	21.70	20.24	19.82	19.51	20.23	20.95	22.04	23.25	....	23.46	24.01
4	22.55	21.66	20.20	19.73	19.53	20.27	20.98	22.64	23.27	....	23.45	24.09
5	22.50	21.69	20.17	19.60	19.56	20.29	21.01	22.18	23.28	23.80	23.68	23.58
6	22.51	21.66	20.18	19.48	19.59	20.30	21.35	22.21	23.30	23.59	23.52	23.54
7	22.53	21.63	20.23	19.44	19.64	20.36	21.08	22.22	23.30	23.58	23.51	23.48
8	22.55	21.61	20.16	19.38	19.68	20.41	21.12	22.25	23.33	23.58	24.02	24.05
9	22.53	21.64	20.17	19.38	19.68	20.45	21.15	22.28	....	23.56	23.59	23.56
10	22.57	21.59	20.18	19.35	19.75	20.47	21.18	22.32	....	23.53	23.57	23.49
11	22.54	21.66	20.21	19.29	19.79	20.50	21.20	22.36	....	23.52	23.57	23.45
12	22.48	21.58	20.22	19.26	19.81	20.53	21.21	22.39	....	23.51	23.60	23.42
13	22.48	21.55	20.25	19.22	19.85	20.56	21.24	22.44	....	23.53	23.55	23.40
14	22.49	21.40	20.22	19.24	19.89	20.59	21.27	22.47	23.40	23.52	23.57	23.37
15	22.50	21.25	20.24	19.20	19.94	20.62	21.31	22.51	23.40	23.51	23.56	23.35
16	22.46	21.16	20.25	19.31	19.96	20.61	21.35	22.53	23.93	23.49	24.15	23.32
17	22.49	21.08	20.26	19.24	20.00	20.60	21.37	22.56	23.47	23.48	24.22	23.32
18	22.48	20.94	20.25	19.17	20.03	20.62	21.39	22.59	23.44	23.48	24.26	23.27
19	22.40	20.85	20.32	19.27	20.06	20.63	21.41	22.64	23.42	23.47	24.25	23.26
20	22.35	20.75	20.31	19.27	20.05	20.61	21.45	22.68	23.44	23.45	23.75	23.24
21	22.23	20.68	20.24	....	20.00	20.60	21.49	22.72	23.41	23.45	23.69	23.19
22	22.19	20.61	20.24	....	19.93	20.62	21.53	22.74	23.42	23.43	23.67	23.12
23	22.12	20.54	20.32	....	20.03	20.64	21.57	22.77	23.44	23.45	23.59	22.98
24	22.03	20.45	20.34	....	20.03	20.64	21.59	22.82	23.48	23.46	23.64	22.85
25	22.02	20.39	20.28	....	20.67	20.66	21.60	22.87	23.48	23.44	23.62	22.73
26	21.95	20.40	20.36	....	20.14	20.71	21.61	22.90	23.48	23.44	23.62	22.60
27	21.93	20.31	20.25	19.36	20.15	20.72	21.72	22.94	23.45	23.46	23.56	22.47
28	21.83	20.27	20.34	19.41	20.17	20.76	21.88	23.43	23.47	23.44	23.56	22.41
29	21.87	....	20.35	19.40	20.17	20.79	21.83	23.55	23.51	23.44	23.54	22.34
30	21.83	....	20.35	19.40	20.16	20.83	21.87	....	23.52	23.43	23.53	22.18
31	21.78	....	20.26	....	20.14	....	21.92	23.17	....	23.42	....	22.09

a Estimated.

Ko KO 284. St. Regis Paper Co. 240 feet north of Alcott St. and 230 feet west of Portage St. Records available: 1946-49.

Ko KO 284--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	41.6	40.7	39.9	39.6	38.9	39.2	39.89	40.48	41.33	41.49	41.35	41.28
2	41.4	40.9	39.8	39.3	38.9	39.2	39.92	40.54	41.42	41.42	41.26	41.25
3	41.3	40.7	39.8	39.2	39.0	39.2	39.83	40.61	41.41	41.35	41.37	41.24
4	45.4	40.7	39.8	39.1	39.0	39.3	39.80	40.71	41.37	41.37	41.33	41.15
5	45.7	40.7	39.8	39.1	39.1	39.2	39.80	40.67	41.26	41.40	41.42	41.15
6	45.9	40.6	39.7	39.0	39.1	39.1	39.88	40.66	41.30	41.40	41.37	41.18
7	46.0	40.5	39.7	39.1	39.1	39.3	39.91	40.65	41.34	41.47	41.32	41.04
8	42.1	40.5	39.8	39.1	39.0	39.4	39.91	40.62	41.46	41.54	41.32	41.17
9	41.5	40.6	39.7	39.2	39.0	39.4	39.93	40.71	41.39	41.45	41.37	41.28
10	41.3	40.6	39.8	39.1	39.1	39.4	39.88	40.77	41.35	41.35	41.32	41.13
11	45.3	41.0	39.9	38.9	39.2	39.5	39.87	40.76	41.32	41.35	41.38	41.09
12	45.7	40.6	39.8	39.0	39.2	39.4	40.15	40.77	41.26	41.34	41.43	41.05
13	45.8	40.4	39.7	38.9	39.2	39.4	40.15	30.90	41.47	41.45	41.34	41.12
14	46.0	40.3	39.6	39.0	39.3	39.6	40.13	40.83	41.56	41.43	41.36	41.09
15	41.9	40.3	39.8	38.9	39.2	39.5	40.15	40.81	41.52	41.50	41.34	41.10
16	41.3	40.4	39.7	39.1	39.1	39.63	40.15	40.85	41.45	41.41	41.40	41.07
17	41.1	40.5	39.7	39.0	39.2	39.62	40.10	40.87	41.44	41.38	41.44	41.05
18	41.1	40.2	39.6	38.8	39.2	39.66	40.06	40.93	41.36	41.39	41.45	41.02
19	41.4	43.4	39.7	39.0	39.2	39.58	40.15	40.96	41.35	41.40	41.36	41.04
20	41.5	40.2	39.7	39.1	39.4	39.50	40.20	41.02	41.43	41.33	41.40	40.98
21	41.3	40.0	39.5	39.1	39.3	39.58	40.25	41.20	41.39	41.36	41.38	41.07
22	41.3	39.9	39.5	39.0	39.1	39.66	40.27	41.04	41.45	41.29	41.39	41.00
23	41.0	40.0	39.6	39.1	39.1	39.72	40.34	41.19	41.50	41.38	41.22	41.00
24	40.8	39.9	39.7	39.0	39.1	39.69	40.31	41.15	41.52	41.39	41.32	40.86
25	41.3	39.9	39.6	38.9	39.2	39.68	40.26	41.20	41.48	41.36	41.28	40.72
26	41.2	40.0	39.7	38.9	39.2	39.65	40.31	41.23	41.40	41.34	41.35	40.59
27	41.2	39.8	39.4	39.0	39.2	39.62	40.38	41.31	41.32	41.43	41.17	40.49
28	40.9	39.7	39.5	39.0	39.2	39.73	40.49	41.24	41.35	41.37	41.23	40.54
29	41.0		39.7	39.0	39.1	39.81	40.51	41.22	41.41	41.37	41.24	40.50
30	40.8		39.6	39.0	39.1	39.86	40.50	41.24	41.47	41.36	41.21	40.49
31	40.6		39.6		39.0		40.52	41.33		41.31		40.46

Ko KO 311. Columbian Hotel. 90 feet south of Michigan Ave. and 90 feet west of Pitcher St. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	18.18	Mar. 23	16.71	May 18	16.91	Sept. 21	18.67
26	18.63	Apr. 6	15.64	June 22	17.15	Oct. 19	18.83
Feb. 9	17.37	20	17.02	July 20	18.36	Nov. 23	19.20
23	16.09	May 4	16.39	Aug. 24	19.05	Dec. 21	18.90
Mar. 9	16.30						

City of Parchment

Ko PT 6. Kalamazoo Vegetable Parchment Co. test well 6. About 950 feet north of Oak Grove Ave. and 75 feet west of Wilson Ave. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	12.44	Mar. 16	11.46	May 25	11.87	Sept. 28	13.13
19	12.23	30	11.63	June 29	12.24	Oct. 26	12.85
Feb. 2	11.67	Apr. 13	11.04	July 27	12.98	Nov. 30	12.85
16	11.36	27	11.35	Aug. 31	13.50	Dec. 28	11.60
Mar. 2	11.05	May 11	11.82				

Ko PT 13. Kalamazoo Vegetable Parchment Co. 400 feet south of Superior Ave. and 350 feet west of Riverview Drive. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.94	14.53	13.59	13.85	14.27	14.74	15.34	.....	16.42	16.09	15.68	15.74
2	14.72	14.53	13.69	13.65	14.22	14.93	15.44	.....	16.35	16.03	15.76	15.74
3	14.77	14.56	13.79	13.34	14.44	15.07	15.33	16.14	16.30	15.90	15.84	15.78
4	14.94	14.62	13.86	13.14	14.50	14.09	15.27	.....	16.15	15.95	15.84	15.56
5	14.93	14.68	13.91	12.94	14.58	14.88	15.20	.....	15.99	15.98	15.90	15.36
6	14.95	14.45	13.81	12.87	14.65	14.88	15.22	.....	15.74	16.06	15.70	15.55
7	14.92	14.43	13.84	13.01	14.76	15.18	15.26	.....	15.88	15.94	15.64	15.51
8	14.90	14.64	13.97	13.24	14.60	15.33	15.26	.....	15.92	15.86	15.70	16.65
9	14.69	14.68	14.05	13.43	14.49	15.42	15.19	.....	15.99	15.73	15.80	15.70
10	14.60	14.71	14.10	13.40	14.79	15.54	15.00	16.55	16.02	15.58	15.84	15.72

Ko PT 13--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	14.70	14.75	14.16	13.49	14.87	15.63	14.92	16.56	15.98	15.71	15.84	15.48
12	14.87	14.69	14.21	13.71	14.95	15.47	15.27	16.53	15.76	15.72	15.84	15.27
13	14.94	14.48	14.07	13.83	15.02	15.38	15.43	16.33	15.95	15.71	15.74	15.36
14	14.95	14.06	14.08	14.00	15.06	15.47	15.57	15.94	16.05	15.66	15.53	15.37
15	15.03	13.74	14.23	14.02	14.88	15.44	15.52	15.87	16.13	15.63	15.67	15.36
16	14.74	13.53	14.31	14.05	14.79	15.16	15.56	16.22	16.15	15.49	15.70	15.37
17	14.66	13.40	14.37	13.80	14.89	15.02	15.46	16.45	16.16	15.36	15.72	15.47
18	14.71	13.14	14.46	13.78	14.99	14.80	15.39	16.55	16.10	15.55	15.69	15.39
19	14.56	12.91	14.54	13.92	14.97	14.59	15.68	16.58	15.77	15.67	15.65	15.21
20	14.42	12.70	14.39	14.01	14.77	14.44	15.84	16.49	15.81	15.69	15.53	15.36
21	14.21	12.62	14.34	14.04	14.63	14.46	15.98	16.30	15.80	15.64	15.43	15.30
22	14.18	13.01	14.48	14.09	14.34	14.40	16.07	16.21	15.81	15.63	15.61	15.05
23	14.04	13.18	14.53	14.10	14.32	14.45	16.15	16.48	15.85	15.56	15.67	14.75
24	13.93	13.31	14.45	13.92	14.37	14.55	16.19	16.63	15.90	15.38	15.71	14.40
25	13.98	13.43	14.42	13.94	14.43	14.78	16.12	16.68	15.77	15.56	15.71	14.18
26	14.08	13.56	14.46	14.11	14.49	14.61	16.30	16.82	15.66	15.69	15.76	13.94
27	14.22	13.41	14.15	14.24	14.55	14.58	16.36	16.94	15.83	15.78	15.56	13.68
28	14.18	13.40	14.08	14.34	14.54	14.85	16.45	16.82	15.98	15.77	15.43	13.87
29	14.31		14.19	14.33	14.40	15.04	16.45	16.47	16.03	15.75	15.63	13.96
30	14.02		14.31	14.42	14.41	15.19	16.23	16.44	16.05	15.67	15.70	14.06
31	14.25		14.16		14.37		.....	16.43		15.53		14.14

a Estimated.

Village of Vicksburg

Ko VB 6. Lee Paper Co. well 6A. About 400 feet west of west edge of mill pond and 200 feet south of Washington St. extended. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 22	+0.05	June 12	+0.70	July 3	0.36	July 24	+0.40
23	+ .09	13	+ .77	4	+ .60	25	+ .48
24	+ .06	14	.22	5	+ .66	26	.57
25	.02	15	.14	6	+ .73	27	.64
26	.05	16	.03	7	+ .80	28	.66
27	.07	17	.01	9	+ .91	29	.71
28	.10	18	.15	10	+ .95	30	.71
29	+ .87	19	.13	11	+ .98	31	.77
30	+ .94	20	.16	12	.04	Aug. 1	.79
31	+ .97	21	.30	13	.10	2	.75
June 1	.05	22	.25	14	.20	3	.78
2	.12	23	.38	15	.25	Sept. 26	.84
3	.19	24	a .35	16	.38	Oct. 4	.88
4	.12	25	+ .46	17	.35	Nov. 9	1.23
5	.06	26	+ .63	18	.36	22	1.25
6	.08	27	+ .73	19	.50	26	.40
7	.13	28	.22	20	.52	Dec. 3	1.17
8	.16	29	.26	21	.57	10	1.28
9	.19	30	.29	22	.59	17	1.03
10	.22	July 1	.38	23	.64	31	.25
11	.25	2	.41				

a Estimated.

Ko VB 7. Lee Paper Co. well 7A. About 500 feet west of west edge of mill pond and 250 feet south of Washington St. extended. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.30	2.90	3.71	....	4.48	4.10	4.43
2	2.43	2.93	3.60	....	2.48	4.35	4.52
3	2.55	2.92	3.71	....	1.95	4.34	4.62
4	2.38	1.22	3.71	....	3.67	4.50	4.90
5	2.53	.97	3.72	....	3.95	4.55	4.77
6	2.62	.79	3.80	....	4.08	4.62	4.80
7	2.63	.70	....	....	4.00	4.73	4.80
8	2.73	.65	....	....	4.10	4.85	4.75
9	2.79	.45	....	....	4.20	4.78	4.85
10	2.82	.54	....	....	4.40	4.85	4.92

Ko VB 7--Continued.

Water level at 2:00 a.m., from recorder graph

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	2.84	0.52	....	....	4.35	4.80	4.85
12	1.14	2.42	....	....	4.25	4.82	2.42
1388	2.54	....	....	4.65	....	4.05
14	2.72	....	....	4.60	....	4.28
15	2.86	....	....	4.60	....	4.42
16	3.19	....	....	4.75	....	4.45
17	2.85	....	....	2.60	....	4.52
18	3.60	2.77	....	....	3.80	....	4.60
19	3.55	3.37	....	....	4.13	....	4.58
20	3.61	3.41	....	....	4.31	....	5.33
21	3.71	3.48	....	....	4.25	....	4.41
22	3.82	3.49	....	....	4.27	4.80	3.93
23	3.82	3.55	....	....	4.33	5.05	3.94
24	3.77	1.50	....	....	4.55	4.90	3.98
25	3.76	1.18	....	....	4.53	4.90	....
26	1.64	3.20	....	3.80	4.75	a 4.86	....
27	1.20	3.39	....	3.95	4.60	2.55	2.40
28	2.69	3.44	....	4.20	4.59	2.10	....
29	0.95	2.72	3.53	....	4.35	3.42	4.05	....
30	.72	2.75	3.52	....	4.42	2.56	4.25	....
31	.62	....	3.72	....	....	1.98	....	3.80

a Estimated.

Kalamazoo Township

Ko Ko 5. City of Kalamazoo, Henson property. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 2 S., R. 11 W., about 1,380 feet east and 450 feet north of center of section. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	8.88	Mar. 16	8.76	May 25	8.63	Sept. 28	9.30
19	8.70	30	8.78	June 29	8.85	Oct. 26	9.28
Feb. 2	8.75	Apr. 13	8.64	July 27	9.08	Nov. 30	9.58
16	8.23	27	8.68	Aug. 31	9.30	Dec. 28	8.80
Mar. 2	8.60	May 11	8.79				

Ko Ko 15. City of Kalamazoo, Michigan Ave. station. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 2 S., R. 11 W., about 290 feet east of Wallace Ave. and 30 feet south of Schipper's Lane. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	12.80	Mar. 2	10.23	Apr. 13	9.11	Sept. 28	19.70
19	13.14	16	10.36	27	9.16	Oct. 26	17.01
Feb. 2	12.05	30	10.95	May 11	20.41	Dec. 28	14.63
16	11.28						

Ko Ko 42. Western Michigan College of Education, Gateway golf course. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 2 S., R. 11 W., about 1000 feet north of U. S. Highway 12 and 500 feet west of Vande Glessen Road. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	35.13	Mar. 16	34.89	May 25	35.10	Sept. 28	35.82
19	35.12	30	35.01	June 29	35.35	Oct. 26	35.91
Feb. 2	34.96	Apr. 13	34.84	July 27	35.56	Nov. 30	35.93
16	34.60	May 11	35.13	Aug. 31	35.79	Dec. 28	35.63

Ko Ko 43. Oakwood, Inc. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 2 S., R. 11 W., about 350 feet west of Oakland Drive and 20 feet north of Whites Road extended. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	27.78	Mar. 16	27.77	May 25	27.82	Sept. 28	28.43
19	27.83	30	27.83	June 29	27.95	Oct. 26	28.54
Feb. 2	27.85	Apr. 13	27.69	July 27	28.07	Nov. 30	28.63
16	27.75	27	27.70	Aug. 31	28.30	Dec. 28	28.62
Mar. 2	27.71	May 1	27.78				

Ko Ko 121. Allied Paper Co., Monarch Division. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 2 S., R. 11 W., about 160 feet west of New York Central railroad spur on each side of building and 150 feet south of Cork St. Records available: 1946-49. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	9.02	Feb. 2	8.99	Mar. 2	8.95	Mar. 30	8.93
19	9.02	16	8.98	16	8.94	Apr. 13	8.91

Ko Ko 136. Millwood Community well 1. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 2 S., R. 11W., about 100 feet south of Winton Ave. and 90 feet east of Moreland St. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.61	40.45	39.78	39.29	38.10	40.32	41.2	41.2	41.4	41.3	....	41.6
2	40.23	40.51	39.53	39.38	40.54	40.37	41.7	41.0	449.5	41.1	41.9	41.6
3	40.46	40.30	39.65	39.34	38.02	40.40	42.0	40.6	41.8	41.0	41.4	41.7
4	40.43	40.17	39.65	39.22	38.12	39.74	41.8	40.7	41.4	41.0	41.3	41.8
5	40.29	40.21	39.66	39.21	39.44	40.32	42.3	41.0	41.1	41.1	41.6	42.0
6	40.32	40.55	39.83	39.04	39.58	40.90	41.9	41.8	41.1	41.0	41.7	41.9
7	40.41	40.35	39.82	39.35	....	40.77	40.6	42.1	41.1	40.9	41.4	41.8
8	40.47	40.40	39.63	39.22	....	40.80	40.7	41.0	41.1	41.0	41.4	41.8
9	40.67	40.37	39.52	39.56	....	41.00	40.7	41.8	41.0	....	41.4	41.6
10	40.58	40.28	39.69	39.62	....	41.22	40.2	42.3	41.1	....	41.3	41.5
11	40.65	40.31	39.82	39.32	53.77	41.45	40.1	42.4	41.2	....	41.3	41.5
12	40.43	40.30	39.93	39.05	44.82	41.65	40.4	41.2	449.7	41.5	41.3	41.7
13	40.38	40.25	40.02	39.04	....	41.32	40.3	41.1	41.0	41.4	41.0	41.5
14	40.63	40.12	39.62	39.18	....	40.78	41.1	41.3	40.9	41.1	41.0	41.4
15	40.57	39.88	39.97	38.95	39.76	40.04	40.1	41.4	40.9	41.3	41.3	41.6
16	40.59	39.99	39.75	38.80	39.56	39.8	40.6	41.5	41.1	41.2	41.4	41.5
17	40.53	39.99	39.53	38.93	39.43	39.7	40.7	41.8	41.0	41.1	41.6	41.6
18	40.65	39.73	39.40	38.70	39.35	39.6	40.8	41.7	41.1	41.1	41.5	41.7
19	40.15	39.84	39.83	38.65	39.56	39.8	41.3	42.2	41.0	41.1	41.5	42.1
20	40.53	39.78	39.84	38.65	39.15	39.8	41.8	41.7	40.9	41.2	41.9	41.6
21	40.37	39.80	39.60	39.04	39.14	40.2	41.6	42.2	40.9	41.1	42.0	41.5
22	40.37	39.70	39.56	38.75	39.17	39.6	40.9	42.0	40.9	41.0	41.8	41.3
23	40.33	39.83	39.51	39.10	39.16	40.0	41.2	42.4	41.0	41.3	42.1	41.4
24	40.36	39.90	39.57	39.50	39.11	40.8	41.3	42.5	40.9	41.4	41.8	41.4
25	40.37	39.75	39.68	39.20	39.19	44.0	41.5	43.0	40.9	41.5	42.0	41.9
26	40.16	40.06	39.70	38.70	38.96	40.4	42.6	42.9	41.1	41.7	42.0	41.5
27	40.37	39.80	39.70	38.79	39.13	40.2	42.1	43.0	40.9	41.6	41.8	41.7
28	40.16	39.65	39.63	38.50	39.06	43.5	42.5	42.8	40.9	....	42.0	41.3
29	40.32		39.87	38.17	39.15	41.3	43.1	41.5	41.0	....	41.9	41.3
30	40.37		39.59	38.11	39.25	40.6	41.2	41.6	41.0	....	41.8	41.2
31	40.20		39.38		39.91		41.2	41.5		....		41.3

a Estimated.

Schoolcraft Township

Ko Sc 4. H. H. Chamberlain. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 4 S., R. 11 W., about 1.5 miles east of Schoolcraft and 0.5 mile south of the Schoolcraft-Vicksburg road. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	13.64	Mar. 28	12.98	June 27	12.68	Oct. 11	13.69
11	13.74	Apr. 4	12.48	July 11	12.75	18	13.80
17	13.79	11	12.22	Aug. 1	13.00	25	13.84
23	13.49	18	12.13	8	13.00	Nov. 2	13.85
31	13.52	25	12.13	16	13.10	8	13.98
Feb. 7	13.40	May 4	12.25	22	13.17	15	14.07
13	13.30	9	12.32	28	13.17	21	14.10
21	12.80	23	12.46	Sept. 6	13.33	28	14.17
28	12.80	30	12.52	13	13.39	Dec. 6	14.21
Mar. 7	12.82	June 6	12.39	19	13.48	13	14.30
14	12.87	13	12.65	27	13.54	19	14.36
21	12.95	20	12.67	Oct. 4	13.65	26	14.10

Kalkaska County

Blue Lake Township

Ka Bk 22. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 28 N., R. 5 W. Driven observation well, diameter 2 inches, depth 14.15 feet. Records available: 1949.

Jan. 13	11.47	Apr. 14	10.19	July 19	10.44	Oct. 13	11.45
Feb. 15	11.56	May 17	10.36	Aug. 16	10.80	Nov. 8	11.69
Mar. 15	11.62	June 14	10.62	Sept. 15	11.15	Dec. 14	11.77

Clearwater Township

Ka Cw 13. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 27 N., R. 5 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	16.39	Apr. 14	15.94	July 19	16.00	Oct. 13	16.62
Feb. 15	16.60	May 17	15.93	Aug. 16	16.22	Nov. 11	16.83
Mar. 15	16.77	June 14	16.06	Sept. 15	16.40	Dec. 14	17.11

Ka Cw 100. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 27 N., R. 5 W. Records available: 1939-49.

Jan. 14	13.95	Apr. 14	13.19	July 19	13.31	Oct. 13	14.12
Feb. 15	14.08	May 17	13.34	Aug. 16	13.63	Nov. 11	14.31
Mar. 15	14.14	June 14	13.43	Sept. 15	13.87	Dec. 14	14.49

Lenawee County

City of Adrian

Lw AD 1. City of Adrian, 355 feet east of Springbrook St. and 265 feet north of W. Maple St. Drilled public-supply well, diameter 27 inches, depth 83.5 feet. Records available: 1949. Nov. 17, 6.08; Nov. 25, 6.20; Dec. 1, 6.13; Dec. 10, 5.72; Dec. 15, 5.59; Dec. 23, 4.80; Dec. 29, 4.37.

Livingston County

City of Howell

Lg H0 12. City of Howell old No. 12 well. 105 feet east of Michigan Ave. and 160 feet south of Pere Marquette railroad tracks. Unused drilled well, diameter 8 inches, depth 58.4 feet. Records available: 1949.

Sept. 5	12.42	Oct. 9	11.45	Nov. 7	11.40	Dec. 5	11.85
12	11.65	17	11.50	14	11.25	12	11.65
19	11.65	24	11.50	21	11.15	19	11.15
26	11.70	31	11.40	28	12.05	26	11.60
Oct. 4	11.80						

Manistee County

Norman Township

Ms Nr 1. U. S. Forest Service. In NE $\frac{1}{4}$ NF $\frac{1}{4}$ sec. 13, T. 21 N., R. 14 W., 845 feet west of east section line and 70 feet south of north section line. Unused drilled well, diameter 6 inches, depth 61.7 feet. Records available: 1949.

Jan. 24	15.53	Apr. 26	13.86	July 25	14.29	Nov. 29	16.08
Feb. 22	15.52	May 24	13.88	Aug. 29	14.91	Dec. 19	16.12
Mar. 29	14.88	June 27	14.14	Oct. 24	15.73		

Mason County

Logan Township

Ma Lo 1. U. S. Forest Service. In SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 17 N., R. 15 W., 790 feet north of south section line, 800 feet west of quarter corner. Unused drilled camp-supply well, diameter 6 inches, depth 31.8 feet. Records available: 1948-49.

1948 Measurements

Nov. 18	17.10	Nov. 25	17.17	Dec. 2	17.29	Dec. 26	17.52
19	17.10	26	17.18	3	17.30	27	17.53
20	17.10	27	17.19	22	a17.50	28	17.54
21	17.12	28	a17.23	23	17.50	29	17.54
22	17.14	29	a17.26	24	17.51	30	a17.56
23	17.15	30	17.27	25	17.51	31	a17.57
24	a17.16	Dec. 1	17.28				

Ma Lo 1--Continued.

Water level at 2:00 a.m., from recorder graph, 1949

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	.....	17.82	17.85	17.33	16.31	a15.99	16.12	a16.50	16.99	17.41	17.78
2	.....	17.83	17.83	17.29	16.29	a15.97	16.13	a16.57	17.01	17.42	17.79
3	17.62	17.83	17.82	17.26	16.29	a15.96	16.14	a16.59	17.02	17.44	17.81
4	17.62	17.83	17.80	17.22	16.28	a15.96	16.14	16.59	17.03	17.45	17.82
5	17.63	17.84	17.77	17.19	16.27	a15.96	16.17	16.61	17.05	17.46	17.83
6	17.64	17.84	17.76	17.15	16.25	a15.95	16.17	16.61	17.06	17.48	17.84
7	17.65	17.84	17.76	17.10	16.24	a15.95	16.19	16.63	17.08	17.49	17.85
8	17.66	17.85	17.73	17.06	16.23	a15.96	16.20	16.65	17.10	17.50	17.86
9	17.67	17.85	17.72	17.02	16.21	a15.96	16.21	16.66	17.12	17.53	17.87
10	17.68	17.86	17.71	16.97	16.20	a15.96	16.23	16.68	17.13	17.53a	17.89
11	17.69	17.86	17.70	16.93	16.19	a15.96	16.24	16.69	a17.15	17.53a	17.90
12	17.69	17.87	17.69	16.89	16.17	a15.97	16.25	16.69	17.16	17.55a	17.92
13	17.70	17.87	17.68	16.83	16.16	15.97	16.26	16.71	17.17	17.57a	17.93
14	17.71	17.88	17.67	16.79	16.15	15.97	16.27	16.72	17.19	17.58a	17.95
15	17.72	17.87	17.67	16.74	16.14	15.97	16.28	16.73	17.20	17.60a	17.96
16	17.73	17.88	17.66	16.71	16.13	16.00	16.30	16.75	17.21	17.60a	17.97
17	17.72	17.89	a17.65	16.67	16.11	16.01	16.31	16.76	17.22	17.62a	17.99
18	17.72	17.89	a17.64	16.63	16.10	16.02	a16.32	16.77	17.24	17.63	18.01
19	17.71	17.90	a17.64	16.59	16.08	a16.02	a16.34	16.79	17.25	17.64	18.02
20	17.74	17.90	a17.63	16.56	16.07	16.00	16.36	16.80	17.27	17.65	18.03
21	17.74	17.91	17.61	16.52	16.06	16.00	16.36	16.82	17.28	17.66	18.04
22	17.75	17.91	17.60	16.49	16.04	a16.01	16.37	16.84	17.29	17.67	18.05
23	17.76	17.92	17.58	16.47a	16.03	a16.02	a16.40	16.85	17.30	17.69	18.06
24	17.76	17.92	17.55	16.45a	16.02	a16.03	a16.42	16.86	17.32	17.70	18.07
25	17.78	17.92	17.52	16.43	16.03	a16.04	16.46	16.88	17.33	17.71	18.08
26	17.79	17.91	17.51	16.40	16.02	a16.05	16.46	16.89	a17.35	17.72	18.09
27	17.79	17.87	17.48	16.38	16.02	16.08	16.47	16.90	17.36	17.73	a18.10
28	17.78	17.85	17.42	16.37	16.02	16.08	16.49	16.92	17.37	17.74	a18.11
29	17.80		17.41	16.35	16.01	16.09	16.50	16.94	17.38	17.75	18.13
30	17.81		17.39	16.33	a16.00	16.10	16.52	16.96	17.39	17.76	18.13
31	17.82		17.36		15.99		16.54	16.97		17.77	

a Estimated.

Montmorency County

Albert Township

My Ab 1. Michigan Dept. of Conservation. In SW $\frac{1}{4}$ sec. 22, T. 29 N., R. 2 E., 155 feet north of county road 612 and about 4,000 feet east of Avery Lake road. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.37	3.19	....	1.64	1.49	1.43	....	1.54	1.56	1.58	1.36	1.28
2	3.36	3.17	....	1.60	1.38	1.42	....	1.52	1.63	1.57	1.29	1.20
3	3.44	3.14	2.37	1.56	1.48	1.41	....	1.56	1.63	1.53	1.36	1.24
4	3.50	3.01	2.31	1.52	1.50	1.43	....	1.60	1.60	1.49	1.35	1.11
5	3.43	3.01	2.27	1.46	1.51	1.43	1.48	1.59	1.55	1.52	1.40	1.13
6	3.32	2.98	2.35	1.38	1.49	1.39	1.46	1.58	1.63	1.53	1.35	1.16
7	3.34	2.84	2.39	1.42	1.53	1.45	1.46	1.56	1.63	1.42	1.33	1.09
8	3.43	2.88	2.33	1.40	1.50	1.51	1.49	1.56	1.58	1.50	1.28	1.15
9	3.46	2.73	2.36	1.49	1.47	1.51	1.46	1.55	1.63	1.48	1.36	1.26
10	3.56	2.75	2.37	1.53	1.52	1.51	1.45	1.56	1.63	1.47	1.28	1.24
11	3.54	2.76	2.32	1.48	1.52	1.47	1.49	1.59	1.64	1.44	1.29	1.21
12	3.38	2.66	2.31	1.44	1.45	1.46	1.46	1.60	1.62	1.43	1.32	1.08
13	3.33	2.60	2.33	1.40	1.45	1.46	1.46	1.61	1.58	1.50	1.24	1.17
14	3.35	2.63	2.37	1.43	1.43	1.43	1.48	1.61	1.57	1.50	1.19	1.19
15	3.45	2.47	2.43	1.48	1.50	1.39	1.48	1.61	1.59	1.49	1.21	1.18
16	3.34	2.60	2.40	1.47	1.48	1.48	1.48	1.62	1.57	1.45	1.24	1.16
17	3.47	2.62	2.36	1.53	1.48	1.46	1.48	1.60	1.56	1.46	1.29	1.13
18	3.44	2.60	2.37	1.52	1.45	1.46	1.46	1.59	1.55	1.46	1.29	1.11
19	3.14	2.59	2.38	1.56	1.42	1.48	1.43	1.62	1.54	1.45	1.25	1.13
20	3.50	2.56	2.40	1.57	1.48	1.44	1.48	1.65	1.53	1.42	1.25	1.14
21	3.45	2.62	2.32	1.56	1.46	1.41	1.50	1.65	1.58	1.41	1.36	1.03
22	3.36	2.50	2.29	1.54	1.39	1.42	1.45	1.66	1.55	1.30	1.38	1.00
23	3.43	2.49	2.25	1.50	1.42	1.44	1.54	1.64	1.54	1.38	1.23	1.07
24	3.32	2.43	2.32	1.54	1.44	1.40	1.53	1.66	1.59	1.45	1.30	1.13
25	3.43	....	2.23	1.62	1.47	1.39	1.50	1.66	1.60	1.45	1.27	1.15

My Ab 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	3.43	....	2.23	1.54	1.43	1.40	1.50	1.65	1.59	1.38	1.32	1.02
27	3.35	....	2.10	1.53	1.43	1.45	1.50	1.66	1.51	1.43	1.23	1.02
28	3.19	....	2.02	1.59	1.43	1.46	1.50	1.60	1.53	1.38	1.28	1.02
29	3.33		2.05	1.57	1.43	1.47	1.53	1.61	1.54	1.36	1.20	1.04
30	4.72		1.92	1.54	1.43	1.46	1.55	1.61	1.53	1.31	1.22	1.10
31	3.44		1.77		1.43		1.55	1.59		1.33		1.06

My Ab 7. Michigan Dept. of Conservation. In NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 29 N., R. 2 E., about 200 feet east of Avery Lake Road and 20 feet south of county road 612. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	0.35	May 18	+0.44	July 20	0.94	Sept. 27	1.98
Feb. 17	.33	31	+ .30	22	1.05	Oct. 14	1.82
Mar. 16	+0.08	June 15	+ .39	Aug. 17	1.69	Nov. 11	1.89
Apr. 15	.62	28	+ .15	Sept. 21	1.91	Dec. 15	1.39
May 9	.51						

Briley Township

My Br 6. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 31 N., R. 2 E. Records available: 1934-49.

Jan. 17	11.31	May 9	9.73	June 28	10.14	Sept. 27	11.95
Feb. 17	11.11	18	9.80	July 20	10.54	Oct. 14	12.07
Mar. 16	10.93	31	9.81	22	10.63	Nov. 11	12.21
Apr. 15	9.67	June 15	10.04	Aug. 17	11.29	Dec. 15	12.17

My Br 8. Michigan Dept. of Conservation. In NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 30 N., R. 2 E., 150 feet south and 40 feet east of 90-degree bend in road. Records available: 1946-49.

Jan. 17	3.62	May 18	2.46	July 20	2.78	Sept. 27	3.34
Feb. 17	3.79	31	2.49	22	2.86	Oct. 14	3.48
Mar. 16	3.88	June 15	2.61	Aug. 17	3.02	Nov. 11	3.71
Apr. 15	2.28	June 28	2.65	Sept. 21	3.29	Dec. 15	3.98
May 9	2.39						

My Br 15. Michigan Dept. of Conservation. Records available: 1934-44. Measurement discontinued.

My Br 16. Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T. 31 N., R. 2 E., 347 feet east of State Highway 33, 0.2 mile north of south section line road. Drilled observation well, diameter 2 inches, depth 18.2 feet. Records available: 1948-49. Nov. 12, 1948, 14.54; Dec. 20, 14.46.

Jan. 17	14.52	May 18	13.44	Aug. 17	14.33	Oct. 27	14.79
Feb. 17	14.53	June 15	13.64	Sept. 27	14.71	11	14.79
Mar. 16	14.42	July 20	13.82	Oct. 14	14.70	Dec. 15	14.69
Apr. 15	13.43						

My Br 18. Michigan Dept. of Conservation. Records available: 1938-40, 1942-44. Measurement discontinued.

My Br 28. Michigan Dept. of Conservation. Records available: 1938-42. Measurement discontinued.

Hillman Township

My Hm 1. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 31 N., R. 4 E. Records available: 1935-49.

Jan. 17	1.29	May 18	1.07	July 20	1.27	Sept. 27	1.81
Feb. 17	1.13	31	1.20	22	1.38	Oct. 14	1.74
Mar. 16	1.30	June 15	.98	Aug. 17	1.53	Nov. 11	1.83
Apr. 15	.99	28	.50	Sept. 21	1.74	Dec. 15	1.73
May 9	1.28						

My Hm 12. Michigan Dept. of Conservation. Records available: 1935-44. Measurement discontinued.

My Hm 22. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 31 N., R. 3 E. Records available: 1936-44, 1948-49.

Jan. 17	7.48	Apr. 15	5.83	July 20	6.44	Oct. 14	7.50
Feb. 17	7.49	May 18	5.78	Aug. 17	6.92	Nov. 11	7.63
Mar. 16	7.28	June 15	6.08	Sept. 27	7.37	Dec. 15	7.76

My Hm 23. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 31 N., R. 4 E. Records available: 1935-37, 1946-49.

Jan. 17	0.71	May 9	0.65	June 28	0.82	Oct. 14	0.96
Feb. 17	.80	18	.67	July 20	.92	Nov. 11	.96
Mar. 16	.62	31	.73	Aug. 17	.98	Dec. 15	.89
Apr. 15	.57	June 15	.69	Sept. 21	.97		

My Hm 30. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 31 N., R. 3 E. Records available: 1936-43. Measurement discontinued.

Loud Township

My Ld 6. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 29 N., R. 3 E., about 2.3 miles west of State Highway M-33 and 230 feet south of county road 612. Records available: 1946-49.

Jan. 17	5.67	May 18	4.35	July 20	4.74	Sept. 27	5.61
Feb. 17	5.70	31	4.37	22	4.80	Oct. 14	5.72
Mar. 16	5.62	June 15	4.41	Aug. 17	5.19	Nov. 11	5.81
Apr. 15	4.55	June 28	4.44	Sept. 21	5.55	Dec. 15	5.86
May 9	4.40						

Montmorency Township

My My 1. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 32 N., R. 2 E., 27 feet east of Michigan Highway 33. Drilled unused school-supply well, diameter 2 inches, depth 18.35 feet. Records available: 1948-49. May 26, 1948, 18.38; Sept. 17, 19.29; Oct. 25, 19.65; Nov. 12, 19.75; Dec. 20, 19.64.

Jan. 17	19.93	Apr. 15	19.49	July 20	19.69	Oct. 14	20.46
Feb. 17	19.95	May 18	19.55	Aug. 17	20.97	Nov. 11	20.66
Mar. 16	19.98	June 15	19.63	Sept. 27	20.32	Dec. 15	20.81

Rust Township

My Rs 4. Michigan Dept. of Conservation. About the center of SW $\frac{1}{4}$ sec. 5, T. 29 N., R. 4 E., about 2.3 miles east of State Highway M-33 and 50 feet northwest of dirt road. Records available: 1946-49.

Mar. 16	12.90	May 18	11.45	June 15	11.41	Aug. 17	12.19
Apr. 15	12.04	31	11.48	July 20	11.64	Sept. 27	12.96

My Rs 18. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 30 N., R. 4 E. Records available: 1935-49.

Jan. 17	+0.81	May 18	+0.57	July 20	1.26	Sept. 27	0.36
Feb. 17	+ .72	31	+ .29	22	1.38	Oct. 14	+ .08
Apr. 15	+ .62	June 15	+ .81	Aug. 17	.78	Nov. 11	+ .25
May 9	+ .34	28	+ .03	Sept. 21	1.06	Dec. 15	+ .44

Oakland County

Total precipitation as recorded at Pontiac during 1949 was 34.86 inches or 5.41 inches above normal. All months showed above-normal precipitation except April, May, June, and November.

Ground water for municipal and industrial supply in the Pontiac area

is withdrawn from wells finished in permeable glacial deposits. Available records of withdrawal for municipal supply by the city of Pontiac indicates that average daily withdrawal rates ranged from 9.4 million gallons in February to 13.2 million gallons in August and averaged 10.7 million gallons during the year.

Highest recorded water-level stages for the limited number of observation wells presently available in this area occurred in the period March 21 through May 4. This time of occurrence for lowest recorded stage agrees favorably with the time of minimum water use by industrial or public supply and by vegetation and correlates with the close of a period of above-normal precipitation. The net change of ground-water levels during the year, as indicated by two observation wells in the area, ranged from a decline of 1.2 feet to a decline of 5.1 feet, an average net decline of 3.15 feet.

City of Pontiac

Oa PT 1. City of Pontiac. Well 6 at Walnut St. pumping station, about 200 feet west of supply well 1. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	97.5	Apr. 1	97.4	July 5	111.6	Sept. 30	106.3
5	98.7	4	96.9	6	112.7	Oct. 3	105.7
7	98.4	6	98.1	8	109.9	5	107.6
10	97.3	8	97.7	11	108.3	7	108.4
12	98.8	11	97.4	13	109.2	10	107.2
14	98.4	13	98.0	15	107.9	12	108.3
17	98.2	15	95.8	18	99.9	14	108.6
19	97.8	18	93.8	20	102.2	17	106.3
21	97.6	20	98.0	22	101.6	19	108.3
24	95.5	22	97.9	25	100.9	21	107.0
26	98.9	25	96.3	27	102.0	24	104.9
28	97.8	27	96.6	29	100.3	26	107.3
31	96.6	29	99.3	Aug. 1	109.3	28	107.9
Feb. 2	97.9	May 2	98.0	3	107.4	Nov. 2	104.5
4	97.4	4	98.5	5	109.2	4	104.5
7	97.4	6	100.3	8	108.3	7	104.5
9	98.6	9	99.3	10	112.8	9	105.4
11	99.4	11	100.1	12	112.1	11	104.9
14	98.3	13	101.5	15	110.0	14	103.9
16	99.4	16	102.2	17	110.6	16	106.1
18	99.4	18	104.7	19	110.3	18	106.1
21	98.5	20	103.9	22	97.5	21	104.3
23	99.3	23	100.7	24	111.3	23	104.9
25	99.6	25	102.1	26	111.2	25	102.4
28	97.6	27	99.4	29	110.0	28	102.6
Mar. 2	98.9	31	100.7	31	111.3	30	101.9
4	98.3	June 3	103.9	Sept. 2	110.9	Dec. 2	102.3
7	97.9	6	103.9	5	105.0	5	101.5
9	96.9	10	106.6	7	107.5	7	101.7
11	97.9	13	106.9	9	108.0	9	105.0
14	96.3	15	106.3	12	106.2	12	103.7
16	97.3	17	106.3	14	105.9	14	105.4
18	98.2	20	105.8	16	106.5	16	105.6
21	96.7	22	107.5	19	104.3	19	104.5
23	97.0	24	108.1	21	108.2	21	104.3
25	96.5	27	107.9	23	108.2	23	105.7
28	95.7	29	109.5	26	105.4	26	103.5
30	100.8	July 1	110.7	28	106.4		

On PT 3. City of Pontiac. At pump house of East Boulevard supply well, near intersection of East Blvd. and Mount Clemens St. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	41.9	Apr. 4	38.6	July 5	43.6	Sept. 28	42.9
5	41.8	6	38.5	6	44.3	30	42.8
7	41.9	8	38.6	8	44.5	Oct. 3	43.2
10	41.7	11	38.8	11	43.4	5	43.4
12	41.7	13	38.8	13	43.6	7	43.5
14	41.8	15	38.6	15	43.5	10	43.1
17	41.8	18	38.4	18	43.4	12	42.9
19	41.1	20	38.5	20	43.7	Oct. 17	42.3
21	41.2	22	38.5	22	43.5	19	42.6
24	41.3	25	38.4	25	43.5	21	42.9
26	41.3	27	38.5	27	43.7	24	42.5
31	41.5	29	38.6	29	43.4	26	42.8
Feb. 2	41.8	May 2	38.5	Aug. 1	44.4	28	42.7
4	41.8	4	38.3	3	44.0	Nov. 2	43.3
7	42.0	6	38.5	5	43.6	4	43.3
9	42.2	9	38.8	8	43.6	7	43.3
11	42.1	11	39.1	10	43.6	9	43.3
14	41.6	13	39.1	12	43.6	11	43.4
16	40.8	16	39.2	15	43.9	14	43.3
18	40.9	18	40.0	17	44.1	16	43.3
21	41.0	20	39.1	19	44.1	18	43.3
23	42.0	23	39.3	22	43.8	21	43.3
25	41.2	25	39.1	24	45.9	23	43.3
28	40.8	27	39.8	26	45.4	25	43.5
Mar. 2	40.9	31	40.3	29	44.2	28	43.4
4	40.8	June 3	40.7	31	44.2	30	42.5
7	40.2	6	41.2	Sept. 2	44.2	Dec. 2	42.5
9	40.2	8	41.4	5	44.1	5	41.7
11	40.3	10	41.8	7	44.1	7	42.6
14	39.5	13	42.3	9	44.1	9	42.8
16	39.6	15	42.1	12	44.1	12	42.6
18	40.4	17	42.0	14	44.0	14	42.6
21	39.7	20	42.3	16	44.1	16	42.7
23	39.6	22	42.6	19	42.2	19	42.5
25	39.7	24	43.0	21	43.0	21	40.7
28	39.5	27	43.4	23	42.6	23	40.9
30	39.5	29	43.6	26	42.8	26	41.0
Apr. 1	38.5	July 1	43.7				

On PT 4. G. A. Blaylock. Old Pierce well, about 150 feet west of Lake St. and 190 feet north of Grand Trunk railroad tracks. Records available: 1946-49. Measurement discontinued. July 25, 112.22; Sept. 19, 107.06; Sept. 27, 110.72; Oct. 10, 108.70; Oct. 24, 107.60; Nov. 7, 107.70.

Day	Jan.	Feb.	Mar.	Apr.	May	Aug.
1	.....	100.0	101.5	99.9	100.9	.....
2	.....	100.9	101.8	100.8	99.3	.....
3	100.7	101.3	102.2	99.6	100.4	110.70
4	100.3	100.6	102.0	98.6	101.2	.....
5	100.7	100.9	101.5	99.5	102.8	.....
6	99.4	100.2	100.0	99.9	103.5	.....
7	99.7	99.2	99.4	100.0	.....	.....
8	100.0	101.4	100.3	99.9	101.6	112.85
9	99.8	101.2	100.4	100.4	100.7	.....
10	99.5	101.7	100.7	100.7	100.9	.....
11	99.6	101.9	100.9	99.9	102.0	.....
12	100.9	102.2	101.0	100.7	103.3	.....
13	101.0	101.1	100.3	100.7	.....	.....
14	101.5	100.8	98.8	100.9	.....	.....
15	102.0	101.8	99.5	99.7	103.2	111.90
16	100.3	102.5	100.0	99.3	103.1	.....
17	100.5	102.4	100.1	98.5	.....	.....
18	100.7	102.5	100.4	97.1	.....	.....
19	99.4	102.5	100.6	98.4	.....	.....
20	101.5	101.7	99.9	99.8	.....	.....

Oa PT 4--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	Aug.
21	101.4	101.0	98.5	99.6	.....	.....
22	100.9	101.6	100.3	100.7	102.7	.....
23	100.4	101.8	100.2	100.3	103.3	.....
24	99.1	103.1	101.1	100.1	103.7	.....
25	99.8	102.8	100.8	99.2	103.3	.....
26	100.4	102.8	101.3	98.8	102.9	.....
27	101.0	101.9	99.1	99.4	103.5	.....
28	100.8	100.3	99.0	101.3	102.7	.....
29	101.6		100.2	101.7	101.7	.....
30	101.1		100.3	101.5	101.4	.....
31	100.1		100.6		100.91	.....

Otsego County

Otsego Lake Township

Os Ok 105. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32 T. 29 N.,
R. 3 W. Records available: 1933-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	3.07	Apr. 14	2.26	July 19	3.09	Oct. 13	3.68
Feb. 15	3.03	May 17	2.48	Aug. 16	3.53	Nov. 11	3.77
Mar. 15	2.99	June 14	2.72	Sept. 15	3.61	Dec. 14	3.45

Os Ok 106. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 29 N.,
R. 3 W. Records available: 1933-49.

Jan. 14	8.39	Apr. 14	7.09	July 19	8.08	Oct. 13	8.72
Feb. 15	8.23	May 17	7.54	Aug. 16	8.37	Nov. 8	8.84
Mar. 15	8.19	June 14	7.94	Sept. 15	8.60	Dec. 14	8.94

Ottawa County

Total precipitation as recorded at Holland during 1949 was 34.82 inches or 2.16 inches above normal. Months of above-normal precipitation included January, February, March, July, and December. Extended periods of deficient precipitation occurred from April through June.

Permeable deposits of sand and gravel form the principal aquifer in the Holland area. Average withdrawal of ground water for municipal supply during 1949 ranged from 1.69 million gallons in February to 3.73 million gallons in August and averaged 2.33 million gallons per day during the year.

Highest observed water-level stages in observation wells in the Holland area occurred within the period January 25 through March 22. This period marks the close of the season of minimum ground-water withdrawal by industrial and municipal supplies. Lowest recorded ground-water stages occurred within the period May 10 through December 13, with the greatest number of occurrences about the latter part of October. In general, these low stages follow shortly after the close of the season of peak withdrawal for industrial and public supply.

Net changes in ground-water level during the year ranged from declines as great as 14.4 feet to rises as great as 8.7 feet, with an average decline for the five wells observed of 5.9 feet.

Holland Township

Ot Ho 2. City of Holland, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T. 5 N., R. 15 W., 507 feet west of Waverly Road and 28 feet south of 8th St. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	40.88	Feb. 22	41.74	Mar. 29	41.87	Apr. 26	41.77
25	41.25	Mar. 1	41.85	Apr. 5	41.73	May 3	41.93
Feb. 1	42.04	8	41.60	12	41.82	Dec. 20	42.62
8	41.59	15	41.65	19	42.25	27	42.32
15	41.76	22	41.45				

Ot Ho 4. City of Holland. In SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 5 N., R. 15 W., about 840 feet north of 16th St. and 80 feet east of Waverly Road. Records available: 1947-49. Measurement discontinued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.
1	63.17	63.25	63.26	63.02
2	63.08	.....	63.17	63.32
3	63.30	.....	63.26	63.27
4	63.38	.....	63.00	63.24
5	62.87	.....	62.68	62.98
6	62.82	.....	62.92	62.73
7	63.03	.....	63.43	62.98
8	63.17	62.76	63.06	63.09
9	63.21	63.14	63.04	63.48
10	63.82	63.16	63.08	63.55
11	63.78	63.57	63.14	63.37
12	63.16	62.97	63.08	63.18
13	62.99	62.94	63.24	.....
14	62.98	63.27	63.16	.....
15	63.16	62.55	63.24	.....
16	62.87	63.19	63.18	.....
17	63.39	63.51	63.04	.....
18	63.41	63.18	.....	.....
19	62.52	63.17	.....	63.64
20	.....	63.29	.....	.....
21	.....	63.55	.....	.....
22	.....	63.01	62.51	.....
23	.....	63.24	63.01	.....
24	.....	62.96	63.26	.....
25	63.29	62.89	62.79	.....
26	.....	63.45	63.21	.....
27	.....	63.02	62.47	.....
28	.....	62.98	63.01	.....
29	.....	.....	63.28	.....
30	.....	.....	63.28	.....
31	.....	.....	62.88	.....

Ot Ho 5. City of Holland. In NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 5 N., R. 15 W., 730 feet west of Waverly Rd. and 28 feet south of 8th St. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	44.06	Mar. 8	43.25	May 10	44.07	Nov. 8	43.51
11	44.06	15	43.31	17	45.90	15	43.27
18	43.77	22	42.97	24	46.09	22	43.09
25	43.95	29	43.57	Sept. 27	45.90	29	42.83
Feb. 1	43.83	Apr. 5	43.54	Oct. 4	45.85	Dec. 6	42.58
8	43.42	12	43.65	11	44.80	13	42.55
15	43.54	19	43.84	18	44.48	20	42.12
22	43.44	26	43.43	25	44.08	27	42.02
Mar. 1	43.49	May 3	43.45	Nov. 1	43.74		

Ot Ho 7. City of Holland. In $SE\frac{1}{4}SE\frac{1}{4}$ sec. 28, T. 5 N., R. 15 W., about 30 feet west of Waverly Rd. and 30 feet north of 16th St. Dry from Aug. 30 to Nov. 22. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	73.55	Mar. 15	74.02	May 24	74.15	Aug. 2	80.56
11	74.02	22	73.32	31	74.09	9	81.19
18	73.47	29	73.94	June 7	74.45	16	81.38
25	73.67	Apr. 5	73.55	14	74.23	23	81.66
Feb. 1	73.54	12	73.59	21	74.70	Nov. 29	82.15
8	73.26	19	74.31	28	76.51	Dec. 6	82.11
15	73.48	26	73.77	July 5	77.21	13	82.19
22	73.71	May 3	74.06	12	78.29	20	82.13
Mar. 1	73.92	10	74.14	19	79.51	27	82.10
8	73.75	17	73.99	26	80.11		

Ot Ho 8. City of Holland. In $NE\frac{1}{4}SE\frac{1}{4}$ sec. 34, T. 5 N., R. 15 W., about 3,970 feet east of Waverly Rd. and 15 feet south of 24th St. Records available: 1946-49. Well cased to 70 ft. with 8 in. casing and 290 ft. with 6 in.

Date	Water level		Date	Water level		Date	Water level	
	6-inch	8-inch		6-inch	8-inch		6-inch	8-inch
Jan. 4	+0.36	0.23	Mar. 29	+1.68	+3.26	June 7	+2.18	+1.31
11	+ .32	.16	Apr. 5	+2.15	+3.89	14	+2.05	+1.23
18	+ .62	+ .16	12	+2.37	+3.44	21	+2.02	+1.01
25	+ .40	+ .86	19	+2.56	+3.31	28	+1.89	+ .75
Feb. 8	+ .39	+1.20	26	+2.68	+3.36	July 5	+1.75	+ .55
22	+ .51	+2.35	May 3	+2.72	+3.03	12	+1.84	+ .65
Mar. 1	+ .67	.....	10	+2.63	+2.56	19	+1.75	+ .57
8	+ .60	+2.98	17	+2.54	+2.20	26	+1.61	+ .46
15	+ .48	+2.80	24	+2.46	+1.98	Aug. 2	+1.82	+ .94
22	+1.31	+3.07	31	+2.33	+1.71	9	+1.66	+ .85

Ot Ho 9. City of Holland. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 28, T. 5 N., R. 15 W., about 960 feet north of 16th St. and 60 feet west of Waverly Rd. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	60.69	Apr. 5	60.29	July 5	67.41	Oct. 4	72.29
11	61.01	12	60.39	12	69.31	11	73.27
18	60.47	19	61.07	19	70.84	18	73.42
25	60.87	26	60.55	26	70.91	25	74.46
Feb. 1	60.73	May 3	60.78	Aug. 2	70.93	Nov. 1	74.18
8	60.23	10	60.88	9	71.04	8	74.02
15	60.42	17	60.89	16	70.82	15	74.20
22	60.50	24	61.24	23	71.40	22	73.77
Mar. 1	60.73	31	61.32	30	72.46	29	73.29
8	60.45	June 7	61.79	Sept. 6	73.30	Dec. 6	73.15
15	60.68	14	61.80	14	72.42	13	74.25
22	59.97	21	63.25	20	72.41	20	73.87
29	60.65	28	66.07	27	72.49	27	73.56

Ot Ho 10. City of Holland. In $SW\frac{1}{4}SW\frac{1}{4}$ sec. 27, T. 5 N., R. 15 W., about 750 feet north of 16th St. and 150 feet east of Waverly Rd. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	64.15	Apr. 5	63.84	July 5	73.02	Oct. 4	78.05
11	64.50	12	63.90	12	75.50	11	77.85
18	63.96	19	63.63	19	76.63	18	80.23
25	64.36	26	64.09	26	76.56	25	80.78
Feb. 1	64.22	May 3	64.35	Aug. 2	76.53	Nov. 1	79.05
8	63.71	10	64.44	9	76.59	8	79.79
15	63.92	17	64.39	16	76.10	15	79.04
22	64.00	24	64.69	23	76.85	22	78.24
Mar. 1	64.26	31	64.74	30	78.44	29	77.97
8	63.98	June 7	65.12	Sept. 6	78.95	Dec. 6	77.88
15	64.30	14	65.09	14	76.96	13	79.34
22	63.49	21	67.44	20	76.66	20	78.84
29	64.25	28	72.02	27	78.19	27	78.39

Ot HO 12. City of Holland. 67 feet east of Cleveland Ave. extended and 57 feet north of 26th St. extended. Drilled unused public-supply well, diameter 18 inches, depth 28.5 feet. Records available: 1949.

Water level at 2:00, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	4.29	4.70	4.95	4.35	4.89	5.07	5.26	5.25
2	....	4.29	4.72	4.96	4.36	4.88	5.08	5.26	5.24
3	....	4.32	4.73	4.97	4.39	4.89	5.08	5.27	5.23
4	....	4.32	4.74	4.98	4.42	4.90	5.08	5.27	5.22
5	....	4.33	4.75	4.99	4.44	4.90	5.09	5.29	5.21
6	....	4.35	4.76	5.01	4.46	4.92	5.09	5.29	5.19
7	....	4.38	4.78	4.98	4.49	4.93	5.06	5.30	5.17
8	....	4.38	4.80	4.99	a4.51	4.93	5.06	5.31	5.18
9	....	4.40	4.81	4.97	a4.54	4.93	5.06	5.31	5.18
10	....	4.43	4.81	4.78	4.56	4.94	5.06	5.31	a5.15
11	....	4.45	4.83	4.72	4.59	4.95	5.07	5.32	a5.12
12	....	4.46	4.84	4.70	4.55	4.96	5.07	5.33	a5.09
13	....	4.47	4.85	4.70	4.58	4.95	5.08	5.32	a5.06
14	....	4.50	4.86	4.71	4.60	a4.97	5.08	5.32	5.02
15	....	4.51	4.85	4.68	4.63	4.97	5.09	5.33	4.99
16	....	4.52	4.80	4.68	4.65	4.98	5.09	5.34	4.98
17	....	4.54	4.80	4.69	4.67	4.99	5.10	5.35	4.97
18	....	4.54	4.82	4.71	4.68	4.99	5.11	5.35	4.97
19	....	4.55	4.83	4.72	4.71	4.99	5.12	5.33	4.96
20	....	4.57	4.84	4.75	4.73	5.00	5.14	5.34	4.95
21	....	4.57	4.85	4.76	4.75	4.99	5.15	5.34	4.93
22	....	4.57	4.87	4.78	4.77	5.00	5.17	5.33	4.79
23	....	4.61	4.88	4.81	4.78	5.02	5.18	5.30	4.35
24	....	4.62	4.88	4.82	4.80	5.02	5.19	4.30	4.28
25	4.17	4.63	4.89	4.84	4.82	5.03	5.20	5.29	4.26
26	4.16	4.64	4.91	4.86	4.83	5.04	5.21	5.29	4.26
27	4.23	4.65	4.92	4.88	4.85	5.04	5.22	5.27	4.23
28	4.26	4.67	4.93	4.90	4.86	5.05	5.23	5.28	4.24
29	4.26	4.68	4.92	4.73	4.87	5.06	5.23	5.27	....
30	4.27	4.69	4.94	4.41	4.89	5.06	5.24	5.25	....
31		4.70		4.35	4.90		5.25		a4.27

a Estimated.

Ot Ho 21. City of Holland. In NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 5 N., R. 15 W. 15 feet south of 24th St. Drilled observation well, diameter 1 $\frac{1}{2}$ inches, reported depth 290 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 27	47.45	Oct. 25	49.67	Nov. 22	50.64	Dec. 13	51.32
Oct. 4	49.06	Nov. 1	49.79	29	50.76	20	51.34
11	49.07	8	50.09	Dec. 6	51.00	27	51.50
18	49.42	15	50.27				

Ot Ho 22. City of Holland. In NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 5 N., R. 15 W. 15 feet south of 24th St. Drilled observation well, diameter 1 $\frac{1}{2}$ inches, reported depth 70 feet. Records available: 1949.

Sept. 27	+3.00	Oct. 25	0.93	Nov. 22	1.01	Dec. 13	0.97
Oct. 4	1.25	Nov. 1	.90	29	.99	20	.87
11	.89	8	.91	Dec. 6	1.00	27	+1.14
18	.97	15	.94				

Presque Isle County

Allis Township

Pr As 13. Michigan Dept. of Conservation. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 33 N., R. 2 E. Records available: 1936-44, 1948-49. Oct. 18, 9.79.

Pr As 16. Michigan Dept. of Conservation. Records available: 1942-43. Measurement discontinued.

Pr As 18. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 33 N., R. 2 E. Records available: 1934-44, 1948-49. Oct. 18, 5.62.

Pr As 19. Michigan Dept. of Conservation. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 33 N.,
R. 2 E. Records available: 1934-44, 1948-49. Oct. 18, 10.58.

Pr As 20. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 33 N.,
R. 2 E. Records available: 1934-44, 1948-49. Oct. 18, 5.74.

Pr As 23. Michigan Dept. of Conservation. Records available: 1938-44.
Measurement discontinued.

Roscommon County

Au Sable Township

Ro As 30. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 24 N.,
R. 1 W. Dry from Jan. 13-Sept. 15. Records available: 1934-49. Oct. 12,
17.79; Nov. 11, 17.98; Dec. 14, 18.19.

Backus Township

Ro Bk 3. Michigan Dept. of Conservation. Records available: 1934-43.
Measurement discontinued.

Ro Bk 9. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 22 N.,
R. 2 W. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	6.20	Apr. 14	3.92	July 18	5.58	Oct. 12	7.05
Feb. 14	5.92	May 16	5.04	Aug. 15	6.41	Nov. 11	6.99
Mar. 15	5.59	June 14	5.38	Sept. 15	6.81	Dec. 14	6.37

Ro Bk 15. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 22 N.,
R. 2 W. Records available: 1936-49.

Jan. 13	4.78	Apr. 14	2.80	July 18	3.70	Nov. 9	5.38
Feb. 14	4.40	May 16	2.91	Aug. 15	4.59	11	5.38
Mar. 15	3.92	June 13	3.36	Sept. 15	5.06	Dec. 13	5.14

Ro Bk 16. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 22 N.,
R. 2 W. Records available: 1936-49.

Jan. 13	6.06	Apr. 13	4.23	July 18	5.11	Oct. 12	6.51
Feb. 14	5.74	May 16	4.37	Aug. 15	5.92	Nov. 11	6.54
Mar. 15	5.39	June 13	4.81	Sept. 15	6.35	Dec. 13	6.33

Denton Township

Ro Dt 7. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 22 N.,
R. 3 W. Records available: 1934-49.

Jan. 13	7.91	Apr. 13	6.55	July 18	6.40	Oct. 12	7.92
Feb. 14	7.95	May 16	6.31	Aug. 15	7.03	Nov. 11	8.18
Mar. 15	7.75	June 13	6.55	Sept. 15	7.54	Dec. 13	8.25

Ro Dt 20. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 22 N.,
R. 3 W. Records available: 1934-49.

Jan. 13	7.61	Apr. 14	6.79	July 18	7.48	Oct. 12	8.20
Feb. 14	7.49	May 16	6.96	Aug. 15	8.27	Nov. 11	8.06
Mar. 15	7.33	June 13	7.46	Sept. 15	8.32	Dec. 13	7.97

Ro Dt 26. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 22 N.,
R. 3 W. Records available: 1934-49.

Jan. 13	7.73	May 16	6.72	Aug. 15	7.34	Nov. 11	8.26
Mar. 15	7.87	June 13	6.85	Sept. 15	7.76	Dec. 13	8.45
Apr. 13	7.00	July 18	6.86	Oct. 12	8.03		

Gerrish Township

Ro Gr 1. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, T. 24 N.,
R. 3 W. Records available: 1934-49.

Jan. 13	11.11	May 16	9.82	Aug. 15	10.34	Nov. 9	11.40
Feb. 14	11.14	June 13	9.94	Sept. 15	10.68	11	11.40
Mar. 14	10.91	July 18	9.99	Oct. 12	11.10	Dec. 13	12.12
Apr. 13	10.14						

Ro Gr 7. Michigan Dept. of Conservation. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 24 N., R. 3 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	12.88	Apr. 13	10.90	July 18	11.42	Oct. 12	13.14
Feb. 14	12.64	May 16	10.85	Aug. 15	12.27	Nov. 11	13.21
Mar. 15	12.26	June 13	11.43	Sept. 15	12.91	Dec. 13	13.21

Ro Gr 17. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 24 N., R. 3 W. Records available: 1934-49.

Jan. 13	12.92	Apr. 14	12.11	July 18	12.45	Oct. 12	13.36
Feb. 14	12.98	May 16	12.13	Aug. 15	12.63	Nov. 11	13.46
Mar. 15	12.91	June 13	12.43	Sept. 15	13.16	Dec. 14	13.52

Higgins Township

Ro Hg 1. Michigan Dept. of Conservation, Roscommon recorder well. In NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 24 N., R. 2 W., about 0.6 mile east of U. S. Highway 27 and 82 feet south of section road. Records available: 1934-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.84	5.78	5.48	4.65	...	4.87	5.11	5.53	6.05	6.16	6.20	6.22
2	5.85	5.79	5.49	4.64	4.54	4.88	5.12	5.54	6.05	6.17	6.20	6.22
3	5.85	5.80	5.50	4.63	4.54	4.87	5.13	5.56	6.07	6.17	6.20	a6.22
4	5.85	5.80	5.51	4.62	4.54	4.90	5.15	5.59	6.08	6.17	6.20	6.22
5	5.86	5.81	5.52	4.62	4.54	4.92	5.16	5.61	6.08	6.17	6.20	6.22
6	5.86	5.82	5.50	4.61	4.55	4.93	5.17	5.63	6.09	6.16	6.20	6.23
7	5.86	a5.82	5.52	4.61	4.56	4.95	5.15	5.65	6.09	6.17	6.20	6.23
8	5.86	5.83	5.52	4.61	4.57	4.97	5.17	5.66	6.08	6.17	6.20	6.23
9	5.86	5.83	5.53	4.62	4.57	4.99	5.18	5.67	6.09	6.17	6.21	6.23
10	5.87	5.84	5.54	4.62	4.59	5.00	5.18	5.70	6.09	6.17	a6.21	6.23
11	5.87	5.84	5.55	...	4.61	a5.03	5.19	5.72	6.10	6.14	a6.21	6.23
12	5.87	5.85	5.56	...	4.61	a5.05	5.21	5.72	6.10	6.11	a6.21	a6.02
13	5.88	5.85	5.57	4.61	4.62	5.07	5.22	5.74	6.11	6.13	a6.21	a6.08
14	5.88	5.85	5.54	4.62	4.63	5.07	5.23	5.76	6.10	6.16	6.21	6.06
15	5.89	5.85	5.57	4.63	4.66	5.07	5.24	5.78	6.10	6.16	6.21	6.05
16	5.84	5.86	5.58	4.65	4.66	5.00	5.26	5.79	6.11	6.17	6.21	6.05
17	5.71	5.86	5.59	4.66	4.68	5.00	5.28	5.81	6.11	6.18	a6.21	6.05
18	5.73	5.86	5.60	4.66	4.69	5.01	5.30	5.83	6.12	6.18	a6.21	6.06
19	5.74	5.83	5.61	4.67	4.69	5.02	5.32	5.85	6.13	6.19	a6.21	6.06
20	5.73	5.81	5.60	4.69	4.71	5.03	5.34	4.87	6.13	6.19	a6.21	6.07
21	5.73	5.82	5.62	4.69	4.73	5.03	5.36	5.89	6.12	6.19	6.21	6.06
22	5.73	5.83	5.20	4.69	4.73	5.04	a5.37	5.91	6.10	6.19	6.21	6.03
23	5.73	5.84	5.03	4.69	4.73	5.06	5.38	5.93	6.11	6.18	6.21	6.00
24	5.73	5.77	5.19	4.70	4.75	5.07	5.41	5.95	6.09	6.18	a6.21	6.00
25	5.74	5.14	5.15	4.72	4.77	5.07	5.43	5.96	6.13	6.18	a6.22	6.00
26	5.75	5.35	a5.02	4.71	4.77	5.07	5.44	5.99	6.14	6.18	a6.22	5.99
27	5.76	5.43	4.97	4.64	4.79	5.07	5.44	6.00	6.13	6.19	a6.22	5.99
28	5.76	5.46	a4.94	4.61	4.80	5.09	5.46	6.02	6.13	6.19	6.22	5.99
29	5.77		a4.85	4.59	4.82	5.09	5.48	6.03	6.15	6.20	6.22	5.99
30	5.78		4.74	...	4.84	5.10	5.49	6.04	6.15	6.20	6.22	6.02
31	5.78		4.68		4.85		5.51	6.05		6.20		6.02

a Estimated.

Ro Hg 7. Michigan Dept. of Conservation. N $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 31, T. 23 N., R. 2 W. Drilled observation well, diameter 2 inches, depth 13.3 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 16	2.59	July 18	3.10	Sept. 19	4.27	Nov. 9	4.56
June 13	2.97	Aug. 15	3.51	Oct. 12	4.47	Dec. 13	.45

Ro Hg 81. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 24., R. 2 W. Records available: 1934-49.

Jan. 13	4.89	Apr. 14	4.46	July 18	4.61	Oct. 12	5.18
Feb. 14	5.09	May 16	4.43	Aug. 15	4.80	Nov. 11	5.37
Mar. 15	5.10	June 13	4.42	Sept. 15	4.99	Dec. 14	5.61

Ro Hg 88. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 24 N., R. 2 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	10.80	Apr. 14	9.20	July 18	9.57	Oct. 12	11.08
Feb. 14	10.62	May 16	8.86	Aug. 15	10.15	Nov. 11	11.54
Mar. 15	10.27	June 13	9.22	Sept. 15	10.69	Dec. 14	11.53

Ro Hg 107. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 24 N., R. 2 W. Records available: 1934-49.

Jan. 13	7.83	Apr. 14	6.74	July 18	7.48	Oct. 12	8.05
Feb. 14	7.81	May 17	6.99	Aug. 15	7.76	Nov. 11	8.07
Mar. 15	7.34	June 13	7.24	Sept. 15	8.02	Dec. 14	8.03

Ro Hg 150. Michigan Dept. of Conservation. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 24 N., R. 2 W. Records available: 1934-49.

Jan. 13	5.09	Apr. 13	3.60	July 18	4.66	Oct. 12	5.92
Feb. 14	5.15	May 16	4.13	Aug. 15	5.43	Nov. 11	6.05
Mar. 14	4.55	June 13	4.74	Sept. 15	5.82	Dec. 13	5.71

Ro Hg 1000. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, T. 24 N., R. 2 W. Records available: 1939-49.

Jan. 13	7.25	Apr. 13	5.35	July 18	4.87	Oct. 12	6.55
Feb. 14	7.30	May 16	4.40	Aug. 15	6.33	Nov. 11	7.88
Mar. 15	6.92	June 13	4.84	Sept. 15	7.15	Dec. 13	8.07

Markey Township

Ro Mk 5. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 23 N., R. 3 W. Records available: 1934-49.

Jan. 13	5.96	Apr. 14	4.68	July 18	5.59	Oct. 12	6.49
Feb. 14	5.71	May 16	4.95	Aug. 15	6.09	Nov. 11	6.47
Mar. 15	5.39	June 13	5.47	Sept. 15	6.49	Dec. 13	6.08

Ro Mk 75. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 23 N., R. 3 W. Records available: 1938-49.

Jan. 13	9.43	Apr. 13	8.54	July 18	8.77	Oct. 12	9.79
Feb. 14	9.35	May 16	8.51	Aug. 15	9.17	Nov. 11	9.95
Mar. 15	9.17	June 13	8.73	Sept. 15	9.57	Dec. 13	10.05

Richfield Township

Ro Rf 5. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 22 N., R. 1 W. Records available: 1934-49.

Jan. 13	5.64	Apr. 14	3.87	July 18	4.96	Oct. 12	6.58
Feb. 14	5.61	May 16	3.86	Aug. 15	5.52	Nov. 11	6.76
Mar. 15	5.33	June 13	4.63	Sept. 15	5.86	Dec. 14	6.30

Ro Rf 50. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 23 N., R. 1 W. Records available: 1939-49.

Jan. 13	6.85	Apr. 13	5.09	July 18	5.26	Oct. 12	7.96
Feb. 14	6.66	May 16	4.86	Aug. 15	5.80	Nov. 11	8.11
Mar. 15	6.21	June 13	5.27	Sept. 15	6.40	Dec. 14	8.31

Roscommon Township

Ro Ro 3. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 21 N., R. 3 W. Records available: 1936-49.

Jan. 13	16.25	Apr. 13	16.15	July 18	16.16	Oct. 12	16.85
Feb. 14	16.29	May 16	15.98	Aug. 15	16.33	Nov. 11	17.01
Mar. 15	16.71	June 13	15.92	Sept. 15	16.60	Dec. 13	17.16

Ro Ro 4. Michigan Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 22 N., R. 4 W. Records available: 1934-46, 1948-49.

Jan. 13	(a)	Apr. 13	2.62	July 18	(a)	Oct. 12	5.03
Feb. 14	(a)	May 16	2.80	Aug. 15	(a)	Nov. 11	5.21
Mar. 14	3.44	June 13	(a)	Sept. 15	(a)	Dec. 13	4.62

a Dry.

Ro Ro 8. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 21 N., R. 4 W. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	4.79	Apr. 13	3.10	July 18	3.89	Oct. 12	5.56
Feb. 14	4.37	May 16	3.40	Aug. 15	5.03	Nov. 11	5.65
Mar. 15	3.81	June 13	3.91	Sept. 15	5.52	Dec. 13	4.92

Ro Ro 15. Michigan Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 21 N., R. 3 W. Records available: 1936-49.

Jan. 13	10.20	Apr. 13	9.84	July 18	10.15	Oct. 12	10.49
Feb. 14	10.20	May 16	9.96	Aug. 15	10.41	Nov. 11	10.51
Mar. 15	10.17	June 13	10.16	Sept. 15	10.47	Dec. 13	10.50

Ro Ro 50. Michigan Dept. of Conservation. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 21 N., R. 4 W. Records available: 1939-49.

Jan. 13	6.23	Apr. 14	4.09	July 18	5.42	Oct. 12	7.14
Feb. 14	5.89	May 16	4.32	Aug. 15	6.50	Nov. 11	7.08
Mar. 15	5.33	June 13	4.94	Sept. 15	7.08	Dec. 13	6.59

Saginaw County

Village of Chesaning

Sg CH 8. A. B. Adelman. Community well, 30 feet east of Clark St. and 20 feet south of Church St. Records available: 1947-49.

July 19	47.07	Aug. 20	48.97	Sept. 17	47.60	Oct. 29	41.99
30	47.21	Sept. 3	51.40	24	45.46	Nov. 5	40.19
Aug. 6	49.60	10	49.78	Oct. 22	47.60	12	37.96
12	49.56						

Saint Joseph County

City of Three Rivers

Sp TR 1. City of Three Rivers. About 350 feet south of West Michigan St., on an island at confluence of the St. Joseph and Rock Rivers. Records available: 1939-49.

Jan. 8	+0.65	Apr. 23	+0.35	June 25	+1.85	Sept. 2	2.36
15	+3.30	30	+1.15	July 9	1.90	9	2.04
23	.05	May 7	+1.15	18	1.15	16	3.07
Feb. 11	+1.30	14	2.30	22	+1.45	24	.10
18	+2.10	21	.85	27	2.30	Oct. 1	1.03
Mar. 4	+6.60	28	4.10	Aug. 6	.95	8	3.08
21	1.50	June 4	+1.30	13	+1.05	14	1.09
26	.10	11	+1.50	20	2.20	21	1.05
31	+1.20	18	+1.02	27	.70	28	.07
Apr. 15	+2.20						

Florence Township

Sp Fr 2. J. C. Barnhart. In SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 7 S., R. 11 W. Records available: 1945-49.

Jan. 6	14.31	Apr. 7	12.48	July 7	12.08	Oct. 13	12.36
13	14.37	14	12.32	14	12.26	20	12.60
20	14.26	21	12.23	Aug. 4	12.31	27	12.61
27	13.88	28	12.23	11	12.32	Nov. 3	12.71
Feb. 3	13.72	May 5	12.31	18	12.48	10	12.78
10	13.55	12	12.39	25	12.61	17	12.72
17	13.12	19	12.41	Sept. 1	12.56	24	12.67
24	12.87	26	12.50	8	12.44	Dec. 1	12.71
Mar. 3	12.76	June 2	12.50	15	12.60	8	12.70
10	12.63	9	12.54	22	12.53	15	12.88
17	12.57	16	12.43	29	12.68	22	12.60
24	12.57	23	12.42	Oct. 6	12.44	29	13.01
31	12.45	30	12.34				

Sanilac County

Moore Township

Sa Mr 1. Michigan Highway Dept. In SE $\frac{1}{4}$ sec. 33, T. 12 N., R. 13 E., 72 feet west of State Highway M-19 and 57 feet north of State Highway M-46. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	23.00	Aug. 16	20.00	Oct. 19	20.90	Nov. 30	21.70
July 12	20.00	31	20.00	26	21.30	Dec. 6	21.80
19	19.35	Sept. 20	20.00	Nov. 2	21.20	13	21.50
27	20.00	28	21.00	9	21.50	21	21.30
Aug. 3	20.00	Oct. 5	21.00	16	21.70	28	20.30
9	20.00	12	20.80	23	21.70		

Shiawassee County

City of Owosso

Sh OW 2. City of Owosso. 350 feet east of Oakwood Ave. and 600 feet south of Jerome Ave. Drilled public-supply well, diameter 16 inches, depth 77.95 feet. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 31, 1948	22.52	Oct. 25, 1948	20.48	Jan. 24, 1949	18.0
Sept. 8	18.00	Nov. 3	20.43	31	18.46
14	23.15	15	20.38	Oct. 25	26.63
21	23.29	Dec. 15	19.10	Dec. 5	14.60
28	21.11	22	18.46	12	14.52
Oct. 4	20.88	28	17.96	19	14.36
11	20.9	Jan. 3, 1949	17.40	27	11.85
19	20.74	15	18.99		

Village of Perry

Sh PR 2. Arthur B. Cobb. 170 feet west of Main St. and 100 feet south of Second St. Unused domestic well, diameter 1 $\frac{1}{2}$ inches, depth 25.8 feet. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	20.89	Mar. 2	19.65	May 4	19.25	July 6	19.80
11	20.78	8	19.64	11	19.35	21	19.90
12	20.68	16	19.75	27	19.65	Aug. 2	20.10
25	20.43	23	19.84	31	19.58	24	20.20
Feb. 1	20.35	29	19.80	June 7	19.70	Dec. 12	21.10
9	20.40	Apr. 5	19.45	14	19.87	19	20.90
15	20.00	12	19.35	28	19.60	25	20.45
23	19.70	20	19.30				

Washtenaw County

City of Ypsilanti

Wa YP 3. City of Ypsilanti well 3 N. 40 feet north of Spring St. and 500 feet east of Chidister St. Drilled observation well, diameter 8 inches, depth 66.8 feet. Records available: 1944-46, 1948-49.

1944

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 7	17.83	Sept. 18	13.47	Oct. 27	12.94	Dec. 9	17.95
14	19.71	25	14.34	30	13.55	11	17.12
21	17.39	Oct. 2	14.61	Nov. 6	10.98	18	16.55
28	16.21	9	12.85	20	11.84	26	14.92
Sept. 11	13.58	16	16.37	27	10.77		

Wa YP 3--Continued.

1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	17.51	Apr. 17	17.75	July 23	10.53	Oct. 15	14.75
9	17.45	23	17.47	30	17.01	22	12.95
29	18.23	30	9.90	Aug. 6	12.30	29	15.96
Feb. 5	13.60	May 7	9.79	13	10.55	Nov. 5	6.33
12	16.82	15	17.05	20	16.50	13	16.73
19	15.33	21	8.33	27	15.34	17	13.85
26	13.69	June 4	8.23	Sept. 3	10.33	24	9.56
Mar. 5	11.41	11	15.98	10	15.54	Dec. 1	15.47
12	11.10	18	15.47	17	9.97	8	16.27
19	16.55	25	14.25	24	9.82	15	15.76
26	11.04	July 2	10.60	Oct. 1	12.71	29	16.12
Apr. 2	17.59	16	15.90	8	13.22		

1946

Jan. 12	14.83	Mar. 23	17.25	May 30	12.17	Aug. 24	18.13
19	18.29	30	16.48	June 1	17.67	31	18.05
26	18.51	Apr. 6	17.38	8	17.79	Sept. 7	19.77
Feb. 2	18.46	13	17.58	15	20.43	14	16.26
9	17.48	20	17.68	22	18.34	28	20.99
16	15.70	27	18.02	29	20.57	Nov. 16	17.27
23	15.65	May 4	20.62	Aug. 3	21.11	23	19.92
Mar. 2	17.79	11	18.96	10	17.59	30	16.00
16	16.69						

1948

Apr. 24	18.03	June 12	18.12	Oct. 2	21.36	Nov. 20	19.40
May 1	18.01	26	18.10	9	19.44	27	18.36
8	18.04	July 31	20.45	16	19.41	Dec. 4	18.37
15	17.16	Aug. 21	18.55	23	20.38	11	18.41
22	17.22	Sept. 11	18.41	30	19.45	18	18.42
29	17.75	18	19.35	Nov. 2	18.44	28	17.44
June 5	20.91	25	20.36	13	20.42		

1949

Jan. 8	14.39	Apr. 30	17.44	July 30	21.44	Oct. 15	12.37
15	18.40	May 7	21.37	Aug. 6	21.42	22	15.36
22	18.39	28	12.44	13	18.44	29	13.39
29	18.39	June 4	23.39	20	19.40	Nov. 5	12.42
Feb. 5	17.45	11	21.40	27	20.44	12	26.42
12	19.41	18	19.41	Sept. 3	18.43	19	19.43
19	18.44	25	21.41	10	18.39	Dec. 10	18.37
26	19.36	July 2	24.38	24	18.39	17	18.41
Mar. 5	11.41	9	21.40	Oct. 1	19.38	24	17.38
26	19.38	16	20.39	8	16.38	31	17.43
Apr. 2	19.38	23	19.43				

Wa YP 40. City of Ypsilanti. On centerline of River St. and 470 feet north of Michigan Ave. Records available: 1944-46, 1948-49.

1944

Aug. 7	26.07	Sept. 18	25.99	Oct. 23	25.97	Dec. 4	25.98
14	26.26	28	26.51	30	25.69	11	26.00
21	26.30	Oct. 2	26.01	Nov. 6	25.98	18	26.00
26	26.26	9	24.98	20	24.76	26	26.00
Sept. 11	26.03	16	24.98	27	25.07		

1945

Jan. 2	26.09	Apr. 17	25.58	July 23	25.10	Oct. 15	25.89
9	26.04	23	25.65	30	25.44	22	24.40
29	26.30	30	25.50	Aug. 6	25.57	29	25.07
Feb. 5	26.37	May 7	25.50	13	25.50	Nov. 5	25.09
12	26.39	15	25.20	20	25.65	13	25.20
19	26.39	21	23.72	27	25.69	17	25.38
26	26.22	June 4	23.68	Sept. 3	25.75	24	25.23
Mar. 5	26.02	11	24.00	10	25.73	Dec. 1	25.29
12	26.00	18	24.35	17	25.70	8	25.16
19	26.04	25	24.60	24	25.54	15	25.22
26	26.61	July 2	24.80	Oct. 1	25.19	29	25.58
Apr. 2	25.62	16	25.00	8	24.20		

Wa YP 40--Continued.

1946							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	24.96	Mar. 23	25.02	May 20	26.07	Aug. 24	26.85
19	25.24	30	25.25	June 1	26.16	31	26.95
26	25.56	Apr. 6	25.42	8	26.01	Sept. 7	26.78
Feb. 2	25.65	13	25.77	15	26.35	14	26.79
9	25.83	20	26.00	22	26.94	28	26.98
16	25.35	27	26.18	29	25.89	Nov. 16	26.83
23	25.59	May 4	26.36	Aug. 3	26.89	23	26.81
Mar. 2	25.33	11	26.41	10	26.86	30	26.94
16	24.70						

1948							
Apr. 24	25.14	June 12	25.65	Sept. 25	26.99	Nov. 13	26.95
May 1	25.21	19	25.85	Oct. 2	26.98	20	26.97
8	25.19	26	25.85	9	27.00	27	26.96
15	24.24	July 31	26.49	16	26.97	Dec. 4	26.96
22	24.26	Aug. 21	26.45	23	26.97	11	26.98
29	24.74	Sept. 11	26.94	30	26.98	18	26.95
June 5	25.24	18	27.99	Nov. 2	26.98	28	26.98

1949							
Jan. 8	26.96	Apr. 30	25.97	July 30	27.92	Oct. 15	26.96
15	26.97	May 7	25.99	Aug. 6	27.94	22	26.97
22	26.94	28	26.94	13	26.99	29	26.95
29	26.95	June 4	26.96	20	27.92	Nov. 5	26.98
Feb. 5	26.92	11	26.96	27	27.93	12	21.92
12	26.99	18	26.98	Sept. 3	26.97	19	27.94
19	25.91	25	27.95	10	27.91	Dec. 10	26.94
26	25.91	July 2	27.93	24	26.97	17	26.98
Mar. 5	25.92	9	27.91	Oct. 1	26.98	24	26.94
26	25.93	16	27.93	8	26.95	31	26.97
Apr. 2	25.93	23	27.91				

Wa YP 44. City of Ypsilanti. 80 feet west of Park St. and 140 feet south of Michigan Ave. Federal Works Agency drilled test well 14, diameter 6 inches, depth 96.85 feet. Records available: 1944-46, 1948-49.

1944							
Aug. 21	34.81	Oct. 2	35.25	Oct. 30	33.70	Dec. 4	34.19
28	34.76	9	33.47	Nov. 6	32.50	11	34.53
Sept. 11	33.12	16	34.70	20	33.47	18	34.91
18	33.23	Oct. 23	33.48	27	32.10	26	34.70
25	34.21						

1945							
Jan. 2	35.16	Apr. 17	34.43	July 23	32.93	Oct. 15	32.78
9	34.80	23	34.35	30	34.32	22	32.04
27	35.49	30	31.55	Aug. 6	33.53	29	33.79
Feb. 5	34.29	May 7	31.48	13	32.00	Nov. 5	29.12
12	35.26	15	33.97	20	34.03	13	34.08
19	36.70	21	29.86	27	33.80	17	34.04
26	34.35	June 4	29.93	Sept. 3	31.90	24	31.35
Mar. 5	33.72	11	33.35	10	33.60	Dec. 1	33.54
12	32.60	18	33.22	17	32.74	8	33.81
19	33.27	25	34.02	24	31.56	15	33.85
26	33.15	July 2	31.93	Oct. 1	31.78	29	33.95
Apr. 2	34.43	16	33.28	8	34.09		

1946							
Jan. 12	33.31	Mar. 23	35.45	May 20	33.70	Aug. 24	35.80
19	35.68	30	34.05	June 1	34.01	31	35.88
26	35.72	Apr. 6	34.97	8	35.38	Sept. 7	36.80
Feb. 2	35.72	13	35.17	15	37.14	14	35.94
9	35.27	20	35.05	22	35.66	28	37.20
16	33.24	27	35.58	29	37.15	Nov. 16	35.55
23	34.72	May 4	37.05	Aug. 3	37.92	23	36.90
Mar. 2	35.30	11	36.65	10	36.33	30	35.40
16	34.93						

Wa YP 44--Continued.

1948

Apr. 24	35.19	June 12	36.25	Sept. 25	38.62	Nov. 13	38.61
May 1	35.19	19	36.70	Oct. 2	37.65	20	37.61
8	35.73	26	37.37	9	37.63	27	36.61
15	34.82	July 31	37.24	16	36.66	Dec. 4	36.68
22	34.96	Aug. 21	36.55	23	37.63	11	36.66
29	37.08	Sept. 11	36.69	30	37.65	18	36.67
June 5	37.97	18	37.66	Nov. 2	38.65	28	36.62

1949

Jan. 8	35.69	Apr. 30	35.70	July 30	39.63	Oct. 15	36.61
15	37.64	May 7	37.68	Aug. 6	38.68	22	36.61
22	36.70	28	34.62	13	38.65	29	35.63
29	37.63	June 4	39.64	20	37.63	Nov. 5	35.65
Feb. 5	36.63	11	37.66	27	37.61	12	37.66
12	37.61	18	36.66	Sept. 3	37.67	19	37.62
19	36.64	25	37.64	10	36.63	Dec. 10	36.68
26	35.69	July 2	41.61	24	36.63	17	36.69
Mar. 5	33.64	9	38.66	Oct. 1	37.65	24	36.62
26	36.65	16	37.69	8	36.63	31	36.63
Apr. 2	36.62	23	37.66				

Pittsfield Township

Wa Pf 1. City of Ann Arbor. In SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 3 S., R. 6 E., about 200 feet south of main building of Steere Farm pumping station of city waterworks. Measurements by city personnel. Records available: 1940-49.

Jan. 2	5.84	Apr. 6	3.85	July 1	4.90	Oct. 1	6.60
12	4.10	12	3.75	8	5.37	8	6.16
16	4.77	18	3.53	18	4.74	16	5.97
31	4.66	30	3.63	28	5.19	28	5.83
Feb. 1	5.14	May 7	3.81	Aug. 8	5.34	Nov. 1	6.14
8	2.93	14	4.18	16	5.40	9	6.19
16	2.60	21	4.63	21	5.49	19	6.69
24	2.94	31	4.18	30	3.92	29	6.74
Mar. 6	3.94	June 7	4.53	Sept. 7	4.54	Dec. 7	6.32
14	4.28	15	5.30	16	4.54	14	6.52
20	4.90	21	4.94	22	6.48	21	6.78
28	4.09	30	5.12	29	6.44	30	6.17

Wa Pf 2. City of Ann Arbor, Steere Farm pumping station. In SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 3 S., R. 6 E., 1380 feet east of west section line, 1,800 feet south of north section line. Dug unused public-supply well, diameter 16 feet, depth 22.6 feet. Records available: 1948-49.

1948

Oct. 2	6.68	Oct. 18	+0.50	Nov. 25	8.54	Dec. 20	6.20
16	7.57	Nov. 10	7.40	27	8.03	23	6.20
16	+3.54	15	5.60	Dec. 4	8.13	28	7.29

1949

Jan. 2	8.23	Apr. 6	8.10	July 1	11.06	Oct. 1	9.54
12	9.10	12	7.67	8	11.27	8	8.40
16	7.01	18	8.06	18	7.43	16	8.46
31	9.35	30	8.26	28	9.35	28	8.24
Feb. 1	9.87	May 7	8.73	Aug. 8	8.61	Nov. 1	8.61
8	.63	14	9.29	16	8.40	9	8.47
16	6.00	21	9.50	21	8.79	19	9.51
24	6.82	31	9.44	30	7.66	29	9.57
Mar. 6	7.96	June 7	9.93	Sept. 7	6.62	Dec. 7	9.13
14	8.50	15	11.30	16	7.99	14	8.87
20	8.75	21	11.28	22	10.75	21	9.57
28	8.26	30	10.97	29	10.05	30	8.94

Wa Yk 20. Ypsilanti State Hospital. In NW $\frac{1}{4}$ sec. 9, T. 4 S., R. 6 E., about 1,050 feet south of Willis Rd. and 110 feet east of Moon Rd. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	52.32	Jan. 26	52.56	Feb. 25	52.49	May 27	84.87
2	52.32	27	52.53	26	a52.68	June 3	86.64
3	52.42	28	52.18	27	a52.58	10	88.07
4	52.45	29	a52.42	28	a52.50	17	88.14
5	52.31	Feb. 4	52.30	Mar. 1	a52.61	21	71.82
6	52.22	5	52.42	2	a52.64	24	71.40
7	52.25	6	52.44	3	a52.66	30	86.60
8	52.33	7	52.35	4	a52.63	July 8	63.00
9	52.37	8	52.39	11	52.56	15	75.25
10	52.56	9	52.40	12	a52.54	21	65.37
11	52.60	10	52.46	13	a52.59	29	66.09
12	52.48	11	52.62	14	a52.57	Aug. 5	63.55
13	52.47	12	52.61	15	a52.61	12	82.74
14	52.44	13	52.43	16	a52.60	19	65.15
15	52.53	14	52.46	17	a52.58	26	63.49
16	52.41	15	52.29	18	a52.54	Sept. 2	65.58
17	52.51	16	52.40	19	a52.65	9	63.23
18	52.57	17	52.55	25	52.39	20	63.37
19	52.24	18	52.56	Apr. 1	52.20	30	81.45
20	52.61	19	52.55	8	52.63	Oct. 14	81.66
21	52.52	20	52.56	15	52.53	21	80.45
22	52.52	21	52.67	22	53.29	Dec. 9	63.01
23	52.60	22	52.53	29	57.94	16	62.31
24	52.43	23	52.61	May 5	56.38	23	74.69
25	52.56	24	52.60	13	72.10	30	69.89

a Estimated.

Wa Yk 22. Ypsilanti State Hospital. In SW $\frac{1}{4}$ sec. 10, T. 4 S., R. 6 E., about 2,200 feet south of Willis Road and 15 feet east of Warner Road. Records available: 1946-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	72.55	.....	73.00	73.34	74.40	75.88	a73.59	72.94	72.56	71.12	.....	70.23
2	72.53	.....	a73.05	73.47	74.30	75.86	a73.50	72.87	72.70	71.10	.....	70.20
3	72.63	.....	a73.08	73.49	74.43	75.84	a73.40	72.85	72.67	71.04	.....	70.32
4	72.68	72.57	a73.09	73.54	74.51	75.80	a73.28	72.88	72.58	70.96	70.70	70.16
5	72.47	72.49	a72.94	73.56	74.55	75.72	a73.17	72.91	72.42	70.91	70.79	70.16
6	72.48	72.55	.....	73.41	74.56	75.63	a73.07	72.91	72.42	70.87	70.67	70.19
7	72.42	72.48	.....	73.46	74.57	75.58	a72.93	72.91	72.38	70.72	70.84	69.99
8	72.47	72.56	.....	73.48	74.64	75.63	72.96	72.86	72.21	70.78	70.81	70.16
9	72.51	72.55	.....	73.59	74.62	75.61	72.86	72.87	72.17	.....	70.90	70.27
10	72.66	72.67	.....	73.70	74.70	75.53	72.77	72.91	a72.14	.....	70.89	70.26
11	72.72	72.83	a72.97	73.70	74.83	75.41	72.80	72.94	a72.09	.....	70.86	70.22
12	72.62	72.81	a72.98	73.69	74.87	75.30	72.74	72.89	a72.03	.....	70.94	70.07
13	72.55	72.75	a73.06	73.61	74.47	75.20	72.67	72.88	a71.92	.....	70.86	70.20
14	72.49	72.86	a73.08	73.60	75.05	75.09	72.65	72.86	a71.85	70.70	70.78	70.26
15	72.60	72.57	a73.13	73.51	75.25	74.98	72.64	72.85	a71.83	70.73	70.78	70.28
16	72.49	72.83	a73.20	73.55	75.35	74.93	72.64	72.84	a71.75	70.74	70.80	70.29
17	72.58	72.90	a73.14	a73.65	75.48	74.83	72.65	72.81	.....	70.76	70.81	70.28
18	72.65	72.95	a73.13	73.57	.....	74.75	72.66	72.63	.....	70.81	.....	70.23
19	72.35	72.90	a73.21	73.68	.....	74.71	72.67	72.64	.....	70.84	.....	70.23
20	72.70	72.89	.....	73.80	a75.50	74.59	72.72	72.71	.....	70.81	.....	70.24
21	72.66	73.04	.....	.....	.....	74.47	72.77	72.75	.....	70.78	.....	70.10
22	a72.57	72.91	.....	a73.77	.....	74.32	72.76	72.74	.....	70.66	.....	69.97
23	a72.66	72.95	.....	a73.73	.....	74.26	72.85	72.69	71.20	70.76	.....	70.09
24	a72.49	72.96	.....	a73.77	.....	74.12	72.92	72.71	a71.25	70.82	.....	70.26
25	a72.55	72.83	73.37	a74.03	.....	74.00	72.88	72.75	a71.30	70.84	70.43	70.37
26	a72.57	a73.02	73.46	.....	.....	73.95	72.87	72.74	a71.28	70.74	70.49	70.26
27	a72.52	a72.99	73.33	a74.18	a75.81	73.91	72.88	72.70	71.19	70.82	70.28	70.20
28	a72.21	a72.89	73.37	.....	75.81	73.83	72.89	72.65	71.08	70.76	70.37	70.19
29	a72.30	.....	73.52	74.45	75.87	73.77	72.91	72.63	71.07	.....	70.21	70.21
30	.....	.....	73.53	74.42	75.90	73.69	72.90	72.67	71.07	.....	70.20	70.31
31	.....	.....	73.46	.....	75.89	.....	72.93	72.63	.....	.....	.....	70.29

a Estimated.

Wexford County

City of Cadillac

We CD 1. City of Cadillac. In NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 21 N., R. 9 W., 307 feet south of Pine St. extended and 819 feet west of railroad spur. Drilled unused domestic well, diameter 8 to 6 inches, reported depth 277 feet. Records available: 1949.

Water level at 2:00 a.m., from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	21.93	22.09	21.93	21.85	21.95	22.35	22.62
2	.....	.....	22.20	21.96	22.11	.....	21.91	21.90	22.30	22.68
3	.....	.....	21.91	21.96	21.81	.....	21.90	21.87	22.45	22.70
4	.....	21.80	21.96	22.00	21.75	.....	21.86	21.86	22.42	22.30
5	.....	.....	21.99	21.70	21.72	22.22	21.81	21.96	22.51	22.31
6	.....	.....	21.97	21.63	22.01	22.19	21.90	21.96	22.17	22.51
7	.....	.....	.....	21.97	22.05	.....	21.88	21.91	22.12	22.51
8	.....	.....	21.71	22.05	22.09	22.06	21.86	22.02	22.37	22.64
9	22.25	.....	21.63	22.03	22.05	22.11	21.88	21.94	22.47	22.70
10	22.22	.....	21.97	22.04	21.85	22.19	21.88	21.93	22.41	22.64
11	22.21	22.10	22.00	21.97	21.90	22.22	21.89	21.98	22.47	22.36
12	22.21	.....	21.93	21.72	22.07	22.23	21.86	22.01	22.52	22.24
13	21.98	.....	21.94	21.66	22.04	.....	21.81	22.10	22.12	22.49
14	21.92	.....	21.97	21.93	22.07	.....	21.84	22.16	22.11	22.53
15	22.18	.....	21.73	21.86	22.09	22.22	21.86	22.17	22.41	22.53
16	22.18	.....	21.79	21.99	22.08	.....	21.83	22.01	22.40	22.52
17	22.15	.....	21.91	22.00	21.87	.....	21.83	22.00	22.52	22.49
18	22.14	21.93	21.93	22.04	21.94	.....	21.83	22.06	22.54	22.37
19	22.26	.....	21.89	21.78	22.04	.....	21.83	22.31	22.45	22.38
20	21.99	.....	21.95	21.68	22.10	.....	21.89	22.32	22.18	22.49
21	21.85	.....	21.92	.....	22.13	.....	21.87	22.05	22.26	22.44
22	22.17	.....	21.59	.....	22.09	.....	21.87	22.14	22.55	22.45
23	22.24	.....	21.60	.....	22.20	.....	21.85	22.05	22.44	22.57
24	22.29	.....	21.95	.....	21.97	.....	21.92	22.09	22.37	22.63
25	22.23	21.68	21.98	.....	21.94	.....	21.92	22.38	22.37	22.48
26	22.26	.....	21.93	.....	22.08	.....	21.90	22.33	22.58	22.35
27	21.90	.....	21.99	21.93	22.01	.....	21.83	22.42	22.17	22.58
28	21.89	.....	21.96	22.00	22.10	.....	21.87	22.39	22.25	.....
29	22.09	.....	21.71	22.04	22.10	21.96	21.90	22.40	22.49	.....
30	22.16	.....	21.67	22.06	22.14	21.93	21.90	22.07	22.56	22.84
31	22.10	.....	21.63	.....	21.94	21.90	.....	22.07	.....	22.52

Greenwood Township

We Gw 2. Michigan Dept. of Conservation. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 24 N., R. 10 W. Records available: 1935-49. Oct. 11, 3.39.

We Gw 3. Michigan Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 24 N., R. 10 W. Records available: 1935-44, 1948-49. Oct. 11, 8.62.

We Gw 4. Michigan Dept. of Conservation. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 24 N., R. 10 W. Records available: 1935-44, 1948-49. Oct. 11, 2.71.

We Gw 42. Michigan Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 24 N., R. 10 W. Records available: 1935-44, 1948-49. Oct. 11, 4.92.

Henderson Township

We Hn 1. Michigan Dept. of Conservation. In NE $\frac{1}{4}$ sec. 13, T. 21 N., R. 11 W., 260 feet south of north line and 1,640 feet west of east line of sec. 13. Records available: 1948-49.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47.55	47.83	48.07	48.14	47.66	47.49	47.37	47.26	47.28	.....	47.82	48.09
2	47.57	47.86	48.07	48.15	47.63	47.48	47.37	47.26	47.31	.....	47.80	48.10
3	47.59	47.86	48.08	48.14	47.66	47.48	47.36	47.27	47.31	.....	47.85	48.11
4	47.60	47.85	48.07	48.13	47.64	47.48	47.37	47.27	47.31	.....	47.84	48.08
5	47.59	47.87	48.06	48.10	47.62	47.47	47.37	47.27	47.30	.....	47.87	48.11

We Hn 1--Continued.

Water level at 2:00 a.m., from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	47.58	47.88	48.08	48.06	47.62	47.46	47.36	47.27	47.35	47.58	47.85	48.13
7	47.60	47.85	48.11	48.06	47.61	47.47	47.36	47.26	47.35	.....	47.86	48.10
8	47.63	47.89	48.10	48.05	47.60	47.48	47.36	47.26	47.35	.....	47.86	48.16
9	47.64	47.90	48.12	48.05	47.60	47.47	47.35	47.27	47.36	.....	47.90	48.17
10	47.68	47.92	48.12	48.03	47.60	47.46	47.35	47.26	47.37	47.63	47.88	48.17
11	47.68	47.94	48.12	47.99	47.59	47.45	47.35	47.27	47.38	47.62	47.90	48.17
12	47.64	47.91	48.13	47.96	47.56	47.45	47.34	47.26	47.38	47.64	47.92	48.17
13	47.66	47.93	48.14	47.93	47.56	47.44	47.33	47.26	47.38	47.67	47.90	48.21
14	47.69	47.95	48.14	47.93	47.55	47.43	47.33	47.26	47.40	47.68	47.91	48.22
15	47.70	47.89	48.16	47.88	47.56	47.42	47.33	47.26	47.41	47.69	47.93	48.22
16	47.69	47.96	48.16	47.89	47.54	47.45	47.32	47.26	47.41	47.68	47.95	48.22
17	47.72	47.98	48.16	47.88	47.54	47.44	47.32	47.25	47.42	47.69	47.96	48.23
18	47.73	47.97	48.16	47.85	47.52	47.44	47.31	47.24	47.43	47.70	47.97	48.24
19	47.57	47.99	48.18	47.85	47.51	47.44	47.30	47.25	47.44	47.71	47.95	48.27
20	47.81	48.00	48.19	47.84	47.52	47.42	47.30	47.26	47.46	47.71	47.96	48.27
21	47.74	48.02	48.17	47.81	47.51	47.41	47.30	47.26	47.46	47.72	48.00	48.25
22	47.77	48.01	48.18	47.76	47.48	47.41	47.28	47.26	.....	47.69	48.01	48.25
23	47.79	48.03	48.20	47.76	.....	47.41	47.30	47.26	.....	47.73	47.95	48.31
24	47.75	48.03	48.21	47.77	47.53	47.39	47.29	47.26	.....	47.76	48.01	48.32
25	47.80	48.03	48.18	47.76	47.53	47.39	47.28	47.27	.....	47.76	48.02	48.31
26	47.80	48.06	48.20	47.71	47.51	47.40	47.27	47.27	47.52	47.76	48.04	48.30
27	47.80	48.05	48.15	47.72	47.51	47.40	.....	47.27	.....	47.78	48.00	48.33
28	47.68	48.05	48.17	47.73	47.51	47.39	.....	47.27	.....	47.78	48.05	48.35
29	47.83		48.19	47.70	47.50	47.39	.....	47.28	.....	47.78	48.04	48.36
30	47.84		48.18	47.68	47.50	47.38	.....	47.28	.....	47.78	48.06	48.36
31	47.83		48.15		47.49		.....	47.28		47.80		48.37

a Estimated.

Liberty Township

We Lb 7. Michigan Dept. of Conservation. In NW $\frac{1}{4}$ sec. 27, T. 24 N., R. 9 W. Drilled observation well, diameter 2 inches, reported depth 20.0 feet. Records available: 1935-37, 1941-44, 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	(a)	Apr. 25	8.98	July 25	9.92	Oct. 24	12.40
24	12.08	May 24	9.88	Aug. 29	11.38	Nov. 28	12.85
Feb. 22	12.83	June 27	10.09	Sept. 26	11.94	Dec. 19	13.10
Mar. 29	5.78						

a Dry.

We Lb 38. Michigan Dept. of Conservation. In SW $\frac{1}{4}$ sec. 19, T. 24 N., R. 9 W. Drilled observation well, diameter 2 inches, reported depth 17.4 feet. Records available: 1935-37, 1941-44, 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	1.60	Apr. 25	1.39	July 25	1.61	Oct. 24	2.70
24	1.37	May 24	1.37	Aug. 29	2.86	Nov. 28	2.03
Feb. 22	1.46	June 27	1.24	Sept. 26	3.05	Dec. 19	1.60
Mar. 29	1.06						

NEW HAMPSHIRE

By H. L. Pres, Jr.

PROGRAM OF WORK

Periodic measurements of water level, begun in New Hampshire in 1942 at one observation well in the town of Hill, near Bristol, in Merrimack County, were continued in 1949. Fifty-three water-level measurements were made in this well during the year.

The Manchester Water Works continued periodic measurements of water level, begun in 1942, at one observation well in Auburn, Rockingham County. A water-stage recorder was in operation on this well throughout the year.

Periodic measurements of water level at one observation well at New London, Merrimack County, begun in 1947, were continued in 1949. Fifty-two water-level measurements were made in this well during the year.

FLUCTUATIONS OF WATER LEVELS

The water-level fluctuations in the three observation wells in New Hampshire, all of which are in the southern half of the State, usually follow the same seasonal pattern which has been observed in the other northern New England States. During the winter, when the ground is frozen and covered with snow, water levels fall steadily. A sharp rise, usually in March or April, results from ground-water recharge when temperatures are high enough to melt the snow cover and to partially thaw out the ground. The water table drops during the growing season, when agricultural demands for water are greatest. The end of the growing season is marked by a rise in water levels beginning in September or October and continuing until the onset of cold weather, which is followed by a decline lasting the rest of the winter.

Water levels in all the wells followed, in general, the usual seasonal pattern of fluctuations throughout most of 1949. The rise in water levels in all the observation wells that began during the last two or three days of December 1948, as a result of heavy rains and mild temperatures, continued into January 1949. Colder weather caused the water levels in the wells near

Bristol and New London to drop until the middle of February. The water level in the well at Auburn, however, rose gradually throughout January and February, when most maximum daily temperatures were above freezing. The generally mild weather, which prevailed during the latter part of February and most of March in New London and Bristol, was reflected in the rise of water levels in the wells near these towns. The abrupt rise in each of these wells, which began on March 20, coincided with a sharp temperature rise. Following this rise which continued during the early part of April, however, the water levels in these wells still were well below their highest stages for this time of year.

The fairly steady drop in water levels in all three wells, starting at the onset of the growing season, continued with few interruptions until the end of August in the well at Auburn and until the latter part of November in the well near New London. The well near Bristol was dry from early August until the latter part of November, as were many private wells throughout the State. The lowest water level in the well near Auburn for the period of record occurred at the end of August. The water level in this well rose fairly steadily during most of September as a result of above-normal rainfall, and, except for a drop during most of October, when precipitation was below normal, continued to rise through the end of the year. Water levels in the wells near New London and Bristol rose during the latter part of November and all of December. These end-of-year rises were the result of precipitation which, although below normal, came largely in the form of rain.

At the end of 1949, reported by the U. S. Weather Bureau as one of the driest years on record, water levels in the three observation wells indicated a net decline in ground-water storage during the year.

Precipitation for the State as a whole during 1949 was 35.62 inches, or 3.65 inches below normal which is 39.27 inches. The total for the preceding year was 37.77 inches. Precipitation for the year at Franklin, about 17 miles east of New London and about 11 miles south of Bristol, was 29.9 inches, 10 inches below normal. Precipitation for the year at Manchester, about 6 miles west of Auburn, was 37.27 inches, or 1.88 inches below normal.

Water level measurements are below land-surface datum.

Summary of water levels in observation wells in New Hampshire

Well	First measured	Lowest observed water level		Highest observed water level		Water level on last date of record 1949
		Water level	Date	Water level	Date	
Auburn 8	Sept. 2, 1942	a 6.66	Aug. 31, 1949	a 0.50	Mar. 22, 1948	a 2.47
Bristol 1, US 91	Oct. 8, 1942	(b)	(b)	3.20	Apr. 30, 1947	9.85
New London 1	Oct. 6, 1947	16.43	Feb. 8, 1948	3.10	Apr. 4, 1948	13.23

a Water level at noon, from recorder charts.

b Dry Sept. 30, Oct. 6, 30, Nov. 29, Dec. 30, 1947, Jan. 30, Sept. 19 to Nov. 28, 1948, Aug. 14 to Nov. 13, 1949. Water level below 10.8 feet.

Net decline, in feet, in water levels in observation wells in New Hampshire, 1949

Well	Net change
Auburn 8	0.53
Bristol 1, US 91	1.56
New London 1	al.30

a Net change to Jan. 1, 1950.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Merrimack County

US 91. Bristol 1. J. E. Norcross. In town of Hill, about 0.2 mile south of Smith River, 1.0 mile west of U. S. Highway 3A and 2 miles south of Bristol. Penetrates sandy glacial till. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	8.20	Mar. 13	7.95	May 22	8.30	Aug. 1	9.37
9	6.80	20	8.05	29	8.25	8	9.40
16	7.30	27	5.70	June 5	8.45	Nov. 20	10.76
23	7.87	Apr. 3	5.30	12	8.63	27	10.71
30	8.20	10	5.90	19	8.89	Dec. 4	10.73
Feb. 6	8.40	17	7.50	26	8.65	11	9.96
13	8.47	24	7.80	July 3	8.66	18	10.06
20	8.14	May 1	8.10	10	8.70	25	9.66
27	7.95	8	8.40	17	8.90	30	9.76
Mar. 6	8.00	15	8.40	24	8.90		

Dry on Aug. 14, 21, 28, Sept. 5, 11, 18, 25, Oct. 3, 9, 16, 23, 30, Nov. 6 and 13. Water level below 10.8 feet.

New London 1. W. S. Mariner. About 750 feet northeast of State Highway 114, 2.1 miles southeast of New London. Penetrates sandy glacial till. Records available: 1947-49.

Jan. 2	11.30	Apr. 3	5.56	July 3	9.87	Oct. 2	13.54
9	7.62	10	5.14	10	10.18	9	13.86
16	7.20	17	5.78	17	10.79	16	14.05
26	8.21	24	5.82	24	11.09	23	14.17
30	8.82	May 1	6.22	31	11.47	30	14.41
Feb. 6	9.37	8	5.96	Aug. 7	11.80	Nov. 6	14.48
13	9.82	15	6.63	14	12.03	13	14.67
20	8.88	22	7.55	21	12.59	20	14.48
27	8.45	29	8.03	28	12.68	27	14.62
Mar. 6	8.51	June 5	7.95	Sept. 4	12.95	Dec. 4	14.31
13	7.43	12	8.52	11	13.10	11	14.13
20	7.85	19	9.06	18	13.37	18	13.70
27	5.86	26	9.39	25	13.59	25	13.25

Rockingham County

Auburn 8. Manchester Water Works. About 250 feet east of the intersection of Hookset and Depot Rds., 0.9 mile north of Auburn. Measurements made by Manchester Water Works. Penetrates unconsolidated deposits. Records available: 1942-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.94	1.47	1.29	1.51	1.68	1.88	3.50	5.54	6.64	5.20	4.92	3.26
2	2.06	1.47	1.28	1.53	1.70	1.93	3.62	5.60	6.36	5.20	4.86	3.30
3	2.12	1.48	1.30	1.55	1.43	1.99	3.75	5.66	6.24	5.21	4.83	3.31
4	2.14	1.48	1.33	1.55	1.61	2.02	3.87	5.72	6.23	5.23	4.78	3.31
5	2.12	1.48	1.30	1.55	1.69	2.07	a3.99	5.77	6.23	5.25	4.60	3.30
6	1.39	1.47	1.22	1.24	1.67	2.10	4.10	5.82	6.27	5.30	4.54	3.30
7	1.69	1.46	1.28	1.38	1.71	2.16	4.20	5.87	6.31	5.34	4.48	3.32
8	1.78	1.51	1.34	a1.43	1.78	2.22	4.31	5.92	6.37	5.36	4.46	3.33
9	1.81	1.50	1.35	a1.48	1.80	2.27	4.42	5.96	6.42	5.37	4.45	3.35
10	1.79	1.46	1.35	a1.53	1.82	2.28	4.51	6.02	6.35	5.37	4.45	a3.37
11	1.79	1.48	1.33	a1.57	1.85	2.35	4.51	6.07	6.21	5.39	4.44	a3.41
12	1.78	1.50	1.33	1.60	1.84	2.43	4.57	6.13	6.18	5.40	4.44	3.39
13	1.77	1.50	1.37	1.61	1.86	2.52	4.64	6.15	6.19	5.44	4.43	2.72
14	1.74	1.47	1.40	1.30	1.88	2.63	4.60	6.16	6.20	5.47	4.29	2.53
15	1.73	1.20	1.40	a1.48	1.91	2.70	4.68	6.16	6.16	5.49	4.18	2.60
16	1.66	1.27	1.45	a1.53	1.93	2.80	4.51	6.18	5.72	5.47	4.15	a2.74
17	1.62	1.33	1.46	a1.58	1.93	2.90	4.53	6.22	5.64	5.45	4.13	a2.89
18	1.60	1.37	1.47	1.63	1.96	2.99	4.59	6.27	5.62	5.46	4.13	a2.95
19	1.53	1.39	1.49	1.16	2.00	3.09	4.64	6.28	5.44	5.47	4.12	2.92
20	1.54	1.25	1.51	1.44	1.65	3.00	4.72	6.28	5.35	5.50	4.08	2.87
21	1.55	1.35	1.53	1.51	1.78	3.01	4.81	6.30	5.36	5.53	4.05	2.77
22	1.52	1.37	1.50	1.55	1.87	a3.03	4.90	6.30	5.39	5.57	4.04	2.66
23	1.52	1.13	1.29	1.54	a1.77	3.01	4.97	6.36	5.34	5.60	4.03	2.53
24	1.46	1.26	1.38	1.56	1.84	3.23	5.05	6.40	5.15	5.63	4.03	a2.39
25	1.48	1.24	1.42	1.60	1.66	3.34	5.11	6.46	5.14	5.66	3.98	a2.49
26	1.48	1.18	1.42	1.61	1.83	2.73	5.17	6.52	5.16	5.65	3.88	2.52
27	1.48	1.23	1.43	1.60	1.65	2.93	5.23	6.55	5.16	5.33	3.85	2.47
28	1.46	1.23	1.44	1.62	1.69	3.14	5.30	6.59	5.20	5.23	3.85	2.20
29	a1.41		1.47	1.65	1.76	3.25	5.36	6.62	5.21	5.19	3.82	2.25
30	1.45		1.48	1.67	a1.80	3.37	5.43	6.64	5.22	5.18	3.28	2.35
31	1.45		1.49		1.85		a5.50	6.66		5.08		2.47

a Estimated.

NEW JERSEY

By J. M. Birdsall, J. M. Ludlow, and C. R. Austin

PROGRAM OF WORK

The investigation of the ground-water resources of New Jersey was continued throughout 1949 in cooperation with the New Jersey Department of Conservation and Economic Development, Division of Water Policy and Supply. About 3,600 individual measurements of water level were made in addition to the continuous records obtained by the use of recording gages. Measurements were being made in 150 wells and recording gages were in operation in 57 wells.

FLUCTUATIONS OF WATER LEVELS

The least precipitation in the State was 33.57 inches at Deep Water, Salem County, and in this general area 6 water-table observation wells had record lows. January was the wettest month in the year with a mean total precipitation of 5.99 inches and 15 wells in the State showed new highs in January and February. June was the driest month of the year and the driest month in New Jersey since the beginning of record in 1866, and extended into the second week in July when drought conditions were broken. However, with the exception of September, which had slightly more than the normal amount of precipitation, there was a deficiency for the remaining months in the year and 14 wells had record lows during this period.

The increasing deficiency during the second half of the year affected water supplies in the northern part of the State and the water levels in the large reservoirs which supply the metropolitan area were so low that the situation was critical at the end of the year.

The greatest precipitation for any one month during the year was 11.26 inches in August at Toms River, and during this month 3.40 inches fell on the 13th (within 2 hours) also at this station, and this was reflected in a local well by a rise of 0.17 foot in 48 hours.

The Morrell well (29.11.1.2.3), a water-table well in Middlesex County, is considered to be a reliable index of the amount of water stored in the

ground, particularly during the growing season, as it responds quickly to precipitation and is so situated that it is not affected by pumping. As in previous years, the ground-water storage, as indicated by the hydrograph for 1949, remained uniformly high during the first 5 months, averaging about 74 feet above mean sea level. The precipitation at Runyon, the nearest weather Bureau station to the Morrell well, was 6.25 inches in January, 3.29 inches in March, and 5.48 inches in May. In June, July, and August the precipitation was 0.00, 3.53, and 2.45 inches, respectively, and during these months the altitude of the water surface declined until September 5 when a low for the year of 68.90 feet above mean sea level was reached. There was precipitation of 1.72 inches on September 6, and from then on to the end of the year the water level rose due to reduced transpiration and increased precipitation until, on December 31, it was approximately the same as at the end of the preceding year.

In the Atlantic City area, the artesian pressure in the Atlantic City Water Works 600-foot well, in the Atlantic City 800-foot sand (a part of the Kirkwood Formation), was such that there was a seasonal trend similar to that for 1948. However, from the middle of June until the end of the year the water level was as much as 2 feet below that of 1948, and on October 9 there was a record low of 26.3 feet below mean sea level.

In the Longport 14th Avenue well, in the Atlantic City 800-foot sand, the average daily water level in feet below mean sea level was 40.8 feet at the beginning of the year, and this fell to an average daily depth of 61.8 feet on August 22, and on August 27 there was a low for the year of 63.4 feet which was also a record low. From then on, the average daily water level rose until, at the end of the year, it was approximately a foot lower than at the end of 1948. These fluctuations of artesian pressure are interpreted as being the result of pumping.

In Bergen County, a record low of 8.9 feet below mean sea level was recorded in Garfield well 11 on September 26 and can be attributed to pumping.

In the Camden area, a record low of 29 feet below mean sea level was noted in well 10 of the New Jersey Water Company on June 24, 1949, the previous low for this well being 26.9 feet below mean sea level on May 24, 1948, and this also may be attributed to pumping.

In Essex County, a record low of 109 feet above mean sea level was noted in well 30 of the Commonwealth Water Company on September 23, 1949, also a result of pumping.

In Middlesex County, record lows of 5.74 feet above mean sea level on December 31, 1949, in Duhernal 1, and of 0.74 foot on December 14, 1949, in Duhernal 5 (both of which extend into the Old Bridge sand member of the Raritan formation, or no. 3 sand), and of 56.61 feet on the Robert D. Fischer test well on December 31, 1949 (Farrington sand member of the Raritan formation, or no. 1 sand). All three lows may be attributed to climatic conditions.

At Bradley Beach, in the Asbury Park area of Monmouth County, a record high of 11.64 feet above mean sea level was noted on January 3, 1949. This probably was the result of a shift in the distribution of pumpage.

In Salem County, record highs were observed on February 8 in 14 wells, which were probably the result of climatic conditions, January having been a month of considerable precipitation in that area. Six wells in the area had record lows in December which may be explained also by climatic conditions.

The following water-level measurements for 1949 are in feet referred to mean sea level.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

Atlantic County

Atlantic City area

36.13.2.9.1. Atlantic City Water Dept. 600-foot well. Highest water level -3.05, Mar. 28, 1925; lowest -26.3, Oct. 9, 1949. Records available: 1925-49.

Water level at end of day, below mean sea level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	21.1	20.7	20.5	20.4	21.3	23.3	25.3	26.3	25.7	24.6
2	....	....	21.1	20.7	20.5	20.4	21.3	23.4	25.3	26.3	25.6	24.6
3	....	....	21.1	20.7	20.5	20.4	21.4	23.4	25.4	26.3	25.5	24.5
4	22.9	....	21.1	20.7	20.5	20.4	21.5	23.5	25.4	26.3	25.4	24.5
5	22.9	....	21.1	20.6	20.5	20.4	21.5	23.6	25.4	26.3	25.4	24.5
6	22.8	....	21.1	20.5	20.5	20.4	21.6	23.6	25.4	26.3	25.4	24.5
7	22.8	....	21.0	20.5	20.5	20.4	21.6	23.7	25.4	26.3	25.4	24.5
8	22.8	....	21.0	20.5	20.5	20.5	21.7	23.7	25.4	26.3	25.4	24.4
9	22.8	....	21.0	20.5	20.5	20.5	21.8	23.8	25.4	26.3	25.4	24.4
10	22.8	....	21.0	20.5	20.5	20.5	21.9	23.9	25.5	26.3	25.4	24.3
11	22.8	....	20.9	20.5	20.5	20.5	21.9	23.9	25.5	26.3	25.3	24.3
12	22.7	....	20.9	20.5	20.5	20.5	22.0	24.0	25.5	26.3	25.3	24.2
13	22.6	....	20.9	20.5	20.5	20.6	22.0	24.1	25.6	26.3	25.2	24.1
14	22.6	....	20.9	20.5	20.5	20.6	22.1	24.1	25.6	26.3	25.1	24.1
15	22.6	....	20.9	20.5	20.5	20.6	22.2	24.2	25.6	26.3	25.0	24.0
16	22.6	....	20.9	20.4	20.4	20.6	22.2	24.3	25.7	26.3	25.0	24.0
17	22.5	21.4	20.9	20.4	20.4	20.7	22.3	24.3	25.7	26.3	25.0	24.0
18	22.5	21.4	20.9	20.4	20.4	20.7	22.3	24.4	25.7	26.2	25.0	24.0
19	22.4	21.4	20.9	20.4	20.4	20.7	22.4	24.5	25.7	26.1	25.0	23.9
20	22.4	21.4	20.9	20.4	20.4	20.7	22.5	24.5	25.8	26.0	25.0	23.9

36.13.2.9.1--Continued.

Water level at end of day, below mean sea level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	22.4	21.4	20.9	20.4	20.4	20.8	22.6	24.6	25.8	25.9	24.9	23.9
22	22.4	21.4	20.9	20.4	20.4	20.8	22.6	24.7	25.8	25.9	24.9	23.8
23	22.3	21.3	20.9	20.4	20.4	20.9	22.7	24.7	25.8	25.9	24.9	23.8
24	22.3	21.3	20.9	20.4	20.4	20.9	22.9	24.8	25.9	25.9	24.9	23.8
25	22.2	21.3	20.8	20.5	20.4	21.0	22.9	24.9	26.0	25.9	24.7	23.8
26	22.2	21.2	....	20.5	20.4	21.0	22.9	24.9	26.0	25.9	24.7	23.8
27	22.1	21.2	....	20.5	20.4	21.0	23.0	25.0	26.1	25.9	24.7	23.8
28	....	21.1	....	20.5	20.4	21.1	23.1	25.0	26.2	25.9	24.7	23.7
29	....	....	....	20.5	20.4	21.1	23.1	25.1	26.3	25.9	24.6	23.7
30	....	....	20.8	20.5	20.4	21.2	23.2	25.2	26.3	25.9	24.6	23.7
31	....	....	20.7	....	20.4	....	23.2	25.2	....	25.8	....	23.7

36.23.1.9.6. Longport Water Dept. Longport 14th Avenue well. Highest water level about 19.0 in 1895; lowest -63.4, Aug. 27, 1949. Records available: 1924-49. Corrections: In water-Supply Paper 986, page 88, mean sea level for Longport Sept. 30, 1943, should read 39.3 instead of 32.3; in Water-Supply Paper 1016, page 122, mean sea level for Longport Nov. 9, 1944, should read read 37.5 and not 47.5.

Water level at end of day, below mean sea level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.8	39.2	37.5	36.4	38.9	42.2	52.7	61.1	60.6	54.2	47.1	a44.2
2	41.1	39.5	37.3	36.5	38.8	42.4	53.2	....	....	53.9	46.8	a44.1
3	41.0	39.1	37.3	36.6	38.8	42.7	54.3	61.5	....	53.6	47.1	....
4	40.7	38.4	37.5	36.5	38.8	43.2	55.3	....	61.0	53.6	46.9	....
5	40.3	38.3	37.3	36.6	38.9	43.3	56.1	....	61.4	53.3	47.4	....
6	40.2	38.2	37.2	36.3	39.0	43.2	55.8	....	61.8	52.7	....	....
7	40.6	38.0	36.9	37.2	39.1	43.4	54.6	60.0	61.2	52.2	46.6	....
8	40.4	38.5	....	36.8	39.0	44.0	54.2	....	60.0	....	46.5	....
9	40.2	38.4	....	36.8	39.1	44.6	54.9	61.1	59.6	....	46.4	....
10	40.1	37.8	....	37.4	39.0	45.1	55.7	....	59.7	....	46.0	....
11	39.9	38.0	36.4	37.6	38.4	45.8	55.5	....	59.8	....	45.9	....
12	39.6	37.9	37.3	37.5	36.4	46.4	55.8	62.1	59.3	....	45.5	....
13	39.8	38.1	37.8	37.2	38.8	47.0	54.5	....	58.5	....	45.4	....
14	39.7	38.1	37.3	37.1	39.4	47.6	53.9	....	58.0	....	45.6	....
15	39.4	37.8	36.9	37.2	....	46.0	54.4	61.8	57.5	....	45.4	....
16	39.4	37.8	37.2	37.4	....	46.4	....	62.0	56.9	....	45.3	....
17	39.3	38.3	37.6	37.7	....	46.7	....	....	56.5	....	....	....
18	39.2	38.3	36.9	37.7	40.0	....	55.7	....	....	....	45.6	....
19	39.2	38.1	37.3	37.6	....	....	56.4	....	56.8	....	45.4	....
20	39.5	37.8	37.6	38.1	....	....	56.5	....	53.6	....	45.3	....
21	39.1	37.6	37.6	38.4	....	....	56.9	61.6	56.5	....	45.1	....
22	39.1	37.6	37.4	38.2	....	....	57.3	61.8	56.5	....	45.0	....
23	39.3	37.7	37.0	37.9	....	....	....	....	56.1	....	45.1	....
24	39.0	37.4	37.1	37.9	....	....	....	....	56.0	....	44.8	....
25	39.0	37.2	37.1	37.9	....	....	58.7	....	55.9	48.9	....	....
26	38.6	37.4	37.0	38.2	....	52.3	59.1	61.6	55.6	48.5	44.4	....
27	38.5	37.3	36.9	38.3	40.0	52.5	59.4	....	55.1	48.7	a44.3	....
28	38.2	36.8	37.1	38.3	40.3	52.7	59.8	....	54.5	48.6	44.4	....
29	38.8	....	37.2	38.6	41.0	52.5	....	....	54.4	....	a44.0	....
30	39.3	....	37.2	38.9	41.7	52.7	61.0	....	54.3	47.7	44.1	....
31	38.7	....	36.5	....	42.2	....	61.1	60.9	....	47.5	....	....

a Estimated.

Bergen County

East Paterson area

26.3.1.7.3. City of Garfield well 11. Highest water level 56.2, Mar. 8, 1926; lowest -8.9, Sept. 26, 1949. Records available: 1926-49.

Lowest daily water level, above mean sea level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-0.9	18.0	17.2	12.4	8.7	11.0	3.4	4.8	-2.0	-6.0	-6.3	-8.0
2	-9	17.9	16.7	11.5	9.2	9.1	3.4	4.0	-8	-6.0	-6.8	....
3	-4	18.1	18.3	11.5	9.1	9.1	3.4	3.4	-8	-4.1	-7.2	....
4	-1.0	18.6	18.5	11.1	8.9	8.9	3.7	3.2	2.7	-5.0	-7.4	....
5	-1.0	18.5	17.9	11.1	8.9	8.8	6.6	3.2	2.1	-5.5	-7.5	....

26.3.1.7.3--Continued.

Lowest daily water level, below mean sea level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	-0.6	18.5	21.5	11.0	9.0	8.7	5.5	8.8	1.9	-5.8	-6.1	....
7	-.3	15.4	17.8	10.8	9.1	...	6.8	6.2	1.2	-6.2	-6.0	....
8	1.0	14.5	18.5	10.6	9.3	...	6.1	4.0	.7	-6.2	-6.3	....
9	1.0	14.3	19.3	10.5	9.8	...	5.6	9.0	.4	-6.2	-6.3	....
10	4.4	14.2	17.4	10.5	10.6	...	5.5	10.2	.4	-5.0	-6.8	....
11	4.4	14.0	17.6	10.0	9.9	...	7.2	10.8	1.6	-5.7	-7.0	....
12	4.9	13.9	20.3	9.7	9.3	...	7.4	11.2	1.4	-6.1	-7.2	-5.2
13	5.1	17.1	18.9	9.6	9.0	...	7.1	11.1	.5	-6.4	-7.3	-5.8
14	7.1	16.7	17.8	9.3	8.9	...	6.7	5.8	...	-6.5	-6.0	-6.9
15	7.1	16.2	18.0	9.3	8.7	...	6.2	3.8	-.9	-6.5	-7.0	-7.4
16	8.0	16.1	18.5	9.2	8.7	...	5.9	7.7	-1.3	-3.1	-7.4	-7.4
17	8.9	16.4	17.6	9.2	9.2	...	5.8	10.4	-1.3	-3.8	-7.5	-7.3
18	10.9	15.5	16.9	9.4	8.5	...	6.0	7.7	-1.2	-4.5	-7.8	-3.9
19	11.6	15.4	17.1	9.7	8.2	...	5.3	7.6	1.1	-5.1	-7.8	-5.4
20	14.4	20.4	18.2	9.4	8.2	...	4.8	9.3	-1.0	-5.9	-7.8	-6.1
21	14.3	16.7	17.8	9.3	8.5	...	3.5	2.6	-1.6	-6.5	-6.3	-6.2
22	14.7	19.0	17.2	9.3	9.1	...	2.5	2.1	-1.8	-6.8	-7.0	-5.8
23	15.5	16.8	16.1	9.3	11.3	...	2.4	1.2	-1.9	-6.8	-7.5	-5.0
24	17.2	16.8	15.2	9.3	10.7	...	2.3	.7	-3.5	-5.6	-7.5	-2.9
25	16.6	18.2	14.8	9.4	10.5	...	3.9	-.2	-7.2	-6.5	-6.6	-1.8
26	16.6	19.8	14.3	9.5	10.0	...	3.7	-.8	-8.9	-7.0	-6.7	-.7
27	17.6	19.5	14.2	9.1	10.2	...	7.2	-1.2	-5.7	-7.3	-6.6	-2.0
28	17.6	18.0	13.4	8.9	10.6	...	4.4	-1.2	-5.2	-7.5	-5.8	-3.0
29	16.7		12.9	8.9	15.2	...	4.3	-.4	-5.7	-7.5	....	-3.1
30	16.7		12.7	8.7	17.5	...	3.1	-1.1	-5.9	-7.4	....	-2.3
31	18.4		12.7		12.8		5.4	-1.5		-5.6		-1.1

Camden County

Camden area

31.2.2.5.2. City of Camden. Morris Station test well 3. Highest water level -0.3, Mar. 19, 1936; lowest -35.84, June 14, 1926. Records available: 1924-42, 1945-49.

Lowest daily water level, below mean sea level, from recorder charts							
Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	5.0	5.4	...	6.2	5.7	...
2	...	4.3	5.5	...	6.3	5.5	...
3	...	3.6	5.9	...	5.5	5.4	...
4	...	3.6	5.7	...	5.2	5.7	...
5	...	4.3	5.9	...	5.4	5.1	...
6	...	4.3	5.9	...	5.3	5.0	...
7	...	4.7	5.5	...	5.2	5.5	...
8	...	4.9	5.8	...	5.5	5.6	...
9	...	4.8	6.3	...	5.7	5.9	...
10	5.2	4.2	6.4	...	6.3	6.0	...
11	4.9	4.9	6.5	...	6.4	6.7	...
12	4.1	4.9	6.5	...	6.2	6.7	...
13	5.3	4.9	6.3	...	6.5	5.9	...
14	5.5	5.1	5.7	...	6.9	6.4	...
15	5.5	5.0	6.1	...	6.4	6.8	...
16	5.4	5.0	6.3	...	6.0	6.9	...
17	5.2	4.4	6.4	...	6.3	...	...
18	5.0	5.0	6.5	...	6.4	...	...
19	4.3	5.5	6.4	...	6.0	...	...
20	5.1	5.4	5.8	6.1	6.0	...	...
21	5.6	5.8	6.1	6.2	6.4	...	...
22	5.7	6.0	6.3	6.3	5.8	...	...
23	5.7	5.2	6.7	6.3	5.9	...	...
24	5.8	5.2	6.5	6.0	5.8	...	...
25	5.4	5.8	6.5	5.8	5.5	...	...
26	4.6	6.1	6.2	6.0	5.4	...	...
27	5.4	5.7	6.1	6.2	5.6	...	...
28	5.4	5.9	6.1	6.1	5.6	6.9	7.5
29	5.1	5.9	...	6.0	5.3	...	7.8
30	5.1	5.8	...	6.2	4.6	...	7.9
31		5.3	...		5.3		7.7

31.2.4.5.1. New Jersey Water Co. well 10. Highest water level, 1.26, Mar. 19, 1933; lowest -29.0, June 24, 1949. Records available: 1932-49.

Lowest daily water level, below mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	21.8	22.4	21.3	20.2	18.5	24.2	25.0	26.6	22.5	21.4
2	21.7	22.8	21.6	20.5	22.9	24.5	26.8	26.9	22.3	19.5
3	23.2	22.4	21.0	19.4	23.0	24.7	26.4	....	21.7	20.1
4	23.4	21.8	21.5	20.7	25.1	24.4	25.7	....	20.5	20.4
5	23.0	21.2	20.8	18.7	24.0	23.0	27.9	....	24.2	20.5
6	23.5	21.1	20.3	18.3	21.1	25.6	26.8	....	22.3	20.2
7	23.0	21.3	21.6	18.3	21.1	27.1	24.0	....	22.2	20.2
8	22.0	21.4	21.3	18.1	19.0	26.3	26.0	....	21.4	20.0
9	21.5	21.2	19.7	18.2	24.4	25.9	26.5	....	21.6	19.9
10	23.0	21.1	19.7	18.1	21.4	26.3	24.0	....	22.0	21.4
11	22.9	21.1	19.1	18.5	21.6	28.5	25.7	....	20.5	21.8
12	22.8	21.5	18.9	18.3	22.0	28.9	23.5	....	21.4	21.7
13	22.7	20.6	18.2	18.4	21.8	27.7	23.0	....	21.1	21.6
14	22.6	21.1	22.2	19.2	21.5	27.9	24.4	....	21.4	21.4
15	22.3	23.0	19.8	19.2	20.4	28.0	24.9	....	21.2	19.6
16	21.3	21.6	19.8	19.0	24.3	27.2	25.4	....	21.4	19.5
17	22.1	21.8	20.1	18.3	24.2	27.0	22.0	....	22.0	21.5
18	22.8	20.3	20.1	18.5	25.3	23.1	25.7	....	21.2	21.1
19	22.6	20.2	19.6	19.4	28.0	23.0	26.3	....	22.5	20.9
20	22.5	20.3	19.1	18.8	24.1	26.6	26.9	....	22.0	22.4
21	21.8	21.9	20.3	19.1	21.0	28.5	26.2	....	22.0	22.3
22	22.3	20.4	19.6	18.9	19.5	28.4	27.2	....	21.0	21.6
23	21.9	20.7	19.6	18.2	22.1	28.2	24.9	....	21.5	20.5
24	22.6	20.6	22.9	18.0	24.5	29.0	23.7	....	20.8	21.5
25	22.7	20.1	20.6	20.6	22.0	27.4	27.1	....	19.9	21.7
26	21.9	20.9	19.9	20.2	21.2	27.5	23.0	....	23.7	21.8
27	22.2	20.0	19.5	19.3	23.6	28.3	28.2	....	21.3	22.2
28	21.4	20.5	21.4	23.2	20.6	26.9	28.5	....	21.6	22.1
29	22.0		22.5	22.9	19.8	28.1	27.2	....	21.2	21.6
30	21.4		21.7	21.8	19.9	27.8	27.5	....	21.5	19.7
31	22.2		21.2		23.8		23.4	22.7		....

Cape May County

Atlantic City area

36.31.9.1.9. Sea Isle City Water Dept. well 1. Highest water level -3.5, Apr. 7, 1930; lowest -10.1, Sept. 13, 1931. Records available: 1930-49. Recorder removed on July 13. Measurement discontinued.

Lowest daily water level, below mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	8.7	8.7	8.4	8.2	8.3	8.2	8.8
2	8.9	8.8	8.4	8.2	8.3	8.2	8.8
3	8.9	8.8	8.4	8.2	8.3	8.2	8.9
4	8.9	8.7	8.5	8.2	8.3	8.3	9.0
5	8.9	8.6	8.4	8.2	8.3	8.2	9.0
6	8.7	8.6	8.3	8.0	8.3	8.2	9.0
7	8.8	8.5	8.3	8.1	8.1	8.3	9.0
8	8.8	8.6	8.2	8.1	8.2	8.4	9.0
9	8.9	8.6	8.2	8.2	8.2	8.4	9.1
10	8.9	8.6	8.2	8.2	8.1	8.4	9.1
11	8.9	8.6	8.2	8.3	8.1	8.4	9.1
12	8.8	8.7	8.4	8.2	7.9	8.5	9.0
13	8.8	8.6	8.5	8.2	8.0	8.5	...
14	8.8	8.6	8.5	8.1	8.1	8.5	...
15	8.8	8.6	8.5	8.1	8.1	8.5	...
16	8.8	8.6	8.5	8.2	8.1	8.5	...
17	8.7	8.7	8.5	8.2	8.1	8.4	...
18	8.8	8.8	8.4	8.2	8.1	8.5	...
19	8.7	8.7	8.5	8.1	8.1	8.5	...
20	8.8	8.6	8.6	8.2	8.1	8.5	...
21	8.8	8.6	8.6	8.3	8.1	8.5	...
22	8.7	8.6	8.5	8.3	8.1	8.5	...
23	8.8	8.6	8.5	8.3	8.0	8.6	...
24	8.8	8.6	8.5	8.2	8.1	8.6	...
25	8.7	8.5	8.5	8.2	8.1	8.7	...

36.31.9.1.9--Continued.

Lowest daily water level, below mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
26	8.7	8.5	8.4	8.3	8.0	8.7	...
27	8.6	8.5	8.4	8.2	8.0	8.7	...
28	8.5	8.4	8.4	8.2	8.1	8.7	...
29	8.6		8.5	8.3	8.1	8.7	...
30	8.8		8.5	8.3	8.2	8.8	...
31	8.7		8.3		8.2		...

Essex County

Canoe Brook area

25.15.7.5.4. Commonwealth Water Co. well 30. Highest water level 162.8, Aug. 25, 1931; lowest 109.0, Sept. 23, 1949. Records available: 1925-49.

Lowest daily water level, above mean sea level, from recorder charts

Day	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	121.4	115.9	118.0	.....	.....	117.9	110.0
2	.....	.....	.....	120.6	115.9	116.7	.....	116.7	117.8	112.6
3	.....	.....	.....	117.5	116.5	116.3	.....	116.7	.....	113.9
4	127.7	.....	123.9	116.4	116.9	116.3	116.2	116.6	.....	114.7
5	127.8	.....	122.2	116.2	117.2	113.7	116.2	116.6	116.8	114.9
6	127.8	.....	121.8	116.2	117.3	112.9	115.9	116.3	117.6	115.4
7	127.8	.....	121.3	115.0	117.8	115.2	115.6	.....	117.9	115.9
8	127.4	.....	121.2	115.7	117.6	116.8	115.6	.....	118.1	115.5
9	128.4	.....	121.6	113.3	117.1	.....	115.4	.....	117.9	115.1
10	129.5	.....	121.2	114.1	117.0	.....	115.4	.....	116.1	115.0
11	129.8	.....	121.3	115.0	118.1	115.7	115.7	.....	118.3	115.1
12	129.9	.....	121.2	116.5	117.2	115.9	111.4	.....	118.2	115.2
13	.....	.....	121.2	116.7	118.3	115.9	111.1	.....	118.3	116.1
14	.....	.....	123.0	117.7	117.7	116.1	.....	.....	118.7	115.8
15	.....	135.5	124.1	119.5	117.3	116.4	.....	118.5	118.6	116.2
16	.....	135.3	124.4	121.4	117.0	117.2	.....	118.3	117.2	115.7
17	.....	133.0	124.4	119.4	117.0	119.3	115.0	118.5	116.2	115.5
18	.....	125.9	124.5	118.3	117.4	118.6	115.5	118.3	115.8	115.7
19	.....	128.7	124.5	117.2	116.8	117.3	116.2	118.2	114.9	115.9
20	.....	.....	126.5	117.1	116.5	116.8	111.1	118.2	.....	116.1
21	.....	.....	127.6	117.3	116.3	116.5	109.8	.....	.....	116.2
22	.....	.....	126.8	117.0	116.3	116.4	109.5	118.1	.....	.....
23	.....	.....	125.3	116.9	114.9	116.3	109.0	118.0	.....	118.3
24	.....	.....	126.5	116.8	115.8	115.9	.....	117.8	.....	116.2
25	.....	.....	126.1	116.9	116.2	115.7	.....	117.6	.....	115.9
26	.....	.....	125.6	116.9	115.8	115.6	.....	117.7	114.1	115.9
27	.....	.....	125.3	116.6	115.6	115.6	.....	117.8	113.9	116.4
28	.....	.....	125.4	116.4	115.5	115.8	.....	117.9	113.9	123.6
29	.....	.....	124.5	116.0	115.7	116.2	.....	117.9	114.1	117.9
30	.....	.....	124.5	116.0	115.6	116.9	.....	117.9	111.0	116.2
31	.....	.....	122.6		115.8	.....		117.9		116.2

26.21.1.5.6. Short Hills Water Co. test well 10. Highest water level, 91.78, Jan. 12, 1934; lowest, 64.22, Oct. 31, 1941. Records available: 1930-49.

Water level in feet, above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	75.13	May 3	80.70	Aug. 10	73.85	Nov. 3	72.24
Feb. 3	79.72	June 9	77.51	Sept. 28	76.18	Dec. 1	69.99
Mar. 14	81.02	July 6	75.05				

Middlesex and Monmouth Counties

Runyon area

Average of the water levels in the water-table wells near Runyon, in feet above an assumed datum. Records available: 1923-45, 1947. No measurement made in 1949.

Middlesex County

Runyon area

29.1.4.4.2. Perth Amboy Water Dept. Runyon well 50. Highest water level 12.4, July 26, 1938; lowest, -1.3, Sept. 26, 27, 1929. Records available: 1923-49.

29.1.4.6.8. Clyde Bowne. Browntown test well. Highest water level 28.14, Apr. 9-10, 1939; lowest, 21.83, Nov. 18, 1932. Records available: 1932-49.

Lowest daily water level, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.46	26.40	26.77	26.81	26.90	27.02	26.34	.....	.....	24.32	23.87	23.48
2	25.47	26.40	26.77	26.82	26.90	27.02	26.31	25.58	24.86	24.30	23.85	23.47
3	25.47	26.41	26.77	26.82	26.90	27.00	26.28	25.55	24.84	24.29	23.84	23.47
4	25.47	26.41	26.77	26.82	26.92	27.00	26.23	25.53	24.81	24.27	23.83	23.46
5	25.53	26.42	26.77	26.82	26.94	26.99	26.23	25.51	24.79	24.26	23.82	23.44
6	25.76	26.42	26.83	26.84	26.98	26.98	26.20	25.49	24.77	24.24	23.78	23.43
7	.....	26.44	26.84	26.84	26.98	26.98	26.17	25.47	24.75	24.23	23.78	23.42
8	.....	26.44	26.80	26.86	26.98	26.96	26.14	25.45	24.73	24.21	23.75	23.41
9	25.82	26.47	26.80	26.85	26.98	26.93	26.11	.....	.....	24.20	23.74	23.39
10	25.82	26.47	26.80	26.85	26.98	26.91	26.08	25.43	24.70	24.19	23.72	23.38
11	25.82	26.47	26.82	26.85	26.98	26.89	26.04	25.41	24.68	24.18	23.71	23.38
12	25.82	26.46	26.83	26.85	26.98	26.83	26.04	25.38	24.66	24.16	23.70	23.36
13	25.82	26.46	26.83	26.85	26.98	.....	26.02	25.36	24.64	24.15	23.69	23.36
14	25.82	26.46	26.83	26.85	26.98	26.82	26.00	25.34	24.62	24.13	23.69	23.34
15	.....	26.46	26.83	26.85	26.98	26.79	25.98	25.32	24.60	24.12	23.67	23.33
16	25.81	26.46	26.83	26.85	26.98	26.76	25.96	25.29	24.58	24.11	23.66	23.31
17	25.81	26.46	26.83	26.85	26.98	26.64	25.94	25.28	24.56	24.09	23.65	23.30
18	25.81	26.46	26.83	26.85	26.98	26.64	25.93	25.26	24.54	24.07	23.64	23.30
19	25.80	26.46	26.83	26.85	26.98	.....	.....	25.24	24.53	24.06	23.61	23.29
20	25.80	26.46	26.82	26.85	26.98	26.63	.....	25.22	24.51	24.04	23.61	23.28
21	25.79	26.46	26.82	26.85	26.98	26.62	.....	25.19	24.49	24.03	23.60	23.27
22	25.79	26.55	26.82	26.85	26.98	26.60	.....	25.17	24.47	.....	23.58	23.26
23	25.83	26.64	26.82	26.85	26.98	26.57	.....	.....	24.46	24.00	23.57	23.25
24	25.98	26.65	26.82	26.85	26.98	26.56	.....	.....	.....	23.98	23.56	23.24
25	26.03	26.69	26.82	26.87	26.98	26.53	25.75	25.05	24.42	23.96	23.54	23.23
26	26.08	26.70	26.81	26.87	26.98	26.50	25.73	25.03	24.40	23.95	23.55	23.22
27	26.15	26.70	26.81	26.87	26.98	26.45	25.71	25.01	24.38	23.93	23.54	23.21
28	26.36	26.75	26.81	26.87	26.98	26.44	25.69	24.98	24.37	23.91	23.53	23.21
29	26.39		26.81	26.87	26.98	26.41	25.67	24.96	24.35	23.90	23.51	23.20
30	26.39		26.81	26.90	27.03	26.38	25.65	24.94	24.33	23.89	23.50	23.17
31	26.39		26.81		27.02		.....	24.92		23.88		.....

a Estimated.

28.5.4.8.1. Duhernal observation well 1. Highest water level 7.67, July 31, 1945; lowest, 3.74, Dec. 31, 1949. Records available: 1938-49.

Daily water level, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	6.23	6.50	6.36	6.38	6.33	5.60	5.00	4.54	4.30	4.17	....
2	....	6.23	6.50	6.35	6.42	6.31	5.57	4.99	4.53	4.29	4.21	....
3	....	6.28	6.50	6.36	6.43	6.29	5.55	4.96	4.51	4.28	4.20	....
4	....	6.34	6.53	6.36	6.46	6.28	5.53	4.95	4.50	4.27	4.18	....
5	5.79	6.38	6.54	6.35	6.47	6.26	5.50	4.94	4.49	4.26	4.16	....
6	5.89	6.41	6.54	6.35	6.48	6.25	5.50	4.93	4.49	4.26	4.15	....
7	5.95	6.44	6.53	6.33	6.50	6.23	5.49	4.91	4.51	4.26	4.14	....
8	6.00	6.45	6.57	6.31	6.52	6.20	5.47	4.90	4.52	4.25	4.13	....
9	6.04	6.46	6.58	6.28	6.55	6.19	5.45	....	4.49	4.24	4.11	....
10	6.07	6.49	6.60	6.30	6.58	6.18	5.43	4.85	4.48	4.23	4.11	....

28.5.4.8.1.--Continued.

Daily water level, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	6.11	6.49	6.62	6.32	6.64	6.16	5.41	4.83	4.46	4.22	4.10	....
12	6.13	6.53	6.57	6.37	6.67	6.12	5.39	4.81	4.47	4.20	4.11	....
13	6.17	6.54	6.54	6.44	6.69	6.09	5.41	....	4.48	4.19	4.13	....
14	6.16	6.56	6.58	6.45	6.69	6.06	5.39	....	4.47	4.18	4.11	....
15	6.22	6.59	6.61	6.48	6.69	6.01	5.37	....	4.45	4.18	4.10	....
16	6.25	6.59	6.62	6.44	6.67	5.98	5.36	....	4.43	4.21	4.09	....
17	6.27	6.51	6.59	6.36	6.63	5.95	5.33	....	4.42	4.23	4.11	....
18	6.29	6.47	6.56	6.42	6.58	5.93	5.31	....	4.41	4.27	4.10	....
19	6.29	6.45	6.52	6.39	6.55	5.89	....	4.70	4.40	4.33	4.09	....
20	6.23	6.41	6.48	6.35	6.53	5.87	5.18	4.68	4.39	4.37	4.08	....
21	6.28	6.40	6.46	6.31	6.52	5.84	5.17	4.66	4.37	4.39	4.07	3.82
22	6.25	6.44	6.45	6.31	6.52	5.82	5.14	4.65	4.38	4.40	4.06	3.81
23	6.21	6.39	6.42	6.32	6.49	5.79	5.13	4.64	4.39	4.38	4.05	3.81
24	6.21	6.42	6.40	6.29	6.49	5.77	5.11	4.66	4.37	4.35	4.04	3.82
25	6.16	6.46	6.40	6.30	6.48	5.75	5.11	....	4.36	4.34	4.05	3.81
26	6.23	6.43	6.41	6.32	6.49	5.72	5.10	....	4.35	4.30	4.02	3.80
27	6.24	6.47	....	6.33	6.48	5.70	5.09	....	4.34	4.24	4.02	3.80
28	6.29	6.54	....	6.31	6.46	5.70	5.08	....	4.35	4.21	....	....
29	6.24	....	....	6.33	6.41	5.64	5.06	....	4.35	4.18	....	3.75
30	6.22	....	6.35	6.35	6.40	5.61	5.04	....	4.32	4.17	....	3.74
31	6.25	....	6.38	....	6.37	....	5.02	4.56	....	4.16	....	3.74

28.5.4.8.7. Duhermal observation well 2. Records available: 1938-44.
No measurement made in 1949.

28.4.9.3.5. Duhermal observation well 4. Highest water level 11.75,
Apr. 20, 1949; lowest -2.42, Dec. 16, 18, 19, 1948. Records available:
1938-49.

Daily water level in feet, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	0.87	....	0.68	2.90	1.99	0.28	....	-1.56	-1.23	-1.22	0.23
2	....	.87	....	1.60	1.95	1.79	.73	....	-1.35	-.89	-.22	.26
3	....	.82	....	2.29	1.65	2.90	.89	....	-1.53	-1.08	.40	.17
4	....	.96	....	1.25	1.61	3.65	1.00	....	-1.29	-1.17	.60	.18
5	....	1.28	....	1.17	1.78	3.81	.22	....	-1.17	-1.18	1.00	.15
6	-1.25	1.53	....	.90	1.72	2.35	-.03	....	-1.16	-1.22	1.31	.14
7	-1.07	1.19	....	.97	2.37	1.63	-.15	....	-1.44	-1.21	1.39	.09
8	-.88	1.23	1.51	.98	2.42	1.80	.11	....	-1.13	-1.36	1.37	.00
9	-.49	1.15	1.39	1.95	1.83	1.75	.38	....	-1.66	-1.38	1.28	.06
10	-.50	1.23	1.25	2.29	1.68	2.00	.54	....	-1.39	-1.63	1.32	.04
11	-.60	2.45	1.27	1.25	1.68	2.15	.03	....	-1.21	-1.37	1.27	.13
12	-.58	3.16	1.88	1.05	1.48	2.20	-.16	....	-1.23	-1.51	1.28	.02
13	-.55	3.48	2.20	.85	1.36	1.70	-.16	....	-1.25	-1.61	1.37	-.05
14	-.76	1.74	1.74	.74	2.24	1.00	-.17	....	-1.23	-1.62	1.24	-.04
15	-.61	1.13	....	.79	2.21	.95	-.17	....	-1.16	-1.53	1.22	-.06
16	-.28	.86	....	1.35	1.65	.73	.31	-1.07	-1.16	-1.20	1.18	-.11
17	-.52	.62	....	1.96	1.40	.68	.46	-1.18	-1.08	-1.54	1.12	-.09
18	-.50	.65	....	1.03	1.34	1.52	.31	-1.30	-.87	-1.85	1.06	.14
19	-.60	1.20	....	1.00	1.30	1.53	....	-1.38	-1.25	-1.80	1.09	-.71
20	-.51	1.54	....	.93	1.30	.87	....	-1.14	-1.01	-1.93	1.02	-.30
21	-.54	1.12	....	.85	1.84	.50	....	-.83	-1.50	-1.90	.78	-.05
22	-.35	.96	.82	1.00	2.11	.45	....	-.90	-1.42	-1.64	.69	-.01
23	.01	1.00	.63	1.65	1.85	.33	....	-1.35	-1.32	-1.44	.57	-.04
24	.05	1.14	.79	2.45	1.82	.24	....	-1.43	-1.23	-1.78	.64	-.01
25	.04	1.17	1.41	1.76	1.78	.89	....	-1.59	-1.15	-1.65	.55	.31
26	.46	1.58	2.10	1.67	1.77	.87	....	-1.67	-1.17	-1.78	.52	.46
27	.40	2.09	....	1.59	2.11	.49	....	-1.47	-1.16	-1.76	.42	.48
28	.88	1.50	1.43	1.45	2.32	.25	....	-1.06	-1.28	-1.75	.37	.54
29	1.27	....	1.16	2.20	2.75	.21	....	-1.10	-1.45	-1.30	.40	.55
30	1.71	....	1.50	2.73	2.95	-.01	....	-1.46	-1.35	-.35	.30	.55
31	1.01	....	.72	....	2.10	....	....	-1.35	....	-.80	....	.66

28.5.7.1.5. Duernal observation well 5. Highest water level 14.94, Apr. 7-8, 1939; lowest .74, Dec. 14, 1949. Records available: 1939-49.

Water level at end of day in feet, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.16	7.78	8.34	8.13	9.06	....	6.10	4.78	3.01	2.48	2.31	1.21
2	5.54	7.78	8.36	8.36	8.96	....	....	4.70	2.95	2.50	2.31	1.16
3	5.76	7.82	8.27	8.58	9.00	....	....	4.67	2.91	2.47	2.26	1.13
4	5.96	7.90	8.36	8.31	....	....	....	4.61	2.86	2.42	2.20	1.10
5	6.17	7.96	8.47	8.48	....	....	6.00	4.59	2.83	2.39	2.17	1.06
6	6.48	7.88	8.56	8.35	....	....	5.88	4.63	2.84	2.35	2.19	1.02
7	6.66	7.96	8.56	8.43	....	....	5.61	4.66	2.83	....	2.16	.96
8	6.72	8.08	8.60	8.34	....	7.84	5.70	4.60	2.82	....	2.12	.93
9	6.80	7.98	8.59	8.44	....	7.76	5.69	4.52	2.77	....	2.08	.90
10	6.83	8.04	8.56	8.56	....	7.76	5.67	4.42	2.75	....	2.04	.86
11	6.84	7.89	8.54	8.37	8.95	7.81	5.65	4.35	2.73	2.23	1.99	.82
12	6.82	8.12	8.78	8.29	8.83	7.79	5.60	4.28	2.70	2.19	1.95	.78
13	6.85	8.12	8.84	8.30	8.80	7.53	5.60	4.25	....	2.16	1.93	.75
14	6.65	8.03	8.77	8.14	8.98	7.41	5.56	4.20	....	2.13	1.90	.74
15	6.74	7.90	8.55	....	8.98	7.34	5.49	....	....	2.10	1.88	.77
16	6.84	7.90	8.45	....	8.80	7.22	5.52	4.00	....	....	1.84	.80
17	6.64	7.68	8.35	....	8.62	7.13	5.56	3.95	....	2.12	1.79	.90
18	6.65	7.76	8.18	....	....	7.17	5.64	3.87	....	2.08	1.72	.96
19	6.50	7.95	8.29	....	....	7.11	5.79	3.80	....	2.06	1.68	1.07
20	6.44	8.06	8.43	8.36	....	6.99	5.86	3.77	2.64	2.06	1.61	1.15
21	6.58	8.05	8.30	8.41	....	6.84	5.63	3.73	2.62	2.02	1.55	1.24
22	6.70	8.18	8.27	8.52	....	6.73	....	3.63	2.60	2.01	1.52	1.29
23	7.00	8.21	8.21	8.82	....	6.64	....	3.53	2.58	2.09	1.48	1.21
24	7.10	8.39	8.23	8.93	....	6.53	....	3.47	2.64	2.10	1.47	1.30
25	7.10	8.41	8.32	8.93	....	6.60	....	3.37	2.68	2.07	1.42	1.39
26	7.22	8.52	8.54	8.90	....	6.82	5.21	3.29	2.67	2.01	1.40	1.48
27	7.30	8.66	8.66	8.88	....	6.46	5.13	3.24	2.59	2.07	1.35	1.57
28	7.50	8.59	8.43	8.76	....	6.34	5.02	3.21	2.52	2.11	1.33	1.64
29	7.61	....	8.34	8.80	....	6.24	4.92	3.17	2.49	2.16	1.30	1.70
30	7.78	....	8.22	8.96	....	6.14	4.88	3.12	2.49	2.20	1.27	1.74
31	7.74	....	8.20	....	....	....	4.85	3.08	....	2.26	....	1.81

28.4.9.5.1. Duernal observation well 9. Records available: 1939-44. No measurement made in 1949.

28.4.9.8.2. Duernal observation well 10. Records available: 1938-46. No measurement made in 1949.

28.4.9.3.1. Duernal observation well 11. Highest water level 14.23, June 1, 1940; lowest -1.90, Jan. 22, 23, 24, 1943. Records available: 1939-49.

Water level at end of day in feet, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.1	12.1	10.3	9.1	9.4	9.1	11.0	...	7.5	7.5	...	5.6
2	10.9	12.1	10.3	9.2	9.3	9.0	11.0	8.4	7.5	7.5	...	5.7
3	10.9	12.1	10.1	9.2	9.3	9.1	11.0	8.3	7.4	7.5	...	5.6
4	11.0	12.2	10.1	9.0	9.3	...	11.0	8.4	7.4	7.5	...	5.6
5	11.2	12.2	10.1	9.1	9.3	...	11.0	8.4	7.5	7.5	...	5.6
6	11.3	12.2	10.1	9.1	9.3	...	11.0	8.4	7.6	7.5	...	5.6
7	11.3	12.2	10.0	9.1	9.3	8.9	11.0	8.4	7.5	7.4	...	5.5
8	11.3	12.3	9.9	9.0	9.3	9.7	11.0	...	7.6	7.4	7.2	5.5
9	11.3	12.3	9.9	9.1	9.2	9.2	11.0	8.1	7.5	7.4	7.2	5.4
10	11.3	12.3	9.8	9.1	9.2	10.1	11.0	8.0	7.5	7.3	7.2	5.4
11	11.4	12.3	9.8	8.9	9.2	10.3	11.0	8.0	7.5	...	7.1	5.4
12	11.4	12.4	9.8	8.9	9.3	10.4	11.1	8.0	7.5	...	7.1	5.4
13	11.4	12.5	9.8	8.9	...	10.5	11.2	8.0	7.6	...	7.2	5.3
14	11.3	12.4	9.7	8.9	...	9.9	10.6	8.0	7.6	...	7.1	5.3
15	11.4	12.3	9.5	8.9	...	10.4	10.4	8.0	7.5	...	7.1	5.3
16	11.5	12.4	9.5	9.1	9.2	10.4	10.3	7.9	...	...	7.1	5.2
17	11.4	12.2	9.4	9.2	8.6	10.6	10.3	7.9	...	...	7.1	5.2
18	11.5	12.3	9.3	9.1	9.0	10.8	10.2	7.8	...	7.1	7.1	5.2
19	11.4	12.4	9.4	9.1	9.0	10.8	9.1	7.8	...	7.0	7.1	5.2
20	11.5	12.4	9.4	...	9.1	10.8	8.8	7.8	7.5	7.0	7.1	5.2
21	11.6	11.5	9.3	...	9.1	10.9	8.6	7.8	7.5	7.0	6.5	5.2
22	11.7	11.3	9.3	...	...	10.9	8.4	7.8	7.4	7.0	6.3	5.2
23	11.8	11.1	9.3	...	...	10.9	8.4	7.6	7.5	7.0	6.2	5.1
24	11.8	11.0	9.2	...	9.3	10.9	8.3	7.6	7.4	6.9	6.1	5.1
25	11.8	10.8	9.3	...	9.2	11.0	8.7	7.6	7.4	6.9	6.0	6.5

28.4.9.3.1--Continued.

Water level at end of day in feet, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	11.9	10.7	9.4	9.2	9.2	11.0	...	7.5	7.4	6.9	6.0	6.2
27	12.0	10.6	9.4	9.2	9.2	11.0	...	7.5	7.4	6.9	5.9	5.7
28	12.1	10.5	9.2	9.1	9.2	11.0	...	7.5	7.4	6.9	5.8	5.7
29	12.1		9.1	9.2	9.2	11.0	...	7.5	7.4	6.9	5.8	5.5
30	12.2		9.1	9.3	9.2	11.0	...	7.5	7.4	7.1	5.7	5.5
31	12.1		9.1		9.1		...	7.5		...		6.1

28.4.4.2.1. Robert D. Fischer test well. Highest water level 64.12, Apr. 26-27, 1939; lowest 56.61, Dec. 31, 1949. Records available: 1936-49.

Water level at end of day in feet, above mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	57.60	58.96	59.78	60.20	60.40	60.66	60.06	59.26	.....	57.83	57.28	56.92
2	57.71	59.01	59.80	60.20	60.40	60.66	60.04	59.23	.....	57.81	57.26	56.90
3	57.78	59.08	59.80	60.22	60.41	60.65	60.01	59.20	.....	57.79	57.25	56.89
4	57.83	59.12	59.84	60.20	60.42	60.66	59.98	59.18	.....	57.77	57.23	56.88
5	57.89	59.14	59.87	60.23	60.43	60.67	59.96	59.15	.....	57.76	57.21	56.87
6	57.94	59.18	59.88	60.24	60.45	60.67	59.93	59.12	.....	57.74	57.20	56.86
7	57.98	59.22	59.88	60.25	60.46	60.62	59.90	58.34	57.70	57.18	56.85	
8	58.00	59.26	59.90	60.25	60.47	60.58	59.86	59.08	58.32	57.66	57.18	56.84
9	58.06	59.28	59.92	60.22	60.50	60.54	59.83	59.05	58.28	57.64	57.16	56.82
10	58.12	59.32	59.94	60.23	60.50	60.55	59.82	59.02	58.25	57.62	57.15	56.81
11	58.18	59.32	59.96	60.26	60.51	60.54	59.78	58.99	58.23	57.60	57.14	56.80
12	58.24	59.35	59.98	60.27	60.52	60.52	59.77	58.96	58.21	57.59	57.13	56.80
13	58.30	59.39	59.99	60.30	60.52	60.48	59.77	58.94	58.20	57.56	57.12	56.79
14	58.32	59.41	60.00	60.29	60.54	60.46	59.74	58.91	58.18	57.55	57.11	56.78
15	58.36	59.44	60.01	60.30	60.54	60.44	59.70	58.88	58.15	57.53	57.09	56.77
16	58.40	59.46	60.03	60.30	60.55	60.42	59.67	58.85	58.14	57.51	57.08	56.75
17	58.43	59.46	60.05	60.29	60.56	60.40	59.68	58.83	58.11	57.49	57.07	56.74
18	58.46	59.48	60.05	60.32	60.57	60.38	59.64	58.82	58.10	57.48	57.06	56.73
19	58.49	59.50	60.04	60.31	60.58	60.36	59.61	58.79	58.07	57.46	57.05	56.72
20	58.50	59.52	60.06	60.30	60.58	60.34	59.58	58.76	58.05	57.44	57.04	56.71
21	58.54	59.53	60.08	60.32	60.57	60.34	59.56	58.72	58.02	57.43	57.03	56.70
22	58.58	59.56	60.10	60.33	60.60	60.30	59.52	58.70	58.01	57.41	57.01	56.69
23	58.59	59.58	60.12	60.34	60.61	60.28	59.49	58.68	58.00	57.39	57.00	56.68
24	58.62	59.60	60.11	60.32	60.62	60.24	59.46	.....	57.97	57.37	57.00	56.67
25	58.62	59.62	60.12	60.30	60.60	60.23	59.44	.....	57.94	57.36	56.99	56.66
26	58.66	59.65	60.14	60.35	60.62	60.20	59.41	.....	57.92	57.36	56.97	56.65
27	58.68	59.72	60.16	60.36	60.63	60.17	59.39	.....	57.91	57.34	56.96	56.65
28	58.74	59.76	60.14	60.34	60.64	60.14	59.36	.....	57.89	57.33	56.95	56.64
29	58.76		60.16	60.34	60.64	60.11	59.34	.....	57.88	57.31	56.94	56.63
30	58.81		60.18	60.37	60.66	60.08	59.32	.....	57.85	57.30	56.93	56.62
31	58.90		60.20		60.66		59.29	.....		57.30		56.61

29.11.1.2.3. Joseph Morrell. Highest water level 75.08, Mar. 28, 1932; lowest 68.05, Oct. 6, 1932. Records available: 1923-49.

Water level at end of day in feet, above mean sea level

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	74.24	74.16	74.00	74.07	74.15	73.11	70.95	70.04	68.98	69.48	69.99	72.07
2	74.21	74.06	74.02	74.00	73.99	73.04	70.92	69.97	68.96	69.50	70.14	72.11
3	74.15	73.95	74.01	73.92	74.12	72.97	70.86	69.93	68.94	69.52	70.30	72.15
4	74.07	74.24	74.25	73.81	73.93	72.90	70.82	69.93	68.93	69.55	70.45	72.18
5	74.40	74.17	74.44	73.75	73.78	72.83	70.76	69.93	68.91	69.57	70.60	72.20
6	74.43	74.09	74.28	74.19	73.64	72.72	70.69	69.92	68.90	69.59	70.75	72.21
7	74.23	74.22	74.10	74.05	73.55	72.60	70.63	69.91	68.93	69.61	70.87	72.24
8	74.14	74.13	74.05	73.97	73.53	72.52	70.60	69.90	68.97	69.63	71.00	72.26
9	74.05	74.07	73.97	73.87	73.46	72.43	70.54	69.86	69.00	69.64	71.13	.....
10	74.01	73.98	73.90	73.78	73.97	72.33	70.46	69.82	69.02	69.65	73.22	.....
11	73.94	73.91	73.83	73.73	73.79	72.25	70.39	69.77	69.04	69.66	71.26	.....
12	73.90	73.86	74.12	73.68	73.66	72.18	70.34	69.74	69.04	69.67	71.33	.....
13	73.86	73.91	74.00	74.11	73.64	72.07	70.35	69.70	69.05	69.67	71.40	.....
14	73.82	73.90	73.92	73.96	73.60	71.98	70.40	69.66	69.09	69.67	71.46	.....
15	73.76	73.86	73.83	73.88	73.57	71.90	70.45	69.64	69.15	69.67	71.51	.....
16	73.72	74.04	73.80	73.80	73.44	71.83	70.54	69.60	69.23	69.67	71.54	.....
17	73.68	74.10	73.77	73.73	73.35	71.77	70.57	69.53	69.30	69.67	71.57	.....
18	73.66	74.15	73.74	74.02	73.29	71.72	70.61	69.50	69.33	69.67	71.59	.....
19	73.65	74.24	73.72	74.03	73.21	71.65	70.64	69.45	69.34	69.67	71.62	73.24
20	73.69	74.30	73.70	73.90	73.74	71.58	70.65	79.42	69.35	69.67	71.64	73.29

29.11.1.2.2--Continued.

Water level at end of day in feet, above mean sea level												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	73.72	74.11	74.05	73.80	73.87	71.48	70.65	69.37	69.35	69.67	71.65	73.27
22	73.75	74.33	74.01	73.76	74.00	71.38	70.63	69.32	69.36	69.65	71.67	73.22
23	74.10	74.27	74.22	73.90	74.06	71.21	70.60	69.28	69.37	69.63	71.70	73.18
24	74.41	74.20	74.08	74.00	73.88	71.15	70.59	69.25	69.58	69.61	71.70	73.18
25	74.22	74.12	74.04	73.89	73.79	71.09	70.53	69.20	69.59	69.61	71.78	73.17
26	74.50	74.05	73.99	73.80	73.74	71.07	70.46	69.15	69.40	69.61	71.82	73.17
27	74.26	73.96	74.12	73.74	73.60	71.05	70.39	69.11	69.41	69.62	71.86	73.79
28	74.43	73.90	74.06	73.65	73.45	71.03	70.32	69.06	69.42	69.65	71.88	73.73
29	74.20	74.00	73.60	73.37	73.37	71.01	70.24	69.04	69.43	69.68	71.97	.....
30	74.10	73.95	73.57	73.28	73.28	70.97	70.17	69.03	69.46	69.76	72.05	.....
31	74.32	73.90	73.19	73.19	73.19	70.10	69.00	69.00	69.00	69.86	72.05	.....

a Estimated.

28.5.4.3.9. Perth Amboy Water Dept. Runyon old deep well 1. Highest water level 12.8, Mar. 1, 1943, Mar. 26, 1944; lowest -54.9, Sept. 26-27, 1947. Records available: 1930-49.

Lowest daily water level, below mean sea level, from recorder charts										
Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	....	14.5	15.0	33.3	....	36.2	37.1	36.4	37.0	
2	....	15.6	14.9	33.4	....	36.4	37.1	36.4	37.0	
3	....	+4.1	15.3	33.3	....	36.3	37.2	36.4	36.9	
4	....	+6.0	15.3	32.5	....	34.7	37.3	36.3	36.9	
5	....	+6.6	15.3	32.1	....	34.3	37.3	36.4	36.8	
6	16.3	+6.9	15.2	32.0	....	31.8	37.8	36.4	36.8	
7	16.1	+6.9	15.4	32.1	....	31.9	38.0	36.0	37.6	
8	15.8	....	15.6	32.4	....	32.0	38.4	35.9	37.6	
9	16.0	....	15.7	32.5	....	32.1	38.8	37.8	37.6	
10	15.0	....	15.8	32.5	....	32.2	39.1	38.0	37.6	
11	15.3	....	15.9	33.0	....	32.3	39.3	37.5	37.5	
12	15.3	....	15.9	33.0	....	32.4	39.1	37.6	37.3	
13	15.4	+8.6	15.9	33.7	....	32.2	37.6	37.4	37.1	
14	15.7	+8.7	16.2	34.0	....	32.0	....	36.5	37.5	
15	16.2	+8.8	16.4	34.1	....	35.5	....	37.0	37.5	
16	16.6	+9.3	16.7	34.2	....	35.6	....	37.0	37.3	
17	16.5	11.4	16.8	34.3	....	34.0	38.4	36.7	37.1	
18	16.5	12.7	16.9	34.2	....	35.8	38.4	36.7	36.9	
19	16.6	13.4	17.0	33.6	35.7	36.1	38.5	36.7	5.3	
20	16.6	14.0	16.7	17.0	35.8	36.1	38.6	36.6	4.4	
21	16.5	14.4	....	....	35.8	36.5	38.8	36.7	4.1	
22	16.4	14.4	....	....	35.7	36.8	38.9	36.8	3.9	
23	16.3	14.4	....	....	35.6	36.8	37.6	36.8	3.8	
24	16.1	14.6	28.9	....	35.8	36.9	37.7	36.7	23.9	
25	15.9	14.8	29.8	....	36.0	36.9	37.6	36.5	29.8	
26	+2.9	15.0	32.5	....	36.1	37.0	37.4	36.6	....
27	+5.4	15.2	32.7	....	36.2	37.1	37.5	36.6	26.2	
28	+6.4	15.4	32.6	....	36.1	37.1	37.5	36.8	19.6	
29	12.2	15.4	32.9	....	35.9	37.2	37.4	36.7	19.9	
30	14.0	15.1	33.1	....	35.8	37.1	37.3	36.8	19.9	
31	....	14.8	....	....	35.4	....	36.4	....	19.6	

29.1.4.1.1. Perth Amboy Water Dept. Runyon old deep well 8. Highest water level, 12.2, Apr. 8, 1943; lowest -48.3, Sept. 15, 1947. Records available: 1929-49.

Lowest daily water level, below mean sea level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.2	9.2	7.6	...	...	1.3	21.0	...	...	24.9	26.6	26.1
2	10.9	8.7	7.3	3.1	...	1.3	21.1	...	23.9	24.8	26.5	26.1
3	10.7	8.6	7.1	3.1	...	1.5	21.1	...	23.9	24.9	26.5	26.1
4	10.7	8.4	6.9	2.9	...	1.6	21.0	24.0	23.6	25.2	26.5	26.1
5	10.6	8.3	6.8	3.6	...	1.6	20.6	23.7	23.3	25.6	26.5	26.0
6	...	8.3	6.6	3.5	...	1.5	20.6	23.8	22.4	26.2	...	26.1
7	...	8.0	6.3	...	...	1.7	20.6	23.9	22.4	26.5	...	26.1
8	...	7.7	6.2	...	...	1.9	20.9	23.8	22.4	26.8	...	26.2
9	...	7.8	6.0	3.0	...	2.0	21.1	24.0	...	26.8	...	26.4
10	10.4	7.8	5.8	2.1	...	2.1	21.1	24.1	22.6	26.5	...	26.5

29.1.4.1.1--Continued.

Lowest daily water level, below mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	10.4	8.2	5.6	2.3	...	2.1	22.2	24.1	22.7	26.7	...	26.5
12	10.3	8.3	5.4	2.3	...	2.1	21.5	20.8	22.7	26.8	...	26.3
13	10.0	8.3	5.4	2.3	...	...	21.6	22.7	22.6	26.9	...	26.0
14	10.1	8.0	5.1	2.4	...	...	21.8	22.8	23.2	27.1	25.1	26.4
15	10.0	7.8	4.8	2.8	...	2.6	21.9	23.0	23.4	27.4	25.6	26.4
16	9.8	7.7	4.7	3.2	...	2.9	22.1	23.0	22.2	27.4	25.7	26.0
17	9.4	7.8	4.5	3.2	...	3.0	22.1	23.1	23.3	27.2	25.7	25.8
18	9.8	7.8	4.4	3.1	...	3.2	...	23.1	23.5	27.3	25.7	25.6
19	9.6	7.8	4.5	3.2	...	3.2	...	23.2	23.8	27.3	25.7	24.4
20	9.8	7.7	4.5	3.2	...	3.0	...	23.4	24.1	27.4	25.7	24.7
21	9.8	7.6	4.3	3.2	...	...	21.3	23.4	24.3	27.6	25.7	25.0
22	...	7.6	4.1	3.2	...	...	22.0	23.3	24.3	...	25.9	25.2
23	...	7.4	4.0	3.1	...	...	24.4	23.2	24.3	...	25.8	25.5
24	...	7.4	3.9	2.9	...	16.4	24.2	...	...	27.0	25.8	28.2
25	...	7.4	3.9	2.7	1.4	17.5	23.4	23.6	24.8	27.1	25.7	23.3
26	...	7.3	4.0	...	...	21.5	23.6	23.7	24.8	27.1	25.8	24.4
27	...	9.2	2.5	...	...	...	23.8	23.7	24.8	27.2	25.8	24.4
28	...	6.8	2.9	...	...	20.4	23.7	23.7	24.7	27.2	25.9	21.3
29	...	...	3.0	...	...	20.5	24.6	23.7	24.7	27.2	25.9	20.2
30	8.6	...	3.2	...	...	20.7	24.4	23.4	24.9	27.1	26.0	19.8
31	9.3	...	5.7	...	1.3	...	25.0	23.3	...	27.1	...	19.4

29.1.4.4.2. Runyon well 50. Records available: 1923-49. 2.1, Sept. 29-30, 1949; 4.3, Dec. 28-30, 1941; 4.2, Dec. 31, 1941.

Lowest daily water level, above mean sea level, 1923

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	2.0	3.0	4.6	9	2.4	4.3	6.6	17	2.1	3.7	6.6	25	3.2	4.1	...
2	2.1	3.0	4.7	10	2.2	4.5	6.6	18	2.1	4.0	6.1	26	3.2	4.3	...
3	2.2	3.0	4.6	11	2.1	4.4	6.6	19	2.2	3.7	5.8	27	3.4	4.2	...
4	2.2	3.7	4.6	12	2.0	4.1	6.6	20	2.1	3.7	5.8	28	3.5	4.3	...
5	2.3	3.7	4.7	13	2.0	3.8	6.4	21	2.1	3.7	5.6	29	3.1	4.3	7.2
6	2.3	3.7	4.9	14	1.9	3.6	6.2	22	2.2	3.9	5.6	30	3.1	4.3	7.3
7	2.3	4.0	5.2	15	2.0	3.5	...	23	2.4	3.9	5.7	31	3.1	...	7.4
8	2.4	4.2	6.2	16	2.0	3.4	6.7	24	2.5	3.9	5.8	...	...	...	...

Lowest daily water level, above mean sea level, 1924

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.6	8.2	7.5	8.4	...	9.2	7.3	3.9	8.5	3.7	2.6	2.6
2	7.8	8.0	7.5	8.5	8.1	9.2	7.0	3.9	8.2	4.6	2.7	2.5
3	7.8	8.0	7.6	8.6	8.1	9.2	6.7	3.9	8.1	4.8	2.7	2.8
4	7.8	7.9	7.7	8.7	8.3	9.1	6.7	3.9	7.9	5.1	2.7	2.7
5	8.6	8.0	7.7	...	8.2	9.0	6.9	3.9	7.5	5.3	2.7	2.6
6	8.5	...	7.7	8.8	8.2	9.0	...	4.1	6.9	5.4	2.7	2.6
7	8.5	...	8.0	8.8	8.7	9.0	7.3	4.1	6.8	5.2	2.6	...
8	8.2	...	8.1	...	8.6	9.1	7.1	4.1	6.7	5.1	2.6	2.8
9	8.2	...	8.6	...	8.6	9.1	6.9	4.1	6.4	5.1	2.7	3.1
10	7.8	...	8.8	8.9	9.1	9.0	6.8	...	6.4	4.8	2.6	3.5
11	7.9	...	8.8	8.8	9.1	9.0	6.5	3.9	6.0	4.7	2.4	3.5
12	7.9	...	9.0	8.7	9.2	8.8	6.3	4.0	5.8	4.6	2.4	3.7
13	7.7	...	9.0	8.8	9.0	8.4	6.2	...	5.6	4.7	2.4	3.8
14	7.9	...	8.9	8.8	8.8	8.4	5.9	6.2	5.4	4.5	2.3	3.8
15	8.0	...	8.8	8.7	8.7	8.5	5.7	6.4	5.3	4.2	2.3	3.7
16	7.9	...	8.9	8.6	8.8	8.8	5.5	5.4	5.2	4.1	...	3.7
17	8.1	...	8.9	...	9.0	8.8	5.3	6.1	5.1	3.8	...	3.9
18	8.1	...	8.9	...	9.0	8.7	5.1	5.8	5.1	3.7	2.0	3.5
19	8.4	...	8.9	8.8	9.2	8.4	4.9	5.7	4.9	...	2.2	3.4
20	8.6	...	8.7	9.1	9.2	8.3	4.7	5.6	4.8	...	2.0	3.3
21	8.5	...	8.7	9.0	9.1	8.2	4.5	5.3	...	...	1.9	3.2
22	8.6	...	8.7	9.0	9.1	8.1	4.4	5.0	...	3.5	1.9	3.0
23	8.2	7.8	8.7	9.1	9.1	7.8	4.3	4.9	...	3.4	2.1	2.9
24	8.1	7.8	8.7	9.1	9.0	7.8	4.3	4.8	...	3.3	...	2.7
25	8.4	7.8	8.6	...	9.1	7.7	4.2	4.7	...	3.2	...	2.6
26	8.4	7.7	8.7	...	9.1	7.5	4.1	5.1	...	3.2	...	2.6
27	8.5	7.6	8.6	8.4	9.1	7.4	4.0	7.3	...	3.2	...	2.5
28	8.3	7.6	8.7	8.2	9.1	7.4	4.0	8.1	4.1	3.3	...	2.5
29	8.3	...	8.7	8.4	9.1	7.5	4.0	8.3	3.8	3.2	2.6	2.3
30	8.2	...	8.5	8.2	9.0	7.3	4.0	8.4	3.7	3.0	2.6	2.3
31	8.2	...	8.4	...	9.0	...	4.0	8.4	...	2.9	...	2.1

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1925

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.0	3.1	8.7	4.8	4.5	7.1	...	3.3	3.0	...	6.1	6.6
2	1.9	3.1	9.0	4.3	4.7	6.9	...	3.4	3.0	...	5.9	6.4
3	1.8	3.1	8.8	4.0	4.9	6.8	...	3.5	3.0	...	5.8	6.5
4	1.6	3.3	8.6	3.8	5.0	6.8	...	3.5	2.9	3.9	5.6	7.9
5	...	3.7	8.6	3.4	5.0	6.8	4.7	3.5	3.1	3.9	5.4	8.5
6	1.6	...	8.8	3.4	5.2	...	4.8	3.4	3.1	4.0	5.4	8.7
7	1.6	3.9	8.7	3.3	5.4	...	4.9	3.6	3.1	3.9	5.3	8.7
8	1.6	4.1	8.8	3.2	5.3	...	4.7	3.6	3.4	3.9	5.2	8.7
9	1.8	4.5	8.7	3.1	5.3	5.9	4.7	3.6	3.3	3.8	4.9	8.7
10	1.8	4.8	8.9	3.1	5.5	5.6	4.6	3.6	3.3	3.7	...	8.6
11	1.9	6.6	8.8	3.0	5.6	5.6	4.6	3.6	3.5	3.7	...	8.5
12	1.9	7.6	8.8	2.8	...	5.4	4.6	3.6	3.3	3.6	...	8.4
13	2.1	7.8	9.0	2.7	...	5.2	4.4	3.5	3.2	3.5	...	8.4
14	2.2	8.3	9.1	2.7	...	...	4.2	3.5	3.2	3.5	...	6.1
15	2.1	8.4	9.1	2.7	...	...	4.1	3.3	3.2	3.9	...	8.0
16	2.2	8.3	9.0	2.9	7.3	5.4	4.1	3.3	3.2	3.8	...	7.8
17	...	8.3	9.1	3.0	7.1	5.1	4.0	3.2	3.3	4.2	...	7.5
18	...	8.3	9.0	...	6.9	5.1	4.0	3.2	3.3	4.2	...	7.3
19	...	8.6	8.3	3.2	7.0	4.9	3.9	3.1	3.4	4.4	...	7.1
20	...	8.5	8.3	3.2	6.9	4.6	...	3.1	3.8	4.4	...	...
21	...	8.5	7.8	3.2	6.9	4.7	...	3.1	3.9	4.5	...	6.8
22	...	8.6	7.6	3.2	6.9	4.6	...	3.0	4.0	4.6	6.6	6.7
23	...	8.6	7.3	3.3	7.1	4.4	...	...	4.0	4.7	6.5	6.6
24	3.2	8.5	7.1	3.2	7.1	4.4	...	3.5	4.1	4.7	6.4	6.3
25	3.3	8.5	7.2	3.3	7.1	4.2	...	3.4	4.0	5.0	7.1	6.2
26	3.3	8.4	7.1	3.4	7.3	4.1	3.3	3.3	4.1	5.0	6.8	6.2
27	3.3	8.5	6.9	3.6	7.4	4.0	3.3	3.2	...	5.4	6.8	5.8
28	...	8.4	...	3.7	7.2	4.1	3.3	3.2	...	5.7	6.8	5.6
29	...	...	...	4.2	7.2	4.0	3.3	3.2	...	5.8	6.9	5.4
30	...	...	...	4.3	7.5	...	3.2	3.2	...	5.9	6.5	5.3
31	3.1	...	...	...	7.1	...	3.2	3.0	...	6.1	...	5.2

Lowest daily water level, above mean sea level, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.1	5.8	8.7	9.1	9.2	7.6	6.2	8.6	8.9	...	8.9	...
2	4.9	5.8	9.0	9.1	9.6	7.6	6.1	8.6	8.6	...	9.2	...
3	4.7	5.9	9.0	9.5	9.8	7.5	...	8.2	8.5	...	9.5	...
4	4.5	5.7	9.0	9.6	9.8	7.4	...	7.9	8.0	...	9.3	...
5	4.5	5.7	9.0	9.5	9.8	7.3	5.9	7.5	...	...	9.2	...
6	4.4	5.6	9.0	9.4	9.9	...	5.9	7.4	...	...	...	...
7	4.4	...	...	9.6	9.9	7.3	5.7	7.2	...	...	...	8.8
8	4.4	...	...	9.7	9.9	7.5	...	7.1	9.6	...	...	8.8
9	4.4	...	...	9.7	...	7.6	...	7.0	9.2	...	9.4	8.7
10	4.3	...	...	...	...	7.4	...	6.8	9.1	...	...	8.6
11	4.3	...	...	...	...	7.2	5.9	6.6	...	...	...	8.6
12	4.3	...	...	...	...	7.0	5.8	6.5	...	...	...	...
13	4.4	...	9.3	...	...	...	5.7	...	...	...	...	8.7
14	4.3	...	9.3	...	9.7	6.7	5.6	...	...	...	...	8.5
15	4.2	...	9.2	...	9.8	6.6	5.5	6.7	9.3	...	...	8.7
16	4.2	6.0	9.1	...	9.8	6.5	5.5	7.1	9.3	...	9.5	8.7
17	4.4	6.0	9.0	...	9.8	6.4	6.0	7.5	9.4	...	9.2	8.7
18	4.5	6.2	8.9	...	9.8	6.4	6.6	7.9	...	7.9	9.2	...
19	4.6	6.3	8.9	...	9.7	6.4	6.5	8.1	9.6	8.2	9.2	...
20	5.1	7.1	8.7	8.5	9.5	6.5	6.5	8.4	9.4	8.2	...	8.5
21	5.7	7.7	8.8	8.6	9.4	6.5	6.4	8.4	...	...	...	8.5
22	6.2	7.8	9.0	8.5	...	6.4	5.9	8.5	...	8.6	...	8.2
23	6.8	7.9	8.9	8.6	9.1	6.4	5.8	...	...	...	...	...
24	7.5	8.1	8.7	8.6	8.7	6.7	...	...	9.5	...	8.9	...
25	7.1	6.1	8.7	8.9	8.7	7.3	...	...	9.4	8.3	8.8	...
26	6.9	8.3	8.6	9.1	8.6	...	...	...	...	8.7	8.1	...
27	6.5	8.3	8.9	9.2	8.3	6.1	...	...	7.9	9.0	8.9	...
28	6.3	8.4	9.3	9.2	8.1	6.5	...	...	7.7	9.1	8.9	...
29	6.2	...	9.3	9.2	7.9	6.4	...	...	7.3	8.9	...	...
30	...	...	9.3	9.2	...	6.3	...	...	9.6	...	9.1	8.4
31	...	...	9.2	...	...	...	...	9.2	...	8.9	...	8.3

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1927											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Dec.
1	8.1	7.8	8.1	8.8	8.8	...	6.1	4.0	...	...	...
2	...	7.8	8.1	9.0	8.7	...	6.0	3.9	...	...	...
3	...	7.8	8.0	...	8.5	...	...	3.9	...	8.8	...
4	...	...	8.1	9.0	8.6	9.4	6.0	3.9	...	8.8	...
5	...	...	...	9.0	...	9.4	6.0	3.8	...	8.8	...
6	...	...	...	9.0	...	9.3	5.9	...	...	8.8	...
7	...	...	...	9.0	...	9.2	5.7	...	...	8.7	...
8	...	...	...	8.9	...	9.0	5.6	...	9.5	8.7	...
9	...	...	...	9.1	9.4	8.9	5.5	...	9.4	...	...
10	...	...	...	9.2	9.2	8.8	5.4	...	9.3	8.5	...
11	...	...	8.4	9.1	9.1	8.7	5.3	...	...	8.7	8.7
12	...	...	9.0	9.0	9.3	8.5	5.2	...	9.1	...	...
13	...	...	9.0	8.9	9.1	8.4	5.1	3.8	9.0	8.5	...
14	...	...	9.0	8.8	9.0	8.4	5.0	3.8	8.9	8.6	8.6
15	...	...	9.0	8.7	9.0	8.3	4.9	3.9	...	7.9	8.7
16	...	...	9.1	8.6	8.9	8.0	...	...	...	8.0	...
17	...	...	9.0	8.5	8.9	7.8	4.8	...	...	8.2	...
18	...	...	9.3	8.6	8.8	7.7	4.7	...	...	8.0	...
19	...	8.4	9.0	8.5	...	7.7	4.6	...	...	8.2	...
20	...	...	...	8.4	...	...	4.5	...	...	7.9	8.6
21	...	8.4	...	8.3	8.6	7.4	4.5	...	...	...	8.5
22	7.9	8.3	...	7.8	8.6	7.4	4.5	...	...	...	8.5
23	8.0	8.3	8.7	...	8.6	7.2	4.3	...	...	...	8.5
24	8.0	8.1	8.7	...	8.5	7.1	4.3	...	...	...	...
25	8.0	8.0	8.7	...	...	7.0	4.4	...	...	...	...
26	...	8.1	8.9	...	...	6.8	4.3	...	9.5	...	8.1
27	...	8.0	9.1	...	...	6.6	4.3	...	9.3	...	8.0
28	...	8.1	9.0	...	...	6.5	4.3	...	9.3	...	...
29	...	...	8.9	...	...	6.3	4.2	...	9.2	...	8.0
30	8.0	...	9.0	8.7	...	6.2	4.1	...	9.1	...	8.2
31	7.9	...	8.9	...	...	...	4.0	...	...	...	...

Lowest daily water level, above mean sea level, 1928											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	...	...	...	9.0	9.4	...	8.9	...	8.4	7.1	...
2	...	...	...	...	9.3	...	8.9	...	8.4	7.1	...
3	...	...	...	8.9	...	...	8.6	...	...	7.0	...
4	...	...	...	9.0	...	...	8.4	...	...	7.0	...
5	...	...	...	...	...	9.4	8.2	...	8.4	7.0	...
6	...	8.2	...	...	...	8.9	8.5	...	...	...	...
7	8.2	8.2	...	8.9	...	9.0	...	...	8.5	...	...
8	8.3	...	...	8.9	...	8.9	...	...	...	...	...
9	8.3	...	8.9	...	...	8.9	...	...	...	...	6.5
10	8.3	...	...	8.8	8.9	9.1	...	...	...	...	...
11	8.5	8.6	...	8.9	8.9	9.0	...	...	...	...	...
12	8.5	8.5	8.9	...	8.9	8.9	...	...	...	...	7.3
13	8.3	8.5	9.0	9.0	8.8	8.9	...	...	...	6.9	7.3
14	8.3	...	...	...	8.8	8.9	8.1	...	...	6.8	7.1
15	8.2	...	...	8.8	8.7	9.1	8.2	...	...	6.7	7.0
16	8.2	...	8.9	8.8	8.7	9.0	8.2	...	8.0	6.5	7.2
17	...	...	...	8.7	8.6	8.9	...	...	7.9	6.7	7.2
18	...	...	...	8.7	8.6	8.8	...	8.8	7.9	6.7	7.2
19	...	...	...	8.8	8.6	8.9	...	8.7	7.9	6.7	7.2
20	...	...	...	...	8.6	9.0	7.9	8.6	...	...	...
21	...	...	...	...	8.6	8.9	...	8.5	...	...	...
22	...	...	...	8.9	8.6	8.9	...	...	7.5	...	7.3
23	7.7	...	...	...	8.6	8.9	...	...	7.4	...	7.2
24	7.8	...	...	...	8.6	9.0	...	8.6	7.2	...	...
25	...	...	...	...	...	9.0	...	8.5	7.1	...	...
26	...	...	8.9	9.3	8.5	8.9	...	...	6.9	...	6.9
27	...	...	...	...	...	8.8	...	...	6.9	...	6.8
28	...	...	...	...	8.7	8.8	8.3	...	6.9	...	6.8
29	7.8	...	...	...	8.6	8.8	...	...	...	6.5	6.8
30	7.7	...	...	9.4	8.6	8.9	...	...	7.1	6.4	6.8
31	...	...	9.0	...	8.5	...	...	...	...	6.2	...

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1930

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.3	...	...	...	...	5.2	3.4	4.0	3.0	1.8	1.0	2.0
2	2.0	...	...	...	...	5.0	3.8	...	3.9	1.8	1.3	2.0
3	2.0	...	...	...	...	4.8	3.6	...	3.0	1.9	1.3	1.9
4	2.0	...	...	...	8.2	4.4	3.6	...	2.8	1.8	1.1	1.9
5	1.9	4.9	...	9.9	8.2	4.2	5.2	...	2.9	2.0	1.1	1.9
6	2.0	5.7	...	9.3	7.8	4.0	4.4	...	2.7	2.0	1.0	2.0
7	2.0	6.6	...	9.2	7.5	3.7	4.4	...	2.7	2.1	1.2	2.0
8	...	...	...	8.8	7.2	3.6	4.2	...	2.7	2.1	1.1	2.1
9	...	...	...	8.7	7.0	3.7	4.4	3.2	2.7	2.0	1.1	2.3
10	...	...	...	8.7	7.1	3.7	4.2	3.1	2.6	1.8	1.2	2.1
11	2.6	...	...	8.8	6.8	3.5	4.6	3.0	2.6	1.7	1.2	2.0
12	2.6	...	6.9	8.7	6.5	3.5	4.5	2.9	2.6	1.8	1.2	2.0
13	1.8	...	6.7	8.7	6.4	4.2	4.8	2.8	2.5	1.7	1.1	...
14	1.7	...	6.7	8.8	7.4	3.9	4.8	2.8	2.6	1.6	1.1	...
15	1.7	...	6.7	8.6	7.2	3.7	4.8	2.7	2.6	1.6	1.1	...
16	2.4	...	7.1	8.8	7.1	3.7	4.8	2.8	2.6	1.5	1.1	...
17	2.4	...	6.8	8.7	7.1	3.7	4.8	2.8	2.6	1.5	1.5	...
18	2.4	...	6.7	9.1	7.0	3.5	4.8	2.9	2.5	1.5	1.5	...
19	3.5	...	6.9	9.0	7.1	3.4	4.8	...	2.5	...	1.6	...
20	3.9	...	6.6	9.1	6.8	...	4.7	...	2.4	...	1.6	1.7
21	3.8	...	6.6	9.2	6.8	...	4.6	...	2.5	...	1.8	1.7
22	3.7	...	6.8	9.1	7.0	3.3	4.6	...	2.3	...	1.7	1.9
23	5.1	...	6.7	9.2	6.8	3.4	...	2.7	2.2	...	1.9	1.7
24	...	...	7.0	9.0	6.8	3.3	...	2.9	2.4	...	1.9	1.6
25	...	...	6.8	8.9	6.6	3.3	...	2.9	2.2	...	1.8	1.8
26	...	...	6.7	8.8	6.7	3.3	...	2.9	2.1	...	1.8	1.9
27	...	...	6.5	...	6.5	3.1	...	2.8	...	1.4	1.7	...
28	...	...	6.5	...	5.6	3.0	4.4	2.8	...	1.2	1.9	2.3
29	...	...	6.9	...	5.5	3.0	4.3	2.9	1.9	1.2	1.8	2.3
30	...	...	6.5	...	5.5	3.4	4.2	2.9	1.9	1.1	2.1	2.6
31	...	...	...	...	5.5	...	4.2	3.0	...	1.1	...	3.1

Lowest daily water level, above mean sea level, 1931

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.1	6.1	9.2	9.8	9.3	...	8.0	...	...	3.4	3.7	...
2	3.4	6.2	9.1	9.7	9.1	...	7.7	...	...	3.4	3.8	...
3	3.6	6.1	9.1	9.6	8.8	...	...	...	...	3.5	3.6	...
4	3.8	5.9	9.0	...	8.7	...	...	...	...	3.5	3.7	...
5	3.7	6.2	8.9	...	8.6	...	...	...	...	3.2	3.6	...
6	4.1	5.9	8.8	...	8.5	...	...	...	...	3.6	3.6	...
7	4.1	5.7	9.1	...	8.2	...	...	...	...	3.7	3.6	...
8	4.8	6.4	9.0	...	8.2	...	...	...	...	3.7	3.9	...
9	4.8	6.0	9.7	...	...	...	...	...	...	3.6	3.9	...
10	5.2	5.9	9.6	...	...	...	...	...	...	3.3	3.8	...
11	5.0	6.4	9.6	9.7	...	...	7.3	...	...	3.2	3.7	...
12	5.0	6.1	9.6	9.7	...	10.0	7.1	...	...	3.2	3.8	...
13	5.3	6.1	9.6	9.9	...	10.0	6.9	...	...	3.2	3.7	3.9
14	5.3	6.4	...	9.7	...	10.1	6.8	...	...	3.2	3.8	4.1
15	5.7	7.2	...	9.5	...	10.1	6.7	...	...	3.2	3.7	4.0
16	5.6	7.2	...	9.4	...	10.4	...	...	...	3.2	3.8	4.3
17	5.5	7.7	...	9.6	8.6	...	...	...	...	3.1	3.7	4.3
18	5.4	7.7	...	9.4	8.4	...	...	...	...	3.1	3.7	4.6
19	5.4	8.6	...	9.4	8.5	...	...	...	...	3.7	3.5	4.2
20	5.7	8.8	...	9.5	8.4	10.2	...	...	...	3.7	3.8	4.7
21	6.6	8.9	...	9.3	8.3	10.2	...	...	...	3.7	...	4.7
22	6.6	9.6	10.4	9.2	...	10.1	...	...	...	3.6	...	4.7
23	6.6	9.2	9.2	9.2	...	10.1	...	...	...	...	...	4.0
24	...	9.2	9.1	9.2	...	10.0	...	...	...	3.6	...	4.6
25	...	9.8	9.3	9.1	...	...	...	...	...	3.6	...	4.3
26	...	9.9	9.0	10.4	...	...	...	...	3.4	3.7	...	4.5
27	6.6	9.3	9.1	9.5	...	9.9	...	...	3.7	3.7	...	...
28	6.4	9.2	9.1	9.3	...	9.8	...	...	3.5	3.6	...	...
29	6.3	...	9.9	9.1	...	9.8	3.9	...	3.5	3.7	...	...
30	6.2	...	9.6	9.0	...	9.8	3.9	...	...	3.6	...	...
31	6.2	...	9.5	...	...	...	3.8	...	...	3.4	...	...

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1932										
Day	Feb.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.5	10.0	9.3	6.2	4.3	4.0	4.6	10.3
2	10.4	9.8	9.2	6.1	4.3	3.9	4.7	....
3	9.8	9.2	6.2	4.3	3.8	4.6	....
4	9.7	9.2	6.0	4.2	3.8	4.8	10.5
5	10.2	9.7	9.0	5.9	4.1	3.8	4.9	10.2
6	10.3	9.6	9.0	5.8	4.0	3.7	...	10.2
7	9.5	8.9	5.8	3.9	3.6	...	10.2
8	9.2	8.7	5.7	3.9	3.6	...	10.1
9	9.2	10.0	5.5	3.8	3.5	...	10.1
10	10.2	8.9	8.9	5.4	3.7	3.7	...	10.2
11	10.1	8.7	8.4	5.3	3.6	3.6	...	10.6
12	10.2	9.0	8.3	...	3.6	3.7	9.6	10.4
13	10.3	9.0	8.0	5.1	3.5	3.8	9.9	10.3
14	10.2	9.1	7.7	5.0	3.5	3.8	10.0	10.2
15	10.3	8.9	7.8	5.0	3.5	3.6	10.2	10.2
16	10.9	10.3	8.8	8.1	5.0	3.4	3.8	10.2	10.2
17	10.3	10.2	9.4	7.8	4.8	3.4	3.9	10.2	10.4
18	10.2	11.1	7.8	4.7	3.4	3.8	10.3	10.3
19	10.2	11.1	8.1	4.6	3.3	4.0	10.5	10.4
20	10.2	11.1	...	4.5	3.3	4.1	....	10.3
21	10.4	11.1	...	...	3.3	4.1	....	10.4
22	10.0	....	10.3	11.1	...	4.3	3.3	4.2	....	10.3
23	10.4	....	10.4	11.0	6.8	4.6	3.3	4.1	....	....
24	10.4	....	10.2	9.3	6.7	4.5	3.4	4.1	....	10.2
25	10.3	9.2	6.5	4.0	3.5	4.1	....	....
26	10.3	9.3	6.4	4.4	3.4	4.2	....	....
27	10.6	10.1	9.2	6.4	4.4	3.4	4.1	10.4	....
28	10.0	9.5	6.2	4.4	3.6	4.3	10.5	....
29	10.2	10.3	9.5	6.3	4.4	3.8	4.5	10.4	....
30	10.3	10.1	9.4	6.4	4.3	3.7	4.6	10.3	....
31	10.1	....	6.5	4.3	....	4.5	....	10.2

Lowest daily water level, above mean sea level, 1933												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.4	10.4	10.1	10.0	9.9	....	...	5.4	....	...	7.2	6.8
2	10.3	10.4	10.1	10.0	9.9	....	...	5.5	....	...	7.1	6.8
3	10.3	10.4	10.0	10.2	10.0	....	...	5.1	....	...	7.1	6.9
4	10.3	10.4	9.9	10.2	....	....	...	4.8	....	...	7.0	6.7
5	10.4	10.2	10.0	10.2	....	....	9.6	4.6	....	9.6	7.0	6.5
6	10.3	10.3	10.0	....	9.9	....	...	4.4	....	9.5	7.1	6.4
7	10.3	10.1	9.9	....	10.2	....	...	4.4	....	9.4	7.2	6.5
8	10.3	10.4	10.0	10.1	10.1	....	...	3.9	....	9.3	7.1	6.7
9	10.3	10.2	9.9	10.2	10.1	....	...	4.7	8.6	9.2	7.2	6.7
10	10.3	10.2	10.0	10.0	10.2	10.3	...	4.8	8.4	9.1	7.2	6.7
11	10.0	10.3	10.0	10.0	10.1	10.3	...	5.0	8.3	8.9	7.3	6.6
12	10.2	10.3	10.0	10.1	10.1	10.2	...	4.4	8.2	8.8	7.3	6.6
13	10.2	10.2	9.9	10.2	....	10.1	....	3.6	8.1	7.8	7.4	...
14	10.2	10.1	10.0	10.2	9.9	10.1	...	3.7	8.4	7.6	7.3	...
15	10.1	10.1	10.0	10.1	9.9	....	...	4.0	9.0	7.7	7.1	...
16	10.1	10.0	10.1	10.1	9.9	....	...	3.7	10.0	7.8	7.0	...
17	....	9.9	10.1	10.2	9.9	10.1	....	3.8	10.0	7.7	7.0	...
18	....	9.9	10.0	10.2	9.8	....	...	3.9	10.0	7.5	7.0	...
19	....	9.8	10.1	10.1	9.8	....	...	3.9	10.0	7.4	7.3	6.7
20	....	9.8	10.2	10.0	9.8	....	6.6	3.6	10.0	7.4	...	6.7
21	10.5	10.0	10.3	10.0	10.0	....	6.4	3.5	10.0	7.4	...	6.8
22	10.6	9.8	10.3	9.8	....	....	6.2	...	9.9	7.4	7.1	7.2
23	10.4	9.9	10.2	10.0	....	....	6.1	...	...	7.4	7.0	7.4
24	10.3	9.6	10.2	10.0	....	9.8	6.0	...	...	7.6	7.0	7.5
25	10.1	9.8	10.1	10.1	....	9.7	6.0	...	...	7.4	7.1	7.5
26	10.4	10.2	10.1	10.1	....	9.8	...	...	...	7.4	7.2	7.6
27	10.6	10.2	10.1	9.9	....	....	...	...	...	7.4	7.0	...
28	10.5	10.1	10.2	9.9	....	....	...	...	...	7.3	6.9	...
29	10.4	...	10.1	9.8	....	....	...	...	...	7.3	7.0	...
30	10.3	...	10.1	9.8	....	....	...	...	...	7.2	6.9	...
31	10.3	...	10.1	...	....	....	...	...	...	7.2	...	7.3

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1934

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.3	9.6	...	10.0	9.9	9.8	7.5	9.8	...	10.6	10.0	9.6
2	7.6	9.5	...	10.0	9.9	9.8	7.4	10.0	...	10.5	10.0	9.6
3	7.8	9.5	7.4	9.9	10.0	9.7	7.2	9.8	...	10.4	10.0	9.6
4	7.9	...	7.4	9.8	10.3	9.6	7.0	9.8	5.8	10.3	9.9	9.7
5	8.4	...	8.0	9.9	10.3	9.6	6.9	9.6	5.9	10.3	10.0	9.8
6	9.6	...	9.4	9.8	10.3	9.8	6.7	9.5	5.7	10.6	10.0	9.8
7	10.1	...	9.5	9.8	10.2	9.6	6.7	9.2	5.7	10.6	10.0	9.9
8	10.3	...	9.6	9.9	10.2	9.5	6.7	9.2	5.9	10.5	10.0	9.9
9	10.2	...	9.5	9.8	10.1	9.3	6.6	9.0	8.2	10.4	10.0	9.8
10	10.3	...	9.5	9.8	10.0	9.2	6.6	8.8	10.1	10.4	10.4	9.7
11	10.2	...	9.5	9.8	10.0	9.1	6.5	8.7	10.2	10.4	10.6	9.6
12	....	...	9.4	9.9	10.0	9.1	6.7	8.7	10.2	10.3	10.6	9.6
13	....	8.6	9.3	9.9	9.9	9.5	6.5	8.6	10.2	10.4	10.6	9.5
14	....	8.4	9.3	9.8	9.9	9.4	6.4	8.5	10.2	10.4	10.2	9.3
15	....	8.3	9.5	9.9	9.9	9.2	6.3	8.4	10.2	10.3	10.1	9.2
16	....	8.2	9.5	10.0	9.9	9.1	6.2	8.4	10.3	10.2	10.0	9.2
17	....	8.2	9.6	10.0	9.9	9.0	6.5	8.3	10.6	10.2	9.9	9.1
18	....	...	9.6	10.0	9.8	8.8	6.4	8.2	10.8	10.2	9.9	9.1
19	....	...	9.6	10.1	9.8	9.2	6.4	8.1	10.7	10.1	9.9	8.3
20	....	...	9.7	10.2	9.8	9.4	6.2	7.9	10.5	10.1	9.8	9.4
21	....	7.2	9.6	10.1	9.8	9.4	6.6	7.8	10.5	10.1	9.7	9.5
22	....	7.4	9.5	10.0	9.7	9.3	6.6	7.5	10.4	10.2	9.7	9.5
23	....	7.4	9.5	10.0	10.0	9.2	6.6	7.2	10.4	10.1	9.7	9.5
24	9.8	7.3	9.5	9.8	10.0	9.1	6.5	7.0	10.4	10.1	9.7	9.5
25	9.8	7.2	9.5	9.9	10.0	8.9	6.9	6.9	10.4	10.1	9.6	9.5
26	10.0	7.3	9.6	9.9	10.0	8.7	6.9	6.7	10.4	10.1	9.6	9.4
27	9.9	7.2	9.6	9.9	10.0	8.5	6.9	6.6	10.3	10.1	...	9.3
28	9.8	...	9.6	9.9	10.0	8.3	7.2	6.5	10.3	10.0	...	9.4
29	9.7	...	9.6	9.9	10.1	8.0	9.2	...	10.2	10.1	...	9.4
30	9.6	...	9.5	9.9	10.0	7.8	10.0	...	10.7	10.0	...	9.4
31	9.6	...	9.8	...	9.9	...	9.8	...	...	10.0	...	...

Lowest daily water level, above mean sea level, 1935

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	8.4	9.1	9.7	...	7.1	3.9	2.2	...	0.5	...	7.9
2	...	8.3	9.2	9.7	...	6.9	3.8	2.1	0.4	.6	...	8.2
3	...	8.3	9.2	9.7	...	6.9	3.8	2.1	.4	.6	1.0	8.0
4	...	8.3	9.3	9.7	9.5	6.8	3.6	2.3	.4	.5	1.3	7.8
5	9.4	8.2	9.4	9.7	9.6	6.6	3.5	2.3	.4	.4	1.3	7.6
6	9.4	...	9.3	9.7	9.6	6.4	3.4	2.1	.5	.5	1.7	7.4
7	9.4	...	9.2	9.7	9.6	6.3	3.4	2.0	.5	.6	1.5	7.3
8	9.4	...	8.9	9.7	9.7	6.4	3.3	1.9	.8	.8	1.5	7.9
9	9.4	...	8.8	10.0	9.8	6.7	3.1	1.8	.7	.9	1.4	7.7
10	9.5	...	8.8	9.8	9.8	7.3	3.0	1.8	.8	.8	1.5	7.6
11	9.3	8.0	8.8	9.9	9.7	7.6	2.9	1.7	.8	.7	1.6	7.5
12	9.2	8.0	8.9	10.0	9.5	7.6	2.8	1.6	.7	.8	2.5	8.0
13	9.3	7.7	8.9	10.1	9.5	7.5	2.8	1.6	.7	1.0	2.5	7.7
14	9.2	7.7	8.9	10.0	9.5	7.4	2.9	1.4	.7	.9	2.5	7.5
15	9.2	8.0	9.1	10.1	9.8	7.1	2.7	1.3	.7	.8	2.5	7.5
16	9.1	9.0	9.2	10.1	9.6	6.9	2.7	1.2	1.4	.9	3.1	8.0
17	9.2	9.3	9.2	10.0	9.5	6.7	2.7	1.1	1.1	.9	2.9	7.8
18	9.1	9.3	9.2	10.0	9.4	6.5	2.6	1.1	.9	.9	3.0	7.7
19	9.1	9.3	9.4	9.9	9.3	6.3	2.5	1.0	.8	.8	4.4	7.6
20	9.0	9.3	9.3	10.0	9.2	6.1	2.5	1.0	.6	.7	6.9	7.5
21	9.1	9.3	9.3	10.0	9.1	5.9	2.5	.9	.6	.7	7.0	8.1
22	9.2	9.2	9.3	10.0	8.8	5.8	2.4	.9	.5	.6	7.1	7.5
23	9.2	9.3	9.5	10.0	8.8	5.7	2.4	.7	.5	.6	7.2	7.2
24	9.2	9.3	9.5	10.0	8.7	5.4	2.5	.7	.4	.6	7.9	6.9
25	9.0	9.4	9.6	9.9	8.4	5.1	2.4	.6	.4	.6	7.6	6.6
26	8.9	9.4	9.5	9.9	8.1	4.8	2.4	.6	.3	.5	7.5	6.6
27	8.9	9.3	9.5	9.9	8.0	4.6	2.5	...	.3	.7	7.4	6.8
28	8.8	9.1	9.7	9.8	7.8	4.4	2.4	...	.4	.6	8.3	6.4
29	8.7	...	...	...	7.6	4.3	2.5	...	.5	...	8.3	6.0
30	8.8	...	9.6	...	7.4	4.1	2.4	...	.5	...	8.1	5.8
31	8.6	...	9.7	...	7.3	...	2.3	...	...	...	...	5.4

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1936												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	5.8	4.9	8.2	...	6.7	...	3.2	2.7	...	5.6	4.2
2	...	5.6	5.5	7.8	...	6.3	...	3.2	2.6	...	6.0	4.2
3	...	5.5	7.0	7.7	...	6.1	...	3.4	2.5	...	5.9	5.0
4	...	5.2	7.0	8.9	...	5.8	...	3.2	2.6	4.8	6.2	5.0
5	7.3	5.1	7.5	8.8	...	5.5	5.2	3.1	2.5	5.3	5.8	5.0
6	7.2	4.9	7.5	8.2	...	5.3	5.2	3.0	2.5	5.1	5.7	5.3
7	7.4	4.8	7.2	7.7	...	5.1	4.8	2.9	2.9	5.1	5.5	6.2
8	7.5	4.5	7.8	7.5	...	5.3	4.5	2.8	2.6	5.5	5.5	6.7
9	8.3	4.4	7.5	7.5	8.2	5.0	4.4	2.6	2.5	5.3	6.0	7.4
10	8.3	4.2	7.5	7.7	8.1	4.7	4.7	2.5	2.5	5.1	5.6	7.7
11	8.0	4.0	8.0	9.0	8.3	4.6	4.4	3.0	2.6	5.1	5.5	8.1
12	9.3	3.9	7.8	8.4	8.0	5.0	4.2	2.8	2.4	5.3	6.0	9.0
13	8.6	3.7	8.6	8.1	7.8	4.8	4.0	2.7	2.4	5.0	5.6	9.0
14	8.3	3.6	8.5	7.5	8.0	4.7	3.9	2.6	3.2	4.9	5.5	9.3
15	8.2	3.5	8.9	7.3	8.2	4.7	3.7	2.6	4.2	5.1	5.4	9.2
16	8.6	3.6	8.7	7.2	8.2	5.6	3.6	2.7	4.4	4.9	5.7	9.2
17	7.7	3.6	8.5	9.3	8.6	5.4	3.4	2.6	3.6	4.8	5.5	9.3
18	7.0	3.6	8.6	8.3	8.4	5.3	3.3	2.6	2.5	4.9	5.3	9.2
19	6.9	3.5	8.5	7.9	9.0	5.4	3.2	3.0	2.5	6.0	5.7	9.2
20	7.6	3.5	8.8	7.7	8.3	5.4	3.7	2.8	2.7	5.9	5.4	9.5
21	7.5	3.5	8.6	7.6	8.0	5.8	3.5	2.7	4.0	5.9	5.1	9.3
22	7.4	3.5	8.4	7.5	7.8	6.3	3.4	2.6	...	6.4	5.0	9.1
23	7.2	3.2	8.1	7.4	7.6	6.1	3.4	2.7	...	6.2	5.4	9.0
24	7.2	3.1	7.7	7.4	8.0	5.9	3.8	3.0	...	6.0	5.1	9.0
25	7.1	3.1	7.6	7.8	7.4	5.8	3.6	2.8	...	6.0	4.9	9.6
26	7.0	3.0	...	7.5	7.1	6.3	3.4	2.7	...	6.3	4.8	9.3
27	7.0	3.2	...	7.4	6.8	6.0	3.3	2.7	...	6.0	5.2	9.5
28	6.5	3.5	...	7.2	6.6	5.9	3.3	3.1	...	5.9	4.7	9.3
29	6.4	...	...	...	...	6.3	3.7	2.9	...	6.3	4.5	...
30	6.2	...	8.6	...	...	5.6	3.5	2.9	...	5.9	4.3	...
31	6.0	...	8.4	...	6.3	...	3.4	2.9	...	5.7	...	...

Lowest daily water level, above mean sea level, 1937												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	9.9	8.9	8.8	9.6	8.4	6.3	4.6	4.8	3.7	6.3	9.2
2	...	9.7	9.4	8.8	9.6	8.0	6.3	4.2	4.8	4.0	6.6	9.1
3	9.5	9.5	9.1	9.1	...	7.8	6.2	4.1	5.0	3.8	7.0	9.0
4	9.6	9.5	8.9	8.8	...	7.5	6.2	4.0	...	3.6	6.8	8.9
5	9.3	9.3	8.9	8.7	...	7.2	6.6	4.1	...	3.5	6.8	8.9
6	9.2	9.3	9.4	8.7	9.5	7.0	6.2	3.9	4.5	3.4	6.6	9.4
7	9.2	9.2	9.0	8.9	9.4	7.2	6.0	3.8	4.4	...	6.6	9.2
8	9.2	9.6	8.9	9.5	9.4	6.9	5.8	3.8	4.3	...	7.1	9.1
9	9.2	9.4	8.9	9.3	9.3	6.6	5.7	3.9	4.2	...	6.8	9.0
10	9.2	9.2	8.8	9.1	6.3	6.5	5.6	3.7	4.3	3.3	6.7	8.9
11	9.7	9.1	8.7	9.1	9.3	6.7	5.5	3.6	4.3	3.3	6.5	8.8
12	9.5	8.7	8.7	9.4	9.3	6.7	5.4	3.5	4.1	3.2	6.5	9.1
13	9.4	8.9	9.0	9.3	9.3	6.4	5.5	3.4	4.5	3.5	7.4	8.7
14	9.4	9.0	8.8	9.2	9.3	7.1	5.9	3.4	4.4	3.3	7.6	8.5
15	9.8	9.4	8.8	9.0	9.7	7.0	5.9	3.4	4.4	3.2	8.8	8.4
16	9.6	9.2	9.3	8.9	10.0	6.8	5.6	3.6	4.5	3.1	9.4	8.3
17	9.6	8.9	9.3	8.9	10.2	6.9	5.3	3.4	4.6	3.0	9.3	8.3
18	9.8	8.9	9.2	8.9	10.1	6.7	5.2	3.3	4.6	3.3	9.1	8.5
19	9.6	8.8	9.2	9.3	10.0	6.6	5.1	3.2	5.0	3.1	9.1	8.5
20	9.6	8.8	9.1	8.9	9.8	6.6	5.3	3.1	4.7	3.1	9.1	...
21	9.6	9.0	9.1	8.8	9.7	6.9	5.2	3.0	4.5	3.1	9.3	...
22	9.7	9.5	9.5	8.9	9.7	6.5	5.1	3.0	4.3	3.3	9.0	...
23	9.8	9.3	9.3	9.3	9.6	6.3	5.0	3.4	4.3	3.6	8.8	...
24	9.8	9.2	9.2	9.3	9.5	6.2	4.8	3.3	4.2	4.5	8.7	...
25	10.2	9.2	9.1	9.3	9.4	6.1	4.8	3.3	4.0	4.5	8.6	...
26	10.0	9.1	9.0	9.6	9.2	6.1	4.8	3.7	4.0	4.6	8.8	...
27	9.8	9.1	9.0	9.6	9.2	6.1	4.6	4.0	4.3	4.6	8.5	...
28	9.7	9.0	9.0	9.9	8.9	6.7	4.4	4.0	4.1	5.4	8.5	8.5
29	9.9		9.3	9.8	8.8	6.5	4.3	4.9	3.9	5.5	8.7	8.4
30	9.7		9.1	9.7	8.7	6.5	4.3	4.9	3.7	5.9	9.4	8.5
31	9.6		8.9		8.9		4.3	4.9		6.2		8.4

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1938

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.5	9.3	...	9.6	9.9	9.5	10.6	10.3	...	6.1	...	7.0
2	8.9	9.3	...	9.6	9.7	9.3	10.5	10.2	...	5.9	...	6.7
3	8.9	9.2	...	9.9	9.6	9.3	10.4	10.3	...	6.4	...	6.7
4	8.6	9.2	9.7	9.5	9.7	9.7	10.6	10.2	6.4	5.8	...	6.7
5	8.5	9.2	9.6	9.2	9.5	9.3	10.3	9.9	5.9	5.5	7.0	6.9
6	8.7	9.6	9.5	9.2	9.3	8.9	10.1	9.9	5.6	5.3	7.4	7.5
7	8.7	9.3	9.8	9.4	9.3	8.5	10.0	9.9	6.5	5.9	6.3	7.4
8	8.8	9.3	9.6	9.3	...	8.5	10.1	10.1	5.9	5.6	6.0	7.0
9	9.1	9.3	...	9.4	...	9.5	9.8	10.1	5.7	5.4	5.8	6.9
10	9.5	9.3	...	9.8	...	9.1	9.6	10.0	5.4	6.2	7.1	6.6
11	9.3	9.6	...	10.1	...	8.9	9.5	9.9	5.3	5.9	7.3	6.5
12	9.2	9.4	...	9.9	...	8.7	9.5	10.0	6.1	5.8	6.5	6.3
13	9.1	9.3	...	9.8	...	9.7	9.0	9.8	5.4	5.7	6.5	7.0
14	9.1	9.2	...	9.8	...	9.3	8.6	9.8	5.1	6.5	6.0	6.6
15	9.6	9.1	...	10.1	9.4	9.3	8.6	9.7	5.0	6.1	5.9	6.3
16	9.3	9.0	...	9.9	9.5	9.2	8.6	9.4	5.5	5.8	5.8	6.2
17	9.1	8.9	...	9.8	9.6	9.2	8.2	9.2	5.1	5.8	5.7	7.0
18	8.9	8.9	...	9.7	9.9	9.4	8.2	8.9	4.9	5.8	5.7	6.6
19	8.8	8.8	...	10.7	9.8	9.4	8.0	9.3	4.8	6.1	5.7	6.4
20	8.7	9.7	...	10.1	9.7	9.4	8.0	8.5	6.0	5.7	6.9	6.3
21	8.7	9.6	...	10.0	9.7	9.5	8.1	8.0	6.2	5.4	6.5	5.8
22	9.3	9.5	9.9	9.9	10.2	9.3	10.0	7.7	8.7	5.2	6.2	5.4
23	8.8	9.6	9.9	9.9	9.8	9.1	10.1	7.4	7.9	5.9	6.0	5.2
24	8.7	10.0	10.1	10.1	9.6	9.0	10.5	7.1	7.8	5.5	5.9	7.0
25	8.7	9.8	9.9	10.0	9.6	10.0	10.8	...	8.1	5.2	7.6	5.5
26	9.1	9.7	9.7	9.9	9.8	10.0	11.0	...	7.3	5.0	...	5.3
27	...	...	9.7	10.0	9.7	9.8	10.7	...	6.8	5.5	...	5.3
28	...	...	9.9	9.9	9.7	10.0	10.5	...	6.4	5.1	...	7.0
29	...	...	9.7	9.8	9.7	12.0	10.3	...	6.2	5.0	...	...
30	9.1	...	9.5	9.8	10.1	10.8	10.3	...	6.6	5.0	6.3	...
31	9.4	...	9.8	...	9.8	...	10.5	...	...	...	...	...

Lowest daily water level, above mean sea level, 1939

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	7.5	9.3	9.7	9.5	6.9	4.8	4.7	4.3	2.7	3.4	2.9
2	5.6	8.7	9.9	9.8	9.9	6.7	4.9	5.4	4.2	2.6	3.6	2.8
3	5.5	8.7	9.7	9.7	9.6	6.5	4.9	5.2	4.2	3.3	4.2	2.7
4	6.4	9.4	9.6	10.1	9.5	6.4	5.8	5.3	4.6	3.3	4.1	3.1
5	6.1	...	9.6	9.8	9.4	7.0	5.5	5.2	4.4	3.2	4.1	2.8
6	6.1	...	10.1	9.7	9.8	6.4	5.4	5.1	4.2	3.2	4.2	2.6
7	7.7	...	9.7	10.0	9.5	6.1	5.3	5.0	4.1	3.1	5.5	2.5
8	8.5	...	9.5	9.8	9.4	5.9	5.3	4.9	3.9	3.0	5.5	2.3
9	9.3	...	9.4	10.2	9.4	5.7	5.2	5.1	3.8	3.0	5.3	2.2
10	9.1	...	9.3	10.0	9.7	5.6	5.2	4.7	4.3	3.5	5.2	2.1
11	9.0	...	9.8	9.8	9.4	6.1	5.9	4.4	4.0	3.2	5.1	2.0
12	8.9	...	9.6	9.8	9.2	5.6	5.7	4.3	3.9	3.1	5.0	2.4
13	8.9	...	9.6	10.0	9.1	5.4	5.6	4.1	3.7	3.0	5.5	2.2
14	9.1	...	9.6	9.9	9.0	5.3	5.5	4.0	3.6	2.9	5.2	2.0
15	...	...	10.2	9.7	9.3	5.3	5.4	3.9	3.5	2.8	4.9	1.8
16	...	...	10.0	9.6	9.0	5.2	5.4	4.4	3.4	3.1	4.7	1.7
17	...	...	9.6	9.5	8.7	5.5	6.0	4.1	3.7	2.9	4.5	1.6
18	...	...	9.6	10.0	8.5	5.3	5.7	3.9	3.4	2.8	4.4	1.4
19	...	...	9.5	9.8	8.4	5.2	5.5	3.8	4.1	2.7	4.8	1.7
20	...	...	9.5	9.8	8.8	6.3	5.4	3.9	3.7	3.1	4.4	1.5
21	...	...	9.9	9.8	8.4	5.7	5.3	4.1	3.5	2.9	4.2	1.3
22	...	9.0	9.6	9.7	8.3	5.4	5.2	4.4	3.3	2.8	3.9	1.2
23	...	8.9	9.4	10.1	8.1	5.1	5.1	5.1	3.2	2.7	3.8	1.1
24	...	8.8	9.3	9.8	8.6	5.0	5.0	4.9	3.1	2.7	4.2	.9
25	...	9.2	9.2	9.6	8.1	4.8	5.6	4.8	3.0	3.0	3.8	.8
26	...	9.2	9.7	9.6	7.9	4.6	5.3	4.7	2.8	3.0	3.6	1.3
27	...	9.3	9.3	9.6	7.7	5.2	5.1	4.5	3.3	2.9	3.3	...
28	...	9.2	9.3	10.0	7.5	4.8	5.0	4.4	3.0	2.8	3.2	...
29	7.4	...	9.4	9.8	7.4	4.7	4.9	4.3	2.9	2.8	3.2	...
30	7.4	...	9.9	9.7	7.9	4.7	4.9	4.6	2.8	3.4	3.1	...
31	7.6	...	9.7	...	7.4	...	4.8	4.4	...	3.4	...	1.4

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1940

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.8	...	7.9	9.3	...	10.5	10.1	...	9.9	7.5	...	10.5
2	1.7	...	7.7	9.8	10.0	10.8	9.9	...	9.8	8.5	...	10.8
3	1.6	...	7.7	9.6	10.3	10.5	9.8	...	9.9	8.4	...	10.5
4	1.6	...	8.2	9.6	10.1	10.4	9.8	...	9.9	9.1	...	...
5	1.6	...	9.4	9.5	10.0	10.3	9.7	...	10.1	9.1	...	...
6	1.6	...	9.3	9.4	10.3	10.2	9.6	...	10.0	9.1	...	...
7	1.9	...	9.3	9.4	10.0	10.4	9.9	...	9.8	8.9	...	...
8	1.7	...	9.3	...	9.9	10.2	9.6	...	9.7	8.8	...	...
9	...	...	9.3	...	9.8	10.1	9.4	...	9.6	9.3	...	...
10	...	...	9.2	...	9.7	10.3	9.2	...	9.5	9.1	...	...
11	...	...	9.1	...	10.0	10.3	8.8	...	9.4	9.0	...	...
12	...	...	9.4	...	9.7	10.1	9.0	...	9.6	8.9	...	...
13	...	3.2	9.2	...	9.6	10.5	8.8	...	9.2	8.8	...	...
14	1.4	3.3	9.0	...	9.4	10.2	9.1	...	8.9	8.6	...	10.1
15	2.1	3.4	9.2	...	9.7	10.0	8.7	...	8.7	8.5	...	9.9
16	2.3	3.9	9.6	...	9.5	9.9	8.4	...	8.4	8.3	...	9.8
17	2.6	3.8	9.6	...	9.8	9.8	8.2	...	8.2	8.7	...	10.0
18	...	3.7	10.1	...	10.2	9.7	8.6	...	8.1	8.4	...	10.2
19	...	3.8	9.8	...	10.2	9.9	8.0	...	8.2	8.2	...	10.3
20	...	3.9	9.7	...	10.3	9.6	7.7	...	7.8	8.0	...	10.4
21	...	5.2	9.7	...	10.2	9.4	7.4	...	7.6	7.8	...	10.4
22	...	6.8	9.7	...	10.2	9.2	7.2	...	7.3	...	...	10.3
23	...	7.9	9.6	...	10.2	8.9	7.8	...	7.2	...	...	10.2
24	...	8.1	10.1	...	10.2	8.9	7.1	...	7.7	...	10.2	10.1
25	...	8.1	9.7	...	10.6	9.6	6.8	6.0	7.6	...	10.1	10.5
26	...	8.1	9.6	...	10.4	9.5	6.6	6.0	7.9	...	10.0	10.4
27	...	...	9.5	...	10.3	9.5	6.4	6.9	8.0	...	10.2	10.3
28	...	...	9.4	...	10.3	9.5	6.2	6.9	7.9	...	10.4	10.3
29	...	...	9.4	...	10.5	9.7	6.0	7.4	7.8	...	10.5	10.6
30	...	...	9.4	...	10.3	9.8	...	8.1	7.6	...	10.5	10.5
31	...	...	9.3	...	10.4	...	...	8.6	...	...	...	10.4

Lowest daily water level, above mean sea level, 1941

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	11.1	10.4	9.3	...	8.9	8.6	7.8	...	5.4	3.7
2	10.7	10.3	9.3	...	8.7	...	8.1	...	5.8	3.6
3	10.7	10.2	9.2	...	8.6	...	8.1	6.6	5.7	3.6
4	10.6	10.2	9.8	...	8.5	...	8.3	6.5	5.6	3.5
5	10.6	10.1	9.8	...	8.4	...	9.7	6.7	5.4	3.8
6	10.5	10.1	9.8	...	8.3	...	9.7	6.4	5.3	3.6
7	10.4	10.7	9.8	...	8.3	...	9.9	6.3	5.2	3.5
8	...	10.4	9.9	...	8.4	...	10.5	6.1	5.0	3.4
9	...	...	9.9	...	8.5	...	10.3	6.0	4.9	3.3
10	...	...	9.9	...	9.0	...	10.3	5.9	4.8	3.3
11	...	...	...	...	8.9	8.7	10.3	5.8	4.7	3.2
12	...	...	...	...	8.7	8.5	10.3	5.8	4.6	3.2
13	...	10.4	...	10.4	8.6	8.5	10.2	5.7	4.5	3.1
14	...	10.4	...	10.3	8.6	8.8	10.2	5.6	4.5	3.0
15	...	10.4	...	10.5	8.5	9.2	10.4	5.5	4.4	3.0
16	...	10.4	...	10.3	8.6	9.3	10.2	5.5	4.3	2.9
17	...	10.4	...	10.2	8.6	9.7	10.1	5.4	4.2	2.9
18	...	10.2	...	10.0	8.6	9.6	10.0	5.4	4.1	2.8
19	10.5	10.1	...	10.0	8.6	9.4	9.9	5.4	...	3.2
20	10.4	10.1	...	9.8	9.0	9.2	9.7	5.3	...	2.9
21	10.4	10.0	...	9.6	8.9	9.0	9.6	5.3	...	2.8
22	10.4	9.9	...	9.4	8.8	8.7	9.5	5.2	...	2.8
23	10.3	9.8	...	9.3	8.8	8.5	9.3	5.2	...	...
24	10.3	9.7	...	9.3	8.7	8.2	9.0	5.1	...	2.7
25	10.5	9.7	...	9.3	8.7	8.0	8.8	5.1	4.0	3.1
26	10.7	9.5	...	9.2	8.6	8.2	8.5	5.3	4.0	...
27	10.9	9.5	...	9.6	8.6	7.9	8.2	5.4	3.9	...
28	10.8	9.5	...	9.3	8.7	7.7	8.0	5.5	3.9	...
29	10.6	...	...	9.1	8.7	7.6	7.8	5.5	3.8	...
30	10.5	...	...	9.0	8.7	7.7	...	5.4	3.8	...
31	10.5	...	...	...	8.6	...	...	5.4	...	...

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1942

Day	Jan.	Feb.	Mar.	Apr.	May	June	Sept.	Oct.	Nov.	Dec.
1	4.7	4.8	7.7	10.2	...	4.7	2.8	3.4	5.2	9.4
2	4.5	5.1	8.2	10.4	...	4.5	2.8	3.4	5.2	9.4
3	4.5	5.3	8.2	10.3	8.1	4.3	3.1	3.4	5.3	9.6
4	4.4	5.4	8.8	10.2	7.8	4.1	3.0	3.7	5.9	9.3
5	4.4	5.5	8.9	10.1	7.6	3.9	2.9	3.7	5.9	9.2
6	4.5	5.5	9.0	10.1	7.4	3.7	2.9	3.6	5.9	8.9
7	4.3	5.5	9.0	10.1	7.4	3.7	2.8	3.6	6.1	...
8	4.2	6.8	9.1	10.2	7.4	4.1	2.8	3.5	6.0	...
9	4.2	8.0	9.1	10.0	6.3	3.7	2.8	3.5	5.9	...
10	4.0	8.8	9.8	10.0	6.1	3.6	3.2	3.5	5.8	...
11	3.8	8.6	9.7	10.3	7.3	3.4	3.1	3.9	6.1	...
12	3.7	...	9.6	10.4	6.1	3.3	3.1	3.7	6.2	...
13	3.6	...	9.6	10.4	6.0	3.3	3.0	3.6	6.4	...
14	3.5	...	9.6	10.5	7.3	3.5	3.0	3.6	5.9	...
15	3.5	...	9.7	10.4	7.6	5.0	2.9	3.6	6.5	...
16	3.3	...	9.8	10.3	7.8	5.0	3.1	3.5	6.3	...
17	3.2	...	10.5	10.2	8.0	5.2	3.0	3.5	5.9	...
18	3.1	8.6	10.3	10.1	8.1	5.2	2.9	4.2	6.4	...
19	3.1	8.7	10.1	10.0	8.3	5.1	2.9	4.2	6.3	...
20	3.8	8.7	10.0	10.2	8.5	5.0	2.9	4.3	6.2	...
21	3.8	8.6	10.0	10.0	8.4	4.9	2.9	4.4	6.1	...
22	3.8	8.9	10.1	9.7	8.6	5.4	3.2	4.4	6.1	...
23	4.0	8.6	10.3	9.5	8.6	5.0	3.1	4.5	6.0	...
24	4.1	8.5	10.3	9.4	8.6	4.7	3.0	5.0	6.9	...
25	4.1	8.3	10.4	9.3	7.7	4.4	2.9	5.0	7.1	...
26	4.2	8.2	10.3	9.4	6.5	...	2.9	5.0	9.2	...
27	4.3	8.0	10.2	9.0	6.0	...	...	4.9	9.5	...
28	4.3	7.8	10.0	8.8	5.7	...	...	4.9	9.6	...
29	4.2	...	10.0	...	5.5	...	...	4.9	9.6	...
30	4.1	...	10.0	...	5.2	...	...	4.9	10.1	...
31	4.1	...	10.0	...	4.9	...	...	4.9	...	...

Lowest daily water level, above mean sea level, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Oct.	Nov.	Dec.
1	10.1	7.7	...	9.3	8.7	9.9	...	2.6	...	5.8	7.6
2	10.0	7.6	...	9.1	8.5	9.8	...	2.6	...	5.9	7.5
3	10.0	7.6	...	9.1	8.3	9.6	4.5	2.5	...	6.1	7.4
4	9.8	7.6	...	8.8	8.2	9.5	4.4	2.5	...	7.0	7.4
5	9.8	7.5	...	8.7	8.0	9.2	4.3	2.4	...	7.4	7.2
6	9.7	7.6	...	8.9	7.8	8.9	4.2	2.4	...	7.6	7.2
7	9.6	9.4	...	8.6	7.7	8.7	4.1	2.3	...	7.7	7.1
8	9.6	9.5	...	8.4	7.5	8.6	4.0	2.2	...	7.8	7.0
9	9.4	9.5	9.7	8.2	7.3	8.5	3.9	2.2	...	7.9	6.9
10	9.4	9.6	9.8	8.1	7.1	8.3	3.8	2.3	...	8.3	6.9
11	9.6	9.6	9.8	7.9	7.0	8.1	3.7	2.3	...	8.7	6.7
12	9.2	9.7	9.8	7.8	6.9	7.9	3.6	2.2	...	8.8	6.6
13	9.0	9.7	9.8	7.7	7.1	7.9	3.5	2.2	...	8.8	6.4
14	8.8	9.7	9.7	7.6	7.7	7.6	3.4	2.2	...	8.8	6.3
15	8.6	9.9	10.0	7.5	8.1	7.6	3.4	2.1	...	8.8	6.1
16	8.5	9.6	10.0	7.4	8.3	7.7	3.3	2.1	...	8.8	6.0
17	8.3	...	10.0	7.4	8.3	...	3.2	2.1	...	8.7	5.9
18	8.3	...	10.0	7.6	8.2	...	3.0	2.0	...	8.6	5.7
19	8.3	...	10.0	7.6	8.1	...	3.0	...	...	8.5	5.6
20	8.6	...	10.0	7.5	8.1	...	3.2	...	...	8.4	5.4
21	8.7	...	9.9	7.2	9.0	...	3.1	...	...	8.3	5.4
22	8.6	...	9.9	8.8	9.6	...	3.1	...	...	8.3	5.2
23	8.5	...	9.8	9.5	9.7	...	3.1	...	0.5	8.3	5.1
24	8.2	...	10.1	9.5	9.8	...	3.0	...	.5	8.2	4.9
25	8.2	...	9.9	...	10.1	...	3.0	...	.5	8.1	4.8
26	8.8	...	9.8	...	10.0	...	2.9	...	.5	8.0	4.7
27	8.3	...	9.8	...	10.1	...	2.9	...	.5	7.9	4.8
28	8.2	...	9.6	...	10.1	...	2.9	...	1.4	7.8	4.9
29	8.0	...	9.6	...	10.1	...	2.8	...	2.9	7.8	5.0
30	7.9	...	9.5	...	10.0	...	2.8	...	4.8	7.8	5.1
31	7.8	...	9.4	...	9.9	...	2.7	...	5.5	...	5.2

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1944

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.2	8.0	....	10.5	10.7	9.1	7.0	3.5	...	8.2	6.2	10.4
2	5.1	8.0	....	10.5	10.6	9.0	6.8	3.4	...	8.1	6.0	10.5
3	5.1	8.0	....	10.4	10.6	8.9	6.6	3.4	...	8.0	5.9	10.3
4	...	7.9	....	10.4	10.5	8.9	6.4	3.4	...	7.9	5.8	....
5	...	7.8	....	10.4	10.4	8.7	6.2	3.3	...	7.8	5.6	....
6	...	7.7	....	10.3	10.4	8.6	6.0	3.3	...	7.7	5.5	....
7	...	7.7	....	10.3	10.5	8.5	5.8	3.3	...	7.6	5.3	....
8	...	7.6	....	10.3	10.5	8.4	5.7	3.3	...	7.5	5.2	....
9	9.4	7.5	....	10.3	10.5	8.3	5.5	...	...	7.4	5.1	....
10	9.4	7.4	....	10.0	10.4	8.1	5.3	...	...	7.3	5.0	....
11	9.3	7.4	....	9.9	10.4	8.2	5.2	...	1.3	7.1	4.8	....
12	9.2	7.2	....	9.9	10.3	8.4	5.1	...	1.3	7.0	4.7	....
13	9.1	7.1	....	9.7	10.2	8.4	4.9	...	1.3	6.9	4.6	....
14	9.0	7.0	....	9.6	10.2	8.3	4.9	...	1.3	6.8	4.6	....
15	8.9	7.4	....	9.6	10.3	8.4	4.9	...	2.2	6.6	4.8	....
16	8.7	7.5	....	9.7	10.5	8.2	4.8	...	6.9	6.6	4.7	....
17	8.7	8.2	....	10.2	10.6	8.1	4.8	...	8.0	6.4	4.6	....
18	8.6	8.5	....	10.4	10.5	8.0	4.8	...	8.7	6.3	4.6	....
19	8.6	8.7	....	10.3	10.3	8.1	4.7	...	9.0	6.2	4.6	....
20	8.5	8.9	....	10.2	10.1	8.2	4.6	...	9.2	6.1	4.6	....
21	8.4	9.0	....	10.2	10.0	8.2	4.6	...	9.2	6.1	4.6	....
22	8.3	9.0	....	10.1	9.8	8.1	4.5	...	9.0	6.2	4.7	....
23	8.4	8.9	....	10.0	9.6	8.1	4.4	...	9.0	6.5	7.9	....
24	8.2	...	....	10.1	9.4	8.0	4.4	...	8.9	6.7	8.9	....
25	8.2	...	10.5	10.9	9.6	8.0	4.3	...	8.8	6.8	9.3	....
26	8.1	...	10.4	10.5	9.5	7.7	4.2	...	8.7	6.8	9.5	....
27	8.2	...	10.4	10.6	9.5	7.5	4.1	...	8.5	6.7	9.7	....
28	8.2	...	10.3	10.7	9.5	7.4	4.0	...	8.5	6.7	9.8	....
29	8.3	...	10.3	10.9	9.4	7.3	3.9	...	8.4	6.6	10.1	....
30	8.1	...	10.5	10.8	9.3	7.1	3.8	...	8.4	6.5	10.2	....
31	8.1	...	10.5	...	9.2	...	3.7	...	...	6.4	...	....

Lowest daily water level, above mean sea level, 1945

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	10.3	....	8.6	7.5	11.2	8.6	10.6	...	9.3
2	....	....	10.2	....	8.8	7.4	11.2	8.5	10.5	...	9.4
3	10.1	....	10.2	....	8.6	7.7	11.1	8.4	10.2	...	9.8
4	10.1	....	10.2	11.0	8.5	8.5	11.0	8.3	....	...	9.6
5	10.0	....	10.1	11.0	8.5	8.7	10.9	8.1	....	...	9.6
6	9.9	....	10.0	11.0	8.8	8.8	10.8	8.0	....	...	9.6
7	9.9	....	9.9	11.0	8.7	8.7	10.8	7.9	....	7.1	9.7
8	9.7	....	9.8	11.0	8.6	8.6	10.8	7.8	....	7.1	9.6
9	9.6	10.8	9.7	10.9	8.5	8.5	10.7	7.7	....	7.0	9.6
10	9.5	10.8	9.6	10.9	8.5	8.4	10.6	7.6	....	6.9	9.6
11	...	10.7	9.5	11.1	8.4	8.1	10.5	7.6	....	6.9	9.8
12	...	10.7	9.5	11.2	8.3	8.0	10.4	8.0	....	6.9	...
13	...	10.6	9.4	11.2	8.3	7.9	10.3	8.5	....	6.9	...
14	...	10.5	9.4	11.1	8.2	7.8	10.2	8.7	....	7.5	...
15	...	10.5	9.3	11.1	8.2	7.7	10.1	9.1	....	7.0	...
16	...	10.4	9.3	11.0	8.1	7.8	10.0	10.0	....	6.9	...
17	...	10.4	9.2	11.0	8.0	8.0	9.8	10.2	....	6.8	...
18	...	10.2	9.2	10.9	8.0	8.4	...	10.3	....	6.8	...
19	...	10.2	9.2	10.9	7.9	10.4	...	10.8	....	6.8	...
20	...	10.2	9.2	10.8	7.8	11.7	...	11.5	....	6.8	...
21	...	10.2	9.2	10.8	7.9	11.7	...	11.4	....	6.8	...
22	...	9.8	9.2	10.7	7.9	11.6	...	11.3	....	6.8	...
23	...	9.9	9.1	10.6	8.0	11.5	...	11.2	....	7.0	...
24	...	10.0	9.1	10.5	7.9	11.7	9.0	11.1	....	7.4	...
25	...	10.4	9.0	10.4	8.0	11.6	8.9	11.1	....	7.5	...
26	...	10.5	...	10.2	8.0	11.5	9.1	10.9	....	7.5	...
27	...	10.5	...	10.2	7.9	11.4	9.1	10.9	....	7.5	...
28	...	10.5	...	10.0	7.8	11.4	9.1	10.8	....	7.4	...
29	...	10.5	...	9.5	7.7	11.4	9.0	10.7	....	7.8	...
30	...	10.4	...	9.1	7.6	11.3	8.9	10.6	....	9.0	...
31	...	10.3	...	8.8	...	11.3	8.7	...	....	...	...

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1946

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.5	9.5	6.3	...	6.2	6.9	5.0	2.3	1.9	0.7
2	7.8	9.4	6.9	...	6.5	6.9	4.9	2.2	1.8	.6
3	7.9	9.3	6.6	...	6.5	6.9	4.8	2.2	1.8	.6
4	7.8	9.3	6.4	...	6.4	7.0	4.7	2.2	1.7	.6
5	7.6	9.1	6.4	...	6.4	7.1	4.6	2.1	1.7	.5
6	7.6	9.0	6.3	...	...	7.2	4.5	2.1	1.7	.5
7	7.5	8.9	6.3	10.0	...	7.2	4.4	2.3	1.6	.7
8	7.5	8.9	6.3	9.9	...	7.2	4.3	2.3	1.6	.8
9	7.4	8.8	6.1	9.7	6.0	7.2	4.2	2.3	1.6	.6
10	5.5	9.0	5.9	9.6	5.8	7.3	4.1	2.3	1.6	.7
11	7.1	8.8	5.8	9.6	5.7	7.3	4.1	2.3	1.5	.7
12	7.2	8.6	5.7	9.5	5.6	7.2	4.0	2.3	1.5	.7
13	7.0	8.4	5.7	9.3	5.5	7.1	3.9	2.3	1.3	.7
14	7.0	8.2	5.7	9.2	5.4	7.0	3.9	2.3	1.1	.7
15	7.5	8.1	6.5	9.0	4.9	6.4	3.8	2.2	1.0	.7
16	7.5	8.3	7.5	8.9	4.7	6.1	3.7	2.2	.9	.7
17	7.7	7.9	8.0	9.2	4.4	5.9	3.6	2.2	.8	.8
18	7.6	7.7	8.4	8.9	4.2	5.8	3.6	2.2	.7	.8
19	7.7	7.5	...	8.7	4.0	5.6	3.5	2.1	.6	.8
20	7.9	7.3	...	8.6	3.9	5.6	3.4	2.1	.5	.8
21	7.9	6.5	...	8.3	3.9	5.9	3.2	2.1	.5	.8
22	7.9	7.0	...	8.1	3.9	6.0	3.1	2.1	.4	1.0
23	7.8	6.8	...	7.9	4.3	5.9	2.9	2.1	.4	1.2
24	7.8	6.6	...	7.6	6.7	5.8	2.8	2.0	.3	1.5
25	7.9	6.6	...	7.4	6.6	5.7	2.7	2.0	.2	1.8
26	7.9	6.6	...	7.1	6.6	5.6	2.6	1.9	.2	2.1
27	8.3	7.0	...	6.9	6.3	5.5	2.5	1.9	.6	2.3
28	9.2	7.0	...	6.7	6.2	5.4	2.4	1.9	.7	2.3
29	9.3	6.9	...	6.5	6.2	5.3	2.4	1.9	.7	2.4
30	9.3	6.9	...	6.3	6.4	5.2	2.3	1.8	.7	2.4
31	9.3	...	...	...	6.6	5.1	...	1.8	...	2.5

Lowest daily water level, above mean sea level, 1947

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Nov.	Dec.
1	2.5	7.1	5.9	7.6	8.6	9.6	5.1	...	8.4
2	2.6	7.2	5.9	7.7	9.1	9.4	4.9	...	8.3
3	2.6	7.2	6.4	8.1	9.7	9.1	4.6	2.7	8.2
4	2.7	7.2	7.3	8.9	9.9	8.9	4.4	2.8	7.7
5	2.8	7.2	7.9	9.2	10.0	8.7	4.2	3.0	7.5
6	2.8	7.3	8.1	9.6	10.1	8.5	4.1	3.3	7.3
7	3.0	7.3	8.3	9.7	10.1	8.5	4.2	3.6	7.1
8	3.1	7.2	8.5	9.7	10.0	8.5	4.1	4.0	7.0
9	3.2	7.1	8.5	9.7	10.0	9.0	4.1	4.8	6.8
10	3.2	6.5	9.3	9.7	9.9	9.1	4.0	5.9	6.7
11	3.3	7.1	9.3	9.7	9.9	9.0	3.9	7.5	6.6
12	3.4	7.2	8.7	9.6	9.9	8.7	3.9	7.7	6.7
13	3.4	...	8.6	9.6	9.8	8.5	3.8	8.3	6.7
14	3.5	...	8.6	9.6	9.8	8.5	3.7	8.8	6.6
15	3.6	...	8.9	9.5	9.8	8.3	3.6	9.3	6.5
16	3.8	...	8.8	9.6	9.7	8.1	3.5	9.3	6.4
17	4.4	...	8.6	9.7	9.7	7.9	3.4	9.2	6.7
18	4.9	6.9	8.6	9.6	9.7	7.9	3.5	8.3	6.9
19	5.3	...	9.0	9.6	9.2	7.9	3.7	9.0	6.9
20	5.5	6.8	9.0	9.6	9.2	7.0	...	8.9	6.9
21	6.3	6.7	8.9	9.6	9.3	6.8	...	8.8	6.7
22	7.2	6.6	8.8	9.5	9.3	6.5	...	8.7	6.4
23	7.1	6.5	8.8	9.5	9.6	6.3	...	8.6	6.1
24	7.1	6.4	8.8	9.5	9.7	6.2	...	8.6	6.0
25	7.0	6.3	8.6	9.1	10.1	5.9	...	8.8	6.0
26	6.9	6.2	8.5	9.0	10.0	5.9	...	8.9	5.9
27	6.7	6.1	8.3	8.9	10.0	6.0	...	8.9	5.8
28	6.6	6.0	8.2	8.8	9.9	5.9	...	8.8	5.7
29	6.6	...	8.1	8.6	9.8	5.9	...	8.7	5.5
30	6.5	...	7.9	8.5	9.8	5.4	...	8.5	5.4
31	6.9	...	7.8	...	9.7	...	...	...	5.3

29.1.4.4.2--Continued.

Lowest daily water level, above mean sea level, 1948

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.2	...	9.3	9.6	9.1	10.2	9.7	9.4	8.4	5.9	6.0	7.5
2	5.3	...	9.8	10.3	9.0	10.1	9.9	9.4	8.2	5.8	6.0	7.5
3	5.4	...	10.0	10.4	8.9	10.0	9.7	9.4	8.2	5.8	6.0	7.5
4	5.9	...	10.1	10.4	8.9	9.8	9.7	9.4	8.2	5.8	6.1	7.6
5	6.3	...	10.0	10.4	8.9	9.7	9.5	9.6	8.2	6.2	6.1	7.9
6	7.2	...	10.0	10.3	9.3	9.6	9.4	10.1	8.2	6.3	6.2	8.1
7	7.3	...	10.1	10.2	9.7	9.5	9.1	10.5	8.2	6.4	6.3	8.1
8	7.1	...	10.0	10.2	9.8	9.1	8.9	10.4	...	6.3	6.3	7.9
9	7.0	...	9.6	10.1	9.8	8.8	8.8	10.3	...	6.4	6.4	7.8
10	7.0	...	9.7	10.0	9.8	8.5	8.6	10.2	6.9	6.4	6.4	7.6
11	7.0	...	9.6	10.0	9.7	8.4	8.6	10.1	7.0	6.4	6.5	7.6
12	6.9	...	9.6	10.1	9.5	8.1	8.3	10.1	7.2	6.4	6.5	7.6
13	6.6	...	9.5	10.1	9.6	8.2	8.3	10.2	7.1	6.3	6.6	7.3
14	6.1	...	9.5	10.1	9.9	8.4	8.7	10.2	6.9	6.3	6.6	7.3
15	5.7	...	9.5	10.3	10.0	8.4	9.5	10.1	6.7	6.2	6.7	7.2
16	5.7	7.6	9.5	10.3	10.4	8.3	9.6	9.9	6.4	6.1	6.6	7.2
17	5.6	8.2	9.9	10.2	10.5	8.2	9.5	9.5	6.3	6.1	6.2	7.7
18	5.6	8.6	9.9	10.2	10.6	8.1	9.3	9.2	6.2	6.1	6.0	8.3
19	5.7	8.8	9.9	10.2	10.6	8.5	9.1	8.8	6.1	6.1	6.0	8.5
20	6.1	9.1	10.0	10.2	10.5	8.7	8.8	8.7	6.0	6.1	5.9	8.6
21	6.3	9.1	10.0	10.0	10.4	10.1	8.5	8.7	6.0	6.1	5.9	8.6
22	6.3	9.1	10.0	9.9	10.3	10.4	8.3	9.0	5.9	5.8	6.4	8.6
23	6.3	9.0	9.9	9.9	10.2	10.4	8.3	9.2	5.9	5.6	6.5	8.6
24	6.2	8.9	10.1	9.8	10.1	10.4	9.3	9.8	5.9	5.6	6.6	8.6
25	6.3	9.0	9.7	9.8	10.0	10.4	10.1	10.1	5.9	5.5	6.6	8.5
26	6.6	9.0	9.6	9.7	10.1	10.3	10.1	10.0	5.8	5.5	6.6	8.5
27	6.8	9.1	9.7	9.6	10.3	10.3	10.1	9.7	6.1	6.0	6.7	8.1
28	6.9	9.1	9.7	9.5	10.3	10.2	10.0	9.5	6.3	6.0	6.8	7.6
29	7.0	...	9.7	9.4	10.3	9.9	9.8	9.3	6.3	6.0	7.1	7.5
30	...	...	9.6	9.2	10.2	9.7	9.6	9.0	6.2	6.0	7.2	7.7
31	...	...	9.5	...	10.2	...	9.4	9.6	...	6.1	...	9.1

Lowest daily water level, above mean sea level, 1949

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.5	....	10.2	10.2	10.0	9.8	5.7	5.1	3.3	4.7	3.9	5.9
2	9.6	....	10.2	10.2	10.1	9.7	5.7	5.0	3.2	4.8	4.1	5.9
3	9.9	10.1	10.1	10.2	10.1	9.6	5.7	4.9	3.1	4.6	4.3	5.9
4	9.9	10.1	10.1	10.1	10.1	9.4	5.7	4.7	3.4	4.5	4.5	6.0
5	9.9	10.1	10.2	10.1	10.0	9.2	5.7	4.6	3.5	4.4	4.7	6.0
6	10.2	10.1	10.3	10.2	9.9	8.9	5.7	4.6	3.8	4.3	4.9	6.1
7	10.3	10.2	10.3	10.3	10.0	8.7	5.7	4.8	3.8	4.2	5.0	6.1
8	10.2	10.1	10.3	10.4	9.9	8.5	5.6	4.7	3.9	4.2	5.1	6.1
9	10.2	10.1	10.2	10.3	9.8	8.0	5.6	4.8	3.9	4.1	4.9	6.1
10	10.1	10.1	10.2	10.4	9.8	7.7	5.6	4.8	4.0	4.4	4.8	6.1
11	10.1	10.1	10.3	10.3	9.8	7.5	5.6	4.4	4.1	4.4	4.7	6.2
12	10.0	10.1	10.3	10.2	9.8	7.3	5.6	4.3	4.1	4.4	4.6	6.2
13	10.0	10.1	10.3	10.2	9.7	7.1	5.6	4.2	4.1	4.4	4.6	6.2
14	9.8	10.2	10.2	10.2	9.6	7.0	5.7	4.1	3.9	4.3	5.1	6.3
15	9.8	10.2	10.1	10.2	9.6	6.7	5.9	4.0	3.7	4.1	5.2	6.4
16	9.8	10.1	10.1	10.2	9.4	6.6	5.9	3.9	3.6	3.9	5.2	6.5
17	9.7	10.1	10.1	10.1	9.4	6.4	5.9	3.9	3.6	3.8	5.3	6.5
18	9.6	10.1	10.1	10.0	9.7	6.3	6.2	3.8	3.6	3.7	5.3	6.7
19	9.5	10.1	10.0	10.1	9.6	6.1	7.1	3.7	4.0	3.6	5.4	6.9
20	9.4	10.2	10.0	10.2	9.6	6.1	7.3	3.6	4.1	3.6	5.5	6.9
21	9.4	10.3	10.0	10.3	9.7	6.4	6.5	3.6	4.2	3.5	5.5	7.0
22	9.6	10.3	10.2	10.2	9.8	6.4	6.2	3.5	4.2	3.5	5.5	7.0
23	10.1	10.1	10.2	10.4	10.0	6.1	6.1	3.4	4.0	3.7	5.6	7.1
24	10.2	9.9	10.3	10.5	10.3	6.0	5.9	3.4	4.7	3.8	5.6	7.1
25	....	9.9	10.3	10.2	10.3	5.9	5.8	3.3	4.9	3.8	5.7	7.7
26	....	10.2	10.3	10.1	10.3	5.8	5.7	3.2	5.0	3.9	5.7	7.6
27	....	10.2	10.5	9.9	10.3	5.7	5.4	3.5	4.3	3.7	5.8	7.7
28	....	10.3	10.3	9.8	10.2	5.7	5.6	3.5	4.4	3.5	5.8	7.9
29	....	...	10.2	9.7	10.1	5.7	5.5	3.6	4.8	3.4	5.8	7.9
30	....	...	10.2	10.0	10.0	5.7	5.4	3.3	4.7	3.4	5.8	7.9
31	....	...	10.2	...	9.9	...	5.3	3.3	...	3.7	...	7.9

28.5.4.7.3. Perth Amboy Water Dept. Runyon well 123. Records available: 1938-47. No measurement made in 1949.

28.5.4.6.3.A. Perth Amboy Water Dept. test well A-2. Records available: 1932-45. Recording gage removed May 1947. Manual measurements: Nov. 15, 1.51; Dec. 14, 2.11.

No measurements were made in the following wells in 1949:

28.5.4.3.2	29.1.1.7.5.B	29.1.4.5.2.A
28.5.4.3.6	29.1.1.7.8..	29.1.4.7.6
28.5.4.3.7	29.1.1.7.8.A	29.1.4.9.8
28.5.4.4.9.A	29.1.1.7.9	29.1.5.1.4
28.5.4.4.9.B	29.1.1.7.9.A	29.1.5.1.9
28.5.4.5.6	29.1.1.8.4	29.1.5.4.6
28.5.4.5.9	29.1.4.1.4	29.1.5.4.8
28.5.4.6.2.A	29.1.4.1.6	29.1.5.4.8.A
28.5.4.6.2.B	29.1.4.1.8	29.1.5.6.3
28.5.4.6.5	29.1.4.2.4	29.1.5.6.3.A
28.5.4.6.6	29.1.4.2.7	29.1.5.7.2
28.5.4.6.6.A	29.1.4.2.7.A	29.1.5.7.5.A
28.5.4.6.7.A	29.1.4.4.1.A	29.1.7.3.5
28.5.4.6.7.B	29.1.4.4.2.A	29.11.1.2.5
28.5.4.8.1.A	29.1.4.3.9	29.11.1.2.5.A
29.1.1.7.5.A	29.1.4.5.2	

28.5.1.8.4. Sayreville Borough test well 4. Highest water level, 11.55, Mar. 27, 1944; lowest, -32.9, Oct. 25, 1935. Records available: 1931-49.

Lowest daily water level, below mean sea level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.54	....	1.82	+1.95	+4.02	+3.26	7.74	11.49	10.46	10.72	13.81	12.88
2	4.20	....	1.61	+1.66	+2.92	+3.26	7.96	11.16	10.78	10.79	13.85	12.73
3	4.65	..	1.21	+2.08	+4.73	+2.85	7.66	11.04	10.78	10.92	13.67	12.64
4	4.58	....	1.37	+1.90	+5.68	+2.55	7.51	11.03	10.81	11.26	13.72	12.64
5	4.26	....	1.27	+1.47	+6.06	+3.02	7.37	10.82	10.28	11.88	13.74	12.56
6	4.10	....	.35	+1.88	+6.14	+2.60	7.07	10.84	9.03	12.47	13.55	12.77
7	4.44	....	.86	+1.98	+6.36	+2.48	7.05	10.83	9.18	12.89	13.24	12.49
8	4.35	....	.41	+2.39	+6.95	+2.34	7.39	10.51	9.19	13.18	13.41	12.82
9	4.09	....	.45	+2.26	+7.34	+2.14	7.47	10.68	9.38	13.23	13.84	13.07
10	4.27	2.03	.21	+2.65	+7.65	+2.07	7.30	10.88	9.54	13.38	14.12	13.14
11	4.22	2.33	+.21	+2.61	+7.62	+2.35	7.99	10.78	9.62	13.71	13.18	12.93
12	3.95	2.71	+.04	+2.55	+8.04	+2.08	8.41	9.58	9.55	13.85	13.02	12.57
13	3.99	1.99	+.45	+2.67	+7.58	+1.70	8.36	9.85	9.29	13.81	12.64	12.22
14	4.05	2.28	+.31	+2.70	+7.59	.....	8.63	9.98	9.43	13.96	11.84	12.57
15	4.11	2.16	+.64	+2.21	+8.40	+1.50	8.65	10.06	9.56	13.99	12.37	12.36
16	3.65	2.18	+.74	+1.71	+8.05	+1.12	8.88	10.24	8.65	13.64	12.53	12.15
17	3.71	2.06	+.79	+2.23	+6.96	+1.03	8.71	10.41	9.39	13.62	12.56	11.90
18	4.52	2.15	+.88	+1.94	+5.23	+.83	8.27	10.43	9.56	13.55	12.51	11.70
19	4.08	1.92	+.79	+1.74	+4.60	+1.15	7.15	10.61	10.09	13.58	12.52	10.92
20	4.27	1.93	+1.04	+1.75	+4.50	+1.01	6.78	10.71	10.33	13.71	12.40	11.26
21	4.01	2.14	+.95	+1.96	+3.80	+.73	7.12	10.65	10.40	13.92	12.60	11.73
22	3.83	1.50	+1.14	+2.14	+4.32	.64	8.36	10.55	10.50	14.28	12.81	12.00
23	3.15	1.62	+1.65	+2.24	+3.80	2.70	8.94	10.46	10.44	14.13	12.66	12.29
24	3.02	1.76	+1.44	+2.55	+3.75	.....	....	10.54	10.53	14.20	12.47	15.42
25	3.10	1.56	+1.41	+2.34	+3.61	.....	....	10.81	10.61	14.36	12.28	13.65
26	3.15	1.46	+1.57	+3.90	+3.59	.....	....	10.94	10.70	14.30	12.56	11.04
27	3.21	4.81	+2.68	.....	+3.40	.....	10.23	10.98	10.64	14.39	12.47	11.12
28	2.79	2.69	+2.42	+6.07	+2.97	.....	10.68	10.97	10.49	14.44	12.76	10.39
29	2.92		+2.21	+6.33	+5.37	7.37	10.61	10.64	10.49	14.34	12.66	10.01
30	....		+2.14	+4.29	+3.34	7.51	11.71	10.50	10.63	14.21	12.81	9.69
31	....		+1.59		+3.33		10.70	10.46		13.71		.....

Monmouth County

Asbury Park area

29.24.7.1.6. Avon-by-the-Sea Water Dept. well 1. Highest water level -4.46, Apr. 12, 1937; lowest -132.00, Aug. 4, 1925, pumping. Records available: 1924-49. Jan. 3, -46.58; July 21, -76.50; Nov. 16, -53.11.

29.24.4.8.4. Monmouth Consolidated Water Co. Bradley Beach 650-foot well. Highest water level 11.64, Jan. 3, 1949; lowest -136.68, Aug. 27, 1925. Records available: 1924-49. Jan. 3, 11.64; Apr. 12, 11.32; July 21, 9.20. Measurement discontinued.

Runyon area

No measurement made in 1949 in wells 29.11.2.1.1 and 29.1.8.9.4.

29.11.1.2.9. Rulif Hulsart well. Highest water level 100.40, Apr. 19, 1939; lowest 55.47, Feb. 18, 1940. Records available: 1936-49.

Water level at end of day in feet, above mean sea level

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	97.74	98.94	99.42	99.72	99.48	99.20	98.37	97.48	96.73	96.33	95.96	95.73
2	98.01	98.97	99.45	99.70	99.48	99.18	98.32	97.46	96.72	96.32	95.95	95.71
3	98.18	99.01	99.45	99.71	99.48	99.17	98.30	97.45	96.70	96.31	95.96	95.70
4	98.26	99.06	99.49	99.67	99.48	99.14	98.28	97.42	96.69	96.30	95.96	95.70
5	98.35	99.08	99.51	99.72	99.49	99.12	98.22	97.39	96.70	96.30	95.96	95.69
6	98.40	99.10	99.52	99.70	99.42	99.10	98.20	97.38	96.65	96.29	95.96	95.69
7	98.42	99.13	99.53	99.71	99.42	99.08	98.17	97.37	96.63	96.28	95.96	95.68
8	98.43	99.19	99.58	99.72	99.41	99.03	98.12	97.35	96.62	96.26	95.95	95.67
9	98.47	99.20	99.60	99.68	99.40	99.00	98.10	97.30	96.60	96.24	95.93	95.65
10	98.48	99.22	99.60	99.66	99.40	98.90	98.08	97.28	96.59	96.22	95.92	95.63
11	98.50	99.20	99.62	99.63	99.40	98.97	98.03	97.27	96.58	96.21	95.91	95.62
12	98.51	99.23	99.63	99.67	99.38	98.92	98.02	97.25	96.57	96.20	95.91	95.62
13	98.53	99.28	99.62	99.68	98.38	98.90	98.00	97.20	96.56	96.19	95.91	95.61
14	98.50	99.29	99.65	99.70	99.36	98.88	98.00	97.18	96.54	96.18	95.90	95.62
15	98.53	99.29	99.62	99.64	99.34	98.84	97.98	97.16	96.53	96.16	95.89	95.61
16	98.58	99.31	99.65	99.60	99.33	98.81	97.94	97.14	96.52	96.14	95.88	95.61
17	98.57	99.28	99.65	99.58	99.32	98.80	97.92	97.11	96.51	96.12	95.87	95.60
18	98.59	99.30	99.62	99.57	99.33	98.73	97.89	97.08	96.51	96.11	95.86	95.60
19	98.58	99.32	99.58	99.52	99.32	98.70	97.88	97.05	96.50	96.10	95.84	95.60
20	98.57	99.31	99.60	99.52	99.30	98.70	97.86	97.02	96.49	96.09	95.82	95.60
21	98.64	99.32	99.66	99.57	99.30	98.67	97.83	97.00	96.48	96.08	95.81	95.60
22	98.63	99.38	99.68	99.55	99.33	98.60	97.79	96.99	96.48	96.05	95.80	95.60
23	98.68	99.38	99.70	99.52	99.32	98.58	97.76	96.97	96.44	96.03	95.80	95.60
24	98.70	99.40	99.70	99.51	99.38	98.60	97.74	96.92	96.42	96.02	95.80	95.59
25	98.70	99.41	99.70	99.55	99.32	98.58	97.70	96.90	96.41	96.02	95.79	95.58
26	98.74	99.41	99.72	99.50	99.31	98.52	97.67	96.89	96.40	96.00	95.77	95.59
27	98.78	99.42	99.73	99.46	99.30	98.50	97.64	96.86	96.39	95.99	95.77	95.59
28	98.81	99.47	99.70	99.47	99.28	98.47	97.60	96.83	96.38	95.99	95.76	95.60
29	98.82		98.70	99.44	99.26	98.42	97.58	96.80	96.36	95.97	95.75	95.60
30	98.86		99.71	99.46	99.23	98.40	97.56	96.80	96.35	95.95	95.74	95.60
31	98.92		99.73		99.22		97.52	96.78		95.94		95.60

Salem County

Penns Grove area

The following wells are owned by the State Department of Conservation and Economic Development, Division of Water Policy and Supply.

30.23.1.8.5. Penns Grove observation well 6. Highest water level 2.59, Aug. 14, 1942; lowest 0.19, Sept. 27, 1941. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	2.07	June 14	0.91	Aug. 18	1.11	Nov. 15	1.67
Mar. 24	1.75	July 13	1.92	Oct. 11	1.23	Dec. 22	1.68
May 19	1.28						

30.23.4.1.9. Penns Grove observation well 7. Highest water level 11.09, Aug. 14, 1942; lowest 6.84, Nov. 22, 1941. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	10.52	June 14	9.58	Aug. 18	8.24	Nov. 15	8.46
Mar. 24	10.20	July 13	9.46	Oct. 11	7.82	Dec. 22	9.11
May 19	9.87						

30.22.6.6.7. Penns Grove observation well 9. Highest water level 24.04, Mar. 25, 1944; lowest 19.80, Sept. 25, 1943. Records available: 1940-49.

Feb. 8	23.98	June 14	21.90	Aug. 18	20.45	Nov. 15	21.59
Mar. 24	23.57	July 13	22.04	Oct. 11	20.75	Dec. 22	22.16
May 19	22.63						

30.22.6.9.3. Penns Grove observation well 10. Highest water level 24.10, Mar. 13, 1941; lowest 18.84, Oct. 24, 1943. Records available: 1940-49. Feb. 8, 23.95; Mar. 24, 23.73; May 19, 22.72; June 14, 19.48; July 13, 21.65.

30.23.4.7.8. Penns Grove observation well 11. Highest water level 24.40, Dec. 11, 1940; lowest 18.46, Dec. 22, 1949. Records available: 1940-49.

Feb. 8	22.75	June 14	23.22	Aug. 18	21.68	Nov. 16	19.07
Mar. 24	24.03	July 13	22.50	Oct. 11	19.97	Dec. 22	18.46
May 19	23.54						

30.22.8.3.5. Penns Grove observation well 12. Highest water level 4.52, Feb. 8, 1949; lowest 1.22, Oct. 11, 1941. Records available: 1940-49.

Feb. 8	4.52	June 14	2.73	Aug. 18	2.07	Nov. 16	2.24
Mar. 24	3.79	July 13	2.53	Oct. 11	1.88	Dec. 22	2.64
May 19	3.05						

30.22.9.2.1. Penns Grove observation well 13. Highest water level 21.26, Mar. 13, 1941; lowest 15.01, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	21.16	June 14	18.29	Aug. 18	16.39	Nov. 15	15.97
Mar. 24	20.94	July 13	18.07	Oct. 11	15.43	Dec. 22	15.99
May 19	19.19						

30.22.9.6.2. Penns Grove observation well 14. Highest water level 22.72, Feb. 8, 1949; lowest 16.55, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	22.72	June 14	19.72	Aug. 18	17.88	Nov. 15	17.94
Mar. 24	22.13	July 13	19.24	Oct. 11	17.32	Dec. 22	18.43
May 19	20.53						

30.22.9.5.8. Penns Grove observation well 15. Highest water level 12.00, June 10, 1947; lowest 1.74, Dec. 22, 1949. Records available: 1941-49.

Feb. 8	8.00	June 14	8.08	Aug. 18	4.73	Nov. 15	2.23
Mar. 24	9.59	July 13	6.58	Oct. 11	3.03	Dec. 22	1.74
May 19	9.00						

30.22.9.4.9. Penns Grove observation well 22. Highest water level 14.42, Aug. 18, 1939; lowest, dry on various dates, 1942-45 and 1949. Records available: 1939-49. Feb. 8, 2.61; Mar. 24, 6.17; May 19, 3.33; June 14, 2.23; July 13, 1.16.

30.22.9.7.3. Penns Grove observation well 24. Highest water level 7.83, June 14, 1947; lowest -5.93, Dec. 30, 1949. Records available: 1941-49.

Water level at end of day in feet, above mean sea level

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-4.38	-1.34	1.79	2.75	2.68	2.44	....	-0.69	-2.42	....	-4.79	-5.51
2	-4.30	-1.14	1.87	2.78	2.70	2.41	....	-.78	-2.46	-3.67	-4.82	-5.54
3	-4.21	-.97	1.93	2.84	2.63	2.39	0.96	-.82	-2.48	-3.70	-4.84	-5.56
4	-4.11	-.72	2.05	2.80	2.65	2.42	.91	-.82	-2.51	-3.74	-4.87	-5.56
5	-3.98	-.61	2.16	2.92	2.71	2.40	.83	-.99	-2.53	....	-4.90	-5.58
6	-3.90	-.46	2.20	2.85	2.76	2.37	.79	-1.06	-2.58	....	-4.88	-5.60
7	-3.79	-.33	2.21	2.93	2.72	2.29	.72	-1.12	-2.61	....	-4.90	-5.61
8	-3.69	-.17	2.28	2.92	2.70	2.22	.66	-1.17	....	....	-4.93	-5.63
9	-3.58	-.07	2.34	2.86	2.74	2.16	....	-1.25	....	-3.93	-4.95	....
10	-3.46	.06	2.42	2.87	2.69	2.14	.61	-1.32	....	....	-4.98	....
11	-3.35	.10	2.42	2.91	2.67	2.12	.57	-1.39	-2.79	....	-5.01	-5.67
12	-3.22	.24	2.43	2.96	2.67	2.07	.57	-1.46	-2.81	....	-5.02	-5.68
13	-3.11	.36	2.44	3.02	2.64	2.01	.53	-1.54	-2.84	....	-5.06	....
14	-3.05	.46	2.49	2.91	2.65	1.95	.49	-1.60	....	....	-5.07	....
15	-2.97	.54	2.47	2.89	2.61	1.91	.44	-1.65	....	....	-5.11	....
16	-2.87	.66	2.52	2.81	2.60	1.87	.40	-1.71	....	-4.23	-5.18	....
17	-2.81	.65	2.54	2.73	2.59	1.83	.37	-1.75	....	-4.27	-5.20	....
18	-2.74	.75	2.47	2.74	2.63	1.79	.32	-1.77	-3.07	-4.31	-5.23	-5.77
19	-2.68	.87	2.42	2.70	2.71	1.77	.26	-1.85	-3.10	-4.35	-5.24	-5.78
20	-2.65	.94	2.45	2.71	2.60	1.76	.20	-1.91	-3.15	-4.40	-5.29	-5.80
21	-2.55	.99	2.53	2.74	2.57	1.73	.12	-1.96	-3.19	-4.43	-5.31	-5.81
22	-2.53	1.15	2.57	2.74	2.67	1.66	.04	-2.00	-3.23	4.47	-5.33	....
23	-2.47	1.19	2.46	2.75	2.57	1.58	-.05	-2.05	-3.27	-4.51	-5.35	....
24	-2.39	1.30	2.45	2.67	2.60	1.50	-.13	-2.09	-3.33	-4.55	-5.37	....
25	-2.36	1.40	2.54	2.68	2.54	1.46	-.18	-2.14	-3.37	-4.57	-5.40	....
26	-2.26	1.48	2.63	2.79	2.55	1.40	-.26	-2.17	-3.40	....	-5.42	....
27	-2.17	1.63	2.68	2.78	2.52	1.33	-.32	-2.21	-3.43	....	-5.44	....
28	-2.04	1.76	2.63	2.67	2.50	1.24	-.40	-2.26	....	....	-5.46	-5.90
29	-1.95	....	2.68	2.68	2.47	1.18	-.47	-2.30	....	....	-5.47	-5.91
30	-1.78	....	2.73	2.66	2.48	....	-.56	-2.34	....	-4.73	-5.49	-5.93
31	-1.52	....	2.79	....	2.46	....	-.63	-2.37	....	-4.76	....	....

30.32.2.2.3. Penns Grove observation well 31. Highest water level 3.09, Feb. 8, 1949; lowest -4.23, Nov. 22, 1941 and Oct. 24, 1943. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	3.09	June 14	0.52	Aug. 18	-1.66	Nov. 16	-0.74
Mar. 24	2.50	July 13	.03	Oct. 11	-1.27	Dec. 22	-.32
May 19	1.40	....	....	....	....	....	....

30.22.8.9.5. Penns Grove observation well 32. Highest water level 2.30, Feb. 8, 1949; lowest -1.06, Nov. 22, 1941. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	2.30	June 14	0.65	Aug. 18	-0.14	Nov. 16	-0.43
Mar. 24	1.75	July 13	.90	Oct. 11	-.41	Dec. 22	-.52
May 19	.97	....	....	....	....	....	....

30.22.9.8.6. Penns Grove observation well 35. Highest water level 18.66, Nov. 29, 1940; lowest 0.35, Oct. 9, 1942. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	6.06	June 14	6.03	Aug. 18	3.81	Nov. 15	1.72
Mar. 24	6.73	July 13	5.24	Oct. 11	2.18	Dec. 22	1.38
May 19	6.49	....	....	....	....	....	....

30.32.9.8.4. Penns Grove observation well 36. Highest water level 5.58, June 10, 1947; lowest -9.39, Dec. 4, 1942. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	-4.35	June 14	0.04	Aug. 18	-4.29	Nov. 16	-7.68
Mar. 24	-.67	July 13	-1.96	Oct. 11	-6.59	Dec. 22	-8.23
May 19	-.24	....	....	....	....	....	....

30.32.2.3.3. Penns Grove observation well 41. Highest water level 11.55, Feb. 8, 1949; lowest 4.66, Oct. 15, 1943. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	11.55	July 19	8.28	Aug. 8	a7.24	Oct. 21	6.28
9	11.54	20	8.26	18	a6.85	22	6.28
10	a11.22	21	8.02	Sept. 22	a7.07	23	6.28
Mar. 24	a10.01	22	7.82	Oct. 5	a6.57	25	6.17
May 19	9.99	23	7.69	11	a6.62	26	6.17
June 14	8.81	24	7.52	12	6.59	27	6.17
July 13	8.61	25	7.39	13	6.53	28	6.17
14	8.62	26	7.38	14	6.53	Nov. 16	a7.15
15	8.61	28	6.96	15	6.48	17	7.13
16	8.55	29	6.95	16	6.43	Dec. 2	a7.37
17	8.54	30	6.94	20	6.29	Dec. 20	a7.40
18	8.46						

a Tape measurement.

30.32.2.3.9. Penns Grove observation well 51. Highest water level 11.10, Feb. 8, 1949; lowest 3.94, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	11.10	June 14	8.07	Aug. 18	5.65	Nov. 16	6.07
Mar. 24	10.94	July 13	6.94	Oct. 11	5.04	Dec. 22	6.03
May 19	9.43						

30.32.2.5.1. Penns Grove observation well 52. Highest water level 2.82, Feb. 8, 1949; lowest -13.65, Feb. 12, 1942. Records available: 1940-49.

Feb. 8	2.82	June 14	-0.56	Aug. 18	-3.49	Nov. 16	-1.57
Mar. 24	1.60	July 13	-2.16	Oct. 11	-2.67	Dec. 22	-.52
May 19	.52						

30.32.2.6.5. Penns Grove observation well 54. Highest water level flowing Mar. 13, 1941; lowest, 5.63, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	12.65	June 14	9.71	Aug. 18	7.27	Nov. 16	7.35
Mar. 24	11.94	July 13	8.62	Oct. 11	6.59	Dec. 22	7.71
May 19	10.75						

30.32.3.5.5. Penns Grove observation well 55. Highest water level 7.28, Feb. 8, 1949; lowest 1.93, Oct. 20, 24, 1943. Records available: 1940-49.

Feb. 8	7.28	June 14	5.06	Aug. 18	3.28	Nov. 16	4.56
Mar. 24	6.99	July 13	4.67	Oct. 11	3.67	Dec. 22	5.32
May 19	5.98						

30.32.2.5.8. Penns Grove observation well 62. Highest water level 3.56, Feb. 8, 1949; lowest -10.55, Feb. 13, 1942. Records available: 1940-49.

Feb. 8	3.56	June 14	0.20	Aug. 18	-2.65	Nov. 16	-2.10
Mar. 24	2.08	July 13	-1.60	Oct. 11	-2.99	Dec. 22	-.75
May 19	1.33						

30.32.2.9.1. Penns Grove observation well 63. Highest water level 15.73, Apr. 15, 1947; lowest 8.09, Oct. 24, 1943. Records available: 1941-49.

Feb. 8	15.54	June 14	12.14	Aug. 18	9.59	Nov. 16	10.73
Mar. 24	15.16	July 13	10.71	Oct. 11	10.59	Dec. 22	10.72
May 19	13.66						

30.32.2.9.5. Penns Grove observation well 64. Highest water level 2.06, Feb. 24, 1945; lowest -1.42, Sept. 25, 1943. Records available: 1940-49.

Feb. 8	1.93	June 14	0.75	Aug. 18	0.00	Nov. 16	1.10
Mar. 24	1.57	July 13	.85	Oct. 11	.90	Dec. 22	1.25
May 19	1.02						

30.32.6.1.6. Penns Grove observation well 65. Highest water level 9.23, Feb. 8, 1949; lowest, 1.88, Oct. 24, 1943. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	9.23	June 14	5.93	Aug. 18	3.51	Nov. 16	3.60
Mar. 24	8.68	July 13	4.63	Oct. 11	3.12	Dec. 22	4.28
May 19	7.48						

30.32.1.9.5. Penns Grove observation well 71. Highest water level 8.93, Feb. 8, 1949; lowest 1.33, Dec. 8, 1941. Records available: 1940-49.

Feb. 8	8.93	June 14	6.43	Aug. 18	4.15	Nov. 16	2.96
Mar. 24	8.23	July 13	5.42	Oct. 11	2.93	Dec. 22	2.99
May 19	7.36						

30.32.5.1.3. Penns Grove observation well 72. Highest water level 6.23, Feb. 8, 1949; lowest -0.70, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	6.23	June 14	3.10	Aug. 18	1.43	Nov. 16	1.50
Mar. 24	5.43	July 13	2.42	Oct. 11	.95	Dec. 22	1.79
May 19	4.15						

30.32.4.6.4. Penns Grove observation well 73. Highest water level 2.64, Feb. 8, 1949; lowest -2.01, Sept. 25, 1943. Records available: 1940-49.

Feb. 8	2.64	June 14	0.86	Aug. 18	-0.72	Nov. 16	0.97
Mar. 24	2.45	July 13	.95	Oct. 11	.07	Dec. 22	1.54
May 19	1.66						

30.32.5.4.6. Penns Grove observation well 74. Highest water level 7.07, Dec. 3, 1940; lowest 0.37, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	4.47	June 14	1.68	Aug. 18	0.48	Nov. 16	1.31
Mar. 24	3.32	July 13	1.22	Oct. 11	.78	Dec. 22	.58
May 19	2.49						

30.32.5.7.7. Penns Grove observation well 84. Highest water level 11.44, Feb. 14, 1946; lowest 4.74, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	11.43	June 14	8.48	Aug. 18	6.10	Nov. 16	6.30
Mar. 24	11.31	July 13	7.56	Oct. 11	5.41	Dec. 22	7.30
May 19	9.72						

30.31.9.6.6. Penns Grove observation well 91. Highest water level 7.03, Feb. 8, 1949; lowest 2.19, Oct. 11, 1941. Records available: 1940-49.

Feb. 8	7.03	June 14	4.63	Aug. 18	4.08	Nov. 16	5.55
Mar. 24	6.72	July 13	5.16	Oct. 11	5.27	Dec. 22	5.93
May 19	5.33						

30.32.7.6.9. Penns Grove observation well 92. Highest water level 15.31, Feb. 8, 1949; lowest 5.33, Dec. 6, 1941. Records available: 1940-49.

Feb. 8	15.31	June 14	9.57	Aug. 18	7.00	Nov. 16	6.13
Mar. 24	13.95	July 13	8.14	Oct. 11	5.95	Dec. 22	5.83
May 19	11.20						

30.22.9.4.3. Penns Grove observation well E-14. Logwood Inn. Highest water level 16.69, May 24, 1940; lowest 9.05, Dec. 22, 1949. Records available: 1940-49.

Feb. 8	16.57	June 14	13.38	Aug. 18	10.92	Nov. 15	9.23
Mar. 24	16.29	July 13	11.44	Oct. 11	9.57	Dec. 22	9.05
May 19	14.58						

30.22.9.5.4. Penns Grove observation well E-15. George Schmid. Highest water level 15.12, April 23, 1940; lowest 4.82, Dec. 22, 1949. Records available: 1940-49.

Feb. 8	11.65	June 14	9.79	Aug. 18	7.03	Nov. 15	5.15
Mar. 24	12.22	July 13	8.33	Oct. 11	5.68	Dec. 22	4.82
May 19	10.90						

30.32.2.6.4. Penns Grove observation well E-16. Highest water level 14.85, Mar. 14, 1943; lowest 10.21, Oct. 24, 1943. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	14.70	June 14	12.58	Aug. 18	10.95	Nov. 16	10.92
Mar. 24	14.66	July 13	12.01	Oct. 11	10.44	Dec. 22	10.97
May 19	13.44						

30.32.9.9.8. Penns Grove Water Supply Co. Observation well R-5. Highest water level 10.30, Apr. 24, 1940; lowest 4.10, Oct. 24, 1943. Records available: 1940-49.

Feb. 8	9.44	June 14	7.90	Aug. 18	6.10	Nov. 15	6.28
Mar. 24	9.18	July 13	7.54	Oct. 11	5.84	Dec. 22	6.44
May 19	8.57						

30.23.7.1.4. Penns Grove Water Supply Co. Observation well R-7. Highest water level 24.05, Feb. 24, 1945; lowest 18.82, Oct. 20, 1943. Records available: 1940-49.

Feb. 8	23.81	June 14	21.93	Aug. 18	20.15	Nov. 16	19.96
Mar. 24	23.33	July 13	21.35	Oct. 11	19.55	Dec. 22	20.01
May 19	22.61						

30.32.3.6.5. Penns Grove Water Supply Co. Observation well R-8. Highest water level 7.31, Feb. 24, 1945; lowest 2.09, Oct. 10, 1943. Records available: 1940-49. May 19, 6.49; June 14, 5.55; July 13, 4.66; Aug. 18, 4.14; Oct. 11, 3.57. .

NEW YORK

UPSTATE NEW YORK

By E. S. Simpson and G. R. Ayer

PROGRAM OF WORK

The observation-well program in upstate New York was continued in 1949. Records for 28 wells are included in this report. Of these, four which are equipped with recording gages, are operated in cooperation with the State Department of Conservation. Twenty-four wells (seven with recording gages) are operated in cooperation with the State Water Power and Control Commission, under the sponsorship of the State Departments of Commerce, Health, and Public Works, and Office of the Geologist, New York State Science Service.

Records for wells Cu 5, C 19, F 9, L 1, Ro 18, and St 392 appear for the first time in this report. Well Cu 5, in Chautauqua County, is on a gently sloping hill near the summit of the Southwestern Plateau. Bedrock consists of alternating beds of shale and sandstone, dipping gently southward. In the upland area, there is a mantle of glacial till. In the vicinity of the well, the plateau summit is about 1,800 feet above sea level. The nearest flat-bottomed valley is about a mile east of the well at an altitude of about 1,500 feet. The well is in the watershed of the Allegheny River.

Well C 19, in Cortland County, is in a flat-bottomed valley of the Southwestern Plateau province at an altitude of 1,150 feet above sea level. The surrounding uplands are at an altitude of 1,600 to 2,000 feet. Bedrock consists mainly of thin-bedded shale and a smaller amount of sandstone, which dip gently southward. The well was dug in unconsolidated deposits of glacial origin which fill the preglacial rock valley to a depth of about 200 feet. Water levels may be affected by pumping from nearby municipal supply wells and by nearby stream stage. The well is in the watershed of the Susquehanna River.

Well F 9, in Franklin County, is in the Adirondack province, an area of rugged topography, lakes, and swamps. Bedrock consists of massive, coarsely crystalline, igneous rock. In the immediate vicinity of the well bedrock does not crop out and the surface deposit is a coarse-grained till with numerous boulders. The well is at an altitude of about 1,680 feet above sea level, on a gently sloping hillside, about 160 feet higher than the nearest swamp. The hill rises to an altitude of about 1,820 feet, while surrounding mountains rise to altitudes of about 4,000 feet. The well is in the watershed of the Saranac River which empties into Lake Champlain.

Well L 1, in Lewis County, is in the southeastern part of the Tug Hill Plateau province, near the summit of a gently sloping hill. Bedrock consists principally of shales with some thin-bedded limestone, dipping gently toward the south. In the area of the well, bedrock is mantled with a thin deposit of glacial till. The land surface ranges in altitude from about 1,300 to about 1,700 feet above sea level. The well is in the watershed of the Mohawk River.

Well Ro 18, in Rockland County, in Bear Mountain section of Palisades Interstate Park, is in the Highlands-of-the-Hudson province. Bedrock consists of massive igneous and metamorphic rocks, and is mantled by glacial till and glacial outwash. The well is about half way down the ridge line of a spur which slopes from Bear Mountain to a small stream. The land surface at the well is about 380 feet above sea level and slopes gently toward the west, but rather abruptly toward the east to the Hudson River, 0.3 mile away. The well is in the watershed of the Hudson River.

Well St 392, in St. Lawrence County, is near the northwestern boundary of the Adirondack province. Bedrock consists of massive metamorphic rocks of pre-Cambrian age, and is mantled by deposits of coarse-grained till and glacial outwash. Altitudes range from about 500 to 800 feet. The well is on a gently sloping hillside about 80 feet below its summit, and about 100 feet above the level of the nearest stream, in the watershed of the St. Lawrence River.

FLUCTUATIONS OF WATER LEVELS

The average precipitation for the entire State during 1949 was 13 per cent below the yearly normal and there were only 4 months in which small excess falls occurred. June and October were especially dry. Ground-water levels from May through October were generally far below normal and in

certain rural areas of upstate New York, where the storage capacity of aquifers is relatively limited, varying degrees of water shortage occurred during the late summer and early fall.

The year began with above-normal levels resulting from heavy precipitation and repeated thaws during January and the preceding December. February also was warm, and although precipitation was below normal, little of it was stored because of snow, and water levels continued high. March, which ordinarily is a month of large ground-water recharge from melting snows and rain, was exceptionally bare and dry in 1949, resulting in a downward trend and below-normal levels by the end of the month. Precipitation during April was about normal for the State as a whole, but distribution was spotty and water levels responded accordingly. Water levels began a general decline during May and continued to decline at greater-than-normal seasonal rates to record lows during June, July, and August, which was a period of below-normal precipitation and above-normal temperature. Widespread and heavy rains late in August and normal precipitation during September were sufficient in some areas to reverse the downward trend, but below-normal levels still prevailed. The period from October through December was one of below-normal precipitation and only limited recovery of water levels. However, in the Adirondack province and northern portions of the State, recovery was stimulated to above-normal levels by a late December thaw which melted snow. End-of-month water levels for 1949 compared with averages for 7 years of record in wells Lv 1, Mt 1, St 1, and Wo 1 are plotted on the graph in figure 5.

WELL-NUMBERING SYSTEM

Wells in upstate New York are numbered consecutively in each county. A letter or combination of two letters is prefixed to the numbers. For example, the letters "Cn" are prefixed to all well numbers in Chenango County.

DATUM

Water levels in upstate New York are in feet below land-surface datum unless otherwise indicated.

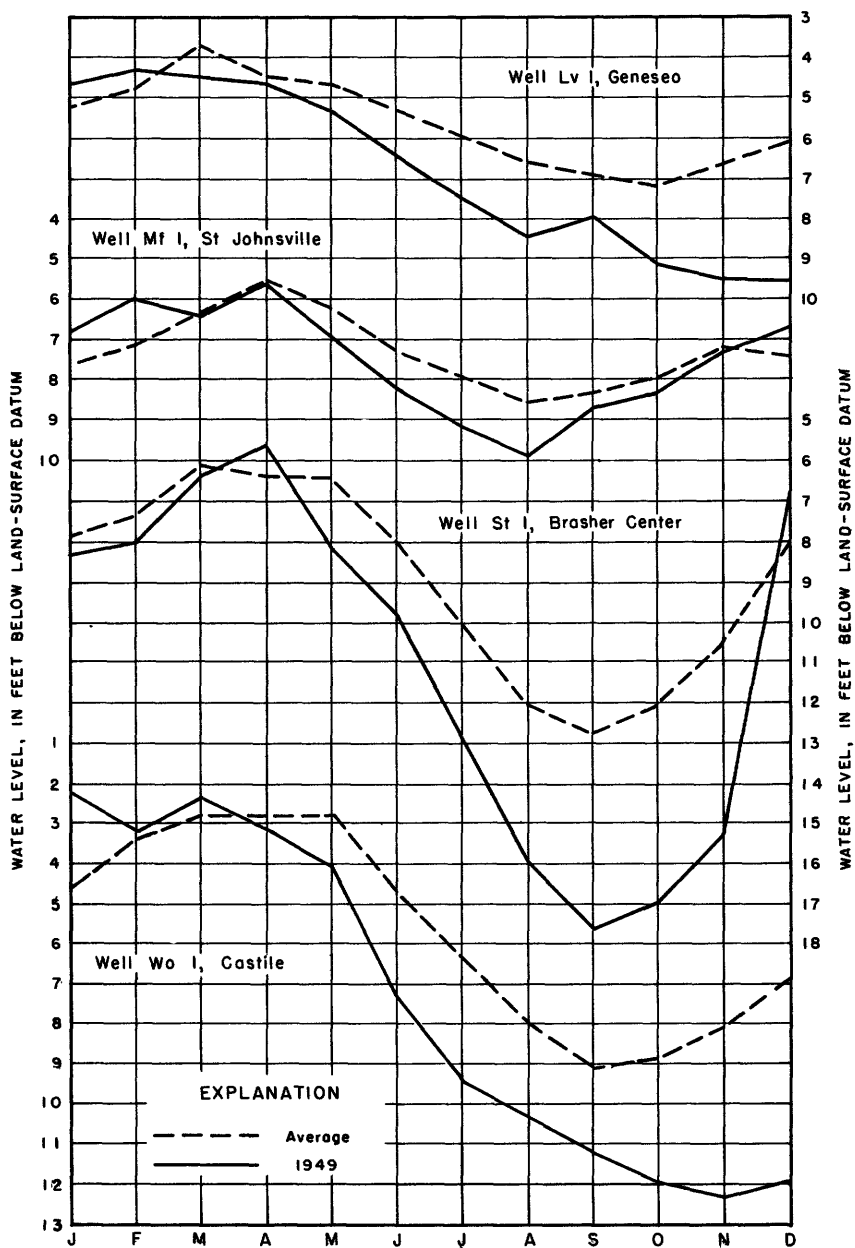


Figure 5.--Graphs showing month-end water levels as compared with the average for 7 years of record in four wells in upstate New York, 1949.

Ground water levels in upstate New York

Well No.	Date of first measurement	Lowest water level	Date	Highest water level	Date	Water level on last date of record, 1949
Ag 95	Aug. 27, 1946	6.01	Nov. 12, 1949	60.36	Feb. 21, 1948	5.66
Bm 49	Feb. 8, 1946	b15.27	Jan. 10, 1948	5.88	Mar. 22, 1948	c13.56
Bm 87	Jan. 30, 1947	8.88	Nov. 1, 1947	.84	Feb. 26, 1949	1.91
Bm 105	Dec. 1, 1947	19.78	Oct. 8, 1948	11.25	Dec. 31, 1948	d17.28
Cu 5	May 11, 1949	9.41	May 24, 1949	3.44	Nov. 26, 1949	3.44
Cm 83	Aug. 29, 1946	12.58	Dec. 10, 1949	2.76	Apr. 3, 1948	11.40
Cm 84	Feb. 20, 1947	18.19	Aug. 29, 1949	15.43	May 26, 1947	16.82
Cn 1	Oct. 27, 1934	6.13	Oct. 10, 1936	0	(f)	d 6.66
C 19	Feb. 18, 1947	7.00	Oct. 29, 1949	2.98	Apr. 5, 1947	6.58
C 100	Oct. 22, 1938	6.15	Oct. 26, 1939	0	(f)	d d.08
C 101	Aug. 26, 1933	(h)	Aug. 17- Oct. 12, 1936 Sept. 7- Nov. 1, 1939	0 0 (f) (f)		d.31 g2.45
D 157	Oct. 24, 1934	9.24	Oct. 27, 1935	0	(f)	
F 9	July 20, 1949	8.38	Aug. 26, 1949	5.52	Dec. 30, 1949	5.52
G 1	Dec. 13, 1945	12.75	Nov. 1, 1948	1.90	May 5, 1947	7.99
L 1	Apr. 11, 1949	10.63	Aug. 19, 1949	4.02	Dec. 30, 1949	4.02
Lv 1	Nov. 17, 1942	9.54	Dec. 27, 1949	.3	Mar. 15, 1945	9.54
Mt 1	Oct. 3, 1942	9.99	Aug. 28, 1949	4.10	Apr. 15, 1948	d6.76
Re 660	Apr. 7, 1946	13.78	Sept. 28, 1949	4.36	Jan. 1, 1949	12.49
Ro 18	July 13, 1949	24.40	Dec. 7, 1949	18.94	July 13, 1949	23.06
St 1	Oct. 4, 1942	e17.8	Oct. 1-4, 1949	3.00	Apr. 6, 1947	d7.3
St 392	Apr. 14, 1949	16.19	Sept. 17, 1949	3.59	Apr. 23, 1949	5.98
Sn 128	Apr. 10, 1946	37.39	Feb. 15, 1948	21.15	Mar. 23, 1948	d32.42
Sy 9	Oct. 1, 1946	9.09	Aug. 11, 28, 1949	1.03	Mar. 22, 1948	d3.48
Sb 200	Sept. 16, 1946	13.80	Dec. 24, 1949	4.36	Mar. 15, 1948	13.08
Sb 240	Dec. 6, 1943	29.3	Oct. 24, 31, Nov. 14, 1949	22.39	Apr. 7, 1947 May 26, 1947	27.6
W 264	July 26, 1946	11.15	Sept. 27, 1948	7.54	Jan. 3, 1949	10.09
Wn 29	Dec. 4, 1947	21.31	Aug. 25, 1949	17.20	Mar. 22, 1948	d19.12
Wo 1	Nov. 18, 1942	12.46	Dec. 10, 1949	.5	Apr. 5, 1947	11.93

a Snow melt water entered well.

b Affected by nearby pumping.

c Water level at noon on Aug. 1, 1949, from recorder graph.

d Water level at noon on Dec. 31, 1949, from recorder graph.

e Estimated.

f This level observed many times during period of record.

g Estimated. Based on records for nearby wells.

h Dry.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Allegheny County

Ag 95. Ronald Mullikin. Lat. 42°20'40", long. 77°44'24". Aquifer is glacial till. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	2.64	Apr. 9	2.36	July 9	4.21	Oct. 8	3.86
8	2.49	16	2.19	16	4.31	15	3.93
15	2.81	23	2.51	23	4.34	22	3.96
22	2.74	30	2.73	30	4.42	29	4.02
29	2.53	May 7	3.51	Aug. 6	4.48	Nov. 5	5.94
Feb. 5	2.49	14	3.72	13	4.50	12	6.01
12	2.05	21	3.81	20	4.46	19	5.99
19	2.20	28	2.82	27	4.51	26	5.91
26	2.27	June 4	2.99	Sept. 3	3.35	Dec. 3	5.91
Mar. 5	1.97	11	3.43	10	3.38	10	5.88
12	2.02	18	3.81	17	3.50	17	5.89
19	2.18	25	4.13	24	3.59	24	5.73
26	2.40	July 2	4.17	Oct. 1	3.72	31	5.66
Apr. 2	2.33						

Broome County

Bm 49. Village of Johnson City. Lat. $42^{\circ}07'11''$, long. $75^{\circ}57'24''$. Aquifer is glacial outwash. Water level is possibly affected by pumping in general area. Records available: 1946-49. Measurement discontinued Aug. 1, 1949.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	9.65	10.19	10.58	11.05	10.71	10.43	12.95
2	9.90	10.34	10.68	11.11	10.73	10.54	13.00
3	10.13	10.43	10.74	11.11	10.66	10.64	13.08
4	10.29	10.46	10.78	11.13	10.67	10.72	13.15
5	10.28	10.62	10.76	11.17	10.72	10.77	12.95
6	8.84	10.70	10.25	10.98	10.01	10.84	12.99
7	9.06	10.70	10.01	10.76	9.97	10.95	13.04
8	9.28	10.72	10.02	10.61	10.00	11.07	13.12
9	9.53	10.75	10.10	10.61	10.07	11.18	13.17
10	9.68	10.77	10.18	10.65	10.21	11.26	13.19
11	9.79	10.91	10.24	10.66	10.33	11.34	13.25
12	9.87	10.92	10.29	10.68	10.43	11.44	13.28
13	10.05	10.93	10.41	10.69	10.56	11.55	13.31
14	10.22	10.95	10.49	10.50	10.62	11.66	13.34
15	10.40	10.78	10.52	10.39	10.71	11.75	13.37
16	10.46	10.61	10.59	10.22	10.78	11.85	13.41
17	10.54	10.60	10.66	10.26	10.87	11.95	13.47
18	10.59	10.65	10.71	10.30	10.93	12.03	13.52
19	10.54	10.68	10.85	10.28	10.31	12.11	13.57
20	10.63	10.71	10.91	10.32	9.93	12.20	13.61
21	10.64	10.79	10.91	10.36	9.54	12.27	13.65
22	10.69	10.78	10.93	10.40	9.63	12.33	13.69
23	10.74	10.62	10.97	10.39	9.78	12.43	13.74
24	10.67	10.52	11.03	10.35	9.89	12.50	13.79
25	10.68	10.46	11.04	10.44	9.87	12.58	13.79
26	10.62	10.49	11.05	10.43	9.94	12.62	13.80
27	10.68	10.49	11.00	10.50	10.01	12.73	13.82
28	10.53	10.46	11.05	10.59	10.08	12.78	13.83
29	10.03		11.10	10.63	10.18	12.83	13.79
30	10.06		11.12	10.66	10.26	12.89	13.82
31	10.02		11.10		10.33		13.56

Bm 87. Mrs. Helen Frawley. Lat. $42^{\circ}19'40''$, long. $76^{\circ}05'58''$. 1.9 miles south of Center Lisle. Aquifer is glacial till. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	1.29	Apr. 9	1.58	July 9	7.22	Oct. 8	5.09
8	1.00	16	2.21	16	7.16	15	5.67
15	1.80	23	2.25	23	7.44	22	5.76
22	1.65	30	3.61	30	7.49	29	5.91
29	1.38	May 7	4.74	Aug. 6	7.55	Nov. 5	5.10
Feb. 5	2.45	14	5.82	13	7.62	12	3.99
12	3.10	21	6.43	20	7.68	19	2.78
19	1.48	28	5.92	27	7.75	26	2.24
26	.84	June 4	5.96	Sept. 3	7.74	Dec. 3	2.21
Mar. 5	2.97	11	6.36	10	7.80	10	2.32
12	al.38	18	6.68	17	7.86	17	1.51
19	al.42	25	6.89	24	7.70	24	1.58
26	2.48	July 2	7.11	Oct. 1	5.80	31	1.91
Apr. 2	2.65						

a Tape and float frozen.

Bm 105. U. S. Geol. Survey. Lat. $42^{\circ}06'43''$, long. $75^{\circ}54'39''$. In Binghamton. Aquifer is glacial outwash, and water level is affected by river stage and by nearby pumping. Records available: 1947-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	16.84	.....	16.90	17.11	18.14	18.95	17.84	18.45	17.06	18.48	17.40
2	.....	16.99	.....	15.87	17.23	18.29	18.84	18.44	18.78	17.61	18.38	17.58
3	14.84	17.32	.....	17.09	16.97	18.41	18.97	18.82	18.99	17.97	18.52	17.76
4	15.52	17.27	.....	17.29	17.09	18.51	19.07	19.01	19.13	18.13	18.55	18.0
5	15.95	17.25	.....	17.46	17.44	18.59	19.06	19.13	19.22	18.31	18.04	18.02
6	11.85	17.48	.....	17.45	17.12	18.67	18.81	19.23	19.26	18.35	17.93	18.01
7	11.61	17.41	14.00	14.73	15.77	18.75	18.98	19.32	19.30	18.46	18.06	18.2
8	12.86	17.62	15.27	15.00	16.59	18.84	18.86	19.38	19.32	18.52	.....	18.1
9	13.81	17.60	15.78	15.70	17.03	18.90	18.71	19.43	19.35	18.39	.....	18.1
10	14.25	17.63	15.96	16.18	17.35	18.94	18.72	19.48	19.35	18.51	.....	18.45
11	14.80	17.82	16.11	16.58	17.59	18.97	18.75	19.53	19.37	18.59	.....	18.35
12	15.58	18.04	16.30	16.88	17.78	19.00	18.72	19.41	19.42	18.64	.....	17.94
13	16.05	17.95	16.65	17.11	17.91	19.04	18.79	19.43	19.45	18.69	.....	13.88
14	16.35	17.41	16.83	17.05	18.03	19.10	18.78	19.51	19.41	18.73	17.0	.....
15	16.75	15.40	16.67	17.11	18.09	19.15	18.95	19.53	19.28	18.70	16.90	.....
16	16.98	12.61	17.03	16.73	18.12	19.17	19.04	19.65	19.11	18.60	17.36	.....
17	16.82	13.30	17.13	16.75	18.22	19.21	18.77	19.58	19.20	18.64	17.62	.....
18	16.19	14.60	17.23	17.13	18.28	19.27	18.85	19.58	19.29	18.72	17.78	.....
19	16.08	15.10	17.48	16.59	18.18	19.28	18.89	19.60	18.56	18.79	17.87	17.00
20	14.50	15.38	17.66	15.93	17.56	19.29	19.33	19.62	17.90	18.84	17.89	16.96
21	15.45	15.52	17.65	16.54	16.57	19.11	19.39	19.66	18.26	18.88	17.55	17.16
22	16.07	16.04	17.07	16.94	17.42	18.85	19.38	19.68	18.47	18.91	17.5	17.19
23	16.18	15.36	15.52	16.55	17.66	18.68	19.36	19.63	18.27	18.92	.....	17.04
24	16.39	15.31	14.65	16.05	17.52	18.91	19.39	19.70	18.21	18.93	.....	16.40
25	15.74	15.07	15.28	16.44	16.86	19.08	19.39	19.71	17.73	18.95	.....	17.06
26	16.11	14.37	15.72	16.86	16.94	17.83	19.18	19.73	18.02	18.72	.....	17.24
27	16.72	15.30	15.85	16.52	17.31	17.65	19.06	19.75	18.31	18.23	.....	16.11
28	16.57	15.61	15.72	15.82	17.53	18.31	19.17	19.77	18.47	18.37	18.1	15.11
29	15.48		16.16	16.55	17.74	18.62	19.23	18.81	17.52	18.56	18.08	15.86
30	16.13		16.64	16.91	17.88	18.83	19.24	16.74	16.60	18.66	17.49	16.60
31	16.75		16.93		17.97		19.00	17.80		18.68		17.28

a Estimated.

Chautauqua County

Cu 5. State Department of Conservation. Lat. $42^{\circ}03'28''$, long. $79^{\circ}29'59''$. 1.5 miles southeast of Panama. Dug unused farm well, diameter 36 inches, depth 32.5 feet. Aquifer is glacial till. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 11	7.40	July 10	8.45	Aug. 27	7.55	Oct. 15	4.91
24	9.41	16	8.50	Sept. 3	6.77	22	5.18
28	8.77	23	8.28	10	6.22	29	5.55
June 4	8.45	30	7.39	18	6.20	Nov. 5	5.83
11	8.43	Aug. 6	7.49	24	5.34	12	6.09
18	8.44	13	7.53	Oct. 1	4.77	19	5.31
25	8.44	20	7.56	8	4.84	26	3.44
July 2	8.52						

Chemung County

Cm 83. Dailey. Lat. $42^{\circ}04'43''$, long. $76^{\circ}41'01''$. About 4.2 miles north of State Route 17 at Lowman. Occasionally pumped at 12 gallons per day or less. Aquifer is glacial till. Records available: 1946-49.

Cm 83.--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	4.40	Apr. 2	3.86	July 2	10.30	Oct. 15	12.24
8	3.62	9	3.18	9	10.50	22	12.38
15	4.10	16	3.15	16	10.60	29	12.36
22	4.26	23	3.16	23	11.25	Nov. 5	12.40
29	3.20	30	3.68	30	11.60	12	12.50
Feb. 5	4.45	May 7	5.90	Aug. 6	11.77	19	12.54
12	5.73	14	6.60	27	12.80	26	12.55
19	5.60	21	7.54	Sept. 3	11.80	Dec. 3	12.53
26	3.26	28	7.03	10	12.05	10	12.58
Mar. 5	3.80	June 4	7.28	17	12.02	17	12.57
12	3.30	11	8.48	24	11.80	24	12.40
19	4.00	18	9.30	Oct. 1	12.10	31	11.40
26	4.46	25	9.80	8	12.05		

Cm 84. Remington-Rand, Inc. Lat. $42^{\circ}04'17''$, long. $76^{\circ}47'47''$.
 South Main St., Elmira. Aquifer is glacial outwash and water level is
 possibly affected by river stage. Records available: 1947-49.

Jan. 3	16.93	Apr. 4	16.34	July 4	17.10	Oct. 17	17.56
10	16.59	11	16.24	11	17.18	24	17.76
17	16.38	18	16.15	18	17.44	31	17.92
24	16.26	25	16.16	25	17.60	Nov. 7	17.98
31	16.13	May 2	16.29	Aug. 15	17.96	14	17.91
Feb. 7	16.23	9	16.45	22	18.17	21	17.76
14	16.32	16	16.48	29	18.19	28	17.43
21	16.31	23	16.49	Sept. 5	17.98	Dec. 5	17.20
28	16.21	31	16.43	12	17.68	12	17.06
Mar. 7	16.20	June 6	16.56	19	17.58	19	16.91
14	16.23	13	16.69	26	17.47	27	16.82
21	16.27	20	16.90	Oct. 3	17.62		
28	16.33	27	17.00	10	17.55		

Chenango County

Cn 1. U. S. Geol. Survey. Lat. $42^{\circ}31'55''$, long. $75^{\circ}25'30''$. 2.5
 miles west of South New Berlin. Aquifer is probably glacial till. Rec-
 ords available: 1934-49.

Jan. 3	0.70	Apr. 4	0.80	July 5	1.20	Oct. 3	0.67
10	.68	11	.78	11	1.58	10	.77
17	.63	18	.78	18	2.26	17	.72
24	.64	25	.74	25	1.29	25	.85
31	.70	May 2	.42	Aug. 1	.84	31	.58
Feb. 7	.76	9	.78	8	1.56	Nov. 7	.66
14	.53	16	.83	15	2.08	14	.51
21	.74	23	.80	22	2.75	21	.63
28	.72	30	.77	29	.39	28	.70
Mar. 7	.69	June 6	1.01	Sept. 5	.20	Dec. 5	.70
14	.74	13	1.33	12	1.15	12	.45
21	.64	20	2.11	19	.68	19	.64
28	.78	27	.90	26	.71	26	.64

Cortland County

C 19. Cortland Water Works. Lat. $42^{\circ}35'45''$, long. $76^{\circ}11'45''$. In
 Cortland, about 250 feet west of Broadway and about 800 feet south of main
 pump house. Abandoned dug public-supply well, diameter about 40 feet,
 depth 18 feet. Land-surface datum is about 1150 feet above mean sea level.
 Aquifer is glacial outwash, and water level may be affected by nearby pump-
 ing and by nearby stream stage. Records available: 1947-49.

C 19--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18, 1947	4.52	July 12	4.28	Nov. 15	6.13	Aug. 14	4.83
22	4.52	19	4.54	22	5.94	21	4.74
Mar. 22	4.49	26	4.73	29	5.81	28	4.93
29	3.64	Aug. 2	4.67	Dec. 6	5.76	Sept. 4	5.06
Apr. 5	2.98	9	4.66	13	5.77	11	5.18
12	3.60	16	4.68	20	5.79	18	5.33
19	3.74	23	5.28	27	5.79	25	5.41
26	3.92	30	5.28	Jan. 3, 1948	5.77	Oct. 23	5.99
May 3	3.70	Sept. 6	5.34	10	5.81	30	6.43
10	3.69	13	5.37	17	5.80	Dec. 4	5.13
17	3.70	20	5.46	July 8	4.82	11	5.14
24	3.98	27	5.52	10	4.82	18	5.14
31	3.98	Oct. 4	5.59	17	4.82	25	5.02
June 7	3.66	11	5.93	24	4.67		
14	3.03	18	6.12	31	4.96		
21	3.01	25	6.55	Aug. 6	4.80		
28	4.44	Nov. 1	5.93	7	4.92		
July 5	4.41	8	6.19				

Jan. 1, 1949	5.00	Apr. 2	4.34	June 25	4.52	Sept. 17	6.13
8	4.86	9	4.25	July 2	4.83	24	6.28
15	4.01	16	4.28	9	5.00	Oct. 1	6.29
22	4.23	23	4.28	16	5.38	8	6.40
29	4.17	30	4.35	23	5.38	11	6.43
Feb. 5	4.41	May 7	4.43	30	5.42	15	6.62
12	4.35	9	4.53	Aug. 6	5.45	22	6.83
19	4.25	14	4.40	13	5.56	29	7.00
26	4.15	21	4.42	20	5.87	Dec. 13	6.59
Mar. 5	4.14	28	4.45	27	5.88	17	6.42
12	4.17	June 4	4.48	Sept. 3	5.88	24	5.59
19	4.15	11	4.48	10	5.92	31	6.58
26	4.20	18	4.49				

C 100. U. S. Geol. Survey. Lat. $42^{\circ}42'00''$, long. $76^{\circ}06'50''$. 2.5 miles north of gaging station in East Homer. Aquifer probably is glacial till. Records available: 1938-49.

Jan. 5	0	Apr. 16	0.42	July 18	3.05	Oct. 10	2.23
14	.03	24	.53	25	1.13	17	2.80
20	.04	May 1	1.06	Aug. 1	2.28	24	2.74
28	.55	9	.45	8	2.99	Nov. 1	.88
Feb. 6	.87	16	2.50	15	3.23	6	.08
15	.87	24	2.66	22	3.50	14	.23
25	.21	June 2	2.75	29	2.00	20	0
Mar. 5	.29	9	3.07	Sept. 5	3.10	28	.59
13	.28	16	3.18	12	3.43	Dec. 4	.36
20	0	27	2.44	19	1.20	11	.66
31	.45	July 4	2.93	26	1.98	18	.96
Apr. 10	.24	12	2.66	Oct. 3	2.40	26	0

C 101. U. S. Geol. Survey. Lat. $42^{\circ}46'00''$, long. $76^{\circ}01'10''$. 5 miles north of Truxton. Aquifer probably is glacial till. Records available: 1933-49.

Jan. 9	0.12	Apr. 10	0.26	July 15	1.67	Oct. 10	0.72
16	.18	17	.30	21	1.79	16	.83
23	.24	24	.34	27	1.94	24	1.01
30	.31	May 1	.39	Aug. 3	2.00	31	1.14
Feb. 6	.34	8	.48	8	2.06	Nov. 6	1.19
13	.49	18	.65	16	2.23	13	1.13
20	.29	26	.38	23	2.38	21	.79
27	.30	31	.41	31	2.56	26	.83
Mar. 6	.31	June 5	.47	Sept. 7	2.63	Dec. 7	.84
13	.33	17	.93	15	2.73	14	.27
20	.37	24	1.49	21	1.20	21	.30
27	.32	July 1	1.40	28	.71	30	.31
Apr. 3	.32	8	1.50	Oct. 4	.63		

Delaware County

D 157. U. S. Geol. Survey. Lat. $42^{\circ}09'35''$, long. $75^{\circ}23'35''$. About 1 mile north of China. Aquifer probably is glacial till. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	1.42	Apr. 3	3.38	July 3	5.89	Oct. 2	2.32
9	1.35	10	2.07	10	6.14	9	4.14
16	2.57	17	2.98	17	6.29	16	4.45
23	2.19	24	1.27	23	6.60	23	4.74
30	2.12	May 1	3.79	31	6.78	30	3.36
Feb. 6	3.36	8	2.65	Aug. 7	6.93	Nov. 6	1.99
13	3.75	15	4.45	14	6.74	13	3.15
20	1.56	22	2.56	21	7.08	20	2.53
27	1.28	29	2.20	28	7.31	27	2.21
Mar. 6	.98	June 5	4.36	Sept. 4	4.06	Dec. 4	2.83
13	2.54	12	4.79	11	5.27	11	3.98
20	3.66	19	5.29	18	5.98	18	2.53
27	3.11	26	5.18	25	2.24	25	1.89

Franklin County

F 9. Fletcher. Lat. $44^{\circ}25'36''$, long. $74^{\circ}03'30''$. About 60 feet south of dirt road, 0.85 mile east of intersection with State Highways 365 and 3, and 2 miles northeast of Bloomingdale. Unused dug farm well, diameter 48 inches, depth 10.6 feet. Aquifer is glacial till. Land-surface datum is about 1680 feet above mean sea level. Records available: 1949.

July 20	7.67	Sept. 2	7.72	Oct. 14	7.04	Nov. 25	7.11
22	7.76	9	7.52	21	7.32	Dec. 2	7.02
29	7.92	16	7.42	28	7.54	9	6.92
Aug. 5	8.00	23	7.32	Nov. 4	7.51	16	6.97
12	8.21	30	7.25	11	7.13	23	5.97
19	8.26	Oct. 7	7.04	18	6.93	30	5.52
26	8.38						

Greene County

G 1. Andersen. Lat. $42^{\circ}23'20''$, long. $73^{\circ}48'19''$. About 2 miles north of West Coxsackie. Aquifer probably is glacial till. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.54	Apr. 4	4.03	July 4	9.06	Oct. 3	10.30
10	2.78	11	3.31	11	9.80	10	10.09
17	3.48	18	3.45	18	10.61	17	9.89
24	3.60	25	3.37	25	11.97	24	9.76
31	3.14	May 2	4.11	Aug. 1	11.12	31	9.62
Feb. 7	3.74	9	4.47	8	12.03	Nov. 8	9.35
14	3.13	16	5.16	15	12.65	14	9.29
21	2.74	23	5.32	22	12.45	21	9.15
28	2.76	30	4.63	29	12.22	28	9.13
Mar. 7	2.54	June 6	5.78	Sept. 5	11.47	Dec. 5	9.10
14	2.74	13	6.96	12	11.23	12	9.13
21	3.76	20	7.83	19	10.97	19	8.60
28	3.44	27	8.60	26	10.62	26	7.99

Lewis County

L 1. State Department of Conservation. On east side of State Highway 26, 2.25 miles north of West Leyden. Dug well, diameter 36 inches, depth 18.6 feet. Aquifer probably is glacial till. Records available: 1949.

Apr. 11	61	June 17	8.88	Aug. 26	10.12	Nov. 4	7.08
15	5.40	24	8.91	Sept. 2	9.01	11	6.30
22	4.33	July 1	8.95	9	8.04	18	5.80
29	4.90	8	9.20	16	7.03	25	5.75
May 6	5.54	15	9.53	23	6.02	Dec. 2	5.55
13	6.35	22	9.84	30	5.03	9	5.91
20	7.00	29	9.90	Oct. 7	5.70	16	4.51
27	7.14	Aug. 5	10.34	14	6.20	23	4.25
June 3	8.74	12	10.62	21	6.30	30	4.02
10	8.80	19	10.63	28	6.78		

Livingston County

Lv 1. William Redmond. Lat. $42^{\circ}48'00''$, long. $77^{\circ}48'46''$. In Genesee. Aquifer probably is glacial till. Records available: 1942-49.

Jan. 25	4.70	Apr. 25	4.65	July 25	7.48	Oct. 25	9.14
Feb. 25	4.30	May 26	5.30	Aug. 25	8.45	Nov. 25	9.50
Mar. 25	4.59	June 27	6.50	Sept. 26	7.91	Dec. 27	9.54

Montgomery County

Mt 1. Floyd B. Groff. Lat. $43^{\circ}01'43''$, long. $74^{\circ}42'38''$. About 1.8 miles west of St. Johnsville. Aquifer is glacial till. Records available: 1942-49.

Mt 1--Continued.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	6.86	6.16	6.14	5.78	7.10	8.42	9.13	9.21	8.73	8.33	7.26
2	....	6.92	6.28	6.19	5.88	7.13	8.47	9.10	9.18	8.69	8.31	7.23
3	6.29	6.97	6.35	6.24	5.95	7.18	8.52	9.11	9.17	8.65	8.31	7.22
4	6.46	6.99	6.39	6.28	6.02	7.21	8.57	9.11	9.18	8.63	8.30	7.21
5	6.56	7.04	6.44	6.34	6.08	7.25	8.61	9.2	9.19	8.62	8.20	7.21
6	6.12	7.10	6.43	6.31	6.14	7.30	8.67	9.21	9.20	8.62	8.07	7.22
7	5.68	7.11	6.26	6.18	6.17	7.35	8.72	9.26	9.21	8.61	7.95	7.23
8	5.76	7.14	6.17	6.02	6.24	7.42	8.77	9.30	9.22	8.53	7.84	7.27
9	5.68	7.17	6.18	5.91	6.30	7.48	8.82	9.35	9.20	8.43	7.80	7.32
10	5.77	7.20	6.22	5.91	6.38	7.51	8.86	9.39	9.19	8.35	7.75	7.38
11	5.92	7.22	6.25	5.94	6.46	7.57	8.85	9.43	9.20	8.28	7.72	7.42
12	6.05	7.24	6.27	6.00	6.51	7.6	8.85	9.47	9.22	8.22	7.71	7.42
13	6.21	7.24	6.31	6.06	6.59	7.7	8.89	9.49	9.25	8.21	7.71	7.13
14	6.35	7.22	6.35	6.12	6.65	7.7	8.94	9.52	9.26	8.20	7.63	6.70
15	6.50	7.01	6.35	6.19	6.73	7.80	8.99	9.55	9.24	8.20	7.50	6.58
16	6.58	6.18	6.35	6.22	6.80	7.85	9.03	9.59	9.23	8.20	7.38	6.63
17	6.58	5.90	6.36	6.3	6.86	7.92	9.07	9.62	9.23	8.20	7.29	6.73
18	6.48	6.05	6.38	6.34	6.92	7.92	9.10	9.65	9.23	8.21	7.23	6.80
19	6.37	6.16	6.44	6.23	6.96	7.97	9.13	9.68	9.17	8.21	7.22	6.89
20	6.02	6.17	6.47	5.92	6.99	8.02	9.15	9.71	9.07	8.24	7.21	6.96
21	6.03	6.21	6.53	5.75	6.98	8.06	9.16	9.75	9.00	8.26	7.23	7.00
22	6.14	6.22	6.61	5.76	6.99	8.11	9.17	9.79	8.95	8.27	7.25	7.02
23	6.32	6.26	6.6	5.79	6.99	8.16	9.17	9.82	8.90	8.30	7.24	7.02
24	6.41	6.28	6.65	5.75	7.01	8.21	9.17	9.85	8.86	8.34	7.27	7.02
25	6.52	6.19	6.65	5.80	6.98	8.26	9.18	9.88	8.85	8.38	7.26	7.00
26	6.60	6.01	6.47	6.82	6.93	8.26	9.16	9.92	8.85	8.38	7.28	6.97
27	6.66	6.00	6.39	5.82	6.92	8.26	9.16	9.95	8.85	8.37	7.28	6.95
28	6.68	6.04	6.29	5.70	6.93	8.30	9.17	9.99	8.84	8.36	7.31	6.91
29	6.73		6.22	5.63	6.96	8.35	9.19	9.93	8.82	8.35	7.31	6.83
30	6.8		6.17	5.67	7.00	8.39	9.22	9.55	8.78	8.35	7.28	6.78
31	6.84		6.14		7.05		9.20	9.32		8.33		6.76

a Estimated.

Rensselaer County

Re 660. Edward Hardgrove. Lat. 42° 37' 11", long. 73° 39' 20". At DeFreestville. Aquifer is glacial till. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	4.36	Feb. 12	10.56	Apr. 18	10.89	Aug. 18	13.48
4	6.47	19	9.28	24	11.04	23	13.55
6	4.53	26	9.11	May 23	11.59	Sept. 28	13.78
10	6.71	Mar. 5	9.39	June 2	11.63	Oct. 4	13.75
18	8.98	10	8.84	15	11.90	Nov. 22	13.37
24	9.64	19	9.68	22	12.12	Dec. 21	12.60
31	10.02	Apr. 6	10.41	July 11	12.69	28	12.49
Feb. 6	10.33	10	10.63	16	12.86		

Rockland County

Ro 18. Palisades Interstate Park. Lat. 41° 18' 02", long. 73° 59' 30". In Bear Mountain section, about 90 feet east of Doodletown Rd. and about 75 feet south of Seven Lakes Drive. Unused drilled farm well, diameter 6 inches, depth 60.8 feet, cased to bottom. Aquifer probably is either glacial till or glacial outwash. Records available: 1949.

July 13	18.94	Aug. 31	22.52	Oct. 12	22.52	Nov. 23	23.91
20	19.18	Sept. 7	22.61	19	22.96	30	24.37
27	19.41	14	23.03	26	23.67	7	24.40
Aug. 3	19.89	21	22.41	Nov. 2	23.59	14	24.31
10	20.78	28	22.29	9	23.82	21	23.44
17	21.31	Oct. 5	22.61	16	23.79	28	23.06
24	22.02						

St. Lawrence County

St 1. Benjamin Compeau. Lat. $44^{\circ} 51' 52''$, long. $74^{\circ} 46' 53''$. At Bra-sher Center. Aquifer is glacial till. Records available: 1942-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.7	a8.2	a7.9	5.4	5.8	a7.8	10.4	13.2	16.4	a17.8	a16.8	14.6
2	a10.7	a8.2	a7.8	5.6	a6.0	a7.8	10.5	13.3	a16.5	a17.8	a16.8	14.5
3	a10.7	a8.1	a7.8	5.7	a6.1	7.8	10.6	13.4	16.6	a17.8	a16.8	14.4
4	a10.7	a8.1	a7.7	5.8	a6.2	7.8	10.7	13.5	16.7	a17.8	a16.7	14.2
5	a10.6	....	7.7	5.8	a6.4	7.9	10.8	13.6	16.7	a17.7	16.7	13.9
6	a10.6	....	7.7	5.6	a6.5	a8.0	10.9	a13.7	16.8	a17.7	16.7	13.8
7	a10.5	....	7.7	5.1	6.6	a8.0	11.0	a13.8	16.9	a17.7	16.6	13.6
8	10.5	....	7.7	5.1	6.7	a8.1	11.1	a13.9	16.9	a17.7	16.6	13.5
9	10.5	....	7.7	5.2	6.8	a8.2	11.1	a14.0	17.1	a17.6	16.6	13.3
10	10.4	a8.3	7.6	5.3	7.0	a8.3	a11.2	a14.1	17.1	a17.6	16.5	13.2
11	10.4	a8.3	7.6	5.5	7.1	8.4	11.3	a14.2	17.1	a17.6	16.5	13.1
12	10.3	....	7.8	5.6	7.2	8.4	11.4	a14.3	17.2	a17.6	16.5	13.0
13	10.2	....	7.8	5.7	7.3	8.5	11.5	a14.4	a17.2	a17.5	16.4	12.8
14	10.2	....	7.8	5.8	a7.3	8.6	11.5	14.5	a17.3	a17.5	16.4	12.6
15	10.2	....	7.9	5.8	a7.4	8.7	11.6	14.6	a17.3	a17.5	16.3	12.4
16	10.1	....	7.9	a5.8	a7.5	8.8	11.7	14.8	a17.3	a17.5	16.3	12.2
17	10.1	....	7.9	5.8	a7.5	8.9	11.8	14.9	a17.4	a17.4	16.2	12.1
18	a10.0	....	8.0	5.8	a7.6	9.0	11.9	a15.1	a17.4	a17.4	16.1	11.9
19	a 9.9	8.3	8.0	5.9	a7.7	9.1	12.0	a15.1	a17.4	a17.3	16.0	11.7
20	a 9.7	8.2	8.0	5.9	a7.8	9.2	12.1	a15.2	a17.5	a17.3	a16.0	11.5
21	a 9.5	8.2	8.1	5.6	7.8	9.3	12.2	a15.2	a17.5	a17.2	a15.9	11.3
22	9.3	8.1	8.1	5.5	a7.9	9.4	12.2	15.3	a17.5	a17.2	a15.8	11.2
23	9.1	8.1	8.1	5.5	a7.9	a9.5	12.3	15.4	a17.6	a17.2	a15.7	10.9
24	8.9	8.1	8.0	5.5	a7.9	a9.6	12.4	15.6	a17.6	a17.1	a15.6	10.7
25	8.7	8.0	7.8	5.5	a8.0	a9.8	12.5	15.6	a17.6	a17.1	a15.5	10.5
26	8.6	a8.0	7.6	5.5	a8.0	a9.9	12.6	15.8	a17.6	a17.0	15.3	10.3
27	8.5	a7.9	7.3	5.4	a8.1	a10.0	12.7	15.9	a17.6	a17.0	15.2	10.0
28	8.4	a7.9	6.7	5.4	a7.8	a10.1	12.8	16.0	a17.7	a17.0	15.0	9.7
29	a8.3		5.8	5.5	a7.8	10.2	12.9	16.1	a17.7	a16.9	14.9	8.9
30	a8.3		5.4	5.7	a7.8	10.3	13.0	16.2	a17.7	a16.9	14.8	8.1
31	a8.2		5.3		a7.8		13.1	16.3		a16.8		7.3

a Estimated.

St 392. Murray Babcock. Lat. $44^{\circ} 28' 10''$, long. $75^{\circ} 13' 31''$. In village of Hermon, 0.4 mile east of highway bridge over Elm Creek. Unused dug well, diameter 36 inches, depth 27.6 feet. Aquifer is believed to be glacial outwash. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 14	3.90	June 18	8.40	Aug. 27	14.98	Oct. 29	14.80
16	3.80	25	9.80	Sept. 3	15.06	Nov. 19	12.88
23	3.59	July 2	10.30	10	15.74	26	12.18
30	3.90	9	10.50	17	16.19	Dec. 3	11.94
May 7	4.67	16	11.18	24	15.86	10	10.76
14	5.88	23	11.59	Oct. 1	15.68	17	8.59
21	5.60	30	12.78	8	15.47	24	6.97
28	6.19	Aug. 6	13.14	15	15.40	31	5.98
June 4	6.98	13	14.26	22	15.19		
11	7.58	20	14.69				

Schenectady County

Sn 128. City of Schenectady. Lat. $42^{\circ} 49' 26''$, long. $73^{\circ} 59' 22''$. Aquifer is glacial outwash, and water level is affected by Mohawk River stage and by nearby pumping wells. Records available: 1946-49.

Sn 128--Continued.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a27.0	30.70	32.12	32.48	30.78	31.40	32.46	31.35	31.86	31.11	31.40	31.37
2	a28.2	.....	32.47	32.63	31.14	31.73	32.44	31.50	32.37	31.04	31.33	31.37
3	a29.4	.....	32.63	32.50	30.60	32.06	32.14	31.66	32.60	31.23	31.27	31.31
4	.....	.....	.....	32.49	30.37	32.57	a31.4	31.73	31.63	31.49	31.47	31.46
5	.....	.....	.....	32.85	30.70	32.22	31.44	31.76	30.92	31.57	30.64	31.14
6	.....	.....	.....	32.74	30.65	31.62	31.64	32.04	31.18	31.65	30.26	31.08
7	28.20	a31.31	a31.39	31.85	30.36	31.94	31.29	a32.1	31.35	31.63	30.85	31.21
8	28.42	31.41	31.58	31.67	30.03	32.28	31.62	31.86	31.75	31.67	30.94	31.32
9	29.15	31.42	32.08	31.82	30.25	32.60	31.72	32.01	31.59	30.91	30.79	31.53
10	29.81	31.33	32.44	32.22	30.82	32.68	31.43	32.28	31.81	30.87	31.14	31.77
11	30.53	31.28	32.64	32.31	31.06	32.62	31.13	32.48	31.22	31.37	31.27	31.92
12	31.16	.....	32.75	32.56	31.42	32.34	31.11	32.56	31.28	31.36	31.29	32.14
13	31.75	.....	32.75	32.70	31.66	31.79	31.36	32.34	31.39	31.43	31.14	32.12
14	31.98	a31.49	32.95	32.73	31.79	31.85	31.47	31.27	31.54	31.69	31.18	31.39
15	32.50	30.24	33.17	32.68	31.16	32.06	31.78	31.09	31.69	31.56	30.88	31.81
16	.....	27.40	33.31	32.18	31.19	32.18	31.61	31.48	31.50	31.25	31.01	32.32
17	a32.60	27.99	33.41	32.20	31.21	32.28	31.47	31.55	31.60	31.14	30.79	32.43
18	32.67	29.36	33.53	32.13	31.35	32.39	31.15	31.72	31.09	31.37	31.12	31.92
19	32.62	30.27	33.68	31.88	31.29	31.93	31.36	32.00	31.39	31.36	31.52	32.34
20	31.87	30.57	33.60	31.28	31.08	31.62	31.54	32.08	31.29	31.41	31.28	32.28
21	31.80	31.07	33.78	31.32	30.77	31.77	31.67	31.77	31.21	31.50	30.83	32.58
22	31.16	31.30	34.07	31.55	30.73	32.03	31.79	31.67	32.10	31.49	31.24	32.67
23	32.22	31.67	33.99	31.59	30.92	31.53	31.89	32.10	32.07	31.45	30.90	32.53
24	32.66	31.53	33.32	30.82	30.53	32.02	31.62	32.03	32.18	31.18	31.47	32.48
25	32.97	31.45	32.93	30.62	30.42	32.44	31.18	32.16	32.09	31.71	31.82	32.54
26	33.08	31.28	33.16	31.10	30.43	31.74	31.33	32.25	31.44	31.57	31.53	32.52
27	32.61	31.19	33.04	31.44	30.45	31.12	31.67	.....	31.71	31.99	31.57	32.56
28	31.78	31.61	a32.74	31.61	30.24	31.55	31.94	.....	32.10	31.93	31.58	32.68
29	31.08	.....	32.09	31.85	30.45	31.49	32.07	.....	32.29	31.75	31.66	32.65
30	30.55	.....	32.24	31.07	30.46	31.69	32.24	.....	31.55	31.61	31.39	32.82
31	30.36	.....	32.26	.....	30.96	.....	a31.8	31.24	.....	31.25	.....	32.42

a Estimated.

Schuyler County

Sy 9. Cornell University. Arnot Forest. Lat. 42°16'40", long. 76°39'41". Aquifer is glacial till. Records available: 1946-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.48	a4.5	.....	4.64	6.13	6.28	8.83	8.87	7.41	7.36	8.83	5.58
2	2.74	a4.8	.....	4.79	7.24	6.54	8.80	8.91	7.72	7.17	8.84	5.16
3	3.03	a5.0	.....	4.89	7.35	6.83	8.74	8.96	8.08	6.96	8.88	4.96
4	3.24	a5.3	.....	5.01	7.49	7.05	8.75	9.00	8.40	6.78	8.80	4.80
5	3.31	a5.5	.....	5.19	7.59	7.19	8.77	9.03	8.61	6.64	8.73	4.74
6	2.34	a5.8	.....	5.18	7.61	7.33	8.79	9.04	8.76	6.61	8.83	4.81
7	2.41	6.04	.....	5.08	7.63	7.48	8.82	9.06	8.89	6.59	8.86	4.81
8	2.44	6.36	.....	4.03	7.74	7.67	8.86	9.06	8.94	6.66	8.85	4.98
9	2.44	6.59	.....	3.73	7.83	7.85	8.86	9.06	9.00	6.78	8.88	5.15
10	2.40	6.85	.....	3.89	7.94	7.99	8.88	9.08	9.01	6.91	8.90	5.34
11	2.43	7.09	.....	4.03	8.06	8.07	8.87	9.09	9.02	7.06	8.90	5.46
12	2.58	7.31	.....	4.22	8.14	8.15	8.88	8.94	9.02	7.20	8.89	5.56
13	3.05	7.40	.....	4.40	8.23	8.25	8.88	8.60	9.02	7.59	8.90	5.96
14	3.49	6.19	.....	4.46	8.28	8.35	8.90	8.55	8.96	7.61	8.79	2.74
15	3.87	2.85	.....	4.60	8.34	8.42	8.91	8.64	8.72	7.78	8.71	2.94
16	4.08	2.37	.....	4.77	8.39	8.48	8.92	8.76	8.71	7.97	8.74	3.32
17	4.09	2.56	.....	5.05	8.43	8.53	8.93	8.86	8.78	8.17	8.80	3.66
18	3.70	2.97	.....	5.30	8.46	8.55	8.93	8.91	8.86	8.35	8.82	3.91
19	3.35	3.42	.....	5.42	8.44	8.57	8.92	8.88	8.25	8.49	8.77	4.08
20	3.14	3.62	.....	5.53	8.15	8.58	8.93	8.93	7.89	8.59	8.62	4.19

a Estimated.

Sy 9--Continued.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	3.35	3.79	a4.4	5.56	7.82	8.57	8.94	8.98	7.84	8.66	8.39	4.20
22	3.45	3.58	a4.4	5.61	7.97	8.53	8.95	9.01	7.90	8.69	8.18	4.17
23	4.01	3.85	a4.1	5.57	7.56	8.56	8.96	9.01	7.91	8.73	7.84	4.08
24	4.15	3.75	a3.9	5.70	6.23	8.61	8.98	9.03	7.98	8.79	7.49	3.92
25	4.32	3.20	a3.9	5.97	5.43	8.63	8.92	9.05	8.09	8.83	7.07	3.90
26	4.32	3.07	a3.9	6.16	5.02	8.61	8.80	9.07	8.21	8.83	6.71	3.89
27	4.43	....	a3.9	6.30	4.98	8.65	8.81	9.08	8.28	8.85	6.38	2.82
28	4.43	....	3.94	6.52	5.18	8.70	8.86	9.09	8.27	8.89	6.15	2.44
29	4.38		4.16	6.79	5.49	8.76	8.91	8.35	7.86	8.91	5.93	2.65
30	4.37		4.33	6.97	5.77	8.80	8.92	7.46	7.56	8.92	5.77	3.11
31	4.35		4.48		6.00		8.90	7.29		8.90		3.48

a Estimated.

Steuben County

Sb 200. Calkins. Lat. $42^{\circ}05'34''$, long. $77^{\circ}25'18''$. 1.3 miles west of Woodhull. Aquifer is glacial till. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	8.19	Apr. 10	5.95	June 26	10.69	Sept. 10	11.96
8	8.22	17	6.91	July 3	10.97	19	12.02
18	8.31	23	7.00	9	11.28	25	12.12
22	7.79	30	6.97	18	11.39	Oct. 1	12.21
30	7.48	May 8	6.00	23	11.56	8	12.39
Feb. 8	7.40	14	8.80	31	11.61	15	12.79
14	7.48	22	7.22	Aug. 6	11.64	22	12.54
21	7.53	29	6.14	13	11.68	30	13.50
28	7.61	June 4	8.23	20	11.71	Nov. 7	12.76
Mar. 19	7.11	11	9.88	29	11.74	Dec. 24	13.80
27	6.24	19	10.45	Sept. 3	12.40	31	13.08
Apr. 3	5.33						

Sb 240. Corning Glass Works. Lat. $42^{\circ}08'37''$, long. $77^{\circ}03'18''$. Walnut and West Market Streets, Corning. Aquifer is glacial outwash and water level is affected by nearby pumping, possibly by river stage. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	25.9	Apr. 4	25.7	July 5	28.2	Oct. 3	28.8
10	24.7	11	25.4	11	28.2	10	29.0
17	25.7	18	24.7	18	28.4	17	29.1
24	25.9	25	25.3	25	28.5	24	29.3
31	25.0	May 2	26.1	Aug. 1	28.2	31	29.3
Feb. 7	25.5	9	26.2	8	28.5	Nov. 7	29.2
14	26.1	16	27.5	15	28.7	14	29.3
21	25.1	23	26.1	22	28.9	21	29.1
28	25.4	31	26.8	29	28.5	28	28.9
Mar. 7	24.5	June 6	27.1	Sept. 6	28.6	Dec. 5	29.0
14	25.3	13	27.8	12	28.8	12	28.9
21	26.1	20	28.2	19	28.7	19	28.0
28	25.8	27	28.4	26	28.8	27	27.6

Washington County

W 264. Village of Salem. Lat. $43^{\circ}10'27''$, long. $73^{\circ}19'43''$. 100 feet south of Delaware & Hudson railroad crossing. Aquifer is glacial outwash and water level is possibly affected by river stage. Records available: 1946-49.

W 264--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	7.54	Apr. 11	9.68	July 11	10.86	Oct. 10	10.80
10	7.71	18	9.79	18	11.04	14	10.82
17	8.19	25	9.85	25	11.08	17	10.81
24	9.44	May 2	9.80	Aug. 1	11.03	24	10.79
31	9.67	9	10.03	8	10.97	31	10.78
Feb. 7	9.55	16	10.15	15	10.95	Nov. 6	10.75
14	9.47	23	10.22	22	10.99	13	10.73
21	9.29	30	10.25	29	11.00	20	10.73
28	9.20	June 6	10.45	Sept. 5	10.99	27	10.68
Mar. 7	9.28	13	10.54	12	10.98	Dec. 5	10.65
14	9.33	20	10.71	19	10.98	12	10.63
21	9.49	27	10.75	26	10.97	17	10.44
28	9.54	July 5	10.77	Oct. 3	10.97	28	10.09
Apr. 4	9.52						

Wayne County

Wn 29. Town of Marion. Lat. $43^{\circ}08'14''$, long. $77^{\circ}11'19''$. In town of Marion. Aquifer is Lockport dolomite. Records available: 1947-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.63	17.37	17.50	17.57	17.70	18.29	19.16	19.68	20.19	19.63	19.56	19.01
2	17.68	17.46	17.57	17.62	17.69	18.30	19.17	19.71	20.31	19.61	19.48	18.98
3	17.79	17.45	17.62	17.62	17.77	18.34	19.22	19.78	20.27	19.57	19.49	19.03
4	17.76	17.35	17.60	17.66	17.81	18.33	19.19	19.85	20.22	19.56	19.45	18.88
5	17.62	17.46	17.49	17.68	17.78	18.33	19.18	19.92	20.12	19.62	19.48	18.85
6	17.35	17.51	17.42	17.47	17.70	18.35	19.19	20.06	20.17	19.65	19.44	18.88
7	17.33	17.41	17.53	17.45	17.76	18.45	19.24	20.07	20.17	19.61	19.40	18.73
8	17.39	17.47	17.49	17.44	17.79	18.55	19.29	20.07	20.10	19.66	19.36	18.85
9	17.41	17.44	17.47	17.54	17.80	18.60	19.28	20.10	20.09	19.67	19.46	18.91
10	17.45	17.43	17.44	17.63	17.90	18.58	19.22	20.15	20.08	19.63	19.40	18.89
11	17.45	17.51	17.40	17.63	17.95	18.56	19.25	20.21	20.08	19.62	19.36	18.86
12	17.34	17.46	17.40	17.62	17.94	18.59	19.42	20.21	20.05	19.60	19.41	18.74
13	17.37	17.39	17.51	17.59	17.98	18.63	19.34	20.21	19.99	19.71	19.32	18.70
14	17.40	17.33	17.56	17.60	17.99	18.66	19.35	20.25	19.96	19.69	19.25	18.64
15	17.53	17.02	17.56	17.53	18.05	18.70	19.36	20.30	19.95	19.67	19.26	18.61
16	17.47	17.14	17.57	17.53	18.04	18.76	19.41	20.33	19.91	19.66	19.27	18.61
17	17.49	17.22	17.56	17.59	18.09	18.82	19.42	20.30	19.93	19.65	19.26	18.59
18	17.54	17.20	17.54	17.58	18.08	19.02	19.41	20.26	19.86	19.66	19.26	18.53
19	17.38	17.21	17.67	17.59	18.03	19.03	19.40	20.35	19.76	19.66	19.21	18.56
20	17.56	17.22	17.74	17.64	18.08	18.99	19.43	20.41	19.75	19.67	19.10	18.55
21	17.51	17.33	17.64	17.64	18.10	18.95	19.48	20.46	19.76	19.67	19.15	18.43
22	17.49	17.24	17.55	17.61	18.03	19.00	19.48	20.41	19.68	19.57	19.17	18.32
23	17.55	17.26	17.48	17.56	18.03	19.09	19.59	20.41	19.64	19.63	19.00	18.36
24	17.43	17.27	17.57	17.63	18.04	19.14	19.61	20.45	19.69	19.65	19.08	18.46
25	17.52	17.28	17.51	17.74	18.09	19.15	19.54	20.51	19.73	19.66	19.03	18.49
26	17.48	17.44	17.55	17.65	18.08	19.08	19.56	20.49	19.71	19.62	19.13	18.36
27	17.49	17.45	17.43	17.64	18.13	19.09	19.57	20.46	19.65	19.70	19.08	18.21
28	17.29	17.36	17.53	17.71	18.16	19.14	19.60	20.44	19.56	19.65	19.14	18.25
29	17.37		17.63	17.70	18.21	19.20	19.61	20.31	19.54	19.63	18.98	18.30
30	17.45		17.64	17.69	18.24	19.15	19.63	20.28	19.55	19.57	18.95	18.36
31	17.33		17.61		18.26		19.65	20.22		19.49		18.32

Wyoming County

Wo 1. State Dept. of Conservation. Lat. $42^{\circ}37'39''$, long. $78^{\circ}00'03''$. About 2.5 miles east of village of Castile. Aquifer is glacial till. Records available: 1942-49.

Wo 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	6.33	Apr. 2	1.70	July 5	8.20	Oct. 8	11.63
8	2.39	9	1.99	18	9.06	15	11.70
15	3.72	16	2.04	25	9.44	22	11.82
22	3.73	23	2.91	Aug. 3	9.53	30	11.96
31	2.34	30	3.21	7	9.60	Nov. 5	12.04
Feb. 5	3.30	May 8	3.62	14	9.81	12	12.14
14	2.63	15	3.98	21	10.10	19	12.23
20	2.61	21	4.17	28	10.38	26	12.34
Mar. 2	3.26	29	4.15	Sept. 4	10.52	Dec. 3	12.41
7	4.36	June 5	4.45	11	10.84	10	12.46
15	4.55	12	5.39	19	11.05	17	12.35
21	4.53	19	6.51	25	11.23	24	12.14
26	2.40	27	7.48	Oct. 1	11.40	31	11.93

LONG ISLAND

By N. J. Lusczynski

PROGRAM OF WORK

The observation-well program in Long Island was continued during 1949 in cooperation with the New York State Water Power and Control Commission, the Nassau County Department of Public Works, the Suffolk County Board of Supervisors, and the Suffolk County Water Authority. Measurements of water levels were made in 235 observation wells, 32 of which were equipped with recording gages.

In 1949 water samples were taken in more than 450 wells in Long Island. The bulk of the samples were analyzed for chloride content (salinity). The remainder of the samples were analyzed for nitrate, chromium, or cadmium. About 50 samples were taken at wells screened in the Lloyd sand member of the Raritan formation for analysis. A few samples were obtained for radiometric analyses.

PRECIPITATION

Rainfall on Long Island was below normal in 1949. In June only 0.16 inch rainfall was recorded at the U. S. Weather Bureau station at the Battery in New York City. Some of the Weather Bureau stations on Long Island reported no rain or only a trace of rain during June. In general, below-normal conditions continued throughout the last 7 months of 1949.

During this period deficiencies in precipitation amounted to as much as 10 inches.

Precipitation in 1949 averaged only about 38 inches on Long Island, and ranged from 33.41 inches (at Orient) to 45.21 inches (at Cutchogue). At the Battery station (longest continuous record near western part of Long Island), a total of 34.70 inches (8.29 inches below normal) was measured. This was the third lowest precipitation on record in the past 25 years. At the Setauket station (longest continuous record in the eastern part of Long Island), 34.87 inches of precipitation (8.22 inches below normal) were recorded.

PUMPAGE

According to pumpage records furnished by the New York State Water Power and Control Commission, by the New York City Department of Water Supply, Gas and Electricity, by the Nassau County Department of Public Works, and other agencies and water districts, the combined pumpage for public water supply in Long Island in 1949 averaged about 180 million gallons a day. This total represents about 24 million gallons a day more than the pumpage in 1948. Of this increase, 11 million gallons a day can be attributed to the additional withdrawals made by the City of New York from its Long Island developments. The withdrawals were necessitated by the rapid dwindling of surface water in upstate reservoirs during the last few months of 1949. The total pumpage by the City of New York from Long Island sources averaged 55 million gallons a day in 1949. The remaining 13 million gallons a day expresses the increase in pumpage for public water supply on Long Island resulting from the large deficiencies in rainfall during the summer and fall. During the summer growing season, nearly all of the pumping facilities and distribution systems were taxed to their maximum capacities because of high temperatures and drought conditions. Concurrent peak demands were caused by increased population, both seasonal and permanent.

The total gross pumpage for all uses -- public-water supply, industrial, agricultural, and domestic -- attained a record high of 275 million gallons a day in 1949. However, when consideration is given to the quantities of water returned through artificial recharge wells and basins,

treatment plants, septic tanks, and cesspools, et cetera, the net withdrawals are estimated to be only about 150 million gallons a day.

GEOLOGY AND HYDROLOGY

There are five water-bearing zones on Long Island that yield large supplies of water to wells. The upper and most productive zone consists of extensive outwash deposits of Pleistocene age which, in most places, are not overlain by impervious material. The second zone, the Jameco gravel, an outwash deposit of Pleistocene age, is found chiefly in the western part and usually is covered by the Gardiners clay, an interglacial deposit. The third and fourth zones consist of widespread beds of sand and gravel of supposed Magothy age. The third zone is in the upper part of the Magothy (?) formation and generally consists of coarse to medium sand. In the center of the island the sand is in direct contact with the overlying outwash beds of Pleistocene age, whereas at the borders of the island the sand is covered by either the Gardiners clay, the Jameco gravel, or beds of recent clay. The fourth zone, in the lower part of the Magothy (?) formation, consists of coarse sand and gravel, and generally is overlain by beds or lenses of clay within the Magothy (?) formation itself. The fifth and lowermost zone, the Lloyd sand member of the Raritan formation, lies just above the bedrock floor of the island and almost everywhere is covered by thick beds of the clay member of the Raritan formation. The Lloyd sand member is also of Cretaceous age, and consists of beds of sand and gravel which underlie most of Long Island.

The shallow-lying outwash of Pleistocene age constitutes a vast reservoir into which water derived from precipitation can readily sink and from which water can be readily and economically withdrawn. Changes in the water table in these deposits chiefly reflects changes in the rate of precipitation. However, in localities where the safe yield has been exceeded, water levels respond more to changes in the rate of pumping, rather than precipitation. In contrast, the water in the deeper sands that lie beneath clay beds is under artesian pressure and is recharged at a more or less constant rate by water percolating down from the overlying formations through relatively small intake areas. Water levels in wells that penetrate the deeper sands, therefore, are controlled chiefly

by changes in the rate of pumping. Thus, the safe yield of the deposit of Pleistocene age is governed primarily by the average rate of precipitation whereas the safe yield of the deeper beds is limited by the capacity of the beds to receive and transmit water from the areas of recharge to points of withdrawal.

FLUCTUATIONS OF WATER LEVELS

Most of the observation wells on Long Island are screened in deposits of Pleistocene age, from which more than half of the withdrawals are made, but some of them penetrate the deeper beds. The observation wells that appear in the present report and which tap the deeper aquifers are listed in the following table:

Jameco gravel	Magothy (?) formation		Lloyd sand member of the Raritan formation	
K19	N9	N2062	K521	Q273
K519	N157	N2400	K1057	Q278
K523	N180	N2528	N7	Q282
K525	N575	N2635	N67	Q283
K1591	N844	Q471	N511	Q287
Q350	N1212	S58	N657	Q470
Q1152	N1244	S203	N2071	Q543
Q1237	N1245	S2314	N2602	Q1222
	N1461	S4134	Q64	S202
	N1613	S4828		

The water-table aquifer on Long Island may be divided into two hydrologic provinces. At the western end of the island excessive pumping for a number of years has lowered the water table below sea level in a large area in Kings County and adjacent parts of Queens County. In the other parts of the island the perennial recharge exceeds ground-water withdrawals and consequently the water table remains above sea level at all but a few places along the shore where local overdevelopment has occurred. In the higher parts of the island the water table is as much as 80 feet above mean sea level.

In the overdeveloped area at the western end of Long Island the water table responds more or less rapidly to changes in the distribution of pumping and also the over-all rate of withdrawal, whereas in other parts of the island, the major fluctuations of the water table are chiefly the result of variations in amount and distribution of precipitation.

As a result of above-normal precipitation in 1948 and during the first few months of 1949, the water table in Nassau, Suffolk, and Queens Counties had risen to extremely high levels by late spring in 1949, and at many places to stages highest on record since 1939. However, by the end of the year, because of appreciable deficiencies in rainfall during the last seven months, and also because of very heavy pumping, the water table receded rapidly to stages generally below those of 1948. But even at that, the water table at the end of 1949 was still normal or slightly above normal in most parts of eastern and central Long Island.

The fluctuation of the water table in Nassau, Suffolk, and Queens Counties is believed to be represented closely by the trend of the composite average water level for 14 selected wells in Nassau and Suffolk Counties. (See fig. 6.) During the first 5 months of 1949, the composite level rose more than 2 feet to a stage 49.53 feet above mean sea level at the end of May. From then on to the end of the year, the composite level receded 2.77 feet to levels slightly above normal for December.

The net drop in the water table of more than 1 foot in central and eastern Long Island during 1949 resulted in a decrease in storage of many billions of gallons of ground water. The gains in 1948 were cancelled by the losses in 1949.

Prior to 1942, overdevelopment of the ground-water reservoir in Kings County (Brooklyn) had resulted in progressively declining water levels. Because of this overdevelopment a "crater-like" depression was formed in the water table. The bottom of the "crater" was as much as 30 feet below sea level, and water levels in pumped wells were at even greater depths.

The decline of water levels was arrested in 1942 and thereafter the water table began to recover slowly at many localities in Brooklyn. The reversal of trend expressed a more favorable balance between recharge (natural and artificial) and pumping. This can be attributed largely to the beneficial effects of the State law passed in 1933 which enabled the New York State Water Power and Control Commission to enforce the provision that water pumped for purposes of cooling from new wells be returned to the ground.

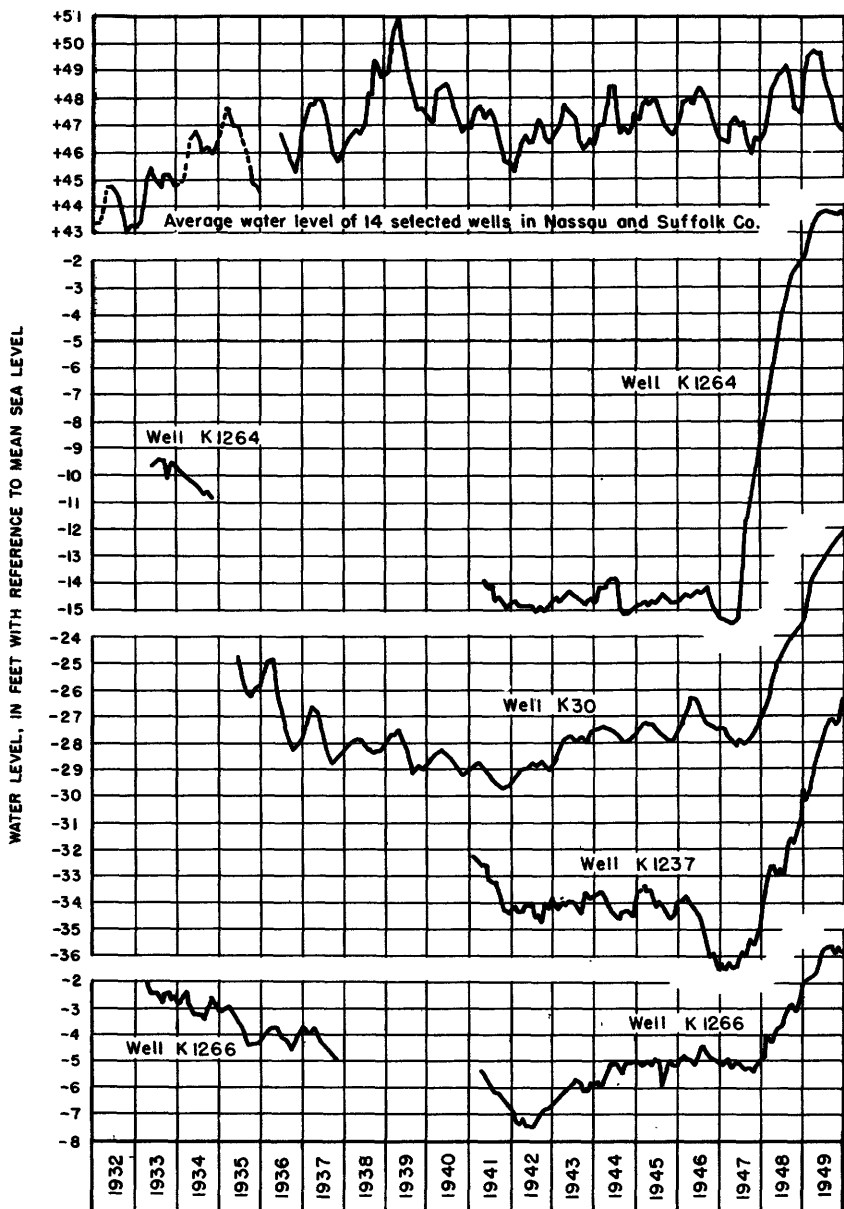


Figure 6.--Composite average water level of 14 selected wells in Nassau and Suffolk Counties, and selected wells in Kings County, 1932-49.

The water table in Brooklyn has recovered very rapidly following a complete shut-down in June 1947 of a private water-supply company whose average daily withdrawals had amounted to about 27 million gallons per day, or approximately 50 percent of the total pumpage in Brooklyn at that time. By the end of 1949, 30 months after the shut-down, recoveries exceeding 18 feet had been measured in Flatbush (central Brooklyn), the former franchise area of the private water-supply company. The abrupt rise of the water level at observation well K1264 (fig. 6), beginning in July 1947 and continuing through the following 30 months, is representative of the recovery that took place at many observation wells in the Flatbush area.

In other sections of Brooklyn, smaller recoveries were observed as evidenced by water levels at wells K1237 and K1266 (fig. 6), north and east, respectively, of the Flatbush area. A rise in water levels was noted also in the highly industrialized area in the northwestern part of Brooklyn, where overdevelopment has been the greatest. At well K30 (fig. 6), an index well near the center of the "crater", there was a recovery of 7.70 feet in 30 months. Of this, 3.21 feet occurred in 1949. By the end of 1949, the water level at well K30 was 4.04 feet above the previous high measured on the first day of record on June 14, 1935. The water levels in Brooklyn had recovered by such appreciable amounts in the 30-month period ending December 1949, that the water table had returned to stages above mean sea level in more than the entire southern half of Kings County.

The following tables include a summary of data pertaining to ground-water levels for Long Island, the net change in water levels during 1949, and monthly, semimonthly, weekly, or daily water-level records. Daily records are available for 32 wells equipped with recording gages. All measurements are in feet above or below mean sea level (Sandy Hook datum) as indicated.

Summary of data on ground-water levels on Long Island

Well No. (1)	Date of first measurement (2)	Lowest level		Highest level		Water level on last date of record in 1949 (feet) (7)
		Water level (3)	Date (4)	Water level (5)	Date (6)	
K19	Sept. 10, 1940	a-26.80	Sept. 26, 1941	a-13.77	Dec. 27, 1949	a-13.84
K30	June 14, 1935	a-29.75	Nov. 8, 1941	a-20.24	Dec. 28, 1949	a-20.30
K65	Nov. 8, 1937	-28.34	Aug. 25, 1939	-19.61	Dec. 28, 1949	-19.61
K67	Nov. 8, 1937	-20.91	Sept. 15, 1947	-16.00	Dec. 28, 1949	-16.00
K92	Dec. 11, 1937	-29.69	Dec. 11, 1937	-14.45	Dec. 28, 1949	-14.45
K97	Apr. 5, 1944	-26.58	Oct. 27, 1944	-15.84	Dec. 28, 1949	-15.84
K196	Sept. 12, 1942	-4.76	Mar. 5, 1944	a-20.24	June 16, 1949	a-4.14
K519	June 24, 1947	b-18.78	June 30, 1947	a-3.56	Dec. 27, 1949	a-3.70
K521	Jan. 1, 1947	a 2.62	Feb. 12, 1947	a 5.94	Dec. 31, 1948	a 5.05
K523	Mar. 6, 1944	-1.91	Feb. 6, 1945	a 3.62	Apr. 6, 1949	a 2.79
K525	Dec. 13, 1945	a .46	Mar. 10, 1947	5.35	June 6, 1949	a 4.44
K539	May 3, 1932	-8.28	Feb. 21, 1942	-.50	Sept. 28, 1949	-.66
K689	June 4, 1945	-39.01	Jan. 25, 1947	-25.53	Oct. 31, 1949	-25.78
K1057	Mar. 29, 1939	(c)		(c)		a 8.5
K1141	Oct. 24, 1936	-7.76	July 1, 1947	.66	June 16, 1949	.34
K1194	Nov. 2, 1940	-3.64	Oct. 31, 1947	-1.09	May 31, 1949	-1.32
K1198	Nov. 2, 1940	-8.45	May 14, 1942	-1.13	Aug. 31, 1949	-1.37
K1199	Nov. 16, 1940	-17.17	Jan. 1, 1944	-7.58	Dec. 28, 1949	-7.58
K1235	Jan. 25, 1941	-10.65	June 27, 1942	-2.16	Dec. 27, 1949	-2.16
K1236	Jan. 25, 1941	-19.42	Oct. 4, 1941	-9.89	Dec. 28, 1949	-9.89
K1237	Jan. 18, 1941	-36.53	Jan. 24, 1947	-26.39	Dec. 28, 1949	-26.39
K1263	Apr. 21, 1933	-11.97	July 21, 1936	2.27	Apr. 18, 1949	2.01
K1264	Apr. 21, 1933	-15.56	Apr. 3, 1947	-.20	Nov. 30, 1949	-.30
			May 7, 1947			
K1265	Apr. 21, 1933	-11.55	Aug. 22, 1942	-.93	Dec. 27, 1949	-.93
K1266	Apr. 21, 1933	-7.49	June 27, 1942	-.58	Sept. 28, 1949	-.76
K1296	Sept. 6, 1941	-8.27	Mar. 7, 1942	.75	May 31, 1949	.37
K1347	Oct. 15, 1942	-24.16	Sept. 10, 1945	-16.76	Apr. 28, 1949	-17.27
K1479	Dec. 7, 1946	a-10.79	Feb. 27, 1947	a 2.25	June 21, 1949	ad 1.92
			Mar. 1, 1947			
K1495	Nov. 5, 1936	1.80	Aug. 13, 1947	3.71	Feb. 23, 1949	2.78
K1591	June 27, 1947	a -2.10	Oct. 27, 1947	a .57	July 23, 1948	a .18
N7	July 24, 1936	2.77	Aug. 3, 1949	a 12.75	Mar. 9, 1941	a 6.36
N9	July 3, 1936	20.99	Sept. 11, 1936	23.57	Sept. 23, 1938	21.27
N53	Jan. 21, 1934	12.05	Feb. 17, 1940	16.49	Apr. 15, 1939	12.76
N67	Mar. 16, 1932	10.42	Aug. 2, 1949	15.51	Dec. 5, 1946	d10.84
N157	Sept. 22, 1932	75.71	May 5, 1933	a 38.84	Oct. 31, 1939	86.79
N180	Oct. 30, 1945	a 17.28	Dec. 25, 1949	a 21.04	Mar. 11, 1949	a 17.32
N511	Jan. 9, 1947	19.18	June 28, 1949	21.52	Dec. 31, 1948	20.78
N575	Nov. 30, 1946	54.97	Aug. 15, 1947	60.22	Apr. 26, 1949	56.54
N657	Feb. 12, 1945	13.0	Nov. 12, 1947	a 15.4	Dec. 31, 1948	a 14.5
N844	Oct. 3, 1939	a 78.87	Apr. 16, 1942	a 85.48	Aug. 5, 1939	83.10
N1102	Apr. 21, 1939	53.81	July 31, 1942	58.94	May 31, 1949	58.62
N1103	Apr. 21, 1939	54.06	Nov. 1, 1943	61.14	May 31, 1949	60.65
N1104	Apr. 21, 1939	55.27	May 1, 1942	61.88	May 31, 1949	60.54
N1105	Apr. 21, 1939	52.88	Mar. 30, 1942	58.87	May 31, 1949	56.92
N1107	Apr. 21, 1939	41.64	Feb. 27, 1942	48.21	Apr. 28, 1939	44.11
N1108	Apr. 21, 1939	36.94	Jan. 30, 1942	43.62	Apr. 28, 1939	38.36
N1109	Apr. 21, 1939	24.53	Nov. 29, 1949	30.04	Apr. 21, 1939	25.44
N1110	Apr. 21, 1939	18.68	Dec. 1, 1941	21.05	Apr. 21, 1939	19.02
					June 6, 1946	
N1111	Apr. 21, 1939	11.62	Oct. 25, 1947	14.79	June 6, 1946	13.43
N1112	Jan. 6, 1939	6.84	Dec. 13, 1941	10.24	June 6, 1946	9.19
N1126	Mar. 12, 1938	55.27	Jan. 31, 1942	62.21	Apr. 29, 1939	59.94
N1132	Apr. 2, 1938	6.06	Feb. 24, 1940	9.77	Sept. 23, 1938	7.06
N1140	Jan. 7, 1939	58.32	Feb. 7, 1942	66.09	Apr. 29, 1939	62.26
N1147	Jan. 6, 1939	16.62	Dec. 13, 1941	19.72	Apr. 8, 1939	16.76
N1160	Jan. 7, 1939	63.37	Jan. 31, 1942	70.90	Apr. 15, 1939	65.10
N1167	Mar. 12, 1938	9.34	Dec. 27, 1949	12.02	Apr. 15, 1939	9.34
N1185	Apr. 2, 1938	10.01	Dec. 28, 1949	15.39	Apr. 8, 1939	10.01

* See footnotes at end of table.

Summary of data on ground-water levels on Long Island--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
N1204	Jan. 6, 1939	5.31	Dec. 28, 1949	12.26	Apr. 8, 1939	5.31
N1212	Jan. 1, 1943	a 83.72	Jan. 20, 1943	a 88.94	Sept. 28, 1949	a 88.82
N1222	Jan. 6, 1939	1.27	Jan. 31, 1942	9.67	Apr. 8, 1939	1.49
N1234	Jan. 7, 1939	59.01	Feb. 14, 1942	66.64	May 6, 1939	62.08
N1240	Jan. 6, 1939	-1.08	Jan. 24, 1942	11.29	Apr. 8, 1939	-3.30
N1244	May 31, 1940	71.31	Oct. 30, 1942	76.50	May 31, 1940	75.15
N1245	Feb. 2, 1940	75.96	Oct. 30, 1942	82.88	Feb. 2, 1940	80.82
N1246	May 31, 1940	77.14	Aug. 31, 1942	82.18	Aug. 29, 1949	81.70
N1247	Apr. 21, 1939	70.52	July 31, 1942	76.98	July 28, 1939	74.11
N1249	Apr. 21, 1939	50.34	Jan. 30, 1942	58.18	Apr. 21, 1939	52.04
N1250	Apr. 21, 1939	43.20	Jan. 30, 1942	49.64	Apr. 21, 1939	44.31
N1251	Apr. 21, 1939	35.57	Jan. 30, 1942	40.54	Apr. 29, 1944	36.05
N1252	Apr. 21, 1939	22.48	Jan. 30, 1942	26.29	May 30, 1948	22.69
					June 5, 1946	
N1253	Jan. 6, 1939	11.31	Jan. 31, 1942	16.89	Apr. 8, 1939	11.35
N1255	May 12, 1913	58.57	Nov. 11, 1918	65.59	Apr. 15, 1939	60.22
N1256	May 12, 1913	70.30	Feb. 27, 1933	80.97	May 20, 1939	79.19
N1257	Aug. 17, 1932	5.56	Oct. 31, 1949	10.17	Apr. 8, 1939	6.24
N1259	Feb. 5, 1909	47.83	Jan. 24, 1933	56.43	Apr. 29, 1939	51.65
N1260	June 6, 1903	16.52	Dec. 20, 1916	23.68	Apr. 8, 1939	17.79
N1262	Oct. 5, 1931	32.66	Oct. 5, 1942	36.20	Apr. 8, 1939	34.16
N1263	Nov. 3, 1911	46.22	Oct. 31, 1932	54.98	Apr. 22, 1939	50.57
N1264	Mar. 7, 1932	2.70	Feb. 17, 1940	9.41	Apr. 8, 1939	2.90
N1265	Mar. 9, 1939	2.43	Dec. 1, 1941	4.69	Jan. 6, 1949	3.04
N1269	Mar. 9, 1939	2.85	Dec. 1, 1949	9.57	Mar. 14, 1939	3.06
N1271	Mar. 9, 1939	1.19	Sept. 5, 1944	4.37	Jan. 6, 1949	2.27
N1273	Nov. 1, 1939	4.33	Dec. 29, 1949	8.03	Mar. 17, 1948	4.33
N1275	Nov. 1, 1939	1.89	Oct. 31, 1941	5.59	Jan. 6, 1949	2.51
N1278	Nov. 3, 1939	4.87	Jan. 30, 1942	8.13	June 5, 1946	5.08
N1280	Jan. 2, 1940	2.22	Jan. 30, 1942	10.79	June 5, 1946	2.59
N1282	Nov. 1, 1939	.28	Dec. 29, 1949	2.58	Jan. 2, 1942	.28
N1285	Nov. 1, 1939	2.12	Jan. 31, 1940	4.88	Jan. 6, 1949	2.61
N1288	Nov. 1, 1939	2.21	Jan. 2, 1940	6.03	Jan. 6, 1949	2.42
N1461	Apr. 27, 1943	a 74.34	Oct. 10, 1943	a 79.97	June 6, 1949	a 77.68
N1462	May 6, 1943	61.26	Nov. 1, 1947	a 66.66	May 24, 1949	a 63.21
					May 25, 1949	
N1463	May 6, 1943	a 36.61	Oct. 28, 1947	a 41.68	Mar. 11, 1949	a 36.85
			Nov. 3, 1947		Mar. 12, 1949	
N1464	May 13, 1943	12.30	Dec. 28, 1949	a 17.59	Apr. 29, 1944	12.30
N1613	June 8, 1940	21.48	Dec. 27, 1949	24.56	July 28, 1948	21.48
N1614	Apr. 2, 1913	61.90	Feb. 27, 1933	72.48	May 31, 1949	68.95
N1615	Mar. 17, 1913	41.49	Oct. 27, 1932	47.17	Mar. 28, 1939	42.92
N1616	Mar. 17, 1913	74.05	Feb. 27, 1933	85.42	June 1, 1939	82.87
N1682	Nov. 30, 1940	41.29	Feb. 28, 1942	46.21	May 31, 1949	43.91
N1683	Dec. 3, 1940	53.46	Jan. 31, 1942	59.83	May 31, 1949	56.71
N1684	Nov. 30, 1940	55.33	Feb. 7, 1942	62.25	Mar. 31, 1949	57.79
N1828	Jan. 7, 1939	58.35	Nov. 28, 1947	63.29	May 31, 1949	59.30
N1829	Mar. 5, 1938	66.10	Nov. 1, 1947	ab69.39	Sept. 15, 1944	67.07
N1830	Jan. 6, 1939	a 49.05	June 7, 1942	54.23	May 31, 1949	52.06
N2052	Mar. 14, 1946	30.46	Aug. 20, 1947	33.07	Apr. 1, 1949	32.64
N2071	Feb. 12, 1948	5.37	June 28, 1949	14.62	Mar. 15, 1946	11.48
N2400	July 7, 1947	71.05	Mar. 12, 1948	74.10	Sept. 30, 1949	73.46
N2528	Dec. 4, 1947	a 68.92	Feb. 15, 1948	a 72.16	June 5, 1949	a 70.58
					June 6, 1949	
N2602	Aug. 17, 1948	a 19.84	Sept. 16, 1948	a 24.02	Dec. 31, 1948	ad23.76
N2635	July 16, 1948	a 25.48	Dec. 31, 1949	a 27.30	May 23, 1949	a 25.48
Q64	Mar. 26, 1947	a-68.90	Nov. 2, 1947	- 6.66	Dec. 23, 1949	-6.78
Q273	Mar. 15, 1935	a 1.12	Mar. 21, 1942	a 8.47	Apr. 20, 1939	a 3.85
Q278	June 4, 1946	- 6.05	July 6, 1949	5.11	Nov. 29, 1946	-2.29
Q282	June 10, 1946	-10.26	Sept. 3, 1947	-4.65	Nov. 29, 1946	-8.11
Q283	June 10, 1946	-10.26	Sept. 3, 1947	-4.69	Nov. 29, 1946	-8.12
Q287	Apr. 13, 1939	(c)	*	(c)		a 7.6
Q350	Mar. 17, 1937	a -.74	Feb. 7, 1948	3.51	Apr. 29, 1939	a .28
			Feb. 10, 1948			
			Feb. 11, 1948			
Q470	Sept. 21, 1933	a-12.75	July 15, 1937	a 6.78	Jan. 8, 1938	a -.27

* See footnotes at end of table.

Summary of data on ground-water levels on Long Island--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Q471	Mar. 31, 1939	13.69	Mar. 31, 1939	17.45	Sept. 30, 1946	15.39
Q543	May 17, 1932	(c)		(c)		a9.1
Q1027	Jan. 1, 1942	a 4.08	Mar. 20, 1942	a 8.30	May 7, 1949	a6.98
Q1089	Oct. 10, 1911	-4.42	Oct. 17, 1932	4.04	Sept. 23, 1938	1.90
Q1090	Oct. 10, 1911	1.19	Oct. 17, 1932	8.29	May 12, 1913	2.16
Q1152	June 27, 1947	-4.31	Dec. 29, 1949	1.15	Apr. 27, 1949	-4.31
Q1222	Apr. 1, 1940	-9.19	Feb. 28, 1942	4.35	Dec. 1, 1945	.69
Q1223	Jan. 28, 1933	4.65	Dec. 30, 1948	10.23	Apr. 4, 1939	4.95
Q1225	Apr. 20, 1933	25.80	Dec. 29, 1949	32.19	Apr. 4, 1939	25.80
Q1237	Feb. 10, 1939	a -6.83	Dec. 31, 1949	a 5.03	May 4, 1939	a-6.83
Q1248	Oct. 12, 1940	34.25	Nov. 3, 1947	38.16	May 31, 1949	35.75
Q1249	Oct. 19, 1940	30.25	Jan. 7, 1948	33.41	Sept. 26, 1946	30.30
Q1250	Oct. 19, 1940	19.03	Dec. 28, 1949	22.52	Aug. 31, 1948	19.03
Q1251	Oct. 19, 1940	9.19	Dec. 29, 1949	14.25	Feb. 24, 1949	9.19
Q1252	Oct. 26, 1940	10.99	Nov. 29, 1949	13.92	Nov. 2, 1948	11.78
Q1253	Nov. 2, 1940	.57	Mar. 2, 1948	4.58	Apr. 26, 1941	1.16
Q1254	Oct. 26, 1940	-5.28	Nov. 29, 1949	.29	Apr. 12, 1941	-4.40
Q1255	Oct. 12, 1911	-6.30	Nov. 3, 1947	12.03	May 12, 1914	-3.38
Q1256	Oct. 26, 1940	-6.98	Mar. 14, 1942	-1.89	May 31, 1949	-2.40
Q1266	Oct. 25, 1946	a -6.68	Sept. 23, 1947	a -2.63	Dec. 28, 1949	-2.63
Q1281	Oct. 11, 1911	-3.62	Mar. 7, 1942	8.59	June 4, 1913	-1.30
Q1282	Jan. 31, 1933	1.22	July 27, 1949	3.40	Jan. 7, 1949	2.30
Q1283	Oct. 12, 1911	1.75	Dec. 30, 1948	13.33	Nov. 10, 1911	2.66
Q1284	Oct. 12, 1911	4.67	Nov. 3, 1947	11.55	June 2, 1913	8.55
Q1285	Apr. 20, 1933	4.16	Dec. 28, 1949	8.05	May 31, 1941	4.16
Q1286	Apr. 20, 1933	8.05	Nov. 3, 1947	11.29	Apr. 26, 1941	8.39
Q1287	Apr. 20, 1933	10.85	Oct. 9, 1945	15.80	Oct. 5, 1934	10.89
Q1288	Apr. 20, 1933	15.58	Dec. 29, 1949	22.06	Oct. 5, 1934	15.58
Q1289	Apr. 20, 1933	30.10	Feb. 7, 1942	34.56	Nov. 8, 1934	30.52
Q1290	Apr. 20, 1933	13.61	Mar. 4, 1947	19.48	Oct. 5, 1934	15.03
S58	Apr. 14, 1944	a 22.39	Aug. 30, 1944	a 25.50	June 11, 1948	a22.80
			Oct. 27, 1947			
			Oct. 28, 1947			
S202	Nov. 25, 1936	a 36.93	Feb. 1, 1939	a 47.17	Apr. 10, 1937	41.13
S203	Nov. 13, 1936	70.59	Apr. 20, 1948	a 77.13	Oct. 31, 1939	74.40
S1803	Oct. 18, 1912	14.93	Oct. 25, 1941	18.19	Apr. 22, 1913	15.63
S1805	Oct. 16, 1912	37.90	Oct. 27, 1932	47.01	Apr. 8, 1939	39.90
S1806	Oct. 18, 1912	50.61	Jan. 5, 1933	61.89	Apr. 22, 1939	55.22
S1807	Oct. 19, 1912	20.59	Sept. 12, 1932	23.48	Oct. 14, 1938	21.16
S1808	Oct. 21, 1912	9.45	Sept. 12, 1932	12.94	Sept. 23, 1938	10.64
S1809	Oct. 21, 1912	25.00	Nov. 2, 1932	32.56	Apr. 15, 1939	28.29
S1810	Oct. 21, 1912	45.24	Feb. 23, 1933	56.19	Apr. 29, 1939	49.46
S1811	Feb. 28, 1937	51.41	Aug. 28, 1941	55.56	Apr. 20, 1940	53.18
S1812	Apr. 17, 1937	44.52	Feb. 5, 1948	51.09	May 27, 1939	46.02
S1813	Nov. 4, 1939	36.82	Oct. 30, 1947	39.64	June 15, 1940	37.50
S1814	Nov. 4, 1939	35.01	Feb. 14, 1942	38.96	July 29, 1948	35.65
S1815	Dec. 2, 1939	43.39	Apr. 1, 1947	47.81	June 29, 1940	44.69
S1816	Dec. 2, 1939	54.72	Mar. 3, 1947	59.93	June 1, 1940	55.41
S1817	Dec. 2, 1939	50.10	Oct. 27, 1947	53.95	June 1, 1940	50.87
S2314	Mar. 27, 1943	58.64	Oct. 27, 1947	61.68	May 25, 1949	59.89
S2454	Sept. 21, 1940	6.70	Oct. 4, 1941	9.32	Feb. 23, 1949	7.37
S2455	June 23, 1933	a 19.98	Nov. 6, 1937	a 24.85	Sept. 23, 1938	20.25
S3112	Aug. 30, 1941	51.65	Feb. 7, 1942	57.00	May 25, 1949	52.37
S3496	Nov. 2, 1942	45.97	Feb. 27, 1948	50.76	July 7, 1949	48.82
S3497	Nov. 2, 1942	45.43	Feb. 28, 1948	50.07	July 1, 1949	48.23
S3498	Sept. 11, 1942	43.28	Jan. 28, 1948	47.32	May 26, 1949	45.03
S3512	Apr. 24, 1942	65.68	Feb. 6, 1948	70.02	July 6, 1949	68.05
S3513	Apr. 24, 1942	a 59.86	Feb. 15, 1948	a 64.19	July 4, 1949	a62.23
			Feb. 21, 1948		July 5, 1949	
			Feb. 23, 1948			
S3514	May 15, 1942	a 65.06	Feb. 15, 1948	a 68.26	Sept. 28, 1949	a67.59
S3515	Mar. 5, 1907	31.01	Dec. 28, 1949	34.83	June 29, 1948	31.01
S3516	Mar. 5, 1907	35.76	Dec. 2, 1909	40.26	June 29, 1948	36.00
S3517	Apr. 2, 1907	11.60	Dec. 4, 1909	14.02	Mar. 28, 1949	12.50

* See footnotes at end of table.

Summary of data on ground-water levels on Long Island--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
S3518	Mar. 22, 1907	30.15	Oct. 27, 1947	33.60	June 29, 1948	30.16
S3519	Mar. 22, 1907	23.69	Dec. 3, 1909	27.20	June 29, 1948	24.42
S3521	Feb. 28, 1907	36.07	Apr. 2, 1947	38.93	Apr. 27, 1949	36.74
S3522	Feb. 6, 1907	19.11	Nov. 1, 1944	20.33	Jan. 26, 1949	19.28
S3524	Mar. 8, 1907	21.47	Dec. 30, 1943	23.57	Mar. 16, 1949	21.90
S3526	Jan. 30, 1943	e26.06	Mar. 31, 1944	e 30.52	Dec. 30, 1948	27.45
S3527	Mar. 7, 1907	31.28	Jan. 26, 1948	35.69	June 4, 1908	32.54
S3529	Mar. 8, 1907	24.07	Nov. 29, 1944	28.46	Apr. 13, 1949	25.16
S3530	Mar. 8, 1907	31.68	Nov. 29, 1944	35.22	May 24, 1949	32.59
S3531	Aug. 9, 1907	9.14	Dec. 11, 1909	10.64	July 2, 1948	9.69
					Apr. 13, 1949	
					Apr. 27, 1949	
S3532	Apr. 21, 1907	e45.80	Dec. 23, 1947	e 51.95	June 8, 1908	47.76
S3533	Apr. 4, 1907	e45.20	Oct. 29, 1947	e 49.86	June 8, 1908	46.51
S3534	June 9, 1907	e26.71	Dec. 31, 1942	e 32.53	July 30, 1948	28.84
S3535	Aug. 13, 1907	e18.15	Apr. 3, 1947	21.84	May 11, 1949	18.99
S3536	Apr. 10, 1907	22.83	Nov. 29, 1944	28.62	June 5, 1908	25.23
S3537	Jan. 11, 1908	14.46	Oct. 28, 1947	16.72	Mar. 28, 1949	14.86
S3538	Jan. 11, 1908	14.79	Nov. 30, 1942	18.20	May 23, 1949	16.00
S3539	Apr. 12, 1907	22.24	Apr. 3, 1947	26.72	June 5, 1908	24.17
S3540	Mar. 9, 1907	18.91	Apr. 3, 1947	23.02	May 8, 1908	20.22
S3541	Mar. 9, 1907	11.38	Nov. 30, 1942	14.25	Apr. 25, 1949	11.54
S3542	Apr. 12, 1907	18.55	Apr. 3, 1947	22.89	June 10, 1908	20.20
S3543	Mar. 18, 1907	15.64	Dec. 31, 1942	19.65	May 23, 1949	17.07
S3544	Mar. 18, 1907	10.27	Nov. 30, 1942	13.60	Mar. 28, 1949	10.83
S3545	Mar. 12, 1907	34.16	Apr. 4, 1947	38.41	Apr. 27, 1949	35.09
S3727	July 13, 1943	29.80	Oct. 30, 1947	33.67	Apr. 27, 1949	30.25
S3728	May 28, 1943	19.47	Apr. 3, 1947	23.67	Mar. 3, 1949	19.93
S3729	Sept. 10, 1943	27.34	Apr. 4, 1947	31.40	Apr. 27, 1949	29.23
					May 24, 1949	
S3730	Sept. 21, 1943	33.52	Feb. 6, 1948	37.67	May 24, 1949	34.93
S3731	May 28, 1943	22.43	Apr. 3, 1947	26.74	Apr. 27, 1949	23.88
S3732	Oct. 5, 1943	51.55	Jan. 9, 1948	57.38	Feb. 26, 1949	54.10
S3735	Oct. 1, 1943	63.02	Feb. 26, 1948	67.19	Aug. 25, 1949	66.83
S3736	July 19, 1943	41.72	Feb. 5, 1948	46.70	July 7, 1949	45.14
S3737	Aug. 17, 1943	54.35	Feb. 27, 1948	58.82	July 28, 1949	57.41
S3738	Aug. 19, 1943	53.99	Feb. 27, 1948	56.70	July 6, 1949	d58.70
S3739	July 20, 1943	26.41	Oct. 30, 1947	30.04	Mar. 28, 1949	26.65
S3760	Nov. 6, 1943	e25.17	Jan. 30, 1945	26.97	Jan. 12, 1949	d26.77
S3868	June 20, 1944	37.18	Mar. 1, 1945	40.13	Dec. 4, 1949	40.13
S3869	June 22, 1944	53.11	Jan. 28, 1948	57.24	July 5, 1949	55.67
S3870	June 16, 1944	53.06	Jan. 28, 1948	56.85	July 6, 1949	55.68
S3871	June 15, 1944	46.17	Feb. 26, 1948	50.19	July 26, 1949	48.69
S3955	May 31, 1944	52.28	Apr. 1, 1948	55.78	Aug. 25, 1949	55.33
S3956	May 31, 1944	30.67	Mar. 30, 1948	33.64	Aug. 25, 1949	33.17
S4134	Mar. 10, 1945	a11.35	Oct. 25, 1945	a13.83	Apr. 7, 1949	a12.01
S4268	Aug. 2, 1945	48.05	Feb. 26, 1948	50.57	Oct. 5, 1949	50.36
S4269	Aug. 2, 1945	12.78	Oct. 29, 1947	16.14	May 24, 1949	14.35
S4270	Aug. 1, 1945	51.19	Apr. 1, 1947	55.41	May 25, 1949	53.08
S4271	Aug. 2, 1945	a 9.24	Oct. 27, 1947	a11.41	June 2, 1949	a10.46
			Oct. 29, 1947		June 6, 1949	
S4367	Aug. 2, 1945	54.08	Apr. 1, 1948	57.91	Aug. 24, 1949	57.26
S4377	Aug. 1, 1945	59.64	Feb. 6, 1948	63.29	May 25, 1949	61.87
S4523	Aug. 2, 1945	e.25	Oct. 29, 1947	10.04	Jan. 31, 1949	8.99
S4524	Aug. 2, 1945	5.57	Oct. 29, 1947	8.61	Mar. 31, 1949	6.25
S4525	Oct. 4, 1945	16.76	Oct. 29, 1947	20.52	July 6, 1948	d20.32
S4526	Aug. 2, 1945	7.60	Oct. 29, 1947	10.55	May 24, 1949	8.90
S4529	Oct. 4, 1945	11.05	Oct. 29, 1947	13.14	May 24, 1949	12.32
S4530	Aug. 2, 1945	14.34	Oct. 3, 1947	18.38	Apr. 26, 1949	14.81
S4827	Dec. 4, 1946	55.11	May 4, 1948	58.16	Nov. 29, 1949	58.12
S4828	Dec. 4, 1946	66.30	May 4, 1948	69.42	Nov. 29, 1949	69.32
S4829	Sept. 30, 1946	37.13	Jan. 28, 1948	40.60	Aug. 24, 1949	39.76
S8912	Oct. 30, 1947	32.90	Jan. 27, 1948	35.61	Mar. 30, 1949	33.36

a From recorder graph.

b Previously listed incorrectly.

c Water levels affected by tidal fluctuation; extremes not determined as water levels were computed on different bases for period of record.

d No readings obtained during latter part of year.

e Adjusted to correct datum.

Net change in water level in wells on Long Island, 1949

Well No.	Net change (feet)	Well No.	Net change (feet)	Well No.	Net change (feet)	Well No.	Net change (feet)
K19 J	2.84	N1234	-0.73	Q1027 L	-0.55	S3519 *	-0.62
K30	3.21	N1240	-6.39	Q1089	.53	S3521	-.21
K65	2.85	N1244 M	1.34	Q1090	.14	S3522	-.21
K67	2.04	N1245 M	1.59	Q1152 J	-2.62	S3524	-.33
K92	4.23	N1246	1.62	Q1222 L	-1.21	S3526	-1.22
K97	3.45	N1247	.32	Q1223	.30	S3527	-1.75
K196	.59	N1249	-1.47	Q1225	-1.46	S3528	-1.10
K519 J	2.43	N1250	-1.45	Q1237 J	-4.69	S3530	-.59
K521 L	-.89	N1251	-1.65	Q1248	-.41	S3531	-.21
K523 J	-.12	N1252	-1.78	Q1249	-1.01	S3532	-.13
K525 J	-.27	N1253	-2.79	Q1250	-1.61	S3533	-.26
K539	1.00	N1255	-.83	Q1251	-3.46	S3534	.07
K889	2.09	N1256	.36	Q1252	-.56	S3535	-.96
K1057 L	-1.1	N1257	-1.70	Q1253	-.46	S3536	-.56
K1141	1.27	N1259	-1.17	Q1254	-2.26	S3537	-.26
K1194	.69	N1260	-2.25	Q1255	1.12	S3538	-.72
K1198	1.28	N1262	-.75	Q1266	2.65	S3539	-.26
K1199	3.12	N1263	-.86	Q1281	.21	S3540	-.39
K1235	2.66	N1264	-4.26	Q1282	2.14	S3541	-.64
K1236	3.83	N1265	(b)	Q1283	.91	S3542	-.51
K1237	4.34	N1269	(b)	Q1284	3.01	S3543	-.77
K1263	1.30	N1271	(b)	Q1285	-.30	S3544	-.69
K1264	1.78	N1273	(b)	Q1286	-.66	S3545	-1.00
K1265	2.20	N1275	(b)	Q1287	-1.70	S3727	-1.02
K1266	1.30	N1278	(b)	Q1288	-1.06	S3728	-1.12
K1296	.77	N1280	(b)	Q1289	-1.04	S3729	.26
K1347	1.85	N1282	(b)	Q1290	-1.66	S3730	-.65
K1479	(a)	N1285	(b)	S58 M	-.49	S3731	-.13
K1495	-.81	N1288	(b)	S202 L	.80	S3732	.15
K1591 J	.73	N1461 M	.16	S203 M	1.22	S3735	1.05
N7 L	-2.81	N1462	-.79	S1803	-.42	S3736	.11
N9 M	-.84	N1463	-2.07	S1805	-.75	S3737	.22
N53	-1.71	N1464	-2.82	S1806	-.04	S3738	(b)
N157 M	.89	N1613 M	-2.61	S1807	-.17	S3739	-.97
N180 M	-1.85	N1614	-.25	S1808	-.18	S3760	(b)
N511 L	-.74	N1615	-1.13	S1809	-1.07	S3868	.69
N575 M	-.87	N1616	.31	S1810	-.87	S3869	.56
N657 L	-.9	N1682	-.03	S1811	.50	S3870	.66
N844 M	.77	N1683	-.90	S1812	-.69	S3871	.02
N1102	1.45	N1684	-1.10	S1813	-.54	S3955	.50
N1103	1.23	N1828	-1.02	S1814	-1.00	S3956	.13
N1104	1.07	N1829	-.63	S1815	-1.06	S4134 M	-.76
N1105	.64	N1830	.11	S1816	-.87	S4268	.60
N1107	-.42	N2052 M	-.16	S1817	-.54	S4269	-.30
N1108	-1.66	N2071 L	.05	S2314 M	.05	S4270	-.70
N1109	-1.80	N2400 M	1.54	S2454	-.01	S4271	-.34
N1110	-1.05	N2528 M	.23	S2455	-.95	S4367	.20
N1111	.36	N2602 L	(a)	S3112	-.99	S4377	.20
N1112	-.92	N2635 M	-.78	S3496	-.47	S4523	-.19
N1126	.42	Q64 L	7.56	S3497	-.14	S4524	-.49
N1132	-1.40	Q273 L	-1.00	S3498	-.11	S4525	(b)
N1140	-.18	Q278 L	-3.23	S3512	1.17	S4526	-.29
N1147	-1.46	Q282 L	-2.39	S3513	.16	S4529	-.32
N1160	-.99	Q283 L	-2.37	S3514	-.03	S4530	-.77
N1167	-1.63	Q287 L	-1.2	S3515	-1.02	S4827	1.31
N1185	-1.64	Q350 J	-.16	S3516	-1.13	S4828 M	1.41
N1204	-4.61	Q470 L	-2.64	S3517	-.17	S4829	.08
N1212 M	1.20	Q471 M	-.83	S3518	-.85	S8912	-.45
N1222	-4.53	Q543 L	-.6				

a No reading latter part of 1949.

b No reading latter part of 1948.

NOTE: Most of above wells screened in upper Pleistocene formations except those indicated by J (Jameco), L (Lloyd), and M (Magothy).

WELL-NUMBERING SYSTEM

Observation wells on Long Island are listed alphabetically by counties and numerically within each county.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

Kings County

(Unless otherwise indicated, all measurements in Kings County are below mean sea level.)

KL9. Formerly Kew Pacific Garage. Dean St. and Fifth Ave., Brooklyn. Records available: 1940-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.66	16.08	15.57	15.22	14.88	14.73	14.86	14.86	15.09	15.01	14.65	14.35
2	16.68	16.10	15.66	15.22	14.87	14.76	14.77	14.91	15.16	14.92	14.63	14.35
3	16.72	16.06	15.70	15.14	14.93	14.77	14.67	14.92	15.11	14.85	14.63	14.35
4	16.74	15.97	15.64	15.11	14.95	14.72	14.60	14.93	14.99	14.85	14.62	14.25
5	16.63	15.99	15.49	15.18	14.92	14.64	14.65	14.95	14.89	14.86	14.64	14.19
6	16.57	15.95	15.43	15.11	14.91	14.63	14.76	14.93	14.91	14.90	14.58	14.23
7	16.59	15.87	15.46	15.19	14.88	14.72	14.80	14.86	15.00	14.87	14.53	14.15
8	16.58	15.95	15.47	15.14	14.87	14.79	14.83	14.84	14.98	14.85	14.54	14.16
9	16.51	15.93	15.44	15.15	14.84	14.83	14.77	14.90	15.02	14.77	14.60	14.16
10	16.46	15.92	15.41	15.12	14.88	14.82	14.67	14.96	15.04	14.75	14.57	14.10
11	16.47	15.96	15.37	15.07	14.92	14.72	14.68	14.99	15.00	14.82	14.55	14.00
12	16.42	15.94	15.36	15.11	14.89	14.65	14.75	15.00	14.96	14.83	14.60	13.93
13	16.42	15.80	15.33	15.06	14.91	14.66	14.75	.....	14.96	14.90	14.49	13.94
14	16.42	15.78	15.32	15.07	14.85	14.74	14.79	.....	14.99	14.89	14.43	14.04
15	16.46	15.79	15.32	15.10	14.82	14.77	14.82	.....	15.01	14.83	14.49	14.06
16	16.32	15.84	15.35	15.09	14.84	14.79	14.79	.....	15.01	14.78	14.51	14.08
17	16.28	15.86	15.33	15.07	14.87	14.78	14.73	.....	15.01	14.76	14.48	14.05
18	16.35	15.88	15.30	15.05	14.88	14.73	14.73	.....	14.91	14.77	14.48	13.96
19	16.30	15.79	15.35	15.07	14.86	14.66	14.82	.....	14.88	14.77	14.47	13.93
20	16.37	15.11	15.29	15.11	14.87	14.64	14.86	.....	14.98	14.78	14.38	14.00
21	a16.34	15.74	15.21	15.08	14.91	14.69	14.89	.....	15.04	14.78	14.40	13.97
22	.....	15.70	15.22	15.04	14.80	14.72	14.90	.....	15.02	14.73	14.45	13.95
23	.....	15.71	15.23	14.98	14.76	14.78	14.89	.....	15.00	14.71	14.41	13.97
24	.....	15.73	15.36	14.95	14.83	14.78	14.85	.....	15.01	14.68	14.38	14.04
25	.....	15.66	15.36	15.01	14.84	14.73	14.81	.....	14.97	14.71	14.27	13.97
26	16.15	15.66	15.29	14.98	14.85	14.67	14.90	.....	14.96	14.69	14.37	13.82
27	16.16	15.59	15.18	14.97	14.83	14.70	14.92	.....	14.95	14.77	14.32	13.77
28	16.09	15.49	15.22	15.01	14.81	14.82	14.93	.....	14.90	14.73	14.31	13.88
29	16.16		15.32	15.01	14.74	14.85	14.92	14.92	14.92	14.68	14.28	13.90
30	16.14		15.27	14.94	14.68	14.86	14.87	15.05	14.98	14.59	14.30	13.93
31	15.99		15.23		14.67		14.84	15.06		14.54		13.84

a Tape measurement.

K30. Detecto Scales Inc. Formerly C. J. Tagliabue Manufacturing Co. Park and Nostrand Ave. Records available: 1935-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.50	23.09	22.68	22.28	21.91	21.53	21.34	20.98	20.79	20.74	20.55	20.46
2	23.52	23.10	22.72	22.29	21.88	21.53	21.33	20.97	20.84	20.75	20.55	20.50
3	23.51	23.09	22.73	22.28	21.86	21.54	21.30	20.97	20.86	20.71	20.55	20.52
4	23.51	23.03	22.73	22.24	21.87	21.53	21.25	20.97	20.83	20.67	20.55	20.52
5	23.46	23.07	22.69	22.24	21.85	21.50	21.22	20.97	20.78	20.64	20.57	20.45
6	23.42	23.07	22.65	22.18	21.83	21.46	21.21	20.97	20.74	20.65	20.58	20.41
7	23.43	22.99	22.65	22.21	21.82	21.45	21.22	20.95	20.74	20.66	20.54	20.40
8	23.44	23.02	22.63	22.21	21.82	21.48	21.25	20.92	20.73	20.67	20.51	20.43
9	23.43	22.98	22.61	22.21	21.79	21.52	21.26	20.89	20.74	20.66	20.53	20.49
10	23.39	22.99	22.59	22.21	21.77	21.50	21.22	20.89	20.77	20.63	20.56	20.52
11	23.37	23.02	22.57	22.17	21.78	21.47	21.19	20.89	20.78	20.61	20.55	20.50

K30--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	23.33	23.04	22.57	22.14	21.77	21.43	21.17	20.89	20.76	20.60	20.57	20.44
13	23.33	22.95	22.56	22.11	21.78	21.41	21.15	20.89	20.72	20.63	20.57	20.39
14	23.33	22.93	22.54	22.10	21.78	21.40	21.15	20.89	20.70	20.66	20.49	20.40
15	23.38	22.89	22.51	22.11	21.76	21.40	21.17	20.87	20.70	20.65	20.48	20.40
16	23.30	22.92	22.51	22.10	21.74	21.40	21.18	20.86	20.70	20.64	20.49	20.41
17	23.27	22.93	22.50	22.10	21.72	21.40	21.17	20.85	20.71	20.62	20.50	20.42
18	23.29	22.97	22.48	22.09	21.70	21.40	21.13	20.83	20.71	20.60	20.51	20.40
19	23.24	22.93	22.53	22.06	21.67	21.38	21.11	20.83	20.67	20.58	20.53	20.35
20	23.30	22.87	22.53	22.04	21.67	21.35	21.10	20.87	20.65	20.58	20.50	20.34
21	23.30	22.87	22.47	22.03	21.70	21.32	21.10	20.87	20.68	20.59	20.49	20.33
22	23.24	22.83	22.43	22.01	21.68	21.30	21.11	20.83	20.69	20.59	20.49	20.31
23	23.23	22.80	22.40	21.99	21.64	21.32	21.11	20.81	20.67	20.59	20.50	20.31
24	23.17	22.82	22.42	21.97	21.62	21.34	21.11	20.80	20.69	20.58	20.50	20.40
25	23.17	22.78	22.42	21.98	21.62	21.34	21.07	20.81	20.72	20.58	20.47	20.44
26	23.16	22.72	22.39	21.95	21.62	21.31	21.05	20.82	20.72	20.57	20.47	20.35
27	23.14	22.77	22.35	21.92	21.61	21.28	21.04	20.81	20.69	20.60	20.49	20.25
28	23.11	22.71	22.33	21.94	21.61	21.29	21.03	20.79	20.66	20.62	20.49	20.24
29	23.15		22.33	21.96	21.60	21.31	21.03	20.76	20.64	20.61	20.46	20.25
30	23.16		22.31	21.94	21.57	21.33	21.02	20.77	20.67	20.58	20.43	20.29
31	23.06		22.29		21.54		21.00	20.78		20.53		20.30

K65. A Ludwig Co. well 2. At 123 Middleton St. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	22.17	Apr. 28	21.18	July 28	20.50	Oct. 31	19.90
Feb. 21	22.00	June 1	20.78	Aug. 31	20.33	Nov. 28	19.89
Apr. 5	21.42	30	20.74	Sept. 28	20.15	Dec. 28	19.61

K67. Young Mens' Christian Association. 179 Marcy Ave. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	17.82	Apr. 28	17.18	July 28	17.06	Oct. 31	16.29
Feb. 21	17.65	June 1	16.97	Aug. 31	16.98	Nov. 28	16.15
Apr. 5	17.32	30	17.15	Sept. 28	16.54	Dec. 28	16.00

K92. St. John's University. 75 Lewis Ave. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	18.15	Apr. 28	16.48	July 28	16.00	Oct. 31	15.35
Feb. 21	17.52	June 1	16.23	Aug. 31	15.78	Nov. 28	14.89
Apr. 5	16.79	30	16.17	Sept. 28	15.52	Dec. 28	14.45

K97. Formerly Colony Foods. Grand and Lexington Ave. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	18.88	Apr. 28	17.45	July 28	16.49	Oct. 31	16.16
Feb. 21	18.56	June 1	17.00	Aug. 31	16.37	Nov. 28	16.08
Apr. 4	17.79	July 1	16.77	Sept. 28	16.23	Dec. 28	15.84

K196. Knickerbocker Ice Co. well 1. Twelfth Ave. and 37th St. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 4	4.30	June 16	4.73	Sept. 1	4.42	Nov. 17	4.22
18	4.34	30	4.49	20	4.40	30	4.19
28	4.40	July 14	4.54	29	4.39	Dec. 15	4.08
May 12	4.48	28	4.49	Oct. 17	4.24	27	4.14
June 1	4.51	Aug. 19	4.49	Nov. 1	4.23		

K519. New York Water Service Corp. 543-545 Troy Ave. Records available: 1947-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.14	5.94	5.45	5.02	4.67	4.44	4.34	4.15	4.11	4.12	3.93	3.83
2	6.24	5.97	5.57	5.06	....	4.46	4.29	4.17	4.21	4.08	3.89	3.83
3	6.31	5.93	5.58	....	....	4.46	4.22	4.17	4.17	4.02	3.89	3.86
4	6.34	5.81	5.51	....	....	4.41	4.18	4.16	4.09	3.99	3.86	3.81
5	6.22	5.85	5.58	....	....	4.34	4.17	4.15	4.01	3.97	3.93	3.70
6	6.12	5.85	5.55	4.90	....	4.33	4.23	4.14	4.01	4.01	3.91	3.73
7	....	5.73	5.43	5.01	4.63	4.37	4.25	4.11	4.08	4.01	3.85	3.70
8	6.23	5.82	5.42	4.94	4.65	4.45	4.29	4.08	4.03	3.99	3.84	3.78
9	6.23	5.76	5.36	4.96	4.60	4.49	4.27	4.09	4.06	3.94	3.91	3.84
10	6.19	5.76	5.33	4.97	4.62	4.47	4.18	4.13	4.11	3.91	3.89	3.85
11	6.17	5.83	5.28	4.91	4.65	4.37	4.17	4.14	4.11	3.95	3.85	3.78
12	6.11	5.82	5.28	4.91	4.61	4.33	4.20	4.13	4.08	3.93	3.93	3.72
13	6.11	5.67	5.27	4.84	4.62	4.34	4.18	4.11	4.03	4.00	3.84	3.69
14	6.12	5.66	5.28	4.84	4.59	4.38	4.20	4.11	4.03	4.01	3.76	3.74
15	6.24	5.64	5.25	4.85	4.59	4.39	4.21	4.10	4.03	3.95	3.83	3.75
16	6.10	5.71	5.29	4.84	4.59	4.38	4.20	4.13	4.02	3.94	3.86	3.76
17	6.04	5.72	5.26	4.85	4.60	4.37	4.17	4.12	4.03	3.95	3.82	3.77
18	6.14	5.76	5.22	4.85	4.59	4.34	4.15	4.06	3.98	3.93	3.83	3.69
19	6.05	5.66	5.32	4.83	4.54	4.30	4.18	4.09	3.92	3.93	3.83	3.64
20	6.16	5.59	5.31	4.87	4.54	4.28	4.20	4.14	3.95	3.94	3.75	3.70
21	6.12	5.68	5.21	4.85	4.60	4.28	4.21	4.13	4.01	3.93	3.80	3.67
22	6.02	5.61	5.17	4.80	4.50	4.29	4.21	4.10	4.02	3.90	3.87	3.64
23	6.04	5.59	5.14	4.75	4.45	4.34	4.21	4.10	4.05	3.92	3.82	3.66
24	5.93	5.62	5.23	4.74	4.51	4.34	4.21	4.10	4.04	3.91	3.80	3.79
25	6.02	5.53	5.20	4.83	4.51	4.30	4.15	4.16	4.04	3.97	3.68	3.79
26	5.99	5.55	5.11	4.76	4.51	4.25	4.20	4.15	4.05	3.90	3.80	3.65
27	5.96	5.51	5.03	4.73	4.49	4.25	4.20	4.11	4.03	4.02	3.80	3.56
28	5.88	5.37	5.07	4.77	4.49	4.34	4.19	4.07	3.96	3.99	3.82	3.66
29	5.99		5.15	4.79	4.45	4.36	4.17	4.01	3.96	3.93	3.74	3.68
30	6.05		5.07	4.71	4.43	4.35	4.13	4.13	4.04	3.86	3.75	3.74
31	5.86		5.03		4.41		4.12	4.12		3.78		3.70

K521. New York Water Service Corp. 1065 Utica Ave. Records available: 1947-49.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.93	4.67	5.26	4.68	4.60	4.78	4.45	....	4.45	4.38	4.70	5.60
2	5.69	4.42	4.95	4.67	4.67	4.75	....	....	4.29	4.37	4.87	5.56
3	5.50	4.32	4.88	4.70	4.70	4.72	....	....	4.29	4.46	4.88	5.49
4	5.28	4.58	4.80	4.74	4.64	4.73	....	....	4.36	4.49	4.82	....
5	5.22	4.68	4.92	4.71	4.64	....	....	a4.31	4.44	....	4.68	....
6	5.23	4.73	5.01	5.03	4.68	....	....	....	4.47	....	4.62	5.52
7	4.96	4.93	4.91	4.84	4.77	....	....	....	4.38	....	4.69	5.53
8	4.72	4.81	4.97	4.76	4.79	....	....	....	4.50	a4.47	4.69	5.58
9	4.70	4.78	5.08	4.67	4.85	....	....	....	4.46	....	4.55	5.19
10	4.72	4.81	5.11	4.58	4.88	4.65	....	....	4.29	....	4.57	5.14
11	4.69	4.84	5.32	4.63	4.88	4.71	....	....	4.26	....	4.62	5.25
12	4.82	4.86	5.14	4.65	5.00	4.70	....	4.35	4.35	....	4.58	5.37
13	4.83	5.01	4.81	4.76	5.01	4.68	....	4.45	4.50	....	4.82	5.36
14	4.77	4.99	4.69	4.86	4.97	4.66	....	4.55	4.57	....	....	5.24
15	4.65	5.12	4.79	4.89	4.91	4.63	....	4.56	4.57	4.60	....	5.25
16	4.79	5.03	4.74	4.93	4.89	4.61	....	4.50	4.55	4.67	....	5.28
17	4.87	4.87	4.67	4.77	4.83	4.62	....	4.51	4.51	4.81	....	5.31
18	4.73	4.58	4.69	4.73	4.76	4.63	....	4.57	4.55	4.87	....	5.38
19	4.88	4.63	4.57	4.88	4.77	4.64	....	4.59	4.61	4.98	5.45	5.44
20	4.64	4.74	4.42	4.76	4.79	4.64	....	4.49	4.52	5.01	5.54	5.39
21	4.62	4.68	4.47	4.63	4.86	4.67	....	4.35	4.44	5.03	5.47	5.47
22	4.85	4.87	4.50	4.60	4.99	4.66	....	4.32	4.51	5.02	5.39	5.52
23	4.65	4.95	4.66	4.71	5.09	4.57	....	4.33	4.60	4.90	5.45	5.52

a Tape measurement.

K521--Continued.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
24	4.74	4.64	4.58	4.72	5.00	4.53	....	4.34	4.50	4.81	5.36	5.29
25	4.65	5.01	4.58	4.61	4.99	4.56	....	4.31	4.37	4.72	5.64	5.19
26	4.73	4.95	4.65	4.65	4.97	4.60	....	4.33	4.38	4.84	5.62	5.37
27	4.83	4.92	4.79	4.65	4.98	4.60	....	4.32	4.45	4.59	5.62	5.52
28	5.05	5.22	4.78	4.59	4.95	4.60	....	4.38	4.60	4.52	5.60	5.36
29	4.91		4.64	4.54	4.90	4.58	a4.25	4.53	4.68	4.54	5.75	5.20
30	4.60		4.61	4.57	4.85	4.51	....	4.41	4.58	4.62	5.75	5.00
31	4.72		4.64		4.82		....	4.41		4.84		5.05

K523. New York Water Service Corp. 267 Newkirk Ave. Records available: 1944-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.50	3.61	3.53	3.56	3.48	3.35	3.21	3.06	2.99	2.88
2	3.47	3.58	3.54	3.55	3.49	3.34	3.19	3.05	2.99	2.88
3	3.47	3.57	3.54	3.55	3.50	3.33	3.19	3.06	3.00	2.86
4	3.47	3.58	3.52	3.57	3.50	3.33	3.19	3.07	2.99	2.88
5	a3.26	3.51	3.56	3.54	3.60	3.50	3.32	3.20	3.08	2.96	2.90
6	3.52	3.62	3.56	3.60	3.49	3.32	3.19	3.05	2.96	2.89
7	3.49	3.58	3.56	3.59	3.47	3.31	3.18	3.05	2.97	2.91
8	a2.96	....	3.50	3.59	3.53	3.55	3.45	3.32	3.20	3.05	2.97	2.86
9	3.53	3.57	3.55	3.53	3.44	3.32	3.17	3.07	2.95	2.84
10	3.54	3.54	3.55	3.53	3.46	3.31	3.15	3.07	2.95	2.84
11	3.56	3.55	3.53	3.55	3.45	3.30	3.15	3.06	2.96	2.85
12	a3.29	3.56	3.56	3.54	3.56	3.45	3.29	3.15	3.06	2.93	2.87
13	3.56	3.60	3.53	3.54	3.47	3.28	3.17	3.04	2.96	2.87
14	3.55	3.61	3.54	3.53	3.46	3.27	3.17	3.04	2.98	2.85
15	a3.02	....	3.57	3.60	3.53	3.53	3.44	3.27	3.17	3.05	2.96	2.84
16	3.56	3.59	3.53	3.52	3.42	3.26	3.16	3.03	2.94	2.83
17	3.57	3.56	3.53	3.53	3.42	3.27	3.15	3.02	2.94	2.83
18	3.58	3.54	3.55	....	3.42	3.31	3.15	3.03	2.93	2.85
19	a3.42	3.53	3.55	3.58	....	3.42	3.29	3.16	3.03	2.93	2.86
20	3.50	3.53	3.59	3.55	....	3.26	3.14	3.02	2.96	2.84
21	3.54	3.53	3.55	3.57	....	3.25	3.13	3.02	2.92	2.85
22	a3.12	....	3.57	3.56	3.57	3.58	3.40	3.24	3.14	3.02	2.91	2.86
23	3.59	3.58	3.59	3.55	3.39	3.24	3.14	3.00	2.93	2.85
24	3.56	3.58	3.58	3.53	3.38	3.24	3.11	2.99	2.92	2.80
25	3.56	3.52	3.58	3.54	3.40	3.23	3.09	2.98	2.96	2.79
26	3.45	3.58	3.55	3.57	3.54	3.38	3.23	3.09	3.00	2.91	2.84
27	3.46	3.61	3.57	3.58	3.53	3.38	3.24	3.10	2.97	2.89	2.87
28	3.50	3.59	3.53	3.57	3.49	3.38	3.23	3.14	2.98	2.89	2.84
29	a3.20	....	3.56	3.51	3.56	3.48	3.37	3.25	3.13	2.99	2.93	2.83
30	3.58	3.53	3.56	3.48	3.37	3.22	3.08	3.00	2.91	2.80
31	3.60	....	3.57	....	3.36	3.22	....	3.03	....	2.79

a Tape measurement.

K525. New York Water Service Corp. 363 Dahill Road. Records available: 1945-49.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.71	4.94	5.19	5.32	5.28	5.29	5.19	5.06	4.91	4.73	4.63	....
2	4.66	4.93	5.16	5.29	5.29	5.28	5.20	5.04	4.88	4.73	4.64	....
3	4.63	4.95	5.16	5.30	5.28	5.28	5.22	5.04	4.88	4.74	4.63	a4.48
4	4.62	4.99	5.17	5.31	5.27	5.31	5.22	5.03	4.89	4.75	4.63	....
5	4.69	4.98	5.22	5.29	5.29	5.34	5.22	5.02	4.90	4.75	4.60	....
6	4.74	4.97	5.22	5.34	5.31	5.35	5.20	5.02	4.88	4.73	4.60	....
7	4.73	5.01	5.18	5.31	5.31	5.32	5.18	5.01	4.87	4.72	4.61	....
8	4.72	5.00	5.20	5.33	5.28	5.27	5.16	5.02	4.89	4.72	4.61	....
9	4.71	5.03	5.23	5.30	5.30	5.23	5.16	5.02	4.87	4.72	4.58	....

a Tape measurement.

K525--Continued.

Daily mean water level, above mean sea level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	4.73	5.04	5.24	5.26	5.29	5.25	5.19	5.01	4.85	4.72	4.59	4.46
11	4.75	5.00	5.26	5.28	5.27	5.29	5.17	5.00	4.83	4.71	4.60	...
12	4.78	5.01	5.25	5.29	5.28	5.29	5.17	5.00	4.83	4.72	4.56	...
13	4.79	5.06	5.25	5.33	5.27	5.29	5.19	5.00	4.86	4.69	4.58	4.49
14	4.79	5.06	5.24	5.33	5.28	5.26	5.17	4.98	4.86	4.69	4.60	4.48
15	4.76	5.08	5.26	5.33	5.26	5.25	5.15	4.98	4.85	4.69	4.58	4.47
16	4.81	5.07	5.25	5.33	5.26	5.25	5.14	4.97	4.84	4.67	4.55	4.46
17	4.82	5.07	5.27	5.30	5.27	5.26	5.14	4.98	4.82	4.66	4.56	4.46
18	4.81	5.06	5.28	5.29	5.28	5.26	5.14	5.02	4.83	4.67	4.55	4.49
19	4.84	5.10	5.22	5.29	5.32	5.27	5.13	5.01	4.84	4.66	4.55	4.50
20	4.80	5.12	5.20	5.27	5.32	5.28	5.13	4.96	4.82	4.66	4.57	4.48
21	4.83	5.09	5.23	5.28	5.28	5.30	5.12	4.95	4.80	4.65	4.53	4.50
22	4.86	5.13	5.27	5.31	5.31	5.31	5.12	4.95	4.82	4.67	4.52	4.52
23	4.86	5.13	5.29	5.34	5.32	5.27	5.10	4.95	4.83	4.65	4.54	4.50
24	4.90	5.13	5.25	5.33	5.32	5.26	5.10	4.94	4.78	4.63	4.53	4.44
25	4.88	5.16	5.26	5.28	5.31	5.27	5.12	4.92	4.77	4.63	4.58	4.43
26	4.90	5.15	5.29	5.31	5.31	5.27	5.09	4.93	4.76	4.66	4.52	4.49
27	4.91	5.16	5.32	5.32	5.31	5.25	5.09	4.94	4.77	4.61	....	4.52
28	4.95	5.21	5.30	5.28	5.30	5.22	5.09	4.93	4.81	4.62	....	4.50
29	4.91		5.28	5.26	5.30	5.21	5.09	4.95	4.80	4.64	....	....
30	4.88		5.29	5.28	5.30	5.20	5.09	4.91	4.76	4.65	....	4.44
31	4.95		5.31		5.30		5.08	4.92		4.68		4.44

a Tape measurement.

K539. New York City Department of Water Supply, Gas and Electricity. Atlantic Ave. and Logan St. Records available: 1932-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	1.41	Apr. 27	0.86	July 28	0.55	Oct. 31	0.58
Feb. 23	1.20	May 31	.68	Aug. 31	.51	Nov. 28	.68
Apr. 4	.96	June 30	.57	Sept. 28	.50	Dec. 27	.66

K889. Finest Steam Laundry. 199 Bogard St. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	27.47	Apr. 28	26.14	July 28	25.72	Oct. 31	25.53
Feb. 23	27.08	June 1	26.02	Aug. 31	25.62	Nov. 28	25.76
Apr. 5	26.39	30	25.89	Sept. 28	25.59	Dec. 28	25.78

K1057. U. S. Navy, Floyd Bennett Airport, Barren Island. Records available: 1939-42, 1944-49.

Daily mean water level, above mean sea level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.3	8.8	9.6	9.6	9.4	9.5	8.3	7.6	7.3	7.2	8.2	8.6
2	8.9	8.5	9.4	9.6	9.4	9.4	8.3	7.6	7.0	7.3	8.7	8.5
3	8.9	8.6	9.4	9.5	9.4	9.3	8.3	7.6	7.0	7.5	8.4	8.4
4	8.9	9.2	9.3	9.6	9.3	9.3	8.3	7.5	7.2	7.5	8.4	8.8
5	9.1	9.3	9.5	9.6	9.4	9.5	8.3	7.4	7.3	7.5	8.1	8.7
6	9.3	9.3	9.6	10.1	9.5	9.6	8.4	7.4	7.3	7.6	8.2	8.3
7	9.0	9.5	9.5	9.5	9.7	9.6	8.4	7.4	7.2	7.7	8.3	8.5
8	8.9	9.1	9.8	9.6	9.6	9.3	8.3	7.4	7.5	7.7	8.3	8.3
9	8.9	9.2	9.6	9.5	9.7	9.1	8.2	7.4	7.3	7.8	8.1	8.1
10	8.9	9.3	9.8	9.4	9.8	...	8.4	7.4	7.0	7.8	8.3	8.1
11	8.9	9.4	10.1	9.4	9.9	9.1	8.2	7.4	7.1	7.9	8.3	8.3
12	9.2	9.4	9.4	9.5	10.0	9.1	8.2	7.4	7.3	7.9	8.4	8.4
13	9.1	9.4	9.0	9.7	9.8	9.1	8.3	7.5	7.4	7.7	8.6	8.3
14	9.1	9.4	9.3	9.9	9.6	9.1	8.3	7.6	7.4	7.8	8.7	8.3
15	9.0	9.6	9.5	9.8	9.5	...	8.2	7.5	7.3	7.9	8.5	8.4
16	9.2	9.5	9.2	9.8	9.6	9.0	8.1	7.4	7.3	8.2	8.5	8.4
17	9.3	9.2	9.1	...	9.4	9.0	8.1	7.4	7.2	8.3	8.6	8.4
18	9.0	8.8	9.3	...	9.4	8.9	8.0	7.5	7.2	8.3	8.5	8.4

K1057--Continued.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19	9.4	9.0	9.1	...	9.5	8.9	7.9	7.6	7.4	8.5	8.4	8.6
20	8.7	9.3	8.8	...	9.8	8.9	7.8	7.4	7.4	8.4	8.5	8.6
21	9.1	9.3	8.9	...	9.8	8.9	7.7	7.1	7.2	8.4	8.4	8.7
22	9.1	9.4	9.1	...	9.8	9.0	7.8	7.1	7.4	8.3	8.3	8.7
23	8.8	9.4	9.4	...	9.8	8.8	7.6	7.3	7.6	8.0	8.5	8.7
24	9.1	9.3	9.3	9.7	9.7	8.8	7.6	7.3	7.2	8.0	8.2	8.3
25	9.0	9.7	9.2	9.4	9.8	8.8	7.7	7.3	7.2	8.0	9.0	8.2
26	9.3	9.4	9.6	9.4	9.7	8.7	7.8	7.1	7.3	8.2	8.7	8.5
27	9.3	9.5	9.6	9.5	9.7	8.8	7.7	7.2	7.5	7.7	8.7	8.6
28	9.7	10.0	9.6	9.4	9.7	8.8	7.7	7.3	7.8	7.8	8.6	8.3
29	9.1		9.3	9.3	9.5	8.6	7.7	7.5	7.8	7.9	9.0	8.0
30	8.7		9.4	9.2	9.5	8.4	7.7	7.3	7.5	8.2	8.8	7.9
31	9.2		9.6		9.5		7.7	7.4		8.5		8.5

K1141. New York City Department of Water Supply, Gas and Electricity.
Former Canarsie pumping station well 17. Avenue D and Remsen Ave. Records
available: 1936-41, 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	0.26	Apr. 18	0.08	July 14	0.54	Oct. 17	0.13
26	.08	28	.18	28	.43	Nov. 1	.18
Feb. 16	.16	May 12	.44	Aug. 19	.43	17	.32
23	.19	June 1	.63	Sept. 1	.30	30	.29
Mar. 2	.19	16	.66	20	.26	Dec. 15	.26
21	.17	30	.57	29	.25	27	.34
Apr. 4	.08						

K1194. New York City Department of Water Supply, Gas and Electricity.
Atlantic and Nichols Aves. Records available: 1940-43, 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	1.75	Apr. 27	1.27	July 28	1.29	Oct. 31	1.37
Feb. 23	1.55	May 31	1.09	Aug. 31	1.31	Nov. 28	1.34
Apr. 4	1.37	June 30	1.17	Sept. 28	1.32	Dec. 27	1.32

K1198. New York City Department of Water Supply, Gas and Electricity.
Cleveland and Fulton Sts. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	2.55	Apr. 27	1.80	July 28	1.20	Oct. 31	1.28
Feb. 23	2.23	May 31	1.50	Aug. 31	1.13	Nov. 28	1.16
Apr. 4	1.97	June 30	1.29	Sept. 28	1.14	Dec. 27	1.37

K1199. New York City Department of Water Supply, Gas and Electricity.
Jefferson and Howard Aves. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	10.57	Apr. 28	9.10	July 28	8.32	Oct. 31	7.99
Feb. 23	10.20	June 1	8.78	Aug. 31	8.16	Nov. 28	7.68
Apr. 4	9.50	30	8.52	Sept. 28	8.02	Dec. 28	7.58

K1235. New York City Department of Water Supply, Gas and Electricity.
Fulton St. and Pennsylvania Ave. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	4.26	Apr. 27	3.54	July 28	3.19	Oct. 31	2.57
Feb. 23	4.17	May 31	3.17	Aug. 31	3.04	Nov. 28	2.85
Apr. 4	4.11	June 30	3.08	Sept. 28	2.58	Dec. 27	2.16

K1236. New York City Department of Water Supply, Gas and Electricity.
Lexington and Patchen Aves. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	13.57	Apr. 28	12.09	July 28	11.41	Oct. 31	10.69
Feb. 23	13.19	June 1	11.99	Aug. 31	11.21	Nov. 28	10.11
Apr. 4	12.57	30	11.44	Sept. 28	10.90	Dec. 28	9.89

Kl237. New York City Department of Water Supply, Gas and Electricity.
Delmonico Place and Hopkins St. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	30.24	Apr. 28	28.60	July 28	27.38	Oct. 31	27.37
Feb. 21	29.95	June 1	28.15	Aug. 31	27.25	Nov. 28	27.13
Apr. 5	29.10	30	27.83	Sept. 28	27.27	Dec. 28	26.39

Kl263. New York City Department of Water Supply, Gas and Electricity.
East 16th St. and Cortelyou Road. Records available: 1933-36, 1941-49.

Jan. 14	1.01	Apr. 18	2.27	July 14	2.23	Oct. 17	2.02
26	1.11	28	2.01	28	2.17	Nov. 1	2.08
Feb. 15	1.41	May 12	2.15	Aug. 19	2.23	17	2.12
23	1.46	June 1	2.19	Sept. 1	2.17	30	2.09
Mar. 2	1.52	16	2.21	20	2.14	Dec. 15	1.96
21	1.71	30	2.17	29	2.16	27	2.01
Apr. 4	1.89						

Kl264. New York City Department of Water Supply, Gas and Electricity.
East 37th St. and Snyder Ave. Records available: 1933-35, 1941-49.

Jan. 14	1.87	Apr. 18	0.74	July 14	0.21	Oct. 17	0.34
26	1.82	28	.61	28	.23	Nov. 1	.31
Feb. 15	1.64	May 12	.51	Aug. 19	.22	17	.22
23	1.36	June 1	.40	Sept. 1	.27	30	.20
Mar. 2	1.08	16	.32	20	.28	Dec. 15	.27
21	.85	30	.30	29	.28	27	.30
Apr. 4	.96						

Kl265. New York City Department of Water Supply, Gas and Electricity.
Riverdale Ave. and Thatford St. Records available: 1933-35, 1941-49.

Jan. 14	3.18	Apr. 4	2.44	July 14	1.99	Oct. 17	1.77
26	2.85	18	2.41	28	1.96	Nov. 1	1.88
Feb. 16	2.76	27	2.40	Aug. 19	1.94	17	1.69
23	2.65	June 1	2.20	Sept. 1	1.94	30	1.54
Mar. 2	2.63	16	2.09	20	1.90	Dec. 15	1.00
21	2.16	30	2.02	29	1.88	27	.93

Kl266. New York City Department of Water Supply, Gas and Electricity.
Vermont St. and Livonia Ave. Records available: 1933-37, 1941-49.

Jan. 26	1.96	Apr. 27	1.63	July 28	0.68	Oct. 31	0.89
Feb. 23	1.89	June 1	1.07	Aug. 31	.59	Nov. 28	.65
Apr. 4	1.83	30	.75	Sept. 28	.58	Dec. 27	.76

Kl296. New York City Department of Water Supply, Gas and Electricity.
Black Ave. and Crystal St. Records available: 1941-49.

Jan. 26	0.19	Apr. 27	0.47	Aug. 2	0.55	Oct. 31	0.54
Feb. 23	.34	May 31	.75	31	.68	Nov. 28	.47
Apr. 18	.41	June 30	.57	Sept. 28	.53	Dec. 27	.37

Kl347. R. K. O. Albee Theatre. DeKalb Ave. and Fulton St. Records available: 1942-49.

Jan. 26	18.78	Apr. 28	16.76	July 28	19.52	Oct. 31	17.65
Feb. 21	18.35	June 1	17.62	Aug. 31	19.80	Nov. 28	17.07
Apr. 4	17.58	July 1	17.80	Sept. 28	18.49	Dec. 28	17.27

Kl479. New York Water Service Corp. Foster and New York Aves.
Records available: 1946-49. Recorder removed after August 30, 1949.

Kl479--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	1.20	1.50	1.86	2.01	2.02	2.17	2.14	2.03
2	1.11	1.49	1.78	1.97	2.04	2.17	2.16	2.02
3	1.04	1.53	1.79	1.97	2.10	2.16	2.19	2.01
4	1.02	1.61	1.79	1.98	2.09	2.20	2.21	2.02
5	1.12	1.60	1.88	1.96	2.10	2.24	2.20	2.01
6	1.24	1.57	1.89	2.06	2.12	2.24	....	2.00
7	1.23	1.64	1.82	2.01	2.17	2.22	....	2.00
8	1.08	1.60	1.84	2.03	2.14	2.16	2.13	2.01
9	1.06	1.67	1.88	1.97	2.16	2.13	2.13	2.02
10	1.08	1.67	1.92	1.92	2.15	2.15	2.19	2.01
11	1.11	1.62	1.94	1.94	2.12	2.21	2.17	2.00
12	1.15	1.60	1.93	1.96	2.13	2.23	2.17	2.00
13	1.15	1.68	1.91	2.03	2.12	2.20	2.22	2.03
14	1.15	1.69	1.87	2.05	2.13	2.20	2.20	2.04
15	1.16	1.72	1.91	2.04	2.12	2.20	2.17	2.00
16	1.24	1.68	1.89	2.03	2.11	2.20	2.15	1.98
17	1.27	1.66	1.92	1.98	2.11	2.21	2.15	2.00
18	1.23	1.62	1.94	1.96	2.13	2.22	2.17	2.06
19	1.29	1.70	1.84	2.01	2.18	2.22	2.15	2.04
20	1.21	1.74	1.81	1.97	2.17	2.23	2.14	1.98
21	1.24	1.67	1.87	1.98	2.12	2.25	2.13	1.95
22	1.36	1.73	1.93	2.03	2.15	2.25	2.12	1.95
23	1.36	1.79	1.97	2.07	2.20	2.21	2.09	1.95
24	1.41	1.78	1.91	2.08	2.20	2.20	2.07	1.95
25	1.37	1.82	1.92	1.98	2.20	2.21	2.10	1.92
26	1.41	1.80	1.96	....	2.19	2.23	2.08	1.93
27	1.43	1.79	2.01	....	2.19	2.22	2.07	1.95
28	1.51	1.87	1.98	....	2.18	2.17	2.08	1.95
29	1.48		1.92	....	2.17	2.16	2.09	1.99
30	1.40		1.97	2.02	2.17	2.16	2.08	1.92
31	1.52		2.00		2.17		2.07	

Kl495. New York City Department of Water Supply, Gas and Electricity.
 Avenue S and E 16th St. Records available: 1936-43 (as K535), 1945-49.

Daily mean water level, above mean sea level, from recorder graph

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	3.68	Apr. 28	3.52	July 28	3.13	Oct. 31	2.96
Feb. 23	3.71	June 1	3.25	Aug. 31	3.03	Nov. 28	2.85
Apr. 4	3.59	July 1	3.18	Sept. 28	3.65	Dec. 28	2.78

Kl591. New York City Department of Water Supply, Gas and Electricity.
 Blake Ave. and Crystal St. Records available: 1947-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.52	0.09	0.13	0.11	...	...	0.40	0.41	0.52	0.34	0.41	0.26
2	.54	.11	.06	.07	...	0.47	.41	.40	.44	.33	.43	.25
3	.56	.09	.06	.08	...	.46	.43	.40	.45	.35	.43	.21
4	.55	.03	.06	.08	...	.47	.45	.43	.47	.38	.45	.23
5	.45	.04	.14	.06	...	.50	.44	.43	.50	.38	.39	.28
6	...	.05	.15	.15	...	.51	.43	.42	.50	.35	.37	.26
7	...	0	.09	.11	0.30	.51	.42	.43	.48	.34	.39	.28
8	.37	.03	.10	.14	.28	.46	.39	.44	.51	.34	.40	.23
9	.37	0	.13	.08	.30	.43	.40	.44	.52	.34	.35	.18
10	.35	0	.15	.05	.32	.43	.43	.42	.47	.35	.35	.17
11	.33	.05	.18	.07	.33	.48	.44	.42	.43	.34	.37	.17
12	.29	.06	.16	.09	.36	.49	.44	.41	.44	.35	.31	.20
13	.27	0	.14	.16	.36	.48	.46	.43	.48	.31	.35	.22
14	.27	.02	.11	.19	.38	.47	.47	.47	.50	.30	.39	.19

K1591--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
15	0.31	0.04	0.14	0.19	...	0.46	0.46	0.48	0.50	0.33	0.36	0.18
16	.25	.01	.12	.18	0.37	.46	.44	.48	.48	.30	.33	.17
17	.24	0	.13	.15	.37	.46	.45	.49	.46	.29	.35	.16
18	.27	.04	.14	.14	.38	.46	.46	.52	.47	.32	.34	.16
19	.22	0	.06	.17	.40	.46	.46	.52	.49	.33	.32	.21
20	.30	.03	.03	.15	.40	.46	.46	.48	.46	.34	.36	.20
21	.26	.04	.06	.16	.38	.48	.45	.45	.41	.35	.32	.21
22	.20	.01	.10	.19	...	.49	.44	.44	.45	.38	.29	.24
23	.21	.05	.14	.22	...	.46	.41	.45	.49	.34	.31	.23
24	.16	.04	.09	.22	...	.45	.38	.47	.41	.33	.29	.12
25	.19	.09	...	.15	...	...	.42	.45	.37	.31	.37	.10
26	.15	.08	.11	.19	...	...	.40	.47	.36	.39	.31	.17
27	.13	.07	.15	.22	...	.45	.41	.49	.39	.33	.29	.24
28	.09	.15	.12	.18	...	.42	.42	.50	.46	.35	.27	.22
29	.11	...	.06	.15	...	.42	.53	.53	.46	.38	.33	.21
30	.16	...	.09	.19	...	.41	.45	.48	.42	.40	.32	.17
31	.07	...	.11	...	...	...	.44	.50	...	.45	...	.18

Nassau County

(Unless otherwise indicated, all measurements in Nassau County are above mean sea level.)

N7. Citizens Water Supply Co. About 130 feet north of Remsen St. and 150 feet west of Corona Ave., Valley Stream. Records available: 1936-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.22	8.42	8.64	8.19	8.93	7.87	3.72	2.84	3.35	4.52	5.74	6.38
2	....	8.36	8.45	8.12	8.88	7.72	3.65	2.79	3.17	4.48	5.81	6.29
3	....	8.32	8.36	8.08	8.88	7.56	3.61	2.77	3.14	4.55	5.86	6.24
4	....	8.53	8.27	8.14	8.81	7.47	3.58	2.80	3.16	4.69	5.98	6.20
5	....	8.61	8.40	8.06	8.76	7.48	3.50	2.84	3.22	4.81	5.91	6.39
6	....	8.50	8.55	8.38	8.76	7.45	3.36	2.86	3.28	4.81	5.85	6.42
7	....	8.68	8.44	8.36	8.79	7.37	3.23	2.89	3.22	4.84	5.90	6.47
8	8.13	8.72	8.35	8.37	8.65	7.15	3.06	2.96	3.29	4.90	5.97	6.41
9	7.89	8.87	8.41	8.30	8.58	6.92	2.95	3.03	3.33	4.98	5.93	6.25
10	7.79	8.90	8.47	8.17	8.55	6.77	2.97	3.03	3.24	5.06	5.90	6.15
11	7.76	8.91	8.63	8.14	8.44	6.75	2.96	3.03	3.12	5.09	5.99	6.18
12	7.80	8.70	8.66	8.16	8.41	6.68	2.95	3.02	3.10	5.13	5.92	6.28
13	7.85	8.78	8.57	8.37	8.39	6.50	3.03	3.02	3.26	5.07	5.94	6.41
14	7.83	8.75	8.40	8.66	8.37	6.31	3.05	3.03	3.43	4.98	6.18	6.37
15	7.53	8.74	8.39	8.72	8.35	6.13	3.04	3.03	3.52	5.07	6.18	6.35
16	7.50	8.65	8.32	8.84	8.28	5.97	3.03	3.04	3.59	5.06	6.15	6.32
17	7.60	8.57	8.32	8.82	8.26	5.83	3.03	3.10	3.64	5.03	6.17	6.29
18	7.48	8.27	8.37	8.77	8.24	5.69	3.09	3.28	3.68	5.13	6.19	6.36
19	7.54	8.24	8.25	8.87	8.33	5.58	3.12	3.35	3.85	5.24	6.15	6.46
20	7.37	8.31	8.03	8.87	8.37	5.47	3.14	3.25	3.91	5.32	6.26	6.40
21	7.19	8.14	8.00	8.90	8.24	5.43	3.14	3.17	3.87	5.39	6.20	6.43
22	7.41	8.11	8.07	8.97	8.24	5.37	3.12	3.15	3.98	5.50	6.13	6.53
23	7.36	8.33	8.21	9.12	8.40	5.14	3.05	3.20	4.25	5.48	6.14	6.58
24	7.49	8.22	8.11	9.18	8.33	4.88	2.92	3.24	4.26	5.44	6.16	6.35
25	7.54	8.31	8.00	9.04	8.55	4.70	2.94	3.20	4.17	5.33	6.33	6.13
26	7.54	8.35	8.02	9.07	8.29	4.58	2.91	3.18	4.15	5.47	6.34	6.25
27	7.78	8.24	8.15	9.24	8.30	4.41	2.87	3.24	4.26	5.39	6.27	6.55
28	8.11	8.46	8.18	9.19	8.24	4.17	2.89	3.27	4.50	5.39	6.25	6.63
29	8.26	...	8.00	9.04	8.17	3.97	2.92	3.36	4.66	5.49	6.37	6.60
30	8.07	...	8.03	8.99	8.06	3.84	2.94	3.26	4.65	5.57	6.48	6.45
31	8.24	...	8.09	...	7.99	...	2.94	3.26	...	5.79	...	6.36

N9. Citizens Water Supply Co. well Valley Stream 7. West side of Corona Ave., 650 feet north of Remsen St. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	22.70	Apr. 25	22.19	July 26	21.33	Oct. 31	21.39
Feb. 28	22.49	May 31	22.18	Aug. 30	21.29	Nov. 29	21.15
Mar. 30	22.27	June 27	21.57	Sept. 27	21.43	Dec. 27	21.27

N53. Village of Rockville Centre. In basement of municipal power station, Morris and Maple Aves. Records available: 1934-49.

Jan. 27	15.69	Apr. 25	15.37	July 26	14.12	Oct. 31	13.09
Mar. 1	16.03	May 31	15.31	Aug. 30	13.44	Nov. 29	12.68
30	15.73	June 27	14.62	Sept. 27	13.39	Dec. 27	12.76

N67. Village of Freeport. Sunrise Highway about 200 feet west of Long Beach Ave. Readings taken a few hours after well shut down. Records available: 1932-44, 1946-49. June 27, 12.01; Aug. 2, 10.42; Aug. 30, 10.84.

N157. J. N. Hill. About 0.4 mile south of Cedar Swamp Road and 450 feet west of Wheatley Road, Wheatley Hills. Records available: 1932-49.

Jan. 26	85.35	Apr. 28	85.70	July 26	86.80	Oct. 27	86.98
Mar. 7	85.44	May 31	86.00	Aug. 30	87.04	Nov. 30	87.01
31	85.68	June 28	86.35	Sept. 27	87.11	Dec. 29	86.79

N190. New York City Department of Water Supply, Gas, and Electricity. Northeast corner of Condit Street and Seamans Neck Road, Seaford. Records available: 1945-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.23	20.46	20.98	20.61	20.37	20.43	19.92	18.74	18.51	18.46	17.85	17.58
2	19.19	20.40	20.81	20.54	20.39	20.40	19.75	18.71	18.40	18.46	17.95	17.58
3	19.21	20.41	20.77	20.56	20.50	20.37	19.60	18.71	18.42	18.50	17.96	17.52
4	19.29	20.59	20.74	20.56	20.51	20.40	19.49	18.71	18.44	18.35	17.96	17.57
5	19.53	20.57	20.85	20.53	20.55	20.44	19.41	18.70	18.45	18.21	17.83	17.68
6	19.77	20.56	20.87	20.78	20.60	20.42	19.35	18.68	18.46	18.09	17.79	17.59
7	19.73	20.71	20.77	20.65	20.66	20.37	....	18.67	18.41	18.08	17.82	17.61
8	19.69	20.64	20.82	20.63	20.61	20.27	19.26	18.67	18.47	18.07	17.83	17.48
9	19.72	20.68	20.89	20.54	20.67	20.21	19.23	18.65	18.44	18.07	17.72	17.39
10	19.79	20.64	20.94	20.47	20.69	20.24	19.23	18.60	18.33	18.06	17.74	17.38
11	19.84	20.58	21.04	20.50	....	20.30	19.17	18.60	18.27	18.03	17.78	17.42
12	19.93	20.57	20.96	20.52	....	20.25	19.15	18.63	18.31	18.04	17.68	17.49
13	19.93	20.70	20.81	20.62	....	20.20	19.21	18.66	18.43	17.95	17.78	17.53
14	19.89	20.68	20.71	20.68	20.72	20.18	19.16	18.65	18.43	17.94	17.86	17.45
15	19.75	20.73	20.77	20.66	20.67	20.18	19.11	18.62	18.39	17.99	17.77	17.44
16	19.88	20.66	20.72	20.64	20.65	20.16	19.07	18.58	18.33	17.98	17.73	17.42
17	19.93	20.61	20.73	20.53	20.62	20.17	19.07	18.63	18.29	18.06	17.76	17.42
18	19.85	20.46	20.76	20.48	20.60	20.18	19.16	18.68	18.29	18.08	17.74	17.48
19	19.96	20.51	20.62	20.56	20.64	20.16	19.10	18.63	18.31	18.11	17.70	17.53
20	19.75	20.57	20.55	20.48	20.61	20.14	19.03	18.53	18.25	18.08	17.73	17.48
21	19.70	20.45	20.56	20.45	20.56	20.17	18.97	18.47	18.19	18.07	17.64	17.53
22	19.87	20.58	20.59	20.46	20.65	20.16	18.94	18.46	18.25	18.10	17.58	17.56
23	19.79	20.69	20.68	20.52	20.70	20.05	18.87	18.47	18.32	18.00	17.64	17.50
24	19.88	20.65	20.59	20.49	20.65	20.02	18.83	18.47	18.20	17.92	17.59	17.32
25	19.81	20.80	20.59	20.36	20.62	20.05	18.88	18.41	18.11	17.87	17.79	17.28
26	19.82	20.76	20.63	20.44	20.60	20.05	18.85	18.43	18.11	17.98	17.69	17.43
27	19.87	20.75	20.69	20.46	20.59	20.00	18.85	18.43	18.36	17.83	17.64	17.55
28	20.03	20.98	20.62	20.37	20.55	19.55	18.86	18.41	18.58	17.83	17.59	17.47
29	20.13		20.52	20.34	20.52	19.96	18.91	18.48	18.63	17.84	17.72	17.42
30	20.14		20.56	20.38	20.48	19.95	18.87	18.40	18.56	17.85	17.69	17.30
31	20.43		20.61		20.46		18.81	18.44		17.96		17.32

N511. Irving Cox Estate. 1,000 feet west of Horseshoe Road, 0.5 mile north of Clefts Road, Mill Neck. Readings taken at or near high tide. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	21.33	Apr. 26	20.83	July 25	19.28	Oct. 27	20.58
Mar. 7	20.78	June 2	20.94	Aug. 30	20.48	Nov. 30	20.98
31	20.98	28	19.18	Sept. 27	21.28	Dec. 28	20.78

N575. Frederick Loeser & Co. 833 Franklin Avenue, Garden City. Records available: 1946-49.

Jan. 26	59.95	Apr. 26	60.22	July 25	55.56	Oct. 28	57.83
Mar. 2	59.99	May 31	58.05	Aug. 29	58.98	Nov. 28	56.45
31	60.17	June 28	57.62	Sept. 26	57.62	Dec. 28	56.54

N657. Town of North Hempstead. West Shore Road, Bar Beach. Records available: 1945-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.9	14.6	14.6	14.9	14.8	14.8	13.6	14.1	14.4	14.0	14.2	14.4
2	14.6	14.3	14.7	14.8	14.7	14.7	13.5	14.1	14.1	14.1	14.5	14.5
3	14.7	14.6	14.6	14.8	14.8	14.7	13.5	14.1	14.1	14.1	14.3	14.4
4	14.7	15.0	14.6	14.9	14.8	14.6	13.5	14.1	14.2	14.0	14.3	14.7
5	14.8	14.9	14.8	14.8	14.7	14.7	13.5	14.2	14.2	14.1	14.2	14.4
6	14.7	14.9	14.8	15.2	14.9	14.8	13.5	14.2	14.2	14.1	14.3	14.2
7	14.5	15.0	14.8	14.7	14.9	14.7	13.5	14.3	14.3	14.2	14.3	14.4
8	14.6	14.6	14.9	14.9	14.9	14.4	13.6	14.3	14.4	14.2	14.3	14.2
9	14.7	14.8	14.7	14.9	14.9	14.3	13.5	14.3	14.3	14.3	14.2	14.2
10	14.6	14.9	14.9	14.8	15.0	14.3	13.6	14.3	14.2	14.2	14.3	14.3
11	14.7	14.9	15.1	14.8	15.1	14.3	13.7	14.3	14.2	14.3	14.3	14.5
12	14.8	14.8	14.4	14.9	15.1	14.2	13.8	14.3	14.4	14.2	14.6	14.4
13	14.7	14.8	14.5	15.1	14.9	14.3	13.9	14.5	14.4	14.2	14.5	14.3
14	14.7	14.8	14.7	15.1	14.9	14.1	14.0	14.4	14.3	14.2	14.5	14.3
15	14.7	15.0	14.8	15.2	14.9	14.1	14.0	14.4	14.3	14.3	14.4	14.4
16	14.8	14.7	14.5	15.0	14.9	14.0	13.9	14.4	14.2	14.6	14.4	14.4
17	14.8	14.4	14.4	14.8	14.8	14.0	14.0	14.4	14.2	14.4	14.5	14.4
18	14.7	14.5	14.8	15.1	14.7	14.1	14.0	14.6	14.2	14.5	14.4	14.4
19	14.9	14.5	14.4	15.0	14.8	...	14.0	14.8	14.3	14.5	14.3	14.5
20	14.4	14.7	14.3	14.7	15.0	...	14.0	14.4	14.2	14.5	14.6	14.5
21	14.8	14.6	14.4	14.7	14.9	...	14.0	14.3	14.1	14.5	14.3	14.6
22	14.6	14.7	14.5	14.9	14.9	...	14.1	14.4	14.3	14.4	14.4	14.6
23	14.4	14.7	14.7	14.9	14.9	...	13.9	14.4	14.3	14.3	14.4	14.6
24	14.6	14.7	14.6	15.0	14.9	13.9	13.9	14.4	14.1	14.3	14.2	14.3
25	14.6	15.0	14.6	14.8	14.9	13.8	14.1	14.4	14.1	14.3	14.9	14.4
26	14.8	14.6	14.7	14.8	14.9	13.7	14.1	14.3	14.1	14.3	14.4	14.5
27	14.7	14.8	14.8	15.0	15.0	13.8	14.2	14.4	14.2	14.0	14.6	14.5
28	15.0	15.1	14.7	14.9	14.8	13.7	14.2	14.4	14.4	14.1	14.5	14.2
29	14.6		14.6	14.8	14.7	13.6	14.1	14.5	14.3	14.1	14.7	14.0
30	14.4		14.6	14.7	14.8	13.6	14.1	14.4	14.1	14.2	14.5	14.1
31	14.9		14.8		14.8		14.1	14.5		14.3		14.5

N844. Long Island Railroad. Jerusalem Avenue about 110 feet north of railroad tracks, Hicksville. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	82.66	Apr. 26	84.39	Aug. 30	84.46	Nov. 30	83.50
Mar. 1	83.43	May 31	84.86	Sept. 27	84.27	Dec. 28	83.10
31	83.98	June 28	84.78	Oct. 28	83.90		

N1102. Nassau County Department of Public Works. Willets and Valley Roads, Lake Success. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	57.88	Apr. 25	58.35	July 25	58.84	Oct. 28	58.75
Feb. 24	58.10	May 31	58.94	Aug. 30	58.71	Nov. 29	58.85
Mar. 30	58.46	June 27	58.92	Sept. 27	58.85	Dec. 27	58.62

N1103. County Department of Public Works. North side of Marcus Ave. and 253 feet east of Lakeville Road. Records available: 1939-49.

Jan. 27	59.84	Apr. 25	60.65	July 25	60.27	Oct. 28	60.84
Feb. 24	60.06	May 31	61.14	Aug. 30	60.91	Nov. 29	60.87
Mar. 30	60.49	June 27	60.86	Sept. 27	61.13	Dec. 27	60.65

N1104. County Department of Public Works. Rhodes St. and 80th Ave., New Hyde Park. Records available: 1939-49.

Jan. 27	59.97	Apr. 25	61.38	July 25	61.62	Oct. 31	61.35
Feb. 24	60.52	May 31	61.88	Aug. 30	61.59	Nov. 29	61.04
Mar. 30	61.18	June 27	61.81	Sept. 27	61.37	Dec. 27	60.54

N1105. County Department of Public Works. Emerson and Whittier Aves., New Hyde Park. Records available: 1939-49.

Jan. 27	56.97	Apr. 25	58.42	July 25	57.97	Oct. 31	57.67
Feb. 24	57.56	May 31	58.87	Aug. 30	57.94	Nov. 29	57.41
Mar. 30	58.23	June 27	58.35	Sept. 27	57.73	Dec. 27	56.92

N1107. County Department of Public Works. Bertha St. and Kingston Ave., South Floral Park. Records available: 1939-49.

Jan. 27	45.82	Apr. 25	46.74	July 26	45.71	Oct. 31	44.66
Feb. 24	46.25	May 31	46.85	Aug. 30	45.44	Nov. 29	44.28
Mar. 30	46.63	June 27	46.31	Sept. 27	45.18	Dec. 27	44.11

N1108. County Department of Public Works. Jacob St. and Rosalind Ave., Elmont. Records available: 1939-49.

Jan. 27	40.72	Apr. 25	41.67	July 26	40.28	Oct. 31	39.00
Feb. 24	41.28	May 31	41.51	Aug. 30	39.85	Nov. 29	38.71
Mar. 30	41.55	June 27	40.87	Sept. 27	39.61	Dec. 27	38.36

N1109. County Department of Public Works. Dutch Broadway and Henry St., Elmont. Records available: 1939-49.

Jan. 27	28.63	Apr. 25	27.19	July 26	25.54	Oct. 31	24.95
Feb. 28	27.99	May 31	27.25	Aug. 30	25.25	Nov. 29	24.53
Mar. 30	28.07	June 27	26.14	Sept. 27	25.39	Dec. 27	25.44

N1110. County Department of Public Works. East side of Henry St., about 500 feet south of Southern State Parkway, North Valley Stream. Records available: 1939-49.

Jan. 27	21.00	Apr. 25	20.51	July 26	19.50	Oct. 31	19.21
Feb. 28	20.85	May 31	20.53	Aug. 30	19.29	Nov. 29	19.01
Mar. 30	20.62	June 27	19.90	Sept. 27	19.43	Dec. 27	19.02

N1111. County Department of Public Works. Fletcher and Teneyck Aves., Valley Stream. Records available: 1939-49.

Jan. 27	13.64	Apr. 25	12.81	July 26	13.00	Oct. 31	13.18
Feb. 28	13.48	May 31	13.36	Aug. 30	12.87	Nov. 29	13.13
Mar. 30	13.22	June 27	13.09	Sept. 27	13.12	Dec. 27	13.43

N1112. County Department of Public Works. Sunrise Highway and Second St., Valley Stream. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	10.14	Apr. 25	9.92	July 26	9.36	Oct. 31	9.37
Mar. 1	10.01	May 31	9.94	Aug. 30	9.36	Nov. 29	9.22
30	9.91	June 27	9.62	Sept. 27	9.46	Dec. 27	9.19

N1126. County Department of Public Works. At northwest corner of Stewart Ave. and Sackville Road, Garden City. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	59.73	June 28	61.12	Sept. 12	60.74	Oct. 17	60.56
Mar. 2	60.15	July 25	61.03	19	60.70	28	60.49
31	60.53	Aug. 22	60.84	26	60.67	Nov. 28	60.25
Apr. 26	60.79	29	60.80	Oct. 3	60.63	Dec. 28	59.94
May 31	61.07	Sept. 6	60.77	10	60.60		

N1132. County Department of Public Works. West side of Lakewood Boulevard, 111 feet south of Sunrise Highway, Lynbrook. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	9.21	Apr. 25	8.84	July 26	7.51	Oct. 31	6.99
Mar. 1	9.06	May 31	8.67	Aug. 30	7.29	Nov. 29	6.97
30	8.80	June 27	7.55	Sept. 27	7.66	Dec. 27	7.06

N1140. County Department of Public Works. West side of Kellum Place, 37 feet north of Ninth St., Garden City. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	62.50	June 28	63.86	Sept. 12	63.36	Oct. 17	63.11
Mar. 2	62.78	July 25	63.74	19	63.34	28	62.96
31	63.10	Aug. 22	63.52	26	63.28	Nov. 28	62.62
Apr. 26	63.34	29	63.48	Oct. 3	63.22	Dec. 28	62.26
May 31	63.75	Sept. 6	63.42	10	63.16		

N1147. County Department of Public Works. North side of Seaman Ave., 310 feet east of Knollwood Road, Baldwin. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	19.30	Apr. 25	18.94	July 26	17.76	Oct. 31	16.99
Mar. 1	19.55	May 31	18.84	Aug. 30	17.24	Nov. 29	16.80
30	19.22	June 27	18.23	Sept. 27	17.25	Dec. 27	16.76

N1160. County Department of Public Works. South side of Stewart Ave., about 75 feet east of Mitchel Field, Mineola. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	68.31	Apr. 26	68.47	July 26	67.20	Oct. 28	65.99
Mar. 2	68.69	May 31	68.57	Aug. 29	66.35	Nov. 28	65.31
31	68.83	June 28	67.80	Sept. 26	66.38	Dec. 28	65.10

N1167. County Department of Public Works. East side of North Ocean Ave., 38 feet north of Brooklyn Ave., Freeport. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	11.91	Apr. 25	11.23	July 26	10.29	Oct. 31	9.47
Mar. 1	12.03	May 31	11.53	Aug. 30	9.76	Nov. 29	9.39
30	11.64	June 27	10.91	Sept. 27	9.89	Dec. 27	9.34

N1185. County Department of Public Works. Northwest corner of West Grand Ave. and Lindgren St., Merrick. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	12.55	Apr. 25	13.11	July 26	11.50	Oct. 28	10.75
Mar. 1	13.30	May 31	12.93	Aug. 30	11.19	Nov. 30	10.17
30	13.34	June 27	11.90	Sept. 27	10.92	Dec. 28	10.01

N1204. County Department of Public Works. Northwest corner of Harris Court and John St., Bellmore. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	10.39	Apr. 25	11.08	July 26	8.87	Oct. 28	6.16
Mar. 1	12.03	May 31	11.46	Aug. 30	7.57	Nov. 30	5.92
30	11.19	June 27	11.16	Sept. 27	7.75	Dec. 28	5.31

N1212. County Department of Public Works. Jericho Turnpike about 1.3 miles east of Broadway, Locust Grove. Records available: 1943-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	86.87	86.65	86.96	87.11	87.31	87.70	88.07	88.38	88.65	88.56	88.73	88.52
2	86.59	86.58	86.73	86.94	87.34	87.70	88.16	88.41	88.46	88.61	88.77	88.58
3	86.48	86.6	86.77	87.04	87.35	87.71	88.22	88.44	88.57	88.73	88.80	88.45
4	86.50	86.9	86.79	87.06	87.31	87.84	88.24	88.48	88.68	88.83	88.81	88.61
5	86.83	86.67	87.05	87.02	87.41	87.93	88.21	88.46	88.75	88.82	88.67	88.72
6	.....	.....	87.01	87.36	87.46	87.89	88.19	88.47	88.71	88.73	88.69	88.60
7	.....	.....	86.73	87.08	87.46	87.82	88.16	88.50	88.66	88.76	88.77	88.74
8	86.58	.....	86.82	87.15	87.33	87.69	88.11	88.55	88.79	88.76	88.80	88.49
9	86.55	.....	86.91	87.01	87.45	87.69	88.17	88.56	88.71	88.80	88.62	88.39
10	86.61	.....	86.96	86.96	87.43	87.88	88.31	88.52	88.57	88.82	88.73	88.40
11	86.66	.....	87.04	87.09	87.37	87.95	88.24	88.54	88.54	88.80	88.77	88.51
12	86.85	86.68	86.91	87.14	87.46	87.91	88.27	88.55	88.65	88.86	88.56	88.60
13	86.80	86.83	86.84	87.33	87.41	87.87	.....	88.55	88.82	88.68	88.75	88.59
14	86.72	86.76	86.76	87.22	87.50	87.86	.....	88.51	88.82	88.72	88.85	88.49
15	86.46	86.88	86.92	87.22	87.41	87.89	88.23	88.51	88.80	88.83	88.72	88.47
16	86.69	86.70	86.83	87.18	87.46	87.93	88.24	88.52	88.78	88.73	88.67	88.43
17	86.69	86.65	86.91	87.07	87.48	87.94	88.29	88.64	88.73	88.69	88.75	88.43
18	86.50	86.59	87.00	87.07	87.56	87.96	88.32	88.77	88.79	88.81	88.73	88.56
19	86.75	86.76	86.71	87.18	87.69	87.98	88.34	88.59	88.85	88.81	88.69	88.57
20	86.41	86.81	86.71	87.12	87.61	88.03	88.35	88.51	88.74	88.80	88.82	88.44
21	86.57	86.54	86.92	87.25	87.46	88.13	88.35	88.51	88.66	88.79	88.65	88.57
22	86.70	86.80	87.03	87.29	.....	88.11	88.37	88.58	88.83	88.87	88.58	88.60
23	86.55	.....	87.10	87.35	.....	87.97	88.28	88.66	88.87	88.71	88.75	88.50
24	86.81	.....	86.86	87.23	.....	87.99	88.29	88.68	88.65	88.69	88.61	88.18
25	86.59	.....	86.96	87.05	.....	88.08	88.43	88.54	88.58	88.66	88.86	88.25
26	86.70	86.78	87.04	87.32	.....	88.11	88.34	88.64	88.59	88.81	88.62	88.57
27	86.71	86.82	87.20	87.31	.....	88.07	88.40	88.69	88.75	88.58	88.60	88.67
28	.....	87.16	87.01	87.15	87.68	87.94	88.42	88.69	88.94	88.73	88.54	88.45
29	86.58	.....	86.87	87.20	87.67	88.00	88.45	88.75	88.87	88.79	88.80	88.43
30	86.43	.....	87.05	87.31	87.69	88.04	88.47	88.58	88.66	88.84	88.71	88.30
31	86.97	.....	87.15	87.72	.....	88.44	88.70	.....	88.89	.....	.....	88.32

N1222. County Department of Public Works. Southwest corner of Cecelia Place and John St., Seaford. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	8.05	Apr. 25	8.94	July 26	6.70	Oct. 28	2.18
Mar. 1	8.51	May 31	9.08	Aug. 29	4.74	Nov. 30	1.78
30	8.78	June 27	8.73	Sept. 26	3.25	Dec. 28	1.49

N1234. County Department of Public Works. Southwest side of Plainview Road, 400 feet northwest of Bethpage State Parkway, Central Park. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	64.05	Apr. 26	65.42	July 25	64.89	Oct. 28	63.23
Mar. 1	64.84	May 31	65.78	Aug. 29	64.38	Nov. 28	62.61
31	65.39	June 27	65.37	Sept. 26	63.80	Dec. 28	62.08

N1240. County Department of Public Works, 44 feet south of Sunrise Highway and 62 feet east of Manhattan Ave. Massapequa Park. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	8.23	Apr. 25	10.45	July 26	5.87	Oct. 28	.80
Mar. 2	8.39	May 31	10.64	Aug. 29	3.67	Nov. 30	.53
30	10.07	June 28	10.13	Sept. 26	1.90	Dec. 29	.30

N1244. County Department of Public Works. North side of Jericho Turnpike, 60 feet west of Avery Road, about 2.5 miles east of Syosset. Records available: 1940-49.

Jan. 26	73.84	Apr. 25	74.04	July 25	74.53	Oct. 27	75.09
Mar. 2	74.06	May 31	74.17	Aug. 29	74.80	Nov. 1	75.22
30	73.93	June 28	74.34	Sept. 26	74.94	Dec. 29	75.15

N1245. County Department of Public Works. West side of Plainview-Cold Spring Harbor Road, about 1 mile south of Jericho Turnpike and about 2 miles northeast of Plainview. Records available: 1940-49.

Jan. 26	79.13	Apr. 25	79.44	July 25	79.91	Oct. 27	80.54
Mar. 2	78.80	May 31	79.21	Aug. 29	80.02	Dec. 1	80.54
30	79.19	June 28	79.41	Sept. 26	80.87	29	80.82

N1246. County Department of Public Works. East side of Plainview-Melville Road, just west of Suffolk County Line, Plainview. Records available: 1940-49.

Jan. 26	80.57	Apr. 25	80.61	July 25	81.74	Oct. 28	82.17
Mar. 2	80.54	May 31	81.11	Aug. 29	82.18	Nov. 30	82.01
30	80.85	June 28	81.54	Sept. 26	82.10	Dec. 29	81.70

N1247. County Department of Public Works. 500 feet north of Motor Parkway, 200 feet west of Suffolk County Line, Bethpage. Records available: 1939-49.

Jan. 26	73.73	Apr. 25	74.78	July 25	75.56	Oct. 28	74.82
Mar. 7	74.18	May 31	75.29	Aug. 29	75.42	Nov. 30	74.56
30	74.47	June 28	75.48	Sept. 26	75.10	Dec. 29	74.11

N1249. County Department of Public Works. Northeast corner of Secatogue Ave. and Wall St., Farmingdale. Records available: 1939-49.

Jan. 26	55.60	Apr. 25	56.16	July 25	54.67	Oct. 28	52.96
Mar. 7	56.49	May 31	56.25	Aug. 29	54.06	Nov. 30	52.36
30	56.33	June 28	55.38	Sept. 26	53.70	Dec. 29	52.04

N1250. County Department of Public Works. 37 feet northwest of Old Carmans Road and about 2,200 feet northwest of Great Neck Road, Farmingdale. Records available: 1939-49.

Jan. 26	48.07	Apr. 25	48.33	July 25	46.72	Oct. 28	45.04
Mar. 7	48.88	May 31	48.35	Aug. 29	46.01	Nov. 30	44.57
30	48.62	June 28	47.37	Sept. 26	45.65	Dec. 29	44.31

N1251. County Department of Public Works. About 275 feet west of County Line Road, about 800 feet north of Southern State Parkway, and about 2 miles south of Farmingdale. Records available: 1939-49.

Jan. 26	39.70	Apr. 25	39.67	July 25	38.25	Oct. 28	36.65
Mar. 2	40.26	May 31	39.68	Aug. 29	37.54	Nov. 30	36.26
30	39.93	June 28	38.86	Sept. 26	37.20	Dec. 29	36.05

N1252. County Department of Public Works. Southwest corner of County Line Road and Smith St., about 1 mile north of Amityville. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	25.87	Apr. 25	25.93	July 26	24.71	Oct. 28	23.20
Mar. 2	26.01	May 31	25.87	Aug. 29	24.12	Nov. 30	22.84
30	25.98	June 28	25.24	Sept. 26	23.71	Dec. 29	22.69

N1253. County Department of Public Works. Northeast corner of Clocks Boulevard and Pine St., about 1 mile east of Massapequa Park. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	15.62	Apr. 25	15.87	July 26	14.37	Oct. 28	11.90
Mar. 2	16.30	May 31	15.90	Aug. 29	13.12	Nov. 30	11.55
30	15.89	June 28	15.18	Sept. 26	12.55	Dec. 29	11.35

N1255. County Department of Public Works. East side of Clinton Road near St. James St., Garden City. Records available: 1913-18, 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	63.42	Apr. 26	63.62	July 26	61.92	Oct. 28	60.99
Mar. 2	63.81	May 31	63.59	Aug. 29	61.67	Nov. 28	60.45
31	63.83	June 28	62.67	Sept. 26	61.38	Dec. 28	60.22

N1256. County Department of Public Works. At junction of Hillside Ave. and Bacon Road, Westbury. Records available: 1913-18, 1932-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	79.46	Apr. 26	80.31	July 26	80.31	Oct. 28	80.09
Mar. 1	79.47	May 31	80.57	Aug. 29	80.05	Dec. 1	79.40
30	80.12	June 28	80.49	Sept. 26	80.48	27	79.19

N1257. New York City Department of Water Supply, Gas and Electricity. Carman and Scranton Aves. East Rockaway. Records available: 1932-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	8.80	Apr. 25	8.21	July 26	7.17	Oct. 31	5.56
Mar. 1	8.73	May 31	8.20	Aug. 30	5.92	Nov. 29	5.66
30	8.59	June 27	7.11	Sept. 27	6.52	Dec. 27	6.24

N1259. U. S. Geol. Survey. About 600 feet south of Union Ave. on west side of Hicksville-Massapequa Road, about 2 miles south of Central Park. Records available: 1909-10, 1912-16, 1930-35, 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	55.04	Apr. 26	55.52	Aug. 2	54.13	Oct. 28	52.59
Mar. 1	55.47	May 31	55.49	29	53.57	Nov. 28	52.15
31	55.87	June 27	54.99	Sept. 26	53.16	Dec. 27	51.65

N1260. County Department of Public Works. West side of Main St., 100 feet south of Pittsburgh Ave., Massapequa. Records available: 1903-7, 1911-16, 1931-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	21.82	Apr. 25	22.01	July 26	20.44	Oct. 28	18.44
Mar. 1	22.77	May 31	22.02	Aug. 29	19.56	Nov. 30	17.94
30	22.24	June 27	21.19	Sept. 26	19.14	Dec. 29	17.79

N1262. New York City Department of Water Supply, Gas and Electricity. East side of Wantagh Ave., about 0.25 mile south of Southern State Parkway, Wantagh. Records available: 1931-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	35.34	Apr. 26	35.49	July 26	34.57	Oct. 28	34.36
Mar. 1	35.49	May 31	35.42	Aug. 29	34.36	Nov. 28	34.10
31	35.54	June 27	35.05	Sept. 29	34.26	Dec. 28	34.16

N1263. County Department of Public Works. Northeast corner of Wantagh and Farmingdale (Seamans Neck) Roads, about 1.3 miles north of Southern State Parkway and about 2 miles south of Central Park. Records available: 1911-15, 1931-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	53.83	Apr. 26	53.97	Aug. 1	52.58	Oct. 28	51.36
Mar. 1	54.31	June 8	53.69	29	52.55	Nov. 28	50.60
31	54.42	27	53.24	Oct. 4	51.66	Dec. 28	50.57

N1264. New York City Department of Water Supply, Gas and Electricity. West side of Newbridge Road about 300 feet south of Sunrise Highway, Bellmore. Records available: 1932-36, 1937-49.

Jan. 27	7.00	Apr. 25	7.79	July 26	7.17	Oct. 28	3.45
Mar. 1	7.32	May 31	7.83	Aug. 30	4.37	Nov. 30	3.37
30	7.56	June 27	7.67	Sept. 27	4.50	Dec. 28	2.90

N1265. County Department of Public Works. Southwest corner of Albany Ave. and Merrick Road, Freeport. Records available: 1939-49. Jan. 6, 4.69; Apr. 7, 3.82; June 20, 3.11; Sept. 22, 3.07; Nov. 2, 3.39; Dec. 1, 2.93; Dec. 29, 3.04.

N1269. County Department of Public Works. Southwest corner of Babylon Turnpike and Poplar St., Merrick. Records available: 1939-49. Jan. 6, 6.07; Apr. 6, 8.23; June 15, 7.39; Sept. 22, 3.08; Nov. 2, 2.89; Dec. 1, 2.85; Dec. 29, 3.06.

N1271. County Department of Public Works. Northeast corner of Beach Drive and Florence St., Merrick. Records available: 1939-49. Jan. 6, 4.37; Apr. 7, 2.59; June 15, 1.53; Sept. 22, 1.52; Nov. 2, 1.97; Dec. 1, 1.90; Dec. 29, 2.27.

N1273. County Department of Public Works. Northwest corner of Cypress St. and Walters Ave., Wantagh. Records available: 1939-49. Jan. 6, 7.62; Apr. 6, 7.54; June 15, 6.74; Sept. 27, 5.11; Nov. 2, 4.73; Dec. 5, 4.35; Dec. 29, 4.33.

N1275. County Department of Public Works. Northeast corner of Byron and Willow Sts., Wantagh. Records available: 1939-49. Jan. 6, 5.59; Apr. 6, 3.37; June 15, 2.59; Sept. 21, 2.31; Nov. 2, 2.51; Dec. 1, 2.39; Dec. 29, 2.51.

N1278. County Department of Public Works. Southeast corner of Nassau St. and Bay Drive, Massapequa. Records available: 1939-49.

Jan. 6	8.10	June 15	6.35	Sept. 22	5.40	Dec. 1	5.01
Apr. 7	6.96	20	6.25	Nov. 2	5.19	29	5.08

N1280. County Department of Public Works. Northwest corner of Harmony Drive and Park Boulevard, Massapequa. Records available: 1940-49. Jan. 6, 8.37; Apr. 7, 9.54; June 20, 9.38; Sept. 27, 4.52; Nov. 2, 3.36; Dec. 1, 2.95; Dec. 29, 2.59.

N1282. County Department of Public Works. West side of Wantagh State Parkway, about 0.9 mile south of Merrick Road, Wantagh. Records available: 1939-49. Jan. 6, 1.80; Apr. 7, 1.37; June 20, 1.06; Sept. 21, 1.20; Nov. 2, 2.36; Dec. 1, 1.26; Dec. 29, 0.28.

N1285. County Department of Public Works. Northwest corner of Spruce and Melvin Sts., Wantagh. Records available: 1939-49. Jan. 6, 4.88; Dec. 5, 2.68; Dec. 29, 2.61.

N1288. County Department of Public Works. West side of Bay View Ave. and St. Regis St., Wantagh. Records available: 1939-49. Jan. 6, 6.03; Apr. 6, 3.76; June 15, 3.08; Sept. 27, 2.47; Nov. 2, 2.50; Dec. 1, 2.38; Dec. 29, 2.42.

N1461. County Department of Public Works. Along tracks of Long Island Railroad about 235 feet southeast of New South Road, South Hicksville. Records available: 1943-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.53	78.40	79.06	79.50	79.83	79.94	79.61	79.18	78.81	78.62	78.36	78.10
2	77.47	78.43	79.04	79.52	79.85	79.93	79.61	79.16	78.77	78.60	78.35	78.06
3	77.44	78.46	79.04	79.54	79.86	79.91	79.62	79.14	78.77	78.60	78.33	78.05
4	77.46	78.50	79.06	79.56	79.85	79.92	79.62	79.13	78.79	78.62	78.33	78.04
5	77.56	78.54	79.10	79.56	79.87	79.95	79.60	79.11	78.82	78.62	78.31	78.06
6	.....	78.55	79.11	79.60	79.89	79.97	79.58	79.09	78.82	78.60	78.29	78.04
7	.....	78.59	79.12	79.62	79.91	79.95	79.56	79.08	78.79	78.58	78.30	78.04
8	77.59	78.61	79.13	79.63	79.89	79.90	79.53	79.08	78.81	78.58	78.30	78.01
9	77.59	78.65	79.15	79.65	79.89	79.86	79.52	79.07	78.80	78.58	78.28	77.97
10	77.62	78.67	79.19	79.66	79.90	79.84	79.53	79.05	78.77	78.57	78.27	77.95
11	77.65	78.69	79.22	79.68	79.89	79.87	79.51	79.03	78.75	78.56	78.29	77.94
12	77.70	78.70	79.22	79.70	79.90	79.88	79.49	79.02	78.75	78.56	78.26	77.94
13	77.71	78.75	79.24	79.72	79.90	79.86	79.49	79.00	78.78	78.53	78.27	77.94
14	77.75	78.78	79.23	79.74	79.91	79.83	79.48	78.99	78.80	78.50	78.30	77.92
15	77.74	78.81	79.25	79.75	79.91	79.81	79.45	78.97	78.78	78.51	78.27	77.90
16	77.78	78.82	79.25	79.78	79.90	79.80	79.43	78.96	78.75	78.49	78.24	77.89
17	77.82	78.83	79.27	79.79	79.91	79.78	79.42	78.96	78.73	78.48	78.23	77.86
18	77.84	78.82	79.29	79.77	79.91	79.78	79.40	78.99	78.73	78.47	78.22	77.86
19	77.89	78.85	79.27	79.79	79.94	79.78	79.39	78.99	78.76	78.47	78.21	77.86
20	77.91	78.88	79.25	79.78	79.94	79.78	79.37	78.95	78.72	78.46	78.23	77.84
21	77.94	78.86	79.28	79.80	79.91	79.80	79.36	78.93	78.69	78.45	78.20	77.82
22	78.01	78.89	79.33	79.82	79.92	79.80	79.34	78.91	78.70	78.45	78.18	77.82
23	78.04	78.92	79.37	79.84	79.96	79.76	79.32	78.91	78.72	78.44	78.18	77.81
24	78.09	78.93	79.37	79.85	79.95	79.72	79.30	78.91	78.69	78.42	78.17	77.78
25	78.12	78.97	79.38	79.80	79.95	79.72	79.30	78.87	78.66	78.40	78.21	77.75
26	78.16	78.98	79.41	79.81	79.95	79.73	79.28	78.86	78.65	78.42	78.18	77.74
27	78.21	78.98	79.45	79.85	79.96	79.71	79.26	78.86	78.65	78.38	78.15	77.77
28	78.27	79.03	79.47	79.84	79.95	79.67	79.25	78.86	78.60	78.36	78.13	77.76
29	78.30		79.45	79.81	79.95	79.65	79.23	78.87	78.71	78.38	78.14	77.72
30	78.31		79.47	79.82	79.94	79.63	79.22	78.83	78.64	78.38	78.14	77.69
31	78.36		79.49		79.95		79.21	78.82		78.41		77.68

N1462. County Department of Public Works. Along tracks of Long Island Railroad at Bloomingdale Road, Island Trees. Records available: 1943-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	64.10	.....	.....	66.55	66.41	66.60	66.20	65.43	65.23	64.65	64.13	63.55
2	64.18	.....	.....	66.54	66.41	66.58	66.19	65.39	65.21	64.63	64.15	63.52
3	64.26	.....	66.07	66.55	66.47	66.56	66.18	65.37	65.14	64.61	64.14	63.52
4	64.34	.....	66.10	66.56	66.52	66.57	66.18	65.46	65.09	64.60	64.12	63.50
5	64.44	65.78	66.14	66.54	66.57	66.60	66.16	65.65	65.06	64.59	64.08	63.48
6	64.56	65.78	66.16	66.59	66.59	66.60	66.14	65.52	65.06	64.57	64.07	63.45
7	64.66	65.80	66.16	66.56	66.62	66.58	66.12	65.42	65.02	64.55	64.06	63.44
8	64.74	65.80	66.18	66.58	66.61	66.53	66.09	65.37	65.01	64.53	64.04	63.42
9	64.79	65.82	66.20	66.56	66.63	66.49	66.07	65.31	64.98	64.51	64.02	63.39
10	64.90	65.84	66.23	66.53	66.65	66.49	66.06	65.28	64.94	64.50	64.00	63.36
11	65.00	65.84	66.26	66.53	66.64	66.50	66.03	65.25	64.91	64.47	63.98	63.35
12	65.10	65.82	66.27	66.53	66.65	66.49	66.00	65.23	64.89	64.46	63.95	63.35
13	65.17	65.85	66.28	66.57	66.65	66.47	65.99	65.25	64.89	64.43	63.94	63.37
14	65.25	65.87	66.28	66.57	66.65	66.45	65.96	65.24	64.88	64.39	63.93	63.36
15	65.28	65.88	66.31	66.57	66.63	66.43	65.94	65.19	64.87	64.37	63.90	63.31
16	65.33	65.88	66.32	66.57	66.62	66.42	65.91	65.16	64.86	64.36	63.87	63.26

N1462--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	65.38	65.88	66.34	66.53	66.62	66.40	65.88	65.13	64.86	64.34	63.85	63.24
18	65.42	65.89	66.37	66.51	66.62	66.39	65.99	65.12	64.84	64.32	63.84	63.22
19	65.47	65.90	66.35	66.51	66.64	66.39	65.94	65.09	64.83	64.29	63.80	63.22
20	65.50	.....	66.35	66.48	66.64	66.38	65.87	65.06	64.81	64.27	63.78	63.19
21	65.52	.....	66.39	66.47	66.60	66.39	65.83	65.02	64.78	64.25	63.75	63.17
22	65.57	.....	66.42	66.49	66.62	66.39	65.79	64.99	64.79	64.23	63.73	63.16
23	65.58	.....	.....	66.52	66.65	66.36	65.76	64.98	64.84	64.21	63.71	63.15
24	65.60	.....	.....	66.51	66.66	66.34	65.72	64.96	64.79	64.19	63.68	63.13
25	65.61	.....	.....	66.45	66.66	66.33	65.69	64.95	64.76	64.16	63.68	63.11
26	65.63 ^a	66.00	66.49	66.46	66.65	66.32	65.65	64.93	64.74	64.20	63.66	63.11
27	65.65	.....	66.51	66.48	66.65	66.31	65.61	64.92	64.73	.....	63.63	63.23
28	65.68	.....	66.52	66.44	66.65	66.27	65.58	64.91	64.72	.....	63.60	63.35
29	65.69	.....	66.49	66.42	66.63	66.25	65.54	64.90	64.71	64.19	63.59	63.30
30	65.66	.....	66.52	66.42	66.62	66.23	65.51	64.88	64.69	64.17	63.59	63.23
31	65.70	.....	66.54	.....	66.62	.....	65.47	64.89	.....	64.15	.....	63.21

^a Tape measurement.

N1463. County Department of Public Works. Southern State Parkway and Seamans Neck Road, Jerusalem. Records available: 1943-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.28	.....	41.45	.....	40.66	40.51	39.41	38.65	38.30	37.86	37.35	37.04
2	39.46	.....	41.43 ^a	41.24	40.64	40.49	39.37	38.61	38.25	37.85	37.36	37.03
3	39.58	.....	41.44	.....	40.82	40.45	39.33	38.59	38.25	37.84	37.34	37.01
4	39.69	.....	41.44	.....	40.82	40.43	39.29	38.63	38.24	37.83	37.32	37.00
5	.....	41.10	41.48	.....	40.82	40.42	39.26	38.62	38.22	37.81	37.30	36.99
6	.....	41.11	41.53	.....	40.82	40.39	39.22	38.59	38.23	37.80	37.30	36.97
7	.....	41.16	41.61	.....	40.87	40.36	39.20	38.57	38.19	37.79	37.29	36.96
8	40.43	41.17	41.62	.....	40.82	40.30	39.17	38.56	38.18	37.77	37.28	36.95
9	40.51	41.20	41.63	41.09	40.82	40.26	39.14	38.53	38.15	37.76	37.27	36.93
10	40.60	41.20	41.65	41.05	40.85	40.22	39.12	38.50	38.14	37.74	37.26	36.92
11	40.68	41.16	41.68	41.03	40.84	40.19	39.11	38.48	38.12	37.72	37.25	36.92
12	40.74	41.15	41.68	41.01	40.84	40.15	39.09	38.48	38.11	37.69	37.23	36.91
13	40.75	41.19	41.67	41.04	40.83	40.11	39.09	38.48	38.11	37.67	37.22	36.92
14	40.77	41.18	41.65	41.03	40.83	40.07	39.07	38.46	38.10	37.64	37.22	36.90
15	40.79	41.19	41.67	40.99	40.81	40.04	39.04	38.44	38.09	37.62	37.21	36.89
16	40.81	41.14	41.63	40.97	40.79	39.99	39.03	38.42	38.07	37.61	37.20	36.88
17	40.82	41.13	41.62	40.93	40.77	39.96	39.02	38.41	38.06	37.59	37.19	36.87
18	40.76	41.07	41.62	.....	40.76	39.93	39.02	38.40	38.05	37.58	37.18	36.87
19	40.77	41.07	41.53	.....	40.76	39.90	38.98	38.38	38.04	37.56	37.16	36.88
20	40.69	41.14	41.47	.....	40.74	39.89	38.96	38.36	38.01	37.54	37.16	36.87
21	40.68	41.06	41.46	.....	40.69	39.84	38.94	38.34	37.99	37.51	37.14	36.86
22	40.77	41.13	41.46	.....	40.70	39.80	38.92	38.31	37.99	37.47	37.13	36.85
23	.....	41.32	41.52	40.85	40.74	39.74	38.87	38.29	37.98	37.46	37.12	36.84
24	.....	41.35	41.46	40.83	40.68	39.69	38.83	38.28	37.96	37.44	37.11	36.83
25	.....	41.38	41.44	40.78	40.67	39.66	38.81	38.26	37.95	37.42	37.11	36.83
26	.....	41.38	41.43	40.78	40.65	39.63	38.79	38.23	37.93	37.43	37.09	36.82
27	.....	41.39	.....	40.76	40.63	39.59	38.77	38.21	37.92	37.40	37.08	36.88
28	40.84	41.45	.....	40.73	40.60	39.54	38.74	38.19	37.91	37.39	37.07	36.84
29	40.86	.....	.....	40.70	40.59	39.49	38.72	38.18	37.90	37.38	37.06	36.83
30	40.86	.....	.....	40.67	40.56	39.45	38.71	38.16	37.88	37.38	37.05	36.84
31	40.91	.....	.....	.....	40.54	.....	38.68	38.17	.....	37.38	.....	36.85

^a Tape measurement.

N1464. County Department of Public Works. About 100 feet east of Grant Ave. on north side of Franklin Ave., Seaford. Records available: 1943-49.

N1464--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	16.49	Apr. 25	16.16	Aug. 1	15.26	Oct. 28	13.02
Mar. 2	17.22	May 31	16.37	29	14.44	Nov. 28	12.59
30	16.44	June 27	15.73	Sept. 26	13.80	Dec. 28	12.30

N1613. Citizens Water Supply Co. well Valley Stream 5. About 1,500 feet west of Corona Ave. and 96 feet north of Southern State Parkway, North Valley Stream. Records available: 1940-49.

Feb. 28	24.17	May 31	23.97	Aug. 30	22.11	Nov. 29	21.77
Mar. 30	24.32	June 27	22.48	Sept. 27	22.38	Dec. 27	21.48
Apr. 25	24.05	July 26	22.11	Oct. 31	22.17		

N1614. New York City Department of Water Supply, Gas and Electricity. West side of Herricks Road, about 150 feet north of Florence Road, Mineola. Records available: 1913-17, 1932-35, 1940-49.

Jan. 26	71.30	June 28	71.92	Sept. 12	70.78	Oct. 17	70.17
Mar. 2	71.98	July 26	71.25	19	70.66	28	69.96
31	72.31	Aug. 22	70.94	26	70.55	Nov. 28	69.50
Apr. 26	72.38	29	70.93	Oct. 3	70.41	Dec. 28	68.95
May 31	72.48	Sept. 6	70.86	10	70.29		

N1615. New York City Department of Water Supply, Gas and Electricity. East side of Merrick Ave., 324 feet north of Luddington Road, East Meadow. Records available: 1913-15, 1932-49.

Jan. 27	46.15	Apr. 26	45.96	July 26	44.50	Oct. 28	43.33
Mar. 2	46.69	May 31	46.03	Aug. 29	43.88	Nov. 28	43.12
31	46.47	June 28	45.23	Sept. 26	43.72	Dec. 27	42.92

N1616. New York City Department of Water Supply, Gas and Electricity. East side of Post Ave. at Argyle Road, Westbury. Records available: 1913-15, 1932-49.

Jan. 26	82.86	Apr. 26	84.51	July 26	84.47	Oct. 28	84.09
Mar. 1	83.23	May 31	84.74	Aug. 29	84.11	Dec. 1	83.24
30	84.05	June 28	84.66	Sept. 29	83.97	27	82.87

N1682. County Department of Public Works. Southwest corner of Crocus and Elm Aves., Bellrose. Records available: 1940-49.

Jan. 27	44.82	Apr. 25	45.95	July 26	45.64	Oct. 31	44.61
Feb. 24	45.28	May 31	46.21	Aug. 30	45.22	Nov. 29	44.22
Mar. 30	45.65	June 27	46.05	Sept. 27	44.97	Dec. 27	43.91

N1683. County Department of Public Works. Northwest corner of Sixth St. and Stewart Ave., New Hyde Park. Records available: 1940-49.

Jan. 26	58.49	Apr. 26	59.53	July 25	59.15	Oct. 31	57.57
Mar. 2	59.02	May 31	59.83	Aug. 30	58.69	Nov. 29	57.19
31	59.48	June 28	59.51	Sept. 27	58.24	Dec. 29	56.71

N1684. County Department of Public Works. About 150 feet west of Madison Ave. and 690 feet north of Stewart Ave., Garden City. Records available: 1940-49.

Jan. 26	61.23	June 28	61.27	Sept. 12	59.56	Oct. 17	59.00
Mar. 2	61.72	July 25	60.43	19	59.50	28	58.79
31	62.25	Aug. 22	59.80	26	59.37	Nov. 28	58.36
Apr. 26	61.90	29	59.73	Oct. 3	59.26	Dec. 28	57.79
May 31	62.16	Sept. 6	59.65	10	59.15		

N1828. County Department of Public Works. Northwest side of Melville Road near Suffolk County line and about 40 feet northeast of well N1248, Farmingdale. Records available: 1939-42 (as N1248), 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	62.37	Apr. 25	63.02	July 26	61.84	Oct. 28	60.32
Mar. 2	62.99	May 31	63.29	Aug. 29	61.31	Nov. 30	59.74
30	63.19	June 28	62.56	Sept. 26	60.97	Dec. 29	59.30

N1829. County Department of Public Works. South side of Stewart Ave., 700 feet west of Newbridge Ave. about 15 feet southeast of well N1180, Salisbury. Records available: 1938-42 (as N1180), 1942-49.

Jan. 26	68.85	Apr. 26	68.74	July 26	68.33	Oct. 28	67.82
Mar. 2	68.94	May 31	68.76	Aug. 29	68.11	Nov. 28	67.50
31	68.90	June 28	68.53	Sept. 26	68.00	Dec. 27	67.07

N1830. County Department of Public Works. West side of Tyson Ave., just north of Creedmoor spur of Long Island Railroad, Floral Park. Records available: 1939-42 (as N1106), 1942-49.

Jan. 27	52.68	Apr. 25	53.89	July 25	53.70	Oct. 31	52.85
Feb. 24	53.20	May 31	54.23	Aug. 30	53.61	Nov. 29	52.45
Mar. 30	53.60	June 27	54.03	Sept. 27	53.32	Dec. 27	52.06

N2052. Port Washington Water District. About 800 feet south of east end of Hewlett Lane, Port Washington. Records available: 1946-49.

Jan. 27	32.53	Apr. 29	32.83	Sept. 30	32.20	Dec. 1	32.65
Mar. 7	32.79	May 27	32.83	Oct. 31	31.89	29	32.64
Apr. 1	33.07	Sept. 1	32.00				

N2071. Appleby Estate, 50 feet south of Herb Hill Road, about 2,000 feet west of Columbia Ribbon & Carbon Co., Glen Cove. Readings taken at or near high tide. Records available: 1946-49.

Jan. 27	10.72	Apr. 26	13.53	July 25	8.38	Oct. 27	10.38
Mar. 3	12.60	June 2	11.14	Aug. 31	9.94	Nov. 30	10.65
7	11.78	28	5.37	Sept. 27	10.45	Dec. 28	11.48
31	12.53						

N2400. Roslyn Water District. Old Westbury Road and Locust Lane. Records available: 1947-49. Jan. 24, 72.81; May 6, 73.83; Sept. 30, 74.10; Oct. 31, 74.00; Dec. 29, 73.46.

N2528. County Department of Public Works. Southwest corner of Chicken Valley and Wolver Hollow Roads, Upper Brookville. Records available: 1947-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	70.52	71.20	71.36	71.61	71.81	72.13	71.94	71.74	71.66	71.42	71.16	70.87
2	70.63	71.19	71.32	71.60	71.82	72.12	71.94	71.73	71.62	71.41	71.17	70.87
3	70.70	71.19	71.32	71.60	71.83	72.12	71.95	71.73	71.64	71.41	71.16	70.85
4	70.75	71.26	71.32	71.61	71.84	72.14	71.95	71.72	71.65	71.42	71.16	70.85
5	70.82	71.25	71.36	71.60	71.86	72.16	71.93	71.71	71.67	71.42	71.13	70.87
6	70.91	71.21	71.39	71.65	71.89	72.16	71.92	71.70	71.66	71.39	71.12	70.84
7	70.98	71.26	71.36	71.64	71.92	72.15	71.90	71.70	71.63	71.39	71.12	70.85
8	71.05	71.23	71.35	71.66	71.93	72.10	71.87	71.70	71.65	71.38	71.12	70.81
9	71.10	71.27	71.38	71.66	71.94	72.08	71.87	71.71	71.63	71.38	71.09	70.78
10	71.15	71.26	71.41	71.64	71.96	72.09	71.90	71.69	71.59	71.37	71.09	70.77
11	71.18	71.24	71.43	71.65	71.96	72.13	71.88	71.68	71.57	71.36	71.09	70.77
12	71.23	71.20	71.44	71.66	71.97	72.13	71.87	71.68	71.57	71.36	71.05	70.78

N2528--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
13	71.25	71.26	71.44	71.68	71.99	72.11	71.90	71.69	71.60	71.33	71.06	70.77
14	71.27	71.27	71.44	71.72	72.00	72.09	71.88	71.73	71.60	71.32	71.09	70.75
15	71.21	71.29	71.46	71.71	72.01	72.08	71.86	71.74	71.59	71.33	71.05	70.73
16	71.23	71.26	71.46	71.73	72.01	72.08	71.84	71.73	71.57	71.31	71.03	70.72
17	71.25	71.25	71.47	71.72	72.02	72.07	71.84	71.75	71.55	71.29	71.03	70.71
18	71.20	71.20	71.49	71.70	72.03	72.07	71.84	71.79	71.56	71.29	71.01	70.72
19	71.23	71.24	71.46	71.72	72.06	72.07	71.84	71.79	71.57	71.28	71.01	70.72
20	71.18	71.27	71.43	71.72	72.07	72.08	71.84	71.74	71.54	71.27	71.02	70.69
21	71.14	71.22	71.46	71.73	72.05	72.09	71.83	71.70	71.51	71.27	70.98	70.70
22	71.19	71.24	71.50	71.75	72.08	72.10	71.83	71.70	71.53	71.27	70.96	70.69
23	71.15	71.29	71.52	71.77	72.10	72.05	71.81	71.71	71.54	71.24	70.98	70.68
24	71.19	71.27	71.51	71.78	72.11	72.03	71.79	71.70	71.50	71.23	70.95	70.63
25	71.16	71.31	71.51	71.74	72.10	72.04	71.81	71.67	71.47	71.21	71.00	70.61
26	71.15	71.31	71.55	71.76	72.11	72.03	71.79	71.67	71.46	71.23	70.94	70.65
27	71.17	71.31	71.57	71.79	72.12	72.01	71.78	71.67	71.47	71.18	70.92	70.68
28	71.21	71.35	71.58	71.79	72.12	71.97	71.78	71.66	71.51	71.19	70.90	70.63
29	71.18		71.55	71.77	72.12	71.95	71.78	71.68	71.50	71.19	70.94	70.61
30	71.12		71.57	71.79	72.12	71.94	71.78	71.65	71.45	71.19	70.91	70.59
31	71.19		71.59		72.13		71.77	71.65		71.22		70.58

N2602. Westbury Water District. Tennyson and Dryden Sts., Westbury.
 Readings discontinued Apr. 15, 1949. Records available: 1948-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.
1	.....	23.23	23.79	23.55
2	.....	23.15	23.60	23.43
3	23.55	23.19	23.54	23.41
4	23.47	23.47	23.49	23.44
5	23.50	23.45	23.68	23.37
6	23.87	23.32	23.76	23.74
7	23.88	23.53	23.59	23.65
8	23.66	23.47	23.57	23.70
9	23.44	23.62	23.64	23.61
10	23.36	23.66	23.72	.....
11	23.37	23.54	23.87	.....
12	23.44	23.46	23.86	.....
13	23.42	23.63	23.80	.....
14	23.36	23.64	23.68	.....
15	23.07	23.74	23.73	a23.76
16	23.11	23.63	23.65	.....
17	23.12	23.58	23.66	.....
18	22.92	23.38	23.74	.....
19	23.05	23.45	23.53	.....
20	22.80	23.55	23.35	.....
21	22.74	23.31	23.40	.....
22	22.93	23.40	23.48	.....
23	22.79	23.54	23.60	.....
24	22.98	23.43	23.42	.....
25	22.89	23.58	23.37	.....
26	22.92	23.51	23.45	.....
27	22.99	23.45	23.58	.....
28	23.28	23.73	23.54	.....
29	23.17		23.34	.....
30	22.94		23.40	.....
31	23.22		23.48	

a Tape measurement.

N2635. County Department of Public Works. About 50 feet east of Washington St. and 650 feet south of intersection of Washington St. and Webster Ave., Port Washington. Records available: 1948-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.34	26.60	26.82	26.83	27.01	.....	26.98	26.74	26.64	26.30	26.18	25.78
2	26.33	26.57	26.76	26.82	27.05	.....	26.98	26.73	26.59	26.27	26.18	25.78
3	26.31	26.56	26.72	26.81	27.16	27.17	26.99	26.79	26.58	26.27	26.16	25.76
4	26.30	26.62	26.69	26.81	27.16	27.17	26.99	26.85	26.58	26.28	26.14	25.75
5	26.36	26.61	26.71	26.79	27.19	27.19	26.98	26.86	26.58	26.29	26.10	25.77
6	26.47	26.58	26.72	26.92	27.23	27.19	26.99	26.86	26.60	26.27	26.08	25.75
7	26.47	26.61	26.66	26.91	27.26	27.17	27.02	26.86	26.56	26.24	26.07	25.76
8	26.47	26.59	26.67	26.92	27.23	27.12	26.99	26.85	26.58	26.23	26.06	25.72
9	26.46	26.60	26.69	26.91	27.23	27.09	26.97	26.83	26.56	26.22	26.02	25.66
10	26.46	26.59	26.72	26.88	27.24	27.09	26.97	26.79	26.53	26.22	26.01	25.65
11	26.46	26.57	26.77	26.88	27.23	.....	26.98	26.76	26.49	26.21	26.02	25.65
12	26.49	26.54	26.77	26.89	27.24	.....	26.96	26.75	26.47	26.22	25.98	25.67
13	26.50	26.58	26.75	26.93	27.23	.....	27.00	26.80	26.49	26.19	25.98	25.70
14	26.49	26.58	26.72	26.99	27.24	.....	27.01	26.82	26.52	26.16	26.02	25.67
15	26.44	26.59	26.73	26.98	27.23	.....	26.97	26.80	26.50	26.17	25.98	25.65
16	26.45	26.57	26.71	26.98	27.21	.....	26.94	26.79	26.49	26.15	25.95	25.61
17	26.45	26.58	26.72	26.95	27.20	27.11	26.95	26.80	26.47	26.14	25.95	25.59
18	26.42	26.54	26.76	26.94	27.21	27.10	26.98	26.81	26.46	26.14	25.92	25.61
19	26.44	26.56	26.74	26.98	27.23	27.09	26.96	26.80	26.46	26.14	25.91	25.63
20	26.39	26.60	26.69	26.97	27.25	27.11	26.95	26.75	26.43	26.12	25.93	25.59
21	26.38	26.56	26.70	26.97	27.24	27.12	26.92	26.72	26.38	26.12	25.90	25.60
22	26.48	26.59	26.72	27.00	27.26	27.13	26.99	26.68	26.39	26.13	25.86	25.60
23	26.45	26.65	26.78	27.05	27.30	27.11	26.86	26.66	26.43	26.11	25.86	25.59
24	26.50	26.62	26.75	27.05	27.29	27.09	26.82	26.66	26.39	26.08	25.85	25.53
25	26.49	26.66	26.74	27.00	27.29	27.08	26.83	26.63	26.35	26.06	25.90	25.48
26	26.50	26.66	26.77	27.01	27.28	27.07	26.84	26.62	26.32	26.16	25.86	25.50
27	26.52	26.66	26.82	27.04	27.28	27.05	26.82	26.61	26.32	26.14	25.83	25.58
28	26.59	26.76	26.82	27.01	27.25	27.02	26.82	26.61	26.35	26.16	25.81	25.55
29	26.56		26.78	26.99	.....	27.01	26.80	26.64	26.36	26.18	25.84	25.53
30	26.51		26.78	27.00	.....	26.99	26.77	26.61	26.34	26.19	25.83	25.49
31	26.58		26.80	.....	.....		26.75	26.61		26.24		25.48

Queens County

(All measurements in Queens County are above or below mean sea level as indicated.)

Q64. American Ice Co. 83d St. and 45th Ave., Elmhurst. Records available: 1947-49.

Water level below mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	14.32	Apr. 8	12.74	July 8	13.82	Oct. 7	8.26
14	14.24	15	12.85	15	14.32	14	8.16
21	14.53	22	12.97	22	14.93	21	7.93
28	13.78	29	12.97	29	14.86	28	7.93
Feb. 4	13.58	May 6	12.18	Aug. 5	13.66	Nov. 4	7.48
11	13.63	13	12.02	12	12.24	10	7.48
18	13.98	20	11.95	19	11.37	18	7.18
25	14.22	27	12.66	26	10.69	25	6.95
Mar. 4	14.44	June 3	12.62	Sept. 2	9.95	Dec. 2	7.04
11	14.02	10	12.63	9	8.81	9	7.10
18	13.99	17	12.22	16	8.52	16	7.03
25	13.60	24	12.52	23	8.10	23	6.66
Apr. 1	12.90	July 1	13.51	30	8.14	30	6.78

Q273. New York City Department of Water Supply, Gas and Electricity.
On south side of Grand Central Parkway about 1,000 feet east of Queens
Blvd., Forest Hills. Records available: 1935-49.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.95	4.82	5.23	5.13	5.25	5.30	4.58	4.52	4.71	4.26	4.41	4.22
2	4.74	4.75	5.02	5.03	5.28	5.27	4.61	4.49	4.56	4.18	4.39	4.14
3	4.52	4.74	4.91	4.96	5.39	5.22	4.67	4.52	4.55	4.22	4.37	4.13
4	4.44	4.93	4.86	4.96	5.36	5.22	4.73	4.57	4.56	4.32	4.40	4.10
5	4.63	4.97	4.98	4.89	5.38	5.29	4.74	4.54	4.62	4.38	4.32	4.24
6	4.88	4.84	5.09	5.09	5.47	5.34	4.71	4.53	4.67	4.34	4.24	4.26
7	4.84	4.92	5.00	5.06	5.54	5.30	4.66	4.53	4.58	4.31	4.28	4.29
8	4.69	4.92	4.91	5.04	5.42	5.16	4.58	4.57	4.61	4.31	4.34	4.26
9	4.56	4.97	4.96	4.97	5.38	5.02	4.54	4.60	4.59	4.32	4.29	4.12
10	4.53	4.96	5.06	4.86	5.40	4.98	4.63	4.56	4.48	4.34	4.24	4.04
11	4.55	4.90	5.24	4.85	5.32	5.07	4.70	4.50	4.35	4.33	4.28	4.05
12	4.66	4.77	5.27	4.90	5.29	5.12	4.73	4.49	4.34	4.34	4.21	4.13
13	4.73	4.89	5.23	5.02	5.27	5.08	4.83	4.51	4.47	4.26	4.19	4.23
14	4.74	4.97	5.15	5.17	5.26	5.03	4.82	4.48	4.55	4.18	4.33	4.20
15	4.54	5.04	5.18	5.12	....	4.99	4.77	4.48	4.54	4.23	4.32	4.15
16	4.52	5.01	5.18	5.12	....	4.96	4.68	4.49	4.52	4.23	4.26	4.10
17	4.61	4.96	5.22	5.04	....	4.94	4.65	4.54	4.50	4.18	4.25	4.08
18	4.51	4.79	5.32	4.97	....	4.93	4.68	4.67	4.48	4.22	4.27	4.12
19	4.57	4.83	5.26	5.04	....	4.92	4.68	4.72	4.54	4.27	4.25	4.20
20	4.48	4.97	5.11	5.03	....	4.92	4.66	4.62	4.51	4.28	4.33	4.13
21	4.40	4.87	5.14	5.08	5.26	4.97	4.62	4.51	4.38	4.30	4.30	4.12
22	4.62	4.88	5.27	5.18	5.25	4.99	4.58	4.48	4.39	4.35	4.21	4.14
23	4.56	5.03	5.45	5.29	5.38	4.89	4.51	4.52	4.50	4.32	4.24	4.13
24	4.64	4.95	5.39	5.32	5.35	4.79	4.44	4.54	4.45	4.27	4.27	3.90
25	4.67	5.00	5.29	5.17	5.37	4.77	4.50	4.50	4.30	4.20	4.39	3.72
26	4.62	5.00	5.26	5.15	5.34	4.77	4.51	4.49	4.22	4.35	4.34	3.83
27	4.69	4.94	5.32	5.28	5.35	4.76	4.52	4.57	4.27	4.26	4.23	4.09
28	4.84	5.13	5.28	5.26	5.32	4.64	4.56	4.61	4.43	4.23	4.17	4.12
29	4.85		5.09	5.17	5.28	4.57	4.71	4.52	4.33	4.26	4.05	
30	4.62		5.05	5.21	5.26	4.56	4.59	4.64	4.45	4.39	4.32	3.91
31	4.70		5.10		5.29		4.59	4.65		4.52		3.85

Q278. New York City Department of Water Supply, Gas and Electricity.
Alley Pond Parkway and Horace Harding Blvd., Douglaston. Records available:
1946-49.

Water level above and below mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	1.22	Apr. 26	4.32	July 27	-2.81	Nov. 29	-0.21
Feb. 24	2.11	June 1	1.84	Sept. 28	-1.49	Dec. 29	-.29
Mar. 28	2.03	July 6	-6.05	Oct. 27	-1.23		

Q282. New York City Department of Water Supply, Gas and Electricity.
Underhill Ave. and 171st St., Flushing. Records available: 1946-49.
Measurement discontinued.

Water level below mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	6.76	Apr. 28	5.21	Aug. 2	9.25	Oct. 27	8.44
Feb. 24	5.94	June 1	5.84	26	8.85	Nov. 29	7.91
Mar. 28	5.73	July 1	9.34	Sept. 28	8.68	Dec. 29	8.11

Q283. New York City Department of Water Supply, Gas and Electricity. Underhill Ave. and 171st St., Flushing. Records available: 1946-49.

Water level below mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	6.78	Apr. 28	5.26	Aug. 2	9.24	Oct. 27	8.44
Feb. 24	5.97	June 1	5.88	26	8.85	Nov. 29	7.91
Mar. 28	5.74	July 1	9.32	Sept. 28	8.67	Dec. 29	8.12

Q287. Broad Channel Corp. Southeast side of Shad Creek Road, about 100 feet southwest of Ninth Road, Broad Channel. Records available: 1939-49.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.4	8.0	8.7	8.8	8.6	8.5	6.7	5.8	5.7	6.0	7.2	7.5
2	8.0	7.6	8.6	8.8	8.6	8.4	6.8	5.8	5.4	6.2	7.7	7.5
3	8.0	7.9	8.6	8.6	8.5	8.4	6.8	5.7	5.5	6.3	7.3	7.4
4	8.0	8.4	8.5	8.8	8.6	8.4	6.8	5.7	5.5	6.4	7.3	7.7
5	8.2	8.4	8.8	8.7	8.6	8.6	6.7	5.7	5.6	6.4	7.2	7.5
6	8.4	8.5	8.8	9.3	8.8	8.6	6.8	5.6	5.6	6.5	7.2	7.2
7	8.1	8.7	8.7	8.6	9.1	8.6	6.7	5.6	5.6	6.6	7.3	7.5
8	8.3	8.4	9.0	8.8	8.9	8.4	6.6	5.6	5.8	6.6	7.3	7.3
9	8.1	8.5	8.8	8.7	9.0	8.1	6.4	5.6	5.6	6.7	7.1	7.0
10	8.1	8.7	9.1	8.6	9.1	8.0	6.6	5.7	5.5	6.6	7.3	7.3
11	8.1	8.5	9.2	8.7	9.3	8.0	6.5	5.6	5.4	6.8	7.3	7.3
12	8.4	8.8	8.5	8.8	9.3	7.9	6.5	5.7	5.7	6.8	7.4	7.4
13	8.4	8.7	8.3	9.0	9.0	7.8	6.5	5.8	5.7	6.8	7.7	7.4
14	8.3	8.8	8.7	9.1	8.8	7.7	6.5	5.8	5.8	6.7	7.7	7.4
15	8.3	9.1	8.8	9.0	8.8	7.5	6.4	5.6	5.8	6.9	7.6	7.5
16	8.4	8.8	8.5	8.7	8.7	7.6	6.2	5.6	5.9	7.1	7.5	7.5
17	8.4	8.1	8.4	8.5	8.6	7.6	6.3	5.6	5.8	7.0	7.7	7.5
18	8.3	8.1	8.7	8.7	8.6	7.6	6.1	5.8	5.9	7.2	7.5	7.6
19	8.6	8.4	8.2	9.0	8.8	7.5	6.0	5.9	6.1	7.4	7.6	7.9
20	7.9	8.6	8.1	8.5	9.1	7.5	6.0	5.6	6.1	7.4	7.5	...
21	8.2	8.5	8.2	8.3	9.0	7.5	5.9	5.5	6.1	7.3	7.5	...
22	8.3	8.7	8.5	8.5	8.9	7.6	6.0	5.5	6.3	7.4	7.3	...
23	7.8	8.5	8.8	8.8	9.0	7.4	5.8	5.7	6.4	7.1	7.4	7.7
24	8.2	8.7	8.5	8.8	8.9	7.3	5.8	5.7	6.1	7.0	7.4	7.4
25	8.1	9.0	8.5	8.6	8.9	7.2	5.9	5.7	6.0	7.2	8.0	7.3
26	8.4	8.6	8.6	8.6	8.9	7.2	6.0	5.6	6.0	7.2	7.5	7.6
27	8.5	8.7	8.9	8.7	8.9	7.2	5.9	5.6	6.4	6.7	7.7	7.6
28	8.9	9.4	8.8	8.6	8.8	7.1	5.8	5.8	6.6	6.8	7.5	7.4
29	8.3		8.5	8.5	8.5	6.9	5.9	5.8	6.9	7.0	7.9	7.1
30	7.9		8.6	8.5	8.5	6.8	5.9	5.6	6.3	7.2	7.7	7.0
31	8.4		8.8		8.5		6.0	5.7		7.4		7.6

Q350. New York Water Service Corp. Deep test well, 700 feet east of Centerville St., 200 feet north of Aqueduct pumping station and about 0.5 mile south of Rockaway Blvd., Aqueduct. Records available: 1937-49.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.53	1.04	1.23	1.19	1.26	...	0.93	0.78	0.84	0.70	0.65	0.38
2	.56	1.05	1.21	1.17	1.25	...	.93	.77	.83	.70	.65	.37
3	.57	1.05	1.21	1.17	1.27	1.22	.93	.76	.84	.69	.65	.36
4	.58	1.08	1.21	1.18	1.30	1.21	.93	.76	.84	.69	.65	.36
5	.61	1.08	1.24	1.16	1.33	1.21	.92	.77	.85	.69	.62	.37
6	.67	1.08	1.25	1.21	1.34	1.20	.91	.78	.85	.68	.60	.36
7	.71	1.09	1.25	1.23	1.34	1.18	.90	.78	.84	.68	.59	.36

Q350--Continued.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	0.74	1.10	1.24	1.25	1.33	1.14	0.89	0.78	0.85	0.67	0.58	0.35
9	.74	1.11	1.27	1.25	1.33	1.11	.88	.78	.85	.67	.57	.33
10	.75	1.12	1.28	1.23	1.34	1.10	.89	.75	.83	.67	.55	.31
11	.77	1.12	1.29	1.23	1.33	1.12	.89	.74	.80	.66	.55	.31
12	.79	1.10	1.30	1.23	1.33	1.13	.88	.72	.79	.65	.52	.31
13	.80	1.13	1.30	1.24	1.33	1.12	.90	.73	.80	.64	.51	.31
14	.81	1.14	1.28	1.26	1.32	1.11	.92	.80	.81	.63	.52	.30
15	.80	1.14	1.28	1.26	1.31	1.11	.92	.84	.81	.62	.50	.30
16	.81	1.14	1.26	1.27	1.31	1.11	.91	.85	.80	.61	.49	.29
17	.82	1.14	1.26	1.25	1.31	1.10	.91	.87	.79	.60	.49	.28
18	.82	1.12	1.27	1.22	1.32	1.10	.93	.89	.78	.60	.48	.27
19	.83	1.13	1.23	1.22	1.32	1.09	.94	.89	.79	.60	.47	.28
20	.83	1.15	1.21	1.23	1.32	....	.93	.85	.77	.60	.48	.27
21	.83	1.14	1.20	1.24	1.28	....	.91	.82	.75	.59	.46	.28
22	.86	1.14	1.21	1.25	1.28	....	.89	.80	.74	.60	.45	.29
23	.89	1.17	1.22	1.27	....	....	.87	.79	.76	.60	.45	.28
24	.91	1.18	1.21	1.28	....	1.03	.85	.78	.74	.59	.44	.26
25	.93	1.20	1.20	1.27	....	1.02	.85	.77	.72	.58	.45	.24
26	.94	1.20	1.20	1.27	....	1.01	.84	.78	.71	.60	.43	.26
27	.96	1.20	1.21	1.29	....	1.00	.83	.80	.71	.61	.42	.29
28	.99	1.21	1.22	1.28	1.37	.97	.82	.80	.72	.61	.40	.30
29	1.02		1.18	1.26	....	.96	.81	.81	.73	.62	.41	.31
30	1.02		1.18	1.26	....	.95	.81	.80	.71	.62	.40	.29
31	1.03		1.18		....		.80	.81		.64		.28

a Tape measurement.

Q470. New York City Department of Water Supply, Gas and Electricity.
 About 325 feet south of Northern Blvd. and 110 feet west of Cross Island
 Parkway (Belt Parkway), Bayside. Records available: 1933-49.

Daily mean water level, above and below msl, from recorder graph*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.43	1.63	2.19	2.13	3.19	2.21	-2.80	-1.50	-1.00	-0.68	-0.32	0.10
2	2.42	1.70	2.20	2.16	3.16	2.14	-2.85	-1.54	-1.02	-0.68	-0.26	.07
3	2.35	1.75	2.20	2.16	3.12	2.06	-2.86	-1.54	-1.05	-0.67	-0.22	.04
4	2.28	1.84	2.21	2.20	3.07	1.97	-2.90	-1.53	-1.06	-0.64	-0.18	0
5	2.19	1.95	2.24	2.20	2.99	1.91	-2.97	-1.49	-1.05	-0.61	-0.19	0
6	2.13	2.01	2.29	2.24	2.90	1.87	-3.14	-1.43	-1.03	-0.59	-0.22	.00
7	2.06	2.08	2.31	2.26	2.81	1.83	-3.18	-1.35	-1.01	-0.58	-0.23	-.01
8	1.98	2.15	2.30	2.27	2.71	1.71	-3.05	-1.25	-0.98	-0.56	-0.23	.00
9	1.90	2.22	2.28	2.27	2.61	1.56	-2.90	-1.15	-0.96	-0.54	-0.24	-.02
10	1.83	2.29	2.27	2.25	2.53	1.43	-2.77	-1.12	-0.95	-0.52	-0.25	-.05
11	1.76	2.37	2.32	2.22	2.47	1.32	-2.62	-1.15	-0.96	-0.51	-0.24	-.06
12	1.70	2.40	2.35	2.21	2.43	1.22	-2.49	-1.16	-0.96	-0.50	-0.24	-.05
13	1.65	2.40	2.35	2.24	2.41	1.10	-2.33	-1.13	-0.93	-0.50	-0.24	-.02
14	1.59	2.40	2.34	2.33	2.39	.95	-2.16	-1.07	-0.88	-0.51	-0.20	0
15	1.51	2.38	2.35	2.42	2.39	.79	-2.00	-0.99	-0.85	-0.51	-0.16	0
16	1.45	2.34	2.35	2.53	2.39	.62	-1.85	-0.90	-0.84	-0.51	-0.14	-.45
17	1.41	2.29	2.35	2.58	2.38	.44	-1.74	-0.83	-0.85	-0.48	-0.13	-1.25
18	1.37	2.19	2.36	2.64	2.37	.28	-1.63	-0.79	-0.87	-0.44	-0.12	-2.04
19	1.33	2.11	2.37	2.74	2.36	.12	-1.55	-0.75	-0.86	-0.40	-0.13	-2.66
20	1.26	2.06	2.31	2.79	2.38	-.01	-1.46	-0.76	-0.82	-0.36	-0.13	-2.71
21	1.15	2.05	2.25	2.84	2.38	-.10	-1.37	-0.80	-0.80	-0.34	-0.13	-2.30
22	1.11	2.05	2.21	2.90	2.36	-.26	-1.34	-0.83	-0.78	-0.33	-0.14	-1.83
23	1.09	2.07	2.19	2.97	2.37	-.92	-1.35	-0.85	-0.73	-0.36	-0.13	-1.44
24	1.09	2.08	2.17	3.04	2.37	-1.84	-1.39	-0.86	-0.70	-0.39	-0.11	-1.19
25	1.12	2.10	2.13	3.09	2.38	-2.30	-1.42	-0.88	-0.72	-0.44	-0.06	-1.01
26	1.15	2.11	2.09	3.14	2.38	-2.43	-1.43	-0.91	-0.72	-0.45	-0.01	-.80
27	1.24	2.09	2.07	3.19	2.37	-2.51	-1.44	-0.94	-0.72	-0.46	.01	-.57
28	1.34	2.12	2.07	3.22	2.36	-2.67	-1.44	-0.97	-0.71	-0.47	.04	-.42

Q470--Continued.

Daily mean water level, above mean sea level, from recorder graph*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
29	1.44		2.05	3.22	2.33	-2.73	-1.44	-0.97	-0.69	-0.46	0.07	-0.33
30	1.46		2.04	3.21	2.29	-2.79	-1.43	-.98	-.68	-.44	.10	-.30
31	1.50		2.08	2.24	2.24		-1.46	-.99		-.37		-.27

* Minus sign indicates below sea level.

Q471. New York City Department of Water Supply, Gas and Electricity well Bayside 11. About 310 feet south of Northern Blvd. and 110 feet west of Cross Island Parkway (Belt Parkway), Bayside. Records available: 1939-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	16.44	Apr. 26	16.29	July 27	15.93	Oct. 27	15.74
Feb. 25	16.26	June 1	16.29	Aug. 26	15.86	Nov. 29	15.55
Mar. 31	16.20	July 1	15.87	Sept. 28	15.89	Dec. 29	15.39

Q543. New York City Department of Water Supply, Gas and Electricity well 3. Rockaway Beach Blvd. and Beach 110th St., Rockaway Park. Records available: 1932, 1936-49.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.4	9.0	9.7	10.0	9.7	9.8	8.3	7.3	7.3	7.4	8.6	8.9
2	8.9	8.6	9.7	10.0	9.8	9.6	8.2	7.3	6.8	7.5	9.0	8.9
3	8.9	8.9	9.7	9.9	9.8	9.5	8.2	7.3	6.9	7.6	8.8	8.8
4	9.0	9.6	9.6	10.0	9.8	9.6	8.1	7.3	6.9	7.7	8.7	9.2
5	9.2	9.7	9.9	9.9	9.8	9.8	8.2	7.2	7.1	7.8	8.5	9.0
6	9.4	9.7	10.0	10.5	10.0	9.9	8.3	7.2	7.0	7.9	8.5	8.7
7	9.1	10.0	9.8	9.7	10.3	9.7	8.2	7.2	7.0	8.0	8.6	8.9
8	9.3	9.5	10.1	10.0	10.1	9.5	8.1	7.2	7.3	7.9	8.6	8.7
9	9.2	9.6	10.0	9.8	10.3	9.3	7.8	7.2	7.1	8.0	8.5	8.4
10	9.2	9.9	10.2	9.7	10.4	9.2	8.0	7.2	6.9	8.0	8.7	8.7
11	9.2	9.8	10.2	9.8	10.4	9.2	8.0	7.2	6.8	8.2	8.8	8.8
12	9.5	10.0	9.4	9.9	10.5	9.1	8.0	7.3	7.2	8.2	8.9	8.8
13	9.5	9.9	9.1	10.2	10.2	9.2	8.1	7.4	7.3	8.2	9.0	8.8
14	9.5	9.9	9.6	10.2	10.0	9.0	8.1	7.4	7.2	8.2	9.0	8.7
15	9.5	10.3	9.9	10.0	10.1	8.9	8.2	7.1	7.2	8.3	8.9	8.9
16	9.6	10.0	9.6	10.0	10.0	9.0	7.9	7.2	7.3	8.5	8.9	8.8
17	9.6	9.2	9.3	9.8	9.8	9.1	8.0	7.1	7.2	8.4	9.0	8.8
18	9.5	9.2	9.7	10.1	9.9	8.8	7.8	7.4	7.2	8.6	8.9	8.9
19	9.6	9.5	9.2	10.3	10.1	8.8	7.7	7.5	7.4	8.8	8.8	9.0
20	9.1	9.7	9.2	9.7	10.5	8.7	7.6	7.1	7.4	8.7	8.9	9.0
21	9.5	9.6	9.5	9.6	10.3	8.7	7.5	7.0	7.3	8.7	8.9	9.2
22	9.5	9.8	9.8	9.7	10.2	8.8	7.5	7.0	7.5	8.7	8.7	9.2
23	9.0	9.6	10.1	10.0	10.3	8.7	7.4	7.1	7.6	8.3	8.8	9.1
24	9.3	9.8	9.7	9.8	10.1	8.8	7.3	7.2	7.3	8.3	8.8	8.7
25	9.3	10.2	9.6	9.7	10.1	8.8	7.3	7.3	7.3	8.5	9.5	8.7
26	9.6	9.7	9.9	9.8	10.1	8.7	7.5	7.0	7.4	8.3	9.0	8.9
27	9.6	9.8	10.0	9.9	10.0	8.7	7.3	7.0	7.7	8.0	9.1	9.0
28	10.1	10.4	10.0	9.8	10.0	8.6	7.3	7.2	8.0	8.2	8.9	8.7
29	9.4		9.7	9.6	9.8	8.4	7.5	7.4	8.1	8.3	9.4	8.4
30	8.8		9.7	9.6	9.7	8.2	7.4	7.2	7.7	8.5	9.2	8.4
31	9.4		10.0		9.8		7.4	7.3		8.8		9.1

Q1027. New York City Department of Parks. About 370 feet west of Rodman St. and 35 feet north of 58th Ave. extended, Flushing Meadow Park, Flushing. Records available: 1942-43, 1946-49.

Daily mean water level, above mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.50	7.66	7.99	8.01	8.04	8.02	6.34	5.48	5.67	7.13	7.36	7.20
2	7.35	7.59	7.87	7.92	8.11	8.03	6.34	5.46	5.76	7.15	7.41	7.18
3	7.28	7.61	7.83	7.89	8.18	8.02	6.32	5.47	5.98	7.19	7.38	7.11
4	7.28	7.77	7.79	7.89	8.17	8.04	6.29	5.51	6.19	7.25	7.37	7.15
5	7.42	7.75	7.88	7.84	8.20	8.09	6.24	5.47	6.37	7.29	7.28	7.20
6	7.56	7.68	7.89	8.03	8.25	8.10	6.18	5.43	6.52	7.29	7.26	7.15
7	7.50	7.78	7.80	7.89	8.30	8.07	6.11	5.42	6.64	7.23	7.30	7.20
8	7.45	7.68	7.82	7.89	8.24	7.99	6.05	5.43	6.80	7.26	7.32	7.10
9	7.42	7.71	7.84	7.80	8.25	7.92	6.05	5.43	6.85	7.26	7.27	7.02
10	7.43	7.76	7.88	7.73	8.26	7.92	6.15	5.41	6.83	7.26	7.27	6.99
11	7.47	7.72	7.98	7.73	8.22	7.96	6.20	5.40	6.85	7.27	7.29	7.03
12	7.55	7.70	7.92	7.76	8.22	7.94	6.22	5.42	6.94	7.28	7.23	7.08
13	7.56	7.76	7.89	7.85	8.16	7.92	6.28	5.43	7.06	7.22	7.27	7.12
14	7.55	7.77	7.89	7.92	8.13	7.87	6.22	5.39	7.11	7.22	7.33	7.08
15	7.44	7.83	7.97	7.90	8.08	7.82	6.15	5.36	7.13	7.26	7.29	7.07
16	7.49	7.77	7.95	7.89	8.04	7.76	6.08	5.35	7.14	7.25	7.25	7.06
17	7.52	7.72	7.97	7.83	8.01	7.70	6.02	5.36	7.14	7.24	7.27	7.06
18	7.45	7.64	8.06	7.84	8.01	7.62	5.98	5.42	7.17	7.29	7.24	7.12
19	7.54	7.67	7.95	7.91	8.04	7.53	5.90	5.42	7.24	7.32	7.22	7.18
20	7.41	7.76	7.91	7.83	8.06	7.42	5.83	5.35	7.22	7.31	7.28	7.14
21	7.45	7.70	7.99	7.83	8.01	7.36	5.75	5.33	7.19	7.29	7.23	7.17
22	7.59	7.78	8.05	7.88	8.04	7.25	5.69	5.35	7.25	7.29	7.20	7.17
23	7.51	7.85	8.17	7.96	8.11	7.06	5.60	5.37	7.30	7.24	7.25	7.13
24	7.62	7.80	8.09	7.94	8.07	6.95	5.55	5.36	7.22	7.22	7.22	6.96
25	7.58	7.88	8.09	7.84	8.10	6.88	5.57	5.33	7.16	7.20	7.36	6.92
26	7.62	7.80	8.12	7.92	8.09	6.80	5.54	5.39	7.16	7.34	7.26	7.02
27	7.64	7.78	8.16	7.98	8.09	6.66	5.46	5.48	7.23	7.23	7.24	7.14
28	7.76	7.97	8.09	7.96	8.05	6.48	5.49	5.51	7.30	7.25	7.21	7.08
29	7.64		7.99	7.95	8.00	6.39	5.53	5.56	7.28	7.29	7.32	7.02
30	7.51		8.00	8.00	7.98	6.36	5.55	5.46	7.22	7.32	7.29	6.95
31	7.69		8.01		8.00		5.53	5.51		7.43		6.98

Q1089. New York City Department of Water Supply, Gas and Electricity. North side of North Conduit Ave., about 800 feet east of Far Rockaway Branch of Long Island Railroad, Aqueduct. Records available: 1911-17, 1932-39, 1941-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	1.96	Apr. 27	1.93	July 27	1.62	Oct. 27	1.71
Feb. 24	2.18	May 31	2.19	Aug. 26	1.79	Nov. 29	1.56
Mar. 28	1.70	June 30	1.80	Sept. 29	1.64	Dec. 27	1.90

Q1090. New York City Department of Water Supply, Gas and Electricity. East side of Hawktree Creek Rd., about 350 feet south of 133d Ave., Aqueduct. Records available: 1911-17, 1932-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	2.37	Apr. 27	3.16	July 27	2.93	Oct. 27	2.39
Feb. 24	2.75	May 31	3.34	Aug. 26	2.90	Nov. 29	2.24
Mar. 28	3.02	June 30	3.18	Sept. 29	2.50	Dec. 27	2.16

Q1152. New York City Department of Water Supply, Gas and Electricity. Ocoee pumping station well 1 east leg. Sunrise Highway and 131st St. Records available: 1947-49.

Water level above and below msl.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	1.50	Apr. 27	+1.15	July 27	4.01	Oct. 27	2.34
Feb. 24	.61	May 31	+.88	Aug. 26	2.02	Nov. 29	3.61
Mar. 28	.82	June 30	2.99	Sept. 29	2.50	Dec. 29	4.31

Q1222. New York City Department of Water Supply, Gas and Electricity well Whitestone 9. About 200 feet east of 142d St., about 850 feet north of 20th Ave., Whitestone. Records available: 1940-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	1.89	Apr. 26	2.04	Aug. 1	.65	Oct. 27	.97
Feb. 24	1.98	May 31	2.07	26	.68	Nov. 29	.93
Mar. 28	1.88	July 1	.94	Sept. 28	.65	Dec. 29	.69

Q1223. New York City Department of Water Supply, Gas and Electricity. Northeast corner of Rockaway Blvd. and 142d Place, South Ozone Park. Records available: 1933-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	5.74	Apr. 27	7.13	July 27	6.46	Oct. 27	5.82
Feb. 24	6.37	May 31	7.38	Aug. 26	6.39	Nov. 29	5.33
Mar. 28	6.76	June 30	6.83	Sept. 29	6.20	Dec. 27	4.95

Q1225. New York City Department of Water Supply, Gas and Electricity. Southeast corner of 109th Ave. and 200th St., Hollis. Records available: 1933-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	27.54	Apr. 27	28.25	July 26	27.47	Oct. 27	26.67
Feb. 24	27.60	May 31	28.31	Aug. 26	27.22	Nov. 29	26.30
Mar. 28	27.99	June 30	27.86	Sept. 29	26.86	Dec. 29	25.80

Q1237. New York City Department of Water Supply, Gas and Electricity. Belt (Southern) Parkway about 1,450 feet west of 150th St., Baisley Park. Records available: (1939-48 as Q337); 1940-49.

Daily mean water level, below mean sea level, from recorder graph*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.66	0.48	0.47	+0.72	+0.29	+0.78	1.35	0.95	0.81	2.17	3.28	4.60
2	1.85	.21	.72	+.85	+.91	+.47	1.16	1.00	1.15	2.40	3.20	4.76
3	1.99	.63	.66	+.62	+1.21	+.27	1.13	.49	1.37	2.45	2.94	4.78
4	2.00	.38	.70	+.72	+1.18	+.11	.90	.10	1.44	2.54	3.23	4.77
5	1.73	.22	.66	+.30	+.75	0	.98	.02	1.14	2.38	3.54	4.53
6	1.55	.23	.60	+.84	+.62	.13	1.35	.06	1.14	2.26	3.92	4.52
7	1.64	+.02	.56	+1.51	+.48	.51	.78	.24	1.53	2.17	3.84	4.33
8	1.70	+.01	.74	+1.76	....	.27	.73	.37	1.63	2.07	3.73	4.33
9	1.76	.02	.57	+1.74	....	.10	.87	1.19	1.48	2.44	3.77	5.30
10	1.82	.06	.26	+1.43	....	.30	.73	1.82	1.45	2.49	4.10	6.02
11	1.86	.10	+.06	+1.58	....	.35	.04	2.10	1.32	2.76	4.20	6.24
12	1.78	.40	+.07	+1.42	....	.85	.48	1.84	1.45	2.85	4.57	6.20
13	1.68	.43	.23	+1.45	....	1.18	.18	.86	1.42	3.04	....	6.18
14	1.70	.48	.47	+1.55	+1.58	1.10	.08	0	1.35	3.45	....	6.25
15	1.82	.47	.46	+1.52	+1.54	.74	.58	+.35	1.42	3.47	....	6.34
16	1.83	.49	.45	+1.53	+1.63	1.03	.62	+.31	1.20	3.35	....	....

Q1237--Continued.

Daily mean water level, below mean sea level, from recorder graph*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	1.78	0.46	.42	+1.42	+1.53	1.25	0.54	0.52	1.27	3.36	....	6.34
18	1.83	.72	.41	+1.67	+1.38	1.28	+0.7	+1.6	1.41	3.33	....	6.35
19	1.75	.82	.47	+1.63	+1.42	1.26	.69	+4.0	1.43	3.35 ^a	3.79	6.26
20	1.85	.76	.66	+1.48	+1.03	1.11	1.14	.25	1.43	2.94	....	6.24
21	1.93	.82	.67	+1.36	+1.40	1.57	1.68	.32	1.55	3.18	....	6.19
22	1.76	.87	.66	+1.32	+1.55	1.66	2.03	.59	1.50	2.91	....	6.29
23	1.77	1.15	.52	+1.39	+2.14	1.85	2.24	1.08	1.51	3.00	....	6.43
24	1.84	1.04	.56	+1.40	+2.02	1.93	2.36	1.12	1.54	3.18	....	6.63
25	1.84	.83	.61	+1.32	+2.27	1.88	2.31	.85	1.60	3.57	....	6.78
26	1.82	.77	.57	+1.29	+2.42	1.70	2.27	.60	1.62	3.23	....	6.65
27	1.63	.78	.54	+1.32	+2.56	1.80	2.30	.96	1.85	2.92	4.59	6.52
28	1.10	.59	.53	+1.27	+2.31	1.87	1.73	1.33	1.69	2.85	4.73	6.57
29	.83		.64	+0.94	+2.15	1.34	1.23	.58	1.55	3.10	4.76	6.46
30	.77		.47	+0.57	+2.08	1.38	1.27	.90	1.82	3.46	4.70	6.51
31	.80		+0.08		+1.40		1.37	.90		3.17		6.83

^a Tape measurement.

* Plus sign indicates above mean sea level.

Q1248. New York City Department of Water Supply, Gas and Electricity. 100th Road and Belt (Cross Island) Parkway, Queens Village. Records available: 1940-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	36.91	Apr. 27	38.08	July 26	36.89	Oct. 27	36.33
Feb. 24	37.52	May 31	38.16	Aug. 26	36.53	Nov. 29	36.05
Mar. 28	37.93	June 30	37.55	Sept. 29	36.44	Dec. 29	35.75

Q1249. New York City Department of Water Supply, Gas and Electricity. Northwest corner of 106th Avenue and 216th St., Queens Village. Records available: 1940-46, 1948-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	31.63	Apr. 27	32.88	July 26	32.24	Oct. 27	31.11
Feb. 24	32.18	May 31	32.92	Aug. 26	31.71	Nov. 29	30.75
Mar. 28	32.60	June 30	32.58	Sept. 29	31.26	Dec. 29	30.30

Q1250. New York City Department of Water Supply, Gas and Electricity. Southwest corner of Liberty and Camden Avenues, Hollis. Records available: 1940-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	21.57	Apr. 27	22.00	July 26	20.79	Oct. 27	19.74
Feb. 24	21.98	May 31	21.87	Aug. 26	20.63	Nov. 29	19.46
Mar. 28	22.18	June 30	21.46	Sept. 29	20.11	Dec. 28	19.03

Q1251. New York City Department of Water Supply, Gas and Electricity. Northwest corner of 107th Ave. and 172d St., Jamaica. Records available: 1940-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	13.76	Apr. 27	12.92	July 27	11.06	Oct. 27	9.77
Feb. 24	14.25	May 31	12.37	Aug. 26	10.62	Nov. 29	9.63
Mar. 28	13.66	June 30	11.79	Sept. 29	10.07	Dec. 29	9.19

Q1252. New York City Department of Water Supply, Gas and Electricity. Northeast corner of Liberty Ave. and 157th St., Jamaica. Records available: 1940-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	13.05	Apr. 27	13.21	July 27	11.83	Oct. 27	11.23
Feb. 24	13.14	May 31	13.18	Aug. 26	11.55	Nov. 29	10.99
Apr. 4	13.09	June 30	12.29	Sept. 29	11.33	Dec. 28	11.78

Q1253. New York City Department of Water Supply, Gas and Electricity. Northeast corner of 101st Ave. and 121st St., Richmond Hill. Records available: 1940-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	2.77	Apr. 27	2.40	July 27	2.19	Oct. 27	1.83
Feb. 23	2.30	May 31	2.57	Aug. 26	1.89	Nov. 29	1.32
Mar. 28	2.29	June 30	2.51	Sept. 29	1.64	Dec. 28	1.16

Q1254. New York City Department of Water Supply, Gas and Electricity. Northwest corner of 101st Ave. and 108th St., Richmond Hill. Records available: 1940-49.

Water level below mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	2.07	Apr. 27	3.89	July 27	4.67	Oct. 27	4.75
Feb. 23	1.96	May 31	4.26	Aug. 26	3.74	Nov. 29	5.28
Mar. 28	1.58	June 30	4.44	Sept. 29	4.90	Dec. 28	4.40

Q1255. New York City Department of Water Supply, Gas and Electricity. Northwest corner of Atlantic Ave. and Woodhaven Blvd., Woodhaven. Records available: 1911-17, 1932-40, 1941-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	3.89	Apr. 27	3.54	July 27	4.51	Oct. 27	4.56
Feb. 23	4.17	May 31	3.22	Aug. 26	4.71	Nov. 29	4.67
Mar. 28	4.16	June 30	4.11	Sept. 29	4.89	Dec. 28	3.38

Q1256. New York City Department of Water Supply, Gas and Electricity. Southeast corner of 95th Ave. and 82d St., Woodhaven. Records available: 1940-43, 1945-49.

Water level below mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	2.59	Apr. 27	2.19	July 27	2.64	Oct. 27	2.95
Feb. 23	2.52	May 31	1.89	Aug. 26	2.79	Nov. 29	2.75
Mar. 28	2.39	June 30	2.30	Sept. 29	2.88	Dec. 27	2.40

Q1266. New York Water Service Corp. well 6. 91st St. between 101st and 97th Avenues, Woodhaven. Record discontinued at this well June 21, 1949 but resumed at nearby well Q1267. (Dec. 28, 1949, water level reading--2.63 feet in well Q1266). Records available: 1946-49.

Daily mean water level, below mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	5.27	4.91	4.74	4.59	4.33	4.21
2	5.31	4.91	4.74	4.61	4.33	4.20
3	5.31	4.89	4.73	4.60	4.32	4.19

Q1266--Continued.

Daily mean water level, below mean sea level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June
4	5.32	4.87	4.71	4.60	4.31	4.19
5	5.30	4.89	4.69	4.60	4.29	4.19
6	5.27	4.87	4.68	4.58	4.27	4.24
7	5.27	4.86	4.69	4.60	4.26	4.27
8	5.18	4.85	4.68	4.58	4.25	4.32
9	5.16	4.84	4.67	4.61	4.25	4.36
10	5.16	4.83	4.66	4.61	4.24	4.39
11	5.14	4.84	4.66	4.60	4.24	4.41
12	5.12	4.83	4.65	4.60	4.23	4.43
13	5.11	4.81	4.65	4.58	4.23	4.45
14	5.11	4.80	4.66	4.58	4.21	4.48
15	5.10	4.78	4.64	4.58	4.21	4.49
16	5.07	4.79	4.65	4.57	4.23	4.50
17	5.06	4.79	4.63	4.56	4.21	4.53
18	5.05	4.80	4.63	4.56	4.22	4.55
19	5.03	4.77	4.65	4.55	4.25	4.54
20	5.04	4.77	4.64	4.52	4.27	4.58
21	5.03	4.78	4.64	4.51	4.30	4.58
22	5.03	4.76	4.62	4.49	4.36	....
23	5.01	4.76	4.62	4.47	4.34	....
24	5.01	4.74	4.63	4.44	4.33	....
25	5.00	4.73	4.62	4.43	4.31	....
26	4.98	4.75	4.60	4.40	4.29	....
27	4.97	4.75	4.59	4.40	4.29	....
28	4.95	4.73	4.59	4.38	4.25	....
29	4.94		4.60	4.37	4.23	....
30	4.94		4.60	4.35	4.22	....
31	4.91		4.58		4.21	

Q1281. New York City Department of Water Supply, Gas and Electricity.
At southwest corner of Liberty Ave. and Woodhaven Blvd., Ozone Park.
Records available: 1911-17, 1933, 1941-49.

Water level below mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	1.14	Apr. 27	0.80	July 27	1.32	Oct. 27	1.59
Feb. 23	1.00	May 31	.84	Aug. 26	1.50	Nov. 29	1.80
Mar. 28	.74	June 30	1.16	Sept. 29	1.61	Dec. 27	1.30

Q1282. New York City Department of Water Supply, Gas and Electricity.
Northeast corner of Liberty Ave. and 113th St., Richmond Hill. Records
available: 1933-37, 1941-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	3.40	Apr. 27	1.44	July 27	1.22	Oct. 27	2.36
25	2.58	May 31	1.56	Aug. 26	1.80	Nov. 29	2.37
Feb. 23	1.96	June 30	1.39	Sept. 30	2.53	Dec. 28	2.30
Mar. 28	1.67						

Q1283. New York City Department of Water Supply, Gas and Electricity.
Southeast corner of Rockaway Blvd. and 121st St., South Ozone Park. Records
available: 1911-16, 1933-35, 1941-49.

Q1283--Continued.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	2.50	Apr. 27	3.39	July 27	2.90	Oct. 27	3.34
Feb. 24	2.52	May 31	3.24	Aug. 26	2.64	Nov. 29	2.30
Mar. 28	2.53	June 30	3.14	Sept. 29	3.22	Dec. 27	2.66

Q1284. New York City Department of Water Supply, Gas and Electricity. Northwest corner of Rockaway Blvd. and Lincoln St., South Ozone Park. Records available: 1911-14, 1933-34, 1941-49.

Water level above mean sea level

Jan. 25	6.40	Apr. 27	6.92	July 27	6.10	Oct. 27	7.12
Feb. 24	6.66	May 31	6.52	Aug. 26	6.66	Nov. 29	7.94
Mar. 28	6.78	June 30	5.64	Sept. 29	6.85	Dec. 27	8.55

Q1285. New York City Department of Water Supply, Gas and Electricity. Northwest corner of 132d St. and 111th Ave., South Ozone Park. Records available: 1933-34, 1941-49.

Water level above mean sea level

Jan. 25	4.64	Apr. 27	5.97	July 27	5.74	Oct. 27	4.99
Feb. 24	5.08	May 31	6.13	Aug. 26	5.41	Nov. 29	4.46
Apr. 4	5.69	June 30	5.99	Sept. 29	5.15	Dec. 28	4.16

Q1286. New York City Department of Water Supply, Gas and Electricity. East side of 144th Place about 315 feet south of Jamaica Ave., Jamaica. Records available: 1933-34, 1941-49.

Water level above mean sea level

Jan. 25	9.41	Apr. 27	10.11	July 27	9.75	Nov. 1	8.71
Feb. 24	9.66	May 31	10.19	Aug. 26	9.39	29	8.64
Apr. 4	10.00	June 30	10.11	Sept. 29	8.91	Dec. 28	8.39

Q1287. New York City Department of Water Supply, Gas and Electricity. Northeast corner of Merrick Blvd. and 116th Ave., St. Albans. Records available: 1933-34, 1941-49.

Water level above mean sea level

Jan. 25	13.59	Apr. 27	12.98	July 27	11.79	Oct. 27	11.49
Feb. 24	13.44	May 31	13.09	Aug. 26	12.08	Nov. 29	11.07
Mar. 28	12.83	June 30	12.28	Sept. 29	11.79	Dec. 27	10.69

Q1288. New York City Department of Water Supply, Gas and Electricity. Northwest corner of Murdock Ave. and 180th St., St. Albans. Records available: 1933-35, 1941-49.

Water level above mean sea level

Jan. 25	18.60	Apr. 27	18.40	July 27	17.46	Oct. 27	16.37
Feb. 24	18.82	May 31	18.50	Aug. 26	17.33	Nov. 29	15.94
Mar. 28	18.78	June 30	17.98	Sept. 29	16.85	Dec. 29	15.58

Q1289. New York City Department of Water Supply, Gas and Electricity.
Northwest corner of Springfield Blvd. and 110th Ave., Queens Village.
Records available: 1933-38, 1941-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	31.91	Apr. 27	32.92	July 27	32.20	Oct. 27	31.10
Feb. 24	32.53	May 31	33.02	Aug. 26	31.72	Nov. 29	30.97
Mar. 28	32.68	June 30	32.69	Sept. 29	31.33	Dec. 29	30.52

Q1290. New York City Department of Water Supply, Gas and Electricity.
Southwest corner of Merrick Road and Springfield Blvd., Springfield.
Records available: 1933-36, 1940, 1941-49.

Water level above mean sea level

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	17.24	Apr. 27	17.28	July 27	16.67	Oct. 27	15.78
Feb. 24	17.46	May 31	17.41	Aug. 26	16.50	Nov. 29	15.27
Mar. 28	17.38	June 30	17.01	Sept. 29	16.20	Dec. 29	15.03

Suffolk County

(Unless otherwise indicated, all measurements in Suffolk County are above mean sea level.)

S58. New York City Department of Water Supply, Gas and Electricity.
California Stovepipe well 6. Southwest corner of Grand Blvd. and 44th St., Islip. Records available: 1944-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.65	24.36	24.72	24.11	.....	23.77	23.17	22.79	22.70	22.63	22.65	22.64
2	24.25	24.41	24.66	24.10	.....	23.75	23.15	22.77	22.74	22.62	22.68	22.64
3	24.59	24.45	24.58	24.09	.....	23.73	23.12	22.76	22.76	22.61	22.71	22.64
4	24.71	24.50	24.52	24.08	.....	23.72	23.10	22.78	22.75	22.61	22.73	22.64
5	24.74	24.52	24.50	24.07	.....	23.71	23.08	22.84	22.74	22.60	22.74	22.65
6	24.75	.....	24.47	24.11	.....	23.70	23.05	22.84	22.74	22.60	22.74	22.65
7	24.77	.....	24.43	24.13	.....	23.68	23.04	22.83	22.74	22.59	22.73	22.66
8	24.82	.....	24.41	24.14	23.99	23.65	23.02	22.80	22.73	22.59	22.72	22.65
9	24.90	24.51	24.41	24.13	23.99	23.63	23.01	22.77	22.72	22.59	.....	22.65
10	24.94	24.49	24.40	24.11	23.99	23.62	23.00	22.75	22.70	22.58	.....	22.64
11	24.93	24.44	24.39	24.10	24.00	23.61	22.99	22.74	22.67	22.58	.....	22.63
12	24.87	24.39	24.38	24.09	24.00	23.59	22.98	22.73	22.66	22.58	22.67	22.63
13	24.79	24.39	24.36	24.10	23.98	23.57	22.99	22.74	22.66	22.58	.....	22.65
14	24.72	24.36	24.33	24.11	23.97	23.55	22.99	22.74	22.68	22.57	.....	22.67
15	24.63	24.34	24.33	24.10	23.95	23.53	22.97	22.73	22.70	22.57	.....	22.68
16	24.58	24.31	24.31	24.08	23.94	23.51	22.96	22.72	22.70	22.57	.....	22.68
17	24.53	24.28	24.30	24.06	23.93	23.49	22.96	22.71	22.68	22.57	.....	22.68
18	24.46	24.24	24.29	24.05	23.93	23.47	22.98	22.71	22.67	22.57	.....	22.68
19	24.42	24.23	24.26	24.04	23.92	23.45	22.98	22.71	22.65	22.57	22.60	22.69
20	24.35	24.22	24.23	24.03	23.92	23.44	22.96	22.69	22.64	22.57	22.60	22.70
21	24.30	24.19	24.22	24.02	23.90	23.42	22.95	22.68	22.63	22.57	22.60	22.71
22	24.27	24.20	24.20	24.03	23.89	23.40	22.94	22.66	22.62	22.56	22.59	22.72
23	24.23	24.29	24.20	24.03	23.90	23.38	22.92	22.65	22.67	22.56	22.58	22.72
24	24.18	24.28	24.19	24.02	23.89	23.35	22.90	22.64	22.69	22.55	22.58	22.72
25	24.14	24.51	24.18	24.00	23.88	23.33	22.89	22.63	22.68	22.55	22.60	22.72
26	24.11	24.61	24.16	23.99	23.86	23.30	22.87	22.62	22.66	22.58	22.62	22.72
27	24.09	24.69	24.17	23.99	23.85	23.28	22.86	22.61	22.65	22.61	22.62	22.73
28	24.12	24.73	24.15	.....	23.84	23.25	22.84	22.60	22.65	22.60	22.62	22.75
29	24.15		24.13	.....	23.83	23.22	22.83	22.59	22.65	22.61	22.62	22.77
30	24.19		24.12	.....	23.80	23.19	22.81	22.58	22.65	22.61	22.63	22.78
31	24.28		24.12		23.79		22.80	22.59		22.63		22.80

a Tape measurement.

S202. New York Water Service Corp. Unused well at Spring St. pumping station, 450 feet south of Gains Ave., Huntington. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	40.68	May 25	41.22	July 26	40.86	Oct. 24	40.91
Feb. 24	40.78	June 28	40.59	Aug. 24	40.94	Nov. 29	41.19
Mar. 30	41.03	30	40.70	Sept. 27	41.04	Dec. 27	41.13
Apr. 28	41.05						

S203. C. A. Gould. About 125 feet north of Wolf Hill Road and about 1.4 miles west of Deer Park Ave., Dix Hills. Records available: 1936-49.

Jan. 27	73.26	Apr. 28	73.59	July 26	74.26	Oct. 24	74.48
Feb. 23	73.34	May 25	73.80	Aug. 25	74.36	Nov. 29	72.76
Mar. 30	73.51	June 28	73.99	Sept. 27	74.38	Dec. 29	74.40

S1803. New York City Department of Water Supply, Gas and Electricity. At north corner of Belmont Ave. and Farmingdale Road, about 1.5 miles west of Babylon. Records available: 1912-14, 1932, 1936-49.

Jan. 27	17.13	May 26	16.46	July 26	15.36	Oct. 24	15.13
Feb. 23	17.45	June 28	15.71	Aug. 22	15.13	Nov. 29	15.40
Mar. 28	16.96	30	15.67	Sept. 27	15.34	Dec. 27	15.63
Apr. 27	16.60						

S1805. New York City Department of Water Supply, Gas and Electricity. At southwest corner of Albany Ave. and Farmingdale Road, about 3 miles north of Amityville. Records available: 1912-14, 1932-49.

Jan. 26	44.33	May 26	45.18	July 26	43.31	Oct. 24	42.19
Feb. 23	45.15	June 28	44.25	Aug. 22	43.21	Nov. 29	40.30
Mar. 28	45.47	30	44.18	Sept. 27	42.93	Dec. 27	39.90
Apr. 27	45.15						

S1806. New York City Department of Water Supply, Gas and Electricity. On northeast corner of Wellwood and Long Island Ave., Pinelawn. Records available: 1912-14, 1932-49.

Jan. 29	57.85	May 25	59.06	July 26	57.56	Oct. 24	56.17
Feb. 23	58.26	June 28	58.70	Aug. 22	57.25	Nov. 29	55.23
Mar. 30	58.84	30	58.40	Sept. 27	56.86	Dec. 27	55.22
Apr. 28	58.70						

S1807. New York City Department of Water Supply, Gas and Electricity. On east side of Higbie Lane, 0.4 mile south of Hunter Ave. and about 1.5 miles northeast of Babylon. Records available: 1912-14, 1932-33, 1936-49.

Jan. 27	22.35	May 26	22.08	July 26	21.42	Oct. 24	20.94
Feb. 23	22.74	June 28	21.66	Aug. 22	21.16	Nov. 30	21.06
Mar. 29	22.38	30	21.64	Sept. 27	21.18	Dec. 27	21.16
Apr. 27	22.17						

S1808. New York City Department of Water Supply, Gas and Electricity. On east side of Sagtikos Manor Lane, about 4,250 feet south of Montauk Branch of Long Island Railroad, and 2.5 miles east of Babylon. Records available: 1912-14, 1932-49.

Jan. 27	11.74	May 26	11.02	July 26	9.87	Oct. 24	9.78
Feb. 23	12.29	June 28	10.14	Aug. 22	9.64	Nov. 30	10.34
Mar. 29	11.37	30	10.10	Sept. 27	9.97	Dec. 27	10.64
Apr. 27	11.19						

S1809. New York City Department of Water Supply, Gas and Electricity. At northwest corner of Sagtikos Manor Lane Road and 0.1 mile south of Bayshore Road, about 1.5 miles northwest of Bayshore. Records available: 1912-14, 1932-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	29.46	May 26	30.10	July 26	28.55	Oct. 24	26.85
Feb. 23	30.22	June 28	29.33	Aug. 22	27.85	Nov. 30	26.44
Mar. 29	30.54	30	29.23	Sept. 27	27.32	Dec. 28	26.29
Apr. 27	30.30						

S1810. U. S. Geol. Survey. On east side of Sagtikos Manor Lane Road, about 1,000 feet south of main line of Long Island Railroad and 1.5 miles southwest of Brentwood. Records available: 1912-14, 1932-49.

Jan. 27	51.06	May 25	52.96	July 27	52.44	Oct. 24	50.68
Feb. 23	51.73	June 28	52.82	Aug. 25	51.92	Nov. 29	50.00
Mar. 29	52.63	30	52.75	Sept. 27	51.28	Dec. 28	49.46
Apr. 28	52.89						

S1811. U. S. Geol. Survey. At north shore of Lake Ronkonkoma. Records available: 1937-49.

Jan. 26	53.45	June 28	53.22	Aug. 25	52.88	Nov. 30	52.99
Feb. 24	53.68	30	53.16	Sept. 27	53.08	Dec. 28	53.18
May 26	53.68	July 27	53.11	Oct. 25	52.78		

S1812. U. S. Geol. Survey. On northeast side of Smithtown Blvd, about 100 feet northwest of Nichols Road and 1 mile west of Lake Ronkonkoma, Nesconset. Records available: 1937-49.

Jan. 26	47.31	Apr. 29	48.49	July 27	48.32	Oct. 25	46.95
Feb. 24	47.71	May 26	48.69	Aug. 25	47.92	Nov. 30	46.44
Mar. 29	48.15	June 30	48.58	Sept. 27	47.49	Dec. 28	46.02

S1813. U. S. Geol. Survey. On south side of Johnson Ave. about 1.5 miles west of Ocean Ave., Ronkonkoma. Records available: 1939-49.

Jan. 26	38.65	Apr. 27	39.38	July 27	38.87	Oct. 24	38.03
Feb. 23	38.83	May 26	39.44	Aug. 25	38.59	Nov. 30	37.74
Mar. 29	39.15	July 7	39.08	Sept. 27	38.36	Dec. 28	37.50

S1814. U. S. Geol. Survey. On northwest corner of Suffolk and Lowells Avenues, Central Islip. Records available: 1939-49.

Jan. 26	37.60	Apr. 27	38.53	July 27	37.89	Oct. 24	36.53
Feb. 23	37.83	May 26	38.55	Aug. 25	37.43	Nov. 30	36.15
Mar. 29	38.37	July 7	38.18	Sept. 27	36.99	Dec. 28	35.65

S1815. U. S. Geol. Survey. On northwest corner of Suffolk and Eastern Avenues, Brentwood. Records available: 1939-49.

Jan. 26	46.32	Apr. 27	47.49	July 27	47.20	Oct. 24	45.85
Feb. 23	46.63	May 26	47.61	Aug. 25	46.82	Nov. 30	45.19
Mar. 29	47.16	July 7	47.38	Sept. 27	46.33	Dec. 28	44.69

S1816. U. S. Geol. Survey. On northeast corner of Brentwood and Commack Road, Deer Park. Records available: 1939-49.

Jan. 27	57.97	Apr. 28	59.28	July 26	58.58	Oct. 24	56.65
Feb. 23	58.40	May 25	59.38	Aug. 22	58.00	Nov. 29	55.97
Mar. 30	59.21	June 28	59.07	Sept. 27	57.25	Dec. 27	55.41

S1817. U. S. Geol. Survey. Southeast corner of Long Island Ave. and 18th St., Wyandanch. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	53.26	Apr. 28	53.18	July 26	51.90	Oct. 24	50.87
Feb. 23	53.87	May 25	53.36	Aug. 22	51.59	Nov. 29	50.70
Mar. 30	53.35	June 28	52.30	Sept. 27	51.31	Dec. 27	50.87

S2314. Foundation Sand & Gravel Co. On west side of Burr's Lane about 1,500 feet north of Straight Path, Wyandanch. Records available: 1943-49.

Jan. 27	60.90	Apr. 28	61.46	July 26	61.19	Oct. 24	60.34
Feb. 23	61.20	May 25	61.68	Aug. 22	60.91	Nov. 29	60.16
Mar. 30	61.48	June 28	61.34	Sept. 27	60.63	Dec. 27	59.89

S2454. Long Island Railroad. On south side of railroad tracks, about 80 feet east of Deer Park Ave., Babylon. Records available: 1940-49.

Jan. 27	8.01	Apr. 27	7.52	July 26	6.95	Oct. 24	7.03
Feb. 23	9.32	May 26	7.50	Aug. 22	6.85	Nov. 30	7.23
Mar. 29	7.66	June 28	6.99	Sept. 27	7.08	Dec. 27	7.37

S2455. U. S. Geol. Survey. About 4,000 feet southeast of intersection of Udalls Road and Hunter Ave., about 2 miles west of Bayshore. Records available: 1933-40 (as S-38), 1940-49.

Jan. 27	23.12	Apr. 27	23.37	July 26	21.47	Oct. 24	20.31
Feb. 23	22.68	May 26	23.13	Aug. 22	20.89	Nov. 30	20.16
Mar. 29	23.64	June 30	22.17	Sept. 27	20.62	Dec. 27	20.25

S3112. New York City Department of Water Supply, Gas and Electricity. On northeast corner of Long Island Ave. and Little Neck Road, Wyandanch. Records available: 1941-49.

Jan. 27	55.83	Apr. 28	56.64	July 26	55.62	Oct. 24	53.52
Feb. 23	56.25	May 25	57.00	Aug. 22	54.88	Nov. 29	52.87
Mar. 30	56.85	June 28	56.38	Sept. 27	54.07	Dec. 27	52.37

S3496. U. S. Geol. Survey. East side of Coates Ave. about 100 feet north of Long Island Railroad, Holbrook. Records available: 1942-49.

Jan. 25	48.99	Apr. 27	49.95	July 27	50.73	Oct. 25	49.83
Feb. 23	48.99	May 26	50.45	Aug. 25	50.49	Dec. 4	49.63
Mar. 29	49.34	July 7	50.76	Oct. 6	50.13	30	48.82

S3497. U. S. Geol. Survey. Northeast corner of Waverly and Long Island Avenues, Holtsville. Records available: 1942-49.

Jan. 26	48.21	Apr. 27	49.50	July 28	50.01	Oct. 25	49.14
Feb. 23	48.47	May 26	49.90	Aug. 25	49.76	Dec. 4	48.62
Mar. 29	48.89	July 1	50.07	Oct. 6	49.41	30	48.23

S3498. U. S. Geol. Survey. South side of Long Island Ave. about 1,000 feet west of State Highway 112, Medford. Records available: 1942-49.

Jan. 26	45.62	Apr. 27	47.20	July 28	46.90	Oct. 25	45.84
Feb. 22	46.27	May 26	47.32	Aug. 25	46.58	Dec. 4	45.37
Mar. 29	46.82	July 1	47.09	Oct. 6	46.14	30	45.03

S3512. State Division of Highways. On south side of Middle Country Road (State Highway 25), about 0.6 mile east of Lake Avenue, Lake Grove. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	68.07	Apr. 28	69.58	July 27	69.88	Oct. 26	68.62
Feb. 24	68.45	May 25	69.95	Aug. 25	69.68	Dec. 4	68.05
Mar. 30	69.07	July 6	70.02	Oct. 5	69.30		

S3513. State Department of Public Works. Middle Country Road (State Highway 25), about 0.9 mile west of Selden. Records available: 1942-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	62.03	62.46	62.75	63.21	63.65	64.04	64.15	63.99	63.66	63.32a	62.99	62.62
2	61.99	62.40	62.73	63.21	63.67	64.05	64.16	63.97	63.63	63.30	62.98	62.61
3	61.98	62.42	62.75	63.23	63.68	64.05	64.17	63.96	63.63	63.30	62.97	62.59
4	61.97	62.47	62.76	63.25	63.69	64.07	64.19	63.95	63.62	63.30	62.97	62.58
5	62.01	62.46	62.80	63.26	63.72	64.09	64.19	63.94	63.62	63.29	62.93	62.59
6	62.07	62.46	62.82	63.31	63.74	64.10	64.18	63.92	63.61	63.27	62.92	62.57
7	62.06	62.50	62.81	63.30	63.76	64.10	64.17	63.91	63.59	63.26	62.91	62.57
8	62.04	62.49	62.82	63.33	63.76	64.08	64.15	63.91	63.60	63.25	62.90	62.54
9	62.04	62.52	62.85	63.33	63.77	64.06	64.14	63.91	63.58	63.24	.....	62.52
10	62.06	62.53	62.87	63.33	63.79	64.08	64.17	63.89	63.55	63.23	62.89	62.50
11	62.08	62.51	62.90	63.35	63.79	64.12	64.16	63.87	63.52	63.22	62.89	62.50
12	62.12	62.51	62.90	63.37	63.81	64.12	64.16	63.86	63.52	63.22	62.86	62.49
13	62.14	62.55	62.90	63.40	63.82	64.12	64.18	63.85	63.53	63.19	62.86	62.49
14	62.14	62.56	62.91	63.42	63.84	64.12	64.18	63.83	63.53	63.18	62.87	62.47
15	62.12	62.58	62.93	63.44	63.85	64.13	64.16	63.81	63.52	63.18	62.84	62.46
16	62.15	62.58	62.94	63.46	63.85	64.13	64.14	63.80	63.50	63.16	62.82	62.44
17	62.17	62.58	62.96	63.45	63.86	64.14	64.13	63.80	63.49	63.15	62.81	62.42
18	62.17	62.57	62.99	63.46	63.88	64.15	64.13	63.83	63.48	63.15	62.79	62.42
19	62.22	62.61	62.96	63.48	63.92	64.15	64.12	63.81	63.49	63.14	62.78	62.42
20	62.19	62.63	62.97	63.49	63.93	64.16	64.11	63.78	63.46	63.13	62.79	62.40
21	62.22	62.61	63.00	63.50	63.92	64.17	64.10	63.76	63.44	63.12	62.75	62.40
22	62.26	62.65	63.03	63.53	63.94	64.18	64.10	63.75	63.45	63.12	62.73	62.39
23	62.26	62.67	63.06	63.56	63.97	64.17	64.07	63.75	63.45	63.09	62.73	.....
24	62.30	62.67	63.04	63.57	63.97	64.16	64.06	63.74	63.41	.....	62.72	62.31
25	62.30	62.70	63.06	63.55	63.98	64.17	64.08	63.72	63.38	.....	62.75	.....
26	62.33	62.70	63.09	63.58	63.99	64.18	64.06	63.71	63.37a	63.08	62.70	.....
27	62.35	62.71	63.12	63.60	64.00	64.18	64.05	63.71	63.38	.....	62.68	.....
28	62.39	62.75	63.13	63.60	64.01	64.15	64.04	63.70	63.40	.....	62.66	.....
29	62.37		63.13	63.61	64.01	64.14	64.03	63.72	63.38	.....	62.67	.....
30	62.35		63.16	63.63	64.02	64.14	64.03	63.68	63.35	.....	62.65	.....
31	62.40		63.20		64.03		64.02	63.67		.....		62.23

a Tape measurement.

S3514. Herman Jurgens. On south side of Jericho Turnpike (State Highway 25), about 0.5 mile east of Lakefield Ave., Commack. Records available: 1942-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	67.50	67.30	67.41	67.61	67.80	68.05	67.01	67.36	67.82	68.09	67.99	67.84
2	67.35	67.30	67.36	67.54	67.84	68.10	67.03	67.38	67.76	68.13	68.04	67.89
3	67.32	67.36	67.37	67.62	67.82	68.11	66.92	67.46	67.87	68.19	68.08	67.80
4	67.36	67.48	67.40	67.61	67.84	68.20	66.99	67.53	67.91	68.23	68.07	67.89
5	67.54	67.31	67.52	67.62	67.90	68.22	66.96	.....	67.95	68.23	67.96	67.93
6	67.49	67.31	67.46	67.76	67.91	68.16	66.97	.....	67.92	68.19	67.98	67.85
7	67.41	67.44	67.35	67.61	67.89	68.09	67.07	.....	67.92	68.22	68.00	67.93
8	67.33	67.33	67.45	67.67	67.86	68.04	67.10	.....	68.01	68.23	68.04	67.77
9	67.35	67.37	67.46	67.60	67.94	68.02	67.16	.....	67.97	68.25	67.93	67.74

S3514--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	67.38	67.41	67.50	67.60	67.90	68.00	67.21	.....	67.93	68.24	68.00	67.77
11	67.40	67.22	67.52	67.66	67.91	67.93	67.21	67.56	67.94	68.18	68.03	67.80
12	67.48	67.34	67.46	67.67	67.95	67.93	67.25	67.65	68.02	68.13	67.91	67.84
13	67.44	67.41	67.42	67.78	67.92	67.91	67.34	67.65	68.09	67.98	68.03	67.82
14	67.39	67.35	67.44	67.70	67.99	67.90	67.35	67.68	68.06	68.01	68.06	67.77
15	67.29	67.43	67.48	67.73	67.93	67.82	67.37	67.72	68.09	68.08	67.98	67.76
16	67.44	67.35	67.46	67.70	67.96	67.66	67.42	67.68	68.08	68.03	67.96	67.72
17	67.39	67.27	67.49	67.65	67.95	67.62	67.49	67.68	68.07	68.04	68.00	67.73
18	67.32	67.29	67.52	67.69	67.99	67.71	67.54	67.71	68.12	68.11	67.97	67.80
19	67.45	67.38	67.36	67.71	68.05	67.69	67.58	67.62	68.15	68.10	67.95	67.77
20	67.24	67.38	67.40	67.70	67.97	67.66	67.62	.....	68.09	68.09	68.04	67.71
21	67.38	67.35	67.51	67.75	67.95	67.70	67.64	.....	68.09	68.08	67.92	67.78
22	67.39	67.44	67.54	67.79	68.08	67.65	67.64	.....	68.19	68.12	67.90	67.77
23	67.34	67.36	67.54	67.81	68.03	67.50	67.60	.....	68.20	68.02	68.00	67.70
24	67.47	67.35	67.45	67.73	68.06	67.39	67.63	67.53	68.09	68.02	67.93	67.54
25	67.28	67.47	67.51	67.68	68.03	67.50	67.65	67.55	68.07	68.03	68.06	67.60
26	67.43	67.35	67.58	67.84	68.08	67.17	67.61	67.67	68.10	68.12	67.86	67.76
27	67.36	67.40	67.64	67.78	68.08	67.04	67.45	67.73	68.18	67.98	67.89	67.77
28	67.52	67.56	67.50	67.71	68.09	66.93	67.32	67.74	68.26	67.86	67.85	67.83
29	67.28		67.53	67.72	68.09	66.90	67.34	67.81	68.20	67.99	68.01	67.63
30	67.24		67.58	67.80	68.12	66.96	67.36	67.73	68.11	68.04	67.94	67.58
31	67.50		67.66		68.12		67.35	67.84		68.09		67.59

S3515. New York City Board of Water Supply test well 57. West side of East Third Ave., about 0.35 mile north of Brook St., Bayshore. Records available: 1907- 9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	33.83	Apr. 27	34.36	July 27	33.01	Oct. 24	31.61
Feb. 23	34.26	May 26	34.26	Aug. 25	32.45	Nov. 30	31.29
Mar. 29	34.55	July 7	33.98	Sept. 27	32.02	Dec. 28	31.01

S3516. New York City Board of Water Supply test well 58. On east side of East Third Ave., about 105 feet south of Walbridge Ave., Bayshore. Records available: 1907- 9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	38.93	Apr. 27	39.75	July 27	38.64	Oct. 24	36.91
Feb. 23	39.34	May 26	39.67	Aug. 25	38.02	Nov. 30	36.38
Mar. 29	39.84	July 7	39.05	Sept. 27	37.43	Dec. 28	36.00

S3517. New York City Board of Water Supply test well 60. On south-west corner of Lakeland Ave. and Tariff St., Sayville. Records available: 1907 - 9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	13.91	Apr. 27	13.80	July 27	12.62	Oct. 25	12.20
Feb. 23	13.97	May 26	13.52	Aug. 25	12.37	Dec. 4	12.22
Mar. 28	14.02	July 7	12.86	Oct. 6	12.31	30	12.50

S3518. New York City Board of Water Supply test well 79. East side of Islip Ave., about 190 feet north of Locust St., Central Islip. Records available: 1907- 9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	32.82	Apr. 27	33.14	July 27	31.85	Oct. 24	30.66
Feb. 23	33.11	May 26	32.98	Aug. 25	31.36	Nov. 30	30.33
Mar. 29	33.28	July 7	32.24	Sept. 27	30.96	Dec. 28	30.16

S3519. New York City Board of Water Supply test well 93. On east side of Carleton Ave., about 2.25 miles south of main line of Long Island Railroad, Central Islip. Records available: 1907-9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	26.39	Apr. 27	26.56	July 27	25.29	Oct. 24	24.53
Feb. 23	26.75	May 26	26.33	Aug. 25	24.96	Nov. 30	24.33
Mar. 29	26.73	July 7	25.54	Sept. 27	24.79	Dec. 28	24.42

S3521. New York City Board of Water Supply test well 162. On east side of Medford Ave., 0.9 mile south of Long Island Ave., Medford. Records available: 1907-9, 1942-49.

Jan. 25	38.25	Apr. 27	38.93	July 28	38.23	Oct. 25	37.25
Feb. 22	38.39	May 26	38.83	Aug. 25	37.89	Dec. 4	36.95
Mar. 29	38.87	July 1	38.53	Oct. 6	37.49	30	36.74

S3522. New York City Board of Water Supply test well 166. East side of Waverly Ave., 1.0 mile north of Main St., Patchogue. Records available: 1907-9, 1942-49.

Jan. 26	20.33	Apr. 27	20.17	July 28	19.60	Oct. 25	19.35
Feb. 23	20.13	May 23	20.05	Aug. 25	19.50	Dec. 4	19.31
Mar. 29	20.18	July 1	19.80	Oct. 6	19.41	30	19.28

S3524. New York City Board of Water Supply test well 215. South side of Park Road, about 0.3 mile east of Yaphank Ave., and about 0.1 mile south of main line of Long Island Railroad, Yaphank. Records available: 1907-9, 1942-49.

Jan. 13	23.35	Apr. 13	23.37	July 14	22.75	Oct. 20	22.20
26	23.51	27	23.33	26	22.66	Nov. 3	22.13
Feb. 9	23.17	May 11	23.25	Aug. 12	22.58	17	22.08
21	23.28	24	23.18	25	22.49	Dec. 2	22.01
Mar. 9	23.47	June 8	23.10	Sept. 9	22.45	15	21.96
16	23.57	21	23.00	22	22.38	29	21.90
30	23.47	28	22.92	Oct. 4	22.30		

S3526. New York City Board of Water Supply test well 218. South side of Long Island Ave. about 100 feet east of South Haven Road, and 1.6 miles east of Yaphank. Recent levels indicate former elevation of measuring point 0.05 foot high. Correction -0.05 foot applies to 1948 and previous records. Records available: 1943-49.

Jan. 3	29.82	Apr. 11	29.88	June 28	29.76	Oct. 4	28.86
13	28.69	13	29.49	July 14	29.71	20	28.59
26	28.42	27	29.03	27	29.54	Nov. 3	28.32
Feb. 10	29.22	May 11	29.35	Aug. 11	29.48	15	28.14
21	29.81	24	29.54	26	29.33	Dec. 1	27.87
Mar. 16	30.16	June 8	29.69	Sept. 9	29.19	15	27.48
Apr. 6	28.64	21	29.79	22	29.01	28	27.45

S3527. New York City Board of Water Supply test well 222. South side of Horseblock Road, 1.6 miles west of Yaphank Ave. and about 1.7 miles southeast of Plainfield. Records available: 1907-9, 1942-49.

Jan. 13	33.26	Apr. 13	35.09	July 27	35.11	Oct. 21	33.78
26	33.45	27	35.32	Aug. 12	34.91	Nov. 3	33.54
Feb. 10	33.68	May 11	35.44	25	34.72	17	33.30
21	33.98	24	35.51	Sept. 9	34.51	Dec. 2	33.02
Mar. 9	34.32	June 8	35.52	22	34.29	15	32.78
16	34.50	21	35.47	Oct. 6	34.04	29	32.54
30	34.77	July 15	35.23				

S3529. New York City Board of Water Supply test well 238. North side of Horseblock Road, about 0.7 mile west of Yaphank Ave., and about 1.3 miles northwest of Brookhaven Railroad Station, Brookhaven. Records available: 1907-9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	27.83	Apr. 13	28.46	July 15	27.48	Oct. 21	25.94
26	27.53	27	28.39	27	27.27	Nov. 3	25.78
Feb. 10	27.86	May 11	28.33	Aug. 12	26.99	17	25.60
21	27.93	24	28.26	25	26.72	Dec. 2	25.42
Mar. 9	28.32	June 8	28.13	Sept. 9	26.52	15	25.31
16	28.44	21	27.96	22	26.35	29	25.16
30	28.36	28	27.81	Oct. 5	26.16		

S3530. New York City Board of Water Supply test well 240. Northeast corner of trail intersection about 0.9 mile west of Yaphank Ave. and about 300 feet south of main line of Long Island Railroad, Yaphank. Records available: 1907-9, 1942-49.

Jan. 13	34.10	Apr. 13	35.09	July 14	34.82	Oct. 21	33.52
26	34.47	27	35.19	26	34.68	Nov. 3	33.35
Feb. 10	34.35	May 11	35.20	Aug. 12	34.49	17	33.16
21	34.50	24	35.22	26	34.26	Dec. 2	32.95
Mar. 9	34.81	June 8	35.13	Sept. 9	34.09	15	32.58
16	34.86	21	35.10	22	33.91	29	32.59
30	35.02	28	35.00	Oct. 6	33.72		

S3531. New York City Board of Water Supply test well 254. East side of River Road, about 0.5 mile north of Montauk Highway (State Highway 27) and about 0.3 mile east of Carmans River, South Haven. Records available: 1907-9, 1942-49.

Jan. 13	10.49	Apr. 13	10.64	July 18	10.12	Oct. 20	9.84
26	10.31	27	10.64	27	10.09	Nov. 4	9.85
Feb. 10	10.28	May 11	10.61	Aug. 12	10.05	17	9.83
21	10.33	24	10.57	26	10.02	Dec. 1	9.68
Mar. 9	10.50	June 8	10.50	Sept. 9	10.01	15	9.75
16	10.57	21	10.33	22	9.98	29	9.69
30	10.54	28	10.27	Oct. 5	9.90		

S3532. New York City Board of Water Supply test well 265. At southeast corner of Whiskey and Randall Roads, about 1.4 miles north of intersection of Randall Road and Middle Country Road (State Highway 25), Ridge. Recent levels indicate former elevation of measuring point 0.21 foot low. Correction +0.21 foot applies to 1948 and previous records. Records available: 1907-9, 1942-49.

Jan. 12	47.99	Apr. 12	50.02	July 14	50.76	Oct. 20	49.03
27	48.47	27	50.27	26	50.34	Nov. 3	48.78
Feb. 9	48.70	May 11	50.46	Aug. 10	50.15	15	48.56
22	48.91	25	50.61	25	49.93	Dec. 1	48.24
Mar. 9	49.24	June 8	50.67	Sept. 9	49.71	15	47.97
16	49.39	21	50.71	22	49.50	28	47.76
30	49.74	29	50.61	Oct. 5	49.30		

S3533. New York City Board of Water Supply test well 272. East side of dirt road, about 0.8 mile east of Yaphank-Middle Island Road and about 1.1 miles south of Middle Country Road (State Highway 25), Middle Island. Recent levels indicate former elevation of measuring point 0.38 foot low. Correction +0.38 foot applies to 1948 and previous records. Records available: 1907-9, 1942-49.

S3533--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	47.26	Apr. 12	49.01	July 14	48.56	Oct. 21	47.41
27	47.91	27	49.11	26	48.46	Nov. 3	47.42
Feb. 10	48.10	May 11	49.17	Aug. 12	48.29	15	47.06
22	48.23	25	49.18	26	48.10	Dec. 2	46.82
Mar. 9	48.50	June 8	49.12	Sept. 9	47.97	15	46.65
16	48.63	21	48.95	22	47.80	28	46.51
30	48.81	29	48.82	Oct. 5	47.62		

S3534. New York City Board of Water Supply test well 276. Northeast side of trail about 1.8 miles east of intersection of Long Island Ave. and South Haven Road. Recent levels indicate former elevation of measuring point 0.02 foot high. Correction -0.02 foot applies to 1948 and previous records. Records available: 1907-9, 1942-49.

Jan. 13	28.62	Apr. 13	30.20	July 15	30.53	Oct. 4	29.35
26	28.65	27	30.46	27	30.39	21	29.10
Feb. 10	29.01	May 11	30.79	Aug. 11	30.20	Nov. 3	28.78
21	29.64	24	30.84	25	29.97	15	28.86
Mar. 9	29.37	June 8	31.07	Sept. 9	29.74	Dec. 1	29.07
16	29.68	21	30.78	23	29.58	16	28.84
30	29.86	28	30.70				

S3535. New York City Board of Water Supply test well 284. South side of Chichester Ave., about 1,000 feet southeast of Brookfield Ave., Center Moriches. Recent levels indicate former elevation of measuring point 0.09 foot low. Correction +0.09 foot applies to 1948 and previous records. Records available: 1907-9, 1942-49.

Jan. 13	19.97	Apr. 13	21.59	July 15	21.41	Oct. 20	20.01
26	20.45	27	21.68	26	21.26	Nov. 3	19.81
Feb. 10	20.28	May 11	21.84	Aug. 11	21.06	15	19.62
21	20.56	24	21.79	25	20.86	Dec. 1	19.39
Mar. 9	20.86	June 8	21.73	Sept. 8	20.65	16	19.16
16	21.06	21	21.63	23	20.43	28	18.99
30	21.39	28	21.58	Oct. 4	20.25		

S3536. New York City Board of Water Supply test well 289. Southwest side of Manor Branch of Long Island Railroad, about 2.7 miles northwest of Eastport railroad station. Records available: 1907-9, 1942-49.

Jan. 28	25.55	Apr. 25	27.01	July 25	27.41	Oct. 27	26.20
Feb. 21	25.78	May 23	27.47	Aug. 23	27.14	Dec. 1	25.67
Mar. 28	26.35	June 29	27.60	Oct. 4	26.58	28	25.23

S3537. New York City Board of Water Supply test well 331. West side of trail, about 1,000 feet north of Old Country Road, about 1 mile west of Speonk-Riverhead Road. Records available: 1908-9, 1942-43, 1948-49.

Jan. 28	15.89	Apr. 25	16.66	July 25	16.06	Oct. 27	15.28
Feb. 21	16.16	May 23	16.59	Aug. 23	15.79	Dec. 1	15.12
Mar. 28	16.72	June 29	16.30	Oct. 4	15.47	28	14.96

S3538. New York City Board of Water Supply test well 339. Northwest side of Fox Trail about 1.7 miles south of intersection of Old Riverhead Road and Riverhead-Quogue Road (State Highway 113). Records available: 1908-9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	17.25	Apr. 25	18.08	July 25	17.82	Oct. 26	16.75
Feb. 21	17.41	May 23	18.20	Aug. 23	17.54	Dec. 1	16.34
Mar. 28	17.86	June 29	18.00	Oct. 4	17.05	28	16.00

S3539. New York City Board of Water Supply test well 403. On west side of trail, about 0.4 mile west of Speonk-Riverhead Road, about 1.8 miles north of Old Country Road, and about 2.3 miles north of Speonk. Records available: 1907-9, 1942-43, 1947-49.

Jan. 28	24.23	Apr. 25	25.52	July 25	25.79	Oct. 27	24.91
Feb. 21	24.40	May 23	25.83	Aug. 23	25.58	Dec. 1	24.53
Mar. 28	24.94	June 28	25.90	Oct. 4	25.18	28	24.17

S3540. New York City Board of Water Supply test well 404. On west side of trail, about 0.4 mile west of Speonk-Riverhead Road. Records available: 1907-9, 1942-43, 1947-49.

Jan. 28	20.69	Apr. 25	22.11	July 25	22.02	Oct. 27	20.92
Feb. 21	20.96	May 23	22.30	Aug. 23	21.74	Dec. 1	20.54
Mar. 28	21.60	June 29	22.21	Oct. 4	21.25	28	20.22

S3541. New York City Board of Water Supply test well 410. About 200 feet west of trail, about 0.2 mile north of Old Country Road, and about 1.3 miles northeast of Speonk. Records available: 1907-9, 1942-43, 1947-49.

Jan. 31	13.01	Apr. 25	14.25	July 25	13.44	Oct. 27	12.11
Feb. 21	13.36	May 23	14.17	Aug. 23	13.01	Dec. 1	11.78
Mar. 28	14.15	June 29	13.78	Oct. 4	12.43	28	11.54

S3542. New York City Board of Water Supply test well 413. On west side of trail, about 1.5 miles north of Old Country Road. Records available: 1907-9, 1942-43, 1947-49.

Jan. 31	20.48	Apr. 25	22.13	July 25	22.28	Oct. 27	21.11
Feb. 21	20.73	May 23	22.47	Aug. 23	21.99	Dec. 1	20.62
Mar. 28	21.49	June 28	22.44	Oct. 4	21.46	28	20.20

S3543. New York City Board of Water Supply test well 418. West side of Bishops Lane, about 0.9 mile north of Montauk Division of Long Island Railroad at Station, Westhampton. Records available: 1907-9, 1942-43, 1947-49.

Jan. 31	18.04	Apr. 25	19.44	July 25	19.19	Oct. 26	17.94
Feb. 21	18.30	May 23	19.65	Aug. 23	18.84	Nov. 30	17.45
Mar. 28	19.06	June 29	19.40	Sept. 28	18.34	Dec. 28	17.07

S3544. New York City Board of Water Supply test well 421. About 200 feet north of Montauk Division of Long Island Railroad and 0.7 mile east of Old Riverhead Road, Westhampton. Records available: 1907-9, 1942-43, 1948-49.

Jan. 31	12.72	Apr. 25	13.58	July 25	12.56	Oct. 26	11.29
Feb. 21	13.00	May 23	13.42	Aug. 23	12.09	Dec. 1	11.01
Mar. 28	13.60	June 29	12.95	Oct. 4	11.55	28	10.83

S3545. New York City Board of Water Supply test well 130. On east side of Lincoln Ave., about 0.6 mile north of Church St. and 2.2 miles south of Holbrook. Records available: 1907-9, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	37.23	Apr. 27	38.41	July 27	37.66	Oct. 25	36.15
Feb. 23	37.62	May 26	38.36	Aug. 25	37.15	Dec. 4	35.52
Mar. 28	38.24	July 7	37.95	Oct. 6	36.51	30	35.09

S3727. New York City Board of Water Supply test well 129. North side of Church St., 0.1 mile east of Lincoln Ave., North Sayville. Records available: 1943-49.

Jan. 25	32.70	Apr. 27	33.67	July 27	32.56	Oct. 25	31.14
Feb. 23	33.19	May 26	33.48	Aug. 25	32.03	Dec. 4	30.56
Mar. 29	33.66	July 7	32.90	Oct. 6	31.51	Dec. 30	30.25

S3728. New York City Board of Water Supply test well 186. About 0.2 mile east of Taylor Ave. and 0.2 mile north of Montauk Highway, Hagerman. Records available: 1943-49.

Jan. 25	22.62	Apr. 27	23.65	July 28	22.51	Oct. 25	20.83
Feb. 22	22.94	May 24	23.47	Aug. 25	21.94	Dec. 1	20.31
Mar. 30	23.67	July 1	23.00	Oct. 6	21.18	30	19.93

S3729. New York City Board of Water Supply test well 204. Barton and Dunston Avenues, North Hagerman. Records available: 1943-49.

Jan. 25	30.05	Apr. 27	31.40	July 28	30.67	Oct. 25	29.87
Feb. 22	30.51	May 24	31.40	Aug. 25	30.62	Dec. 1	29.33
Mar. 30	31.24	July 1	31.04	Oct. 6	30.31	30	29.23

S3730. New York City Board of Water Supply test well 207. Dunston Ave. and South Haven Road, South Plainfield. Records available: 1943-49.

Jan. 25	35.73	Apr. 27	37.59	July 28	37.39	Oct. 25	36.01
Feb. 22	36.52	May 24	37.67	Aug. 25	37.08	Dec. 1	35.42
Mar. 30	37.17	July 1	37.61	Oct. 6	36.38	30	34.93

S3731. New York City Board of Water Supply test well 244. About 30 feet east of Taylor Ave., 0.5 mile north of Montauk Highway, Hagerman. Records available: 1943-49.

Jan. 25	25.59	Apr. 27	26.74	July 28	25.68	Oct. 25	24.52
Feb. 22	25.89	May 24	26.57	Aug. 25	25.63	Dec. 1	23.72
Mar. 30	26.66	July 1	26.12	Oct. 6	24.79	30	23.88

S3732. New York City Board of Water Supply test well 259. Mt. Sinai Road, 2.6 miles north of Route 25, Coram. Records available: 1943-49.

Jan. 25	53.66	Apr. 29	54.46	July 28	54.80	Oct. 25	54.33
Feb. 24	55.15	May 24	54.39	Aug. 25	54.70	Dec. 4	54.10
Mar. 30	54.73	July 5	54.44	Oct. 5	54.49		

S3735. New York City Board of Water Supply test well 1214. Old Town Road, about 0.6 mile east of Dare Road, Selden. Records available: 1943-49.

Jan. 26	65.33	Apr. 29	66.40	July 28	67.01	Oct. 26	66.95
Feb. 24	65.81	May 24	66.63	Aug. 25	67.19	Dec. 4	66.83
Mar. 30	66.02	July 6	66.98	Oct. 5	66.90		

S3736. U. S. Geol. Survey. Northwest corner of Schmidt St. and Lincoln Ave., about 0.7 mile south of Holbrook. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	44.70	Apr. 27	46.04	July 27	46.53	Oct. 25	45.47
Feb. 23	45.30	May 26	46.37	Aug. 25	46.54	Dec. 4	45.46
Mar. 29	45.90	July 7	46.70	Oct. 6	46.35	30	45.14

S3737. U. S. Geol. Survey. East side of Holbrook Road, about 0.6 mile south of Middle Country Road (State Highway 25), and 0.8 mile southwest of New Village. Records available: 1943-49.

Jan. 25	57.14	Apr. 28	58.09	July 28	58.82	Oct. 26	58.12
Feb. 24	57.37	May 25	58.41	Aug. 25	58.67	Dec. 4	57.74
Mar. 30	57.70	July 6	58.79	Oct. 5	58.35	30	57.41

S3738. U. S. Geol. Survey. West side of Oxhead Road, about 0.9 mile north of Middle Country Road (State Highway 25) and 1.3 miles northwest of New Village. No readings obtained during second half of year. Records available: 1943-49. Jan. 25, 56.54; Feb. 24, 56.90; Mar. 30, 57.26; Apr. 29, 57.86; May 25, 58.29; July 6, 58.70.

S3739. U. S. Geol. Survey. West side of Lincoln Ave., about 0.4 mile south of Church St. and 1.5 miles north of Sayville. Records available: 1943-49.

Jan. 25	29.27	Apr. 27	29.97	July 27	28.77	Oct. 25	27.44
Feb. 23	29.60	May 26	29.75	Aug. 25	28.26	Dec. 4	26.95
Mar. 28	30.04	July 7	29.13	Oct. 6	27.74	30	26.65

S3760. W. L. Miller. About 200 feet north of Port Jefferson-Riverhead Road (State Highway 25A) and 600 feet west of Manorville-Wading River Road (north Country Road), Wading River. Only two readings obtained during year. Recent levels indicate former elevation of measuring point 0.42 foot low. Correction +0.42 foot applies to 1948 and previous records. Records available: 1943-49. Jan. 12, 26.97; Jan. 27, 26.77.

S3868. U. S. Geol. Survey. South side of Upper Sheep Pasture Road, 0.4 mile east of Pond Road, Setauket Station. Records available: 1944-49.

Jan. 25	39.23	Apr. 29	39.34	July 28	40.01	Oct. 26	39.92
Feb. 24	39.27	May 25	39.67	Aug. 25	39.87	Dec. 4	40.13
Mar. 30	39.43	July 6	39.86	Oct. 5	40.02		

S3869. U. S. Geol. Survey. East side of Mt. Sinai Road, about 1.3 miles north of Middle Country Road (State Highway 25), North Coram. Records available: 1944-49.

Jan. 25	55.50	Apr. 29	56.89	July 28	57.07	Oct. 25	56.14
Feb. 24	55.90	May 23	57.21	Aug. 25	56.79	Dec. 4	55.67
Mar. 30	56.51	July 5	57.24	Oct. 5	56.39		

S3870. U. S. Geol. Survey. West side of Mill Pond, about 0.7 mile south of Middle Country Road (State Highway 25), South Coram. Records available: 1944-49.

Jan. 25	55.45	Apr. 28	56.54	July 28	56.76	Oct. 25	56.07
Feb. 24	55.80	May 23	56.77	Aug. 25	56.54	Dec. 4	55.68
Mar. 29	56.21	July 6	56.85	Oct. 5	56.27		

S3871. U. S. Geol. Survey. South side of Fire Road about 0.6 mile west of Bellport Road, North Plainfield. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	48.57	Apr. 13	49.08	July 15	50.16	Oct. 21	49.35
26	48.54	27	49.29	26	50.19	Nov. 3	49.42
Feb. 10	48.53	May 11	49.53	Aug. 12	50.15	17	49.26
21	48.56	24	49.70	25	50.01	Dec. 2	49.06
Mar. 9	48.69	June 8	49.90	Sept. 9	49.94	15	48.88
16	48.78	21	50.05	22	49.84	29	48.69
30	48.89	28	50.07	Oct. 5	49.74		

S3955. U. S. Geol. Survey. East side of Pond Road, about 200 feet north of intersection with Horseblock Road, South Setauket Station. Records available: 1944-49.

Jan. 25	54.62	Apr. 29	54.54	July 28	55.63	Oct. 26	55.60
Feb. 24	54.40	May 25	54.88	Aug. 25	55.78	Dec. 4	55.33
Mar. 30	54.34	July 6	55.36	Oct. 5	55.75		

S3956. U. S. Geol. Survey. Southeast corner of Millers Place and Yaphank Road, South Millers Place. Records available: 1944-49.

Jan. 25	32.90	Apr. 28	32.82	July 28	33.53	Oct. 26	33.40
Feb. 24	32.79	May 24	33.04	Aug. 25	33.64	Dec. 4	33.17
Mar. 30	32.73	July 5	33.40	Oct. 5	33.57		

S4134. Riverhead Water District. Northeast corner of old fairgrounds, Riverhead. Records available: 1945-49.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
1	12.88	13.49	13.78	13.77	13.62	.....	12.70	12.55	12.53	12.24	12.17	12.12
2	12.89	13.46	13.69	13.74	13.63	13.41	12.67	12.53	12.48	12.22	12.20	12.08
3	12.86	13.46	13.68	13.72	13.66	13.36	12.67	12.53	12.47	12.23	12.20	12.09
4	12.86	13.51	13.67	13.75	13.65	.....	12.68	12.59	12.49	12.26	12.21	12.11
5	13.01	13.51	13.68	13.67	13.64	.....	12.67	12.67	12.52	12.27	12.17	12.19
6	.....	13.43	13.72	13.82	13.64	13.36	12.61	12.65	12.51	12.23	12.13	12.19
7	.....	13.50	13.70	13.83	13.65	.....	12.66	12.59	12.47	12.20	12.15	12.19
8	.....	13.51	13.68	13.80	13.63	.....	12.65	12.62	12.48	12.21	12.16	12.17
9	.....	13.52	13.68	13.78	13.61	13.14	12.62	12.61	12.50	12.20	12.13	12.10
10	13.23	13.51	13.70	13.71	13.61	13.12	12.63	12.57	12.45	12.22	12.10	12.05
11	13.26	13.51	13.76	13.71	13.59	13.14	12.66	12.52	12.41	12.19	12.13	12.06
12	13.32	13.40	13.77	13.70	13.59	13.14	12.61	12.52	12.40	12.18	12.10	12.10
13	13.36	13.47	13.73	13.73	13.58	13.12	12.68	12.54	12.42	12.16	12.09	12.14
14	13.35	13.53	13.69	13.78	13.58	13.07	12.72	12.54	12.47	12.13	12.19	12.13
15	13.25	13.54	13.69	13.74	13.57	13.03	12.72	12.54	12.47	12.15	12.16	12.11
16	13.27	13.52	13.67	13.74	13.56	12.99	12.71	12.52	12.47	12.15	12.13	12.09
17	13.36	13.53	13.67	13.73	13.54	12.96	12.70	12.52	12.45	12.15	12.12	12.06
18	13.32	13.46	13.71	13.71	13.53	12.93	12.75	12.54	12.41	12.15	12.12	12.08
19	13.35	13.49	13.70	13.74	13.56	12.94	12.73	12.55	12.43	12.17	12.07	12.13
20	.....	13.58	13.67	13.71	13.55	12.97	12.71	12.47	12.41	12.18	12.09	12.10
21	.....	13.53	13.67	13.69	13.53	12.95	12.69	12.42	12.36	12.15	12.09	12.08
22	.....	13.53	13.67	13.69	13.53	12.91	12.66	12.42	12.35	12.14	12.05	12.10
23	.....	13.66	13.75	13.75	13.61	12.83	.....	12.40	12.39	12.13	12.05	12.09
24	13.43	13.57	13.72	13.75	13.57	12.79	.....	12.38	12.36	12.12	12.06	12.00
25	12.39	13.62	13.66	13.67	13.55	12.78	12.69	12.38	12.30	12.08	12.17	11.96
26	12.37	13.65	13.71	13.65	.....	12.81	12.70	12.58	12.28	12.15	12.18	12.02
27	13.41	13.62	13.77	13.69	.....	12.79	12.68	12.39	12.28	12.13	12.12	12.11
28	13.44	13.70	13.80	13.67	.....	12.74	12.66	12.38	12.33	12.11	12.13	12.09
29	13.40		13.72	13.61	.....	12.70	12.64	12.43	12.36	12.13	12.14	12.03
30	13.33		13.70	13.62	13.47	12.71	12.59	12.42	12.32	12.15	12.16	12.01
31	13.40		13.72		13.46		12.56	12.41		12.22		12.01

S4268. County of Suffolk, Superintendent of Highways. West side of Town Line, about 1,300 feet south of Kings Park-East Northport Road, West Kings Park. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	49.68	Apr. 28	49.70	July 26	50.33	Oct. 25	50.51
Feb. 24	49.63	May 25	49.90	Aug. 24	50.47	Nov. 29	50.36
Mar. 30	49.60	June 28	50.13	Oct. 5	50.57		

S4269. County of Suffolk, Superintendent of Highways. North side of Reeves Ave., 2,000 feet west of Roanoke Ave., North Riverhead. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	14.88	June 24	15.95	Aug. 3	15.54	Oct. 4	15.16
21	15.02	30	15.83	8	15.66	26	14.90
Mar. 31	15.45	July 11	15.68	16	15.55	Nov. 30	14.60
Apr. 26	15.85	19	15.62	23	15.51	Dec. 28	14.35
May 24	16.14	25	15.60	29	15.45		

S4270. County of Suffolk, Superintendent of Highways. Crooked Hill Road, about 0.8 mile northwest of intersection with Wicks Road, Brentwood Park. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	53.73	Apr. 28	55.11	July 27	55.18	Oct. 24	54.19
Feb. 23	54.05	May 25	55.41	Aug. 25	54.88	Nov. 29	53.56
Mar. 29	54.60	July 7	55.20	Sept. 27	54.72	Dec. 28	53.08

S4271. County of Suffolk, Superintendent of Highways. About 500 feet south of Sound Ave., and 0.8 mile west of Roanoke Ave., Baiting Hollow. Records available: 1945-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.78	10.79	10.88	11.00	11.18	11.39	10.93	10.90	10.96	10.92	10.74	10.62
2	10.76	10.78	10.87	10.99	11.18	11.40a	10.90	10.91	10.96	10.92	10.73	10.62
3	10.74	10.77	10.88	10.99	11.18	11.41a	10.87	10.91	10.96	10.92	10.73	10.62
4	10.74	10.79	10.89	11.00	11.19	11.41	10.85	10.91	10.96	10.92	10.74	10.62
5	10.75	10.79	10.90	11.00	11.20	11.41	10.83	10.92	10.97	10.90	10.73	10.62
6	10.78	10.79	10.91	11.03	11.21	11.41	10.82	10.92	10.97	10.88	10.73	10.61
7	10.77	10.80	10.91	11.03	11.22	11.38	10.80	10.93	10.97a	10.86	10.73	10.62
8	10.75	10.79	10.93	11.03	11.22a	11.32	10.79	10.94	10.98a	10.83	10.73	10.61
9	10.73	10.80	10.94	11.04	11.23	11.29a	10.78	10.95	10.98a	10.81	10.72	10.60
10	10.73	10.81	10.95	11.04	11.23a	11.27a	10.77	10.95	10.98	10.78	10.72	10.59
11	10.74	10.80	10.96	11.04	11.24a	11.26	10.76	10.95	10.97	10.77	10.71	10.59
12	10.76	10.82	10.97	11.04	11.25a	11.25	10.75	10.95	10.96	10.77	10.70	10.58
13	10.77	10.82	10.97	11.05	11.26	11.24	10.74	10.95	10.97	10.76	10.69	10.57
14	10.76	10.82	10.97	11.06	11.27	11.23	10.75	10.95	10.97	10.76	10.70	10.56
15	10.74	10.83	10.97	11.07	11.28	11.20	10.76	10.96	10.98	10.76	10.70	10.56
16	10.75	10.83	10.97	11.08	11.28a	11.18	10.78	10.97	10.98	10.75	10.69	10.56
17	10.76	10.84	10.98	11.09	11.28a	11.16	10.77	10.98	10.98	10.75	10.68	10.55
18	10.74	10.82	10.99	11.09	11.29a	11.14	10.79	10.99	10.98	10.76	10.68	10.55
19	10.76	10.83	10.98	11.09	11.30a	11.12	10.81	10.98	10.99	10.76	10.68	10.54
20	10.74	10.84	10.97	11.10	11.32	11.10	10.81	10.98	10.99	10.76	10.67	10.53
21	10.75	10.83	10.97	11.11	11.33	11.09	10.81	10.98	10.98	10.75	10.66	10.53
22	10.76	10.84	10.98	11.11	11.34	11.07	10.81	10.98	10.98	10.75	10.67	10.52
23	10.74	10.84	10.98	11.12	11.35	11.05	10.80	10.98	10.98	10.74	10.68	10.51
24	10.77	10.84	10.97	11.13	11.35	11.04	10.81	10.98	10.97	10.74	10.66	10.49
25	10.76	10.85	10.97	11.14	11.36	11.03	10.85	10.97	10.97	10.74	10.66	10.49
26	10.76	10.85	10.98	11.15	11.36a	11.01	10.86	10.97	10.96	10.75	10.65	10.48
27	10.77	10.85	10.99	11.15	11.36	11.00	10.87	10.96	10.95	10.74	10.65	10.48
28	10.79	10.88	10.99	11.16	11.37	10.98	10.88	10.95	10.95	10.74	10.63	10.47
29	10.78		10.98	11.17	11.38	10.96	10.89	10.96	10.94	10.74	10.64	10.47
30	10.76		10.98	11.18	11.39	10.94	10.90	10.95	10.93	10.74	10.63	10.46
31	10.79		10.99		11.39		10.90	10.95		10.75		10.46

a Estimated.

S4367. M. E. Geotzinger. 200 feet north of Florida Ave., 1.0 mile east of Babylon. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	56.67	Apr. 28	56.82	July 27	57.78	Oct. 25	57.69
Feb. 24	56.63	May 25	57.13	Aug. 24	57.91	Nov. 29	57.26
Mar. 30	56.68	July 7	57.61	Oct. 5	57.72		

S4377. Jacob Zimmerman. About 1.2 miles north of Middle Country Road on Moriches Road, St. James. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	62.12	Apr. 28	63.05	July 27	63.09	Oct. 26	62.33
Feb. 24	62.35	May 25	63.29	Aug. 25	62.90	Dec. 4	61.87
Mar. 30	62.70	July 6	63.23	Oct. 5	62.56		

S4523. U. S. Geol. Survey. Northville Turnpike and Route 58, Riverhead. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	10.04	June 24	9.23	Aug. 3	8.77	Oct. 4	8.76
Feb. 21	10.01	30	9.11	8	8.73	26	8.66
Mar. 28	9.93	July 11	8.92	16	8.84	Nov. 30	8.86
Apr. 26	9.85	19	8.87	23	8.71	Dec. 28	8.99
May 24	9.69	25	8.85	29	8.63		

S4524. U. S. Geol. Survey. Tuthills Lane, 0.15 mile north of Main Road (State Highway 25), Riverhead. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	7.94	June 24	7.45	Aug. 2	6.92	Oct. 3	6.70
22	8.22	29	7.18	8	7.28	26	6.48
Mar. 31	8.61	July 11	6.94	15	7.19	Dec. 5	6.41
Apr. 26	8.54	19	6.69	23	7.00	29	6.25
May 24	8.32	25	6.97	29	6.96		

S4525. U. S. Geol. Survey. Twomey Ave. and Deep Hole Road, Riverhead. Well pumped after July 19. Readings continued at nearby well S4529. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	19.93	Apr. 26	21.04	June 24	20.85	July 11	20.40
22	20.12	May 24	21.23	30	20.63	19	20.32
Mar. 31	20.62						

S4526. J. T. Downe. Southeast corner of West Lane and Sound Ave., Jamesport. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	9.43	June 24	10.16	Aug. 3	9.75	Oct. 4	9.53
22	9.60	30	10.02	8	9.78	26	9.31
Mar. 28	9.95	July 11	9.86	16	9.74	Nov. 30	9.12
Apr. 26	10.36	19	9.86	23	9.72	Dec. 28	8.90
May 24	10.55	25	9.81	29	9.72		

S4529. J. Gresseck. Sound Ave. and Twomey Ave. intersection, Riverhead. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	12.68	June 24	12.82	Aug. 3	12.79	Oct. 4	12.85
22	12.77	30	12.70	8	12.87	26	12.67
Mar. 31	12.93	July 11	12.54	16	12.86	Nov. 30	12.62
Apr. 26	13.00	19	12.68	23	12.91	Dec. 30	12.32
May 24	13.14	25	12.78	29	12.89		

S4530. U. S. Geol. Survey. Roanoke Ave. and Middle Road, Riverhead.
Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	17.53	June 24	17.19	Aug. 3	16.28	Oct. 4	15.62
Feb. 21	17.71	30	16.81	8	16.41	26	15.24
Mar. 28	18.29	July 11	16.57	16	16.25	Nov. 30	15.01
Apr. 26	18.38	19	16.48	23	16.11	Dec. 28	14.81
May 24	18.10	25	16.52	29	16.01		

S4827. U. S. Geol. Survey. East side of Broadway, 164 feet north of Cuba Hill Road, Greenlawn. Drilled observation well, diameter 4 inches, depth 199 feet. Records available: 1948-49.

Jan. 27	56.85	Apr. 28	57.03	July 26	57.55	Oct. 25	57.96
Feb. 24	56.86	May 25	57.24	Aug. 24	57.72	Nov. 29	58.16
Mar. 30	57.01	June 28	57.30	Sept. 27	57.90	Dec. 27	58.12

S4828. U. S. Geol. Survey. Southwest corner of Broadway and Park Ave., Greenlawn. Drilled observation well, diameter 4 inches, depth 141 feet. Records available: 1948-49.

Jan. 27	67.92	Apr. 28	68.11	July 26	69.02	Oct. 25	69.22
Feb. 24	67.95	May 25	68.60	Aug. 24	69.16	Nov. 29	69.42
Mar. 30	68.18	June 28	68.69	Sept. 27	69.25	Dec. 27	69.32

S4829. U. S. Geol. Survey. West side of Randall Road, 0.95 mile south of Port Jefferson-Riverhead Road (State Highway 25A), Shoreham. Drilled observation well, diameter 4 inches, depth 97 feet. Records available: 1946-49.

Jan. 28	39.41	Apr. 27	39.78	July 27	40.58	Nov. 2	40.27
Feb. 28	39.21	May 25	40.11	Aug. 24	40.60	30	40.04
Mar. 30	39.50	June 29	40.45	Sept. 28	40.53	Dec. 28	39.76

S8912. Owner unknown. Southeast corner of Route 25 and Route 111, The Branch. Dug unused well, diameter 36 inches, depth 26 ft. Records available: 1947-49.

Oct. 3, 1947	33.47	May 4, 1948	35.39	Dec. 1, 1948	33.78	May 26, 1949	35.05
30	33.26	June 1	35.12	29	33.81	July 6	34.40
Nov. 26	33.71	30	35.25	Jan. 27, 1949	35.53	28	34.10
Jan. 9, 1948	32.90	July 29	35.00	Feb. 24	35.54	Aug. 24	33.84
Feb. 5	34.00	Aug. 27	34.58	Mar. 30	35.61	Oct. 5	33.63
26	34.28	Oct. 1	34.12	Apr. 28	35.35	Dec. 4	33.36
Apr. 2	35.54	Oct. 26	33.86				

OHIO

By E. J. Schaefer

PROGRAM OF WORK

The observation-well program was continued in 1949 in cooperation with the Ohio Water Resources Board (recently changed to Division of Water, Ohio Department of Natural Resources), the Ohio State University Engineering Experiment Station, the Commissioners of Hamilton County and the city of Canton. The over-all program of work included collection of water-level data by means of a State-wide network of observation wells, county surveys of ground-water conditions and determination of the physical properties of various aquifers by means of pumping tests. At the end of the year recording gages were being operated on 118 observation wells and periodic measurements were made in 37 other observation wells.

FLUCTUATIONS OF WATER LEVELS

When not unduly affected by heavy pumping, water levels in practically all aquifers in Ohio follow cyclical seasonal trends in response to natural recharge and discharge. The nongrowing season, extending from the first killing frost in the fall to the last killing frost in the spring offers the most favorable conditions for recharge from precipitation because usage by vegetation and losses by evaporation are at a minimum. As a result ground-water levels in Ohio generally rise at some time during the non-growing season, the exact period of rise depending on when precipitation occurs and on soil conditions. Usually these rising trends extend for a short time into the growing season and occasionally peak levels are reached as late as June or early July.

After the growing season starts, less and less water percolates to the water table but natural discharge from the aquifer continues, generally into surface streams through springs and seeps. This discharge represents a loss of storage in the aquifer and when it is not balanced by recharge ground-water levels decline steadily until recharge is again greater than discharge.

Conditions for recharge of aquifers in Ohio in 1949 were above normal in January and February, when precipitation was above normal and temperatures averaged above freezing throughout most of the State. In the spring months precipitation averaged slightly below normal and conditions were therefore not as favorable. Precipitation was also below normal in November and December. As a result the seasonal declines which had started with the advent of the growing season, continued into December and record low levels were recorded in many wells near the end of the year.

Peak levels were reached in many wells in January, February, and March. In a few deeper wells or in wells at considerable distances from recharge areas, peak levels were recorded as late as June.

The most heavily pumped ground-water areas in Ohio are at Dayton, the Mill Creek Valley immediately north of Cincinnati, Hamilton, Middletown, Canton, and Akron. The trends of ground-water levels in these areas in 1949 are described in the following sections of this report to aid the reader in the interpretation of the tables of water-level data.

Dayton area, Montgomery County

More ground water is pumped in the Dayton area than in any other area of similar size in Ohio. A survey made in the area in 1947 by Stanley E. Norris¹ showed that approximately 91 million gallons a day was pumped in that year. About 50 million gallons a day was pumped by industries and about 41 million gallons a day by the city of Dayton at its Rohrer's Island well field in the Mad River valley. The municipal and the industrial supplies are obtained from glacial gravels in the Mad and Miami River valleys which exceed 200 feet in depth in the area. Fortunately the industrial ground-water developments are more or less uniformly spaced along the Miami River from the business section of Dayton south to Miamisburg. Observation wells are so located that the trends of water levels can be followed in most of the heavily pumped areas. Although the municipal wells are concentrated in a relatively small area, water levels are maintained at high levels by artificial recharge through a system of diversion ditches which conduct water from the Mad River to infiltration ponds on Rohrer's Island.

A complete pumpage survey has not been made in the Dayton area since 1947. However, several industries have developed additional large

¹Norris, Stanley E., Cross, W. P. and Goldthwait, R. P., The water resources of Montgomery County, Ohio: Ohio Water Resources Board Bull. 12.

ground-water supplies since that time and it is estimated that the pumping in 1949 exceeded 100 million gallons a day. The water-level records show that this increase results in lower levels in the summer months. In fact, record low levels were recorded in all the observation wells in the heavily pumped parts of the Dayton area in 1949. In 1948 the lowest levels were also lower than previously recorded although not so low as in 1949. In spite of these record low 1948 levels, however, the peak levels in the spring of 1949 were approximately the same as in previous years of record.

All available evidence indicates that the major portion of the recharge to the glacial gravels in the Dayton area is induced from the Miami and Mad Rivers by pumping in the area. It seems reasonable from the above discussion of water levels that the heavier pumping in the Dayton area produces steeper ground-water gradients along these rivers which in turn induce greater amounts of recharge, especially during periods of high stream flow. The fact that approximately the same peaks are reached each year indicates that the increased amount of induced recharge is approximately equal to the increased amount of water pumped. The conclusion is reached, therefore, that the heavy pumping in the Dayton area to date has not been in excess of the recharge available.

Mill Creek Valley north of Cincinnati, Butler, and Hamilton Counties

Ground-water conditions in the Mill Creek Valley have been described in detail by Klaer and Thompson in Water-Supply Paper 999 and in a report by Bernhagen and Schaefer.²

Mill Creek originates in Liberty Township in Butler County and follows a southerly course in a broad flat valley to the Ohio River at Cincinnati. The area north of Sharonville is agricultural. South of Sharonville the Mill Creek Valley is part of the metropolitan area of Cincinnati and is highly industrialized, many industries being dependent for water supplies on ground water in the glacial gravels underlying the present valley floor. The largest concentrations of pumping are at industrial plants in Reading and Lockland, the well fields, and at industrial plants to the south near the Cincinnati city limits at Carthage and Ivorydale. From Lockland south the permeable glacial gravels are overlain by fairly continuous till

² Bernhagen, Ralph J. and Schaefer, E. J., Ground-water conditions in Butler and Hamilton Counties, Ohio, 1946: Ohio Water Resources Board Bull. 8.

deposits which are relatively impermeable. The intake area of the aquifer is north of Lockland where these till deposits are fairly discontinuous.

The 1949 records for the observation wells immediately north of Lockland (wells 207-3, 212-1, 214-3 and 216-B) show that water levels in the area rose slightly higher in the spring of 1949 than in 1948 indicating that recharge conditions in the intake area to the north were better in 1949 than in 1948. However, pumping was started at the new Lockland municipal waterworks plant during the year and increased slightly at the Glendale municipal plant. As a result ground-water levels in the area declined after the recharge period to levels lower than at the end of 1948. Immediately to the south in Lockland, Reading, and Wyoming both the highest and lowest water levels of the year were only slightly different than those that had occurred in 1948.

At the National Distillers Corporation plant in Carthage, the water level in observation well 246-1 reached a record low level in November but by the end of the year had risen to a level higher than at the end of 1948. Immediately north of Cincinnati at the Procter and Gamble Company plant at Ivorydale, water levels in observation wells 265, 270-A4 and 270-T7 were maintained slightly higher throughout 1949 than in 1948. Although water levels are still very low in the area, conservation measures practiced by the Procter and Gamble Co. have improved ground-water conditions greatly over those that existed during the second World War when water levels in the area followed a continuous downward trend.

Hamilton area, Butler County

The city of Hamilton is situated along the Miami River in Butler County, about 22 miles north of Cincinnati. A survey of pumpage in the Hamilton area in 1945 showed that approximately 15 million gallons a day of ground water was pumped in that year from glacial gravels underlying the city. It is believed that pumpage has increased a small amount since that time.

The water level in well 85-7 at the Hamilton municipal well field a short distance north of the Hamilton city limits reached a record low in October 1949 when it stood at about 31 feet below the land surface. The previous record low level occurred in 1944. The peak level in 1949 was about 19 feet below the land surface which was slightly higher than most

peak levels for previous years of record. The lower levels that have occurred in this well field near the end of the years 1948 and 1949 are due to increased pumping by the city. The fact that peak levels are about the same as in former years indicates that the available recharge is not being exceeded. City officials report that water levels have dropped a large amount in the pumping wells in the last several years. In view of the observation-well record which shows only slightly lower water levels in the dry season it would seem that the low levels in the pumping wells are probably due to well failure, perhaps incrustation, rather than to a large lowering of the water table.

The water levels in observation wells 86-7 and B-30-D which are near the centers of the heaviest industrial pumping in the city, reached peak stages in the spring of 1949 that were higher than in 1948. In fact the peak level in well 86-7 in 1949 was the highest of the record which extends back to 1939. The lowest levels recorded in these wells near the end of 1949 were about the same as those recorded in 1948.

Middletown area, Butler County

Middletown lies along the Miami River about 10 miles upstream from Hamilton. Ground water in the area is pumped from glacial gravels that fill the same buried valley which passes through Hamilton. A survey made in 1945 showed that ground-water pumpage amounted to approximately 29 million gallons a day in the area at that time, about 14 million gallons a day at the municipal well field at the north end of the city near the Miami River and the remainder at industrial plants in the city and south of the city.

The lowest water level recorded in 1949 in observation well 25-5 at the municipal well field was 34.7 feet below the surface, about the same as the lowest level recorded in 1948. The highest level was 16.2 feet below land surface, 2.5 feet higher than the peak level in 1948. The record as a whole, which was started in 1941, shows a fairly level trend except for daily and seasonal fluctuations.

Well 29-1 is in the business section of Middletown and shows trends produced by recharge from the river and by the regional pumping. The combination of low precipitation in November and December and probable increased industrial pumping in 1949 produced a record low water level in

this well late in December in spite of the fact that the water level in the spring rose to a higher-than-average stage.

Observation well 36-13, in the southeastern part of Middletown at the East Works of the American Rolling Mill Company shows water-level trends that correlate almost entirely with nearby pumping because each of the two recharge areas of the buried valley aquifer are more than 2 miles distant, to the southwest and northwest of the city where the aquifer is traversed by the Miami River. Because of decreased pumping rates in nearby wells from January to June 1949, the water level in well 36-13 rose almost 15 feet. A declining trend then continued to the end of the year but the water level at that time stood a little more than 2 feet higher than at the lowest stage in January.

Canton area, Stark County

The largest concentrations of pumping in and near Canton are in the business and industrial sections of the city proper, the northeast well field in the valley of the middle branch of the Nimishillen Creek and at the northwest well field in the valley of the West branch of Nimishillen Creek. Water supplies in these sections of the Canton area are pumped mostly from permeable glacial gravels, deposited in buried valleys in the area. It is estimated that pumping from these sources averaged about 32 million gallons a day in 1949.

Trends of ground-water levels in the business section of Canton have improved greatly since 1945. At that time conservation measures, which included installation of equipment for reuse of water, were started at the Timken Roller Bearing Company plant in the southwest part of the city proper. This resulted in a large reduction in pumping at this plant. In well St-6 which is only a short distance away, a more or less steady rise in water level totaling about 17 feet has occurred in the period from February 1945 to the end of 1949 when the water level stood only 8.17 feet below the surface. In 1949 the net rise in this well amounted to about 7.91 feet. The rise has been accelerated somewhat by a reduction in pumping at the nearby 9th Street well pumped by the Canton Water Department. Trends of water levels similar to those shown by the record for well St-6 are also evident in the records for wells St-3 and St-2 in the city proper about 1 and 2 miles northeast, respectively, from well St-6.

A report describing ground-water conditions in the Canton area was prepared in 1948 by the Geological Survey in cooperation with the city of Canton and the Ohio Water Resources Board.³ That report stated that geologic conditions seemed favorable for development of a large ground-water supply in Plain Township immediately northwest of the city where permeable glacial gravels were deposited in a buried valley. The report also pointed out that these gravels are traversed by the West Branch of Nimishillen Creek from which recharge might be induced if wells were pumped in the area. On the basis of this statement the area was explored by test drilling and pumping tests were conducted. Later three large water collectors were constructed as an addition to the city water supply. Pumping was started at this well field (named the northwest well field) in July 1948, and has continued at varying rates since that time. Observation wells St-11, St-12, St-13, St-21 and St-22 were established before pumping began to follow the trends of water levels under pumping conditions. After pumping began the water levels in these wells declined sharply until the end of 1948. During 1949 the water levels in all the observation wells followed rising trends in January, then fairly level trends to the end of April and then varying downward trends to the end of the year when they were from 2.8 to 5.8 feet lower than at the beginning of the year.

Trends of ground-water levels in the Middle Branch valley of Nimishillen Creek are best shown by the record for well St-4, about 1.5 miles north of the northeast well field. This well is affected by pumping at the well field but also shows recharge fluctuations. The trends of water level fluctuations in this well in 1949 were very similar to those that occurred in the observation wells in the West Branch valley of Nimishillen Creek. The water level rose sharply in January about 2½ feet and then followed a fairly level trend until April when a steady decline started which continued through the end of the year. At the end of the year the water level was 3.9 feet lower than at the beginning of the year reflecting the less-than-average recharge that had occurred early in the year.

³ Schaefer, E. J., White, G. W. and Van Tuyl, D. W., The ground-water resources of the glacial deposits in the vicinity of Canton, Ohio: Ohio Water Resources Board Bull. 3.

Akron area, Summit County

An average of about 23 million gallons a day of ground water is pumped in the Akron area including Barberton. About 18 million gallons a day is pumped from wells in Akron and the remainder at Barberton. At the present time no observation wells have been established at Barberton so the trends of water levels cannot be described.

In Akron proper, ground water is pumped mainly from glacial gravels in a buried valley running north and south through the center of the city and from gravels in a tributary buried valley in the southeast part of the city. The large rubber companies are the principal users. The city obtains its supply entirely from surface-water sources.

Pumping from both buried valleys is seasonal, the rubber companies using the ground water only when surface-water supplies are too warm for their purposes. Pumping generally starts in March and ends in November. Early and late in this period the ground water is mixed with surface water to maintain desired temperatures.

Observation wells have been maintained for several years to follow the trends of water levels in both buried valleys. As might be expected water levels decline sharply when the pumping season begins and rise sharply after pumps are shut off at the end of the season. The records for wells Su-3 in the southeast part of the city in the well field of the Goodyear Rubber Company and that for well Su-4 at the Firestone Rubber Company well field in the south-central part of the city show the trends of water levels in both buried valleys. To date the water level in well Su-3 has returned to practically the same stage each year of record except in 1945. In 1949 the water level rose to a peak of about 19.3 feet below the surface early in May, then declined to a low level of 55.5 feet in mid-November and then rose to a level of 38 feet by the end of the year. Although a record is not available for the first 6 days of January a hydrograph of the record indicates that the water level at the end of the year was about the same as at the beginning of the year.

The water level in well Su-4 at the Firestone field stood at 21.2 feet below the surface on January 1, then rose to a peak of 8.5 feet on March 29, then declined to a low of 29.4 feet on October 20 and then rose to 17.2 feet by the end of the year.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

Allen County

Al-1. Standard Oil Co. Lima. Records available: 1946-49.

Lowest daily water level, from recorder graph.						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	144.80	146.37	146.72	145.31	142.59	146.07
2	146.04	146.46	146.80	144.60	139.95	148.07
3	146.30	146.00	146.32	144.18	146.88	146.30
4	148.07	146.70	146.32	144.53	146.20	145.85
5	147.98	146.46	145.01	145.93	146.21	134.80
6	147.35	142.73	140.40	145.38	143.80	140.38
7	147.32	143.96	145.44	147.36	143.91	140.12
8	146.65	146.86	145.35	147.38	143.92	.....
9	145.20	147.12	141.92	147.30	145.20	135.89
10	146.57	147.40	142.67	142.78	146.58	135.90
11	147.87	147.58	139.31	144.39	147.03	129.10
12	148.01	147.34	130.22	145.63	145.65	130.25
13	147.96	146.30	137.70	147.31	145.40	131.40
14	147.10	146.42	143.58	147.23	144.20	154.14
15	146.45	139.84	145.20	147.71	139.76	121.30
16	145.50	147.18	145.60	146.10	144.21	124.90
17	145.79	147.73	145.57	144.22	145.90	126.47
18	147.22	147.83	144.07	146.72	145.62	123.63
19	146.94	147.60	144.09	147.20	145.83	125.77
20	147.70	147.40	145.28	142.60	145.12	.....
21	147.67	.....	144.40	145.80	144.40	144.26
22	146.00	147.40	145.43	147.75	139.25	145.32
23	143.58	146.86	143.31	147.70	143.51	145.71
24	147.48	147.02	143.26	143.13	145.53	146.12
25	147.50	147.18	145.61	137.16	143.30	147.55
26	147.30	144.92	145.00	137.05	144.63	.....
27	147.60	143.86	145.40	.....	146.12	.....
28	146.50	143.24	145.00	145.60	145.70	142.42
29	144.74		143.71	145.40	141.65	142.19
30	143.52		145.26	142.40	144.51	142.35
31	145.43		145.33		146.20	

Lowest daily water level, from recorder graph						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	145.26	146.11	145.60	140.60	146.88	148.42
2	.....	146.52	146.80	143.47	149.05	149.02
3	.....	146.70	146.72	146.10	149.11	147.30
4	.....	147.02	145.12	146.27	149.33	145.40
5	144.20	147.20	146.00	145.43	149.10	147.58
6	142.82	147.19	147.60	145.60	149.30	148.52
7	143.14	145.32	147.70	150.29	149.69	148.41
8	143.22	145.92	147.40	149.51	149.60	148.40
9	142.55	144.25	147.10	148.11	149.25	148.12
10	139.51	143.82	146.61	149.10	149.61	147.91
11	141.62	145.70	145.80	149.35	149.70	146.90
12	141.68	146.31	144.55	149.50	149.01	148.10
13	144.36	146.05	147.18	149.50	149.31	148.40
14	143.88	143.30	147.28	149.90	149.59	148.49
15	145.51	146.23	146.47	149.69	149.80	148.49
16	144.00	146.79	145.10	149.24	149.90	147.89
17	140.62	146.94	141.98	149.95	149.90	147.68
18	140.75	148.19	140.59	150.00	149.91	146.71
19	144.11	147.30	143.29	150.03	149.54	148.72
20	145.95	147.00	142.40	150.54	149.35	148.92
21	145.93	144.41	142.39	149.81	149.87	149.12
22	145.00	144.32	142.36	149.49	149.88	148.68
23	145.15	147.00	140.90	148.30	149.84	149.00
24	141.70	146.70	140.87	149.40	149.30	148.12
25	144.23	147.14	139.26	148.83	149.29	146.61
26	.....	146.98	141.03	148.91	149.01	146.89
27	145.63	146.32	141.62	148.82	149.04	146.98
28	146.24	145.30	142.58	148.80	138.00	147.73
29	146.44	145.63	142.77	147.61	146.41	147.90
30	146.10	145.77	143.40	146.38	148.12	147.20
31	142.92	146.59		146.87		147.90

Ashland County

As-1. Faultless Rubber Co. At Ashland. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.20	28.14	31.23	21.30	18.32	28.82	32.55	29.74	30.90	29.95	31.66	36.20
2	21.88	28.76	31.26	20.70	18.50	29.19	24.48	32.12	30.79	28.22	31.62	26.08
3	22.90	29.32	31.40	19.99	18.98	30.57	22.78	31.50	30.42	30.75	31.80	36.08
4	38.50	28.97	31.43	19.71	19.22	30.57	22.51	31.34	27.25	32.65	32.10	33.20
5	41.45	26.92	24.12	19.90	19.22	26.02	26.35	31.29	23.20	32.10	32.10	33.72
6	39.50	21.67	22.12	19.91	19.53	27.90	24.52	31.21	23.20	30.48	28.22	33.80
7	33.62	21.78	29.50	25.72	19.53	29.12	24.37	28.30	34.90	31.08	30.47	34.00
8	34.00	25.41	31.44	25.72	18.80	29.90	27.22	30.91	34.85	31.40	31.45	34.00
9	27.90	24.01	31.80	21.99	20.73	30.12	28.89	32.26	34.34	.....	31.76	33.92
10	26.20	35.83	31.80	19.85	20.81	30.72	25.50	34.98	34.92	29.62	31.82	33.91
11	31.98	35.75	31.15	20.02	21.02	30.77	27.70	35.10	31.58	33.12	32.03	30.40
12	33.29	35.00	31.10	20.35	21.22	27.90	30.30	33.20	31.50	33.48	32.03	32.60
13	33.75	26.93	22.37	20.31	22.02	28.10	31.39	35.90	32.06	33.03	28.20	33.13
14	33.80	33.66	28.30	20.15	20.60	29.82	31.45	27.82	33.04	32.60	30.30	33.24
15	30.70	33.97	29.89	20.35	20.00	30.92	31.31	33.90	33.03	31.88	31.17	33.32
16	26.27	33.51	30.12	20.29	19.83	30.99	31.31	34.22	32.98	28.58	31.55	33.40
17	32.00	32.97	29.95	19.03	20.18	31.18	.....	34.43	32.82	29.60	33.06	33.40
18	33.11	29.83	29.00	19.21	20.47	31.10	30.64	32.53	29.35	30.82	33.29	29.48
19	33.21	22.50	28.33	19.28	.....	26.48	31.60	32.26	29.28	31.02	32.62	32.47
20	32.72	29.32	22.43	19.99	.....	30.97	32.08	32.53	31.80	31.70	28.70	32.48
21	32.46	29.86	33.00	19.87	30.05	34.15	32.06	29.83	32.30	31.69	34.80	32.11
22	30.27	30.52	33.12	19.60	27.50	33.17	31.93	31.06	32.37	31.73	35.95	31.39
23	22.51	29.96	33.32	21.66	29.77	32.52	31.82	31.51	33.00	29.55	36.38	31.18
24	25.10	28.23	32.91	20.17	29.80	32.28	26.50	32.85	32.78	30.05	35.50	30.21
25	25.60	22.45	32.16	19.61	29.70	30.13	32.10	33.09	31.73	31.30	30.90	28.22
26	21.77	21.87	31.85	21.06	29.28	27.17	32.56	32.97	30.85	32.08	30.45	24.29
27	35.48	26.97	23.35	20.89	24.38	27.55	31.32	32.60	33.72	32.19	27.42	24.07
28	35.43	26.10	22.43	20.70	22.42	28.03	34.82	29.95	33.50	32.32	34.86	24.13
29	31.94	.....	22.40	20.22	.....	25.82	34.82	29.95	33.10	32.32	36.63	27.83
30	22.39	.....	22.41	19.71	.....	29.04	32.87	31.50	31.69	30.00	36.20	28.45
31	25.93	.....	21.94	.....	28.04	.....	38.30	31.87	.....	32.42	.....	26.18

Ashtabula County

Ab-1. K. K. Tisch. 3 miles south of Jefferson. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.90	6.01	5.55	5.18	5.44	6.58	....	....	9.17	9.97	10.79	10.68
2	6.99	6.13	5.58	5.25	5.44	6.61	....	8.22	9.28	9.97	10.68	10.66
3	7.17	6.13	5.61	5.25	5.66	6.69	....	8.29	9.28	9.97	10.71	10.65
4	7.20	5.90	5.61	5.34	5.75	6.69	....	8.38	9.28	9.98	10.72	10.61
5	7.16	5.83	5.44	5.23	5.78	6.69	7.89	8.42	9.28	10.04	10.72	10.11
6	6.89	5.85	5.45	5.17	5.78	6.68	7.90	8.47	9.28	10.04	10.72	10.51
7	6.78	5.79	5.60	5.14	5.91	....	7.97	....	9.27	10.08	10.73	10.25
8	6.85	5.80	5.60	5.23	5.98	6.95	8.08	....	9.27	10.15	10.77	10.26
9	6.94	5.87	5.51	5.38	6.00	7.03	8.08	8.51	9.30	10.15	10.80	10.27
10	7.05	5.87	5.51	5.47	6.30	7.05	8.04	8.55	9.34	10.15	10.80	10.25
11	7.06	6.06	5.30	5.47	6.37	7.05	8.08	8.57	9.35	10.17	10.82	10.15
12	6.96	6.06	5.37	5.38	6.43	6.98	8.09	8.57	....	10.17	10.83	10.01
13	6.75	5.92	5.43	5.38	6.50	6.98	8.11	8.57	9.36	10.27	10.83	9.97
14	6.78	5.98	5.43	5.35	6.54	7.03	8.14	8.59	9.52	10.27	10.84	9.94
15	6.80	5.92	5.47	5.35	6.68	7.07	8.18	8.59	9.57	10.27	10.99	9.88
16	6.77	5.73	5.47	5.47	6.79	7.14	8.26	8.74	....	10.27	10.99	9.84
17	6.78	5.90	5.40	5.52	6.93	7.19	8.26	8.74	....	10.37	11.00	9.79
18	6.79	5.90	5.39	5.52	6.94	7.30	8.26	8.73	....	10.36	11.00	9.74
19	6.70	5.85	5.57	5.61	6.93	7.36	8.26	8.86	....	10.45	11.00	9.60
20	6.84	5.89	5.65	5.67	6.84	7.36	8.12	8.89	9.70	10.45	10.97	9.58
21	6.84	5.93	5.63	5.67	6.84	7.36	8.14	8.97	9.71	10.45	10.97	9.36
22	6.71	5.92	5.49	5.61	6.82	7.38	8.14	8.97	9.71	10.47	11.07	9.20
23	6.72	5.77	5.41	5.46	6.71	7.45	8.25	8.98	9.71	10.50	11.06	9.10
24	6.48	5.77	5.43	5.52	6.71	7.45	8.25	9.06	9.80	10.50	11.02	9.10
25	6.43	5.62	5.41	5.60	6.63	7.45	8.25	9.15	9.90	10.50	10.94	9.26
26	6.43	5.67	5.35	5.57	6.55	7.53	8.22	9.15	9.90	10.50	10.95	9.25
27	6.24	5.67	5.27	5.45	6.55	7.60	....	9.15	9.90	10.71	10.89	9.11
28	5.96	5.41	5.23	5.53	6.56	7.69	....	9.15	9.80	10.71	10.86	8.93
29	5.99	....	5.34	5.53	6.56	7.80	....	9.15	9.80	10.71	10.76	8.92
30	6.22	....	5.32	5.49	6.56	7.76	....	9.15	9.87	10.11	10.72	8.93
31	6.22	....	5.32	....	6.58	....	....	9.13	....	10.79	....	8.90

Athens County

At-1. State Hospital. In Athens. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.53	11.41	13.93	14.58	17.68	19.19	19.71	19.54	20.38	20.90	21.05	21.02
2	15.59	8.99	14.15	14.71	17.73	19.24	19.73	19.54	20.40	20.91	21.05	21.00
3	15.61	12.37	14.38	14.91	17.78	19.28	19.77	19.54	20.42	20.92	21.05	21.00
4	15.73	12.80	14.54	14.08	17.81	19.33	19.78	19.54	20.43	20.93	21.05	20.98
5	15.73	12.81	14.68	15.19	17.81	19.36	19.78	19.57	20.47	20.93	21.05	20.98
6	15.60	12.85	14.89	15.43	.....	19.42	19.78	.....	20.48	20.95	21.05	20.98
7	15.05	13.16	14.91	15.56	.....	19.47	19.78	.....	20.49	20.95	21.04	20.99
8	14.65	13.31	14.93	15.71	18.08	19.51	19.83	19.40	20.51	20.96	21.05	21.00
9	14.62	13.60	15.01	15.85	18.11	19.56	19.83	19.41	20.52	20.97	21.05	21.01
10	14.75	13.95	15.18	15.97	18.19	19.60	19.79	19.45	20.54	20.97	21.06	21.01
11	14.83	14.12	15.18	16.09	18.25	19.63	19.77	19.50	20.56	20.98	21.06	21.02
12	14.94	14.35	15.18	16.19	18.31	19.65	19.70	19.53	20.59	20.98	21.06	21.02
13	14.96	14.58	15.29	16.33	18.40	19.65	19.68	19.54	20.61	20.99	21.07	20.98
14	15.11	14.67	15.37	16.49	18.46	19.65	19.70	19.61	20.62	20.99	21.07	20.79
15	15.13	14.67	15.49	16.56	18.55	19.65	19.73	19.63	20.64	20.99	21.07	20.67
16	15.25	14.31	15.56	16.64	18.61	19.65	19.78	19.67	20.66	20.99	21.06	20.59
17	15.37	12.67	15.64	16.73	18.68	19.69	19.81	19.71	20.69	21.00	21.04	20.51
18	15.67	11.32	15.79	16.84	18.73	19.69	19.81	19.76	20.72	21.00	21.03	20.49
19	15.92	11.83	15.87	16.84	18.80	19.69	19.81	19.82	20.72	21.00	21.02	20.45
20	15.99	12.24	15.99	16.84	18.84	19.69	19.78	19.87	20.73	21.01	21.01	20.39
21	15.10	12.24	16.31	16.84	18.91	19.71	19.79	19.90	20.74	21.02	21.01	20.31
22	15.16	12.37	16.45	16.95	18.97	19.73	19.85	19.94	20.74	21.03	21.01	20.25
23	16.06	12.57	16.56	16.96	18.97	19.76	19.81	19.98	20.77	21.03	21.00	20.21
24	15.99	12.62	16.60	17.32	18.94	19.80	19.67	20.02	20.78	21.03	21.00	20.19
25	15.68	12.99	16.66	17.33	18.94	19.83	19.56	20.06	20.84	21.03	21.00	20.14
26	14.51	13.12	16.70	17.41	18.97	19.88	19.49	20.11	20.85	21.04	21.00	20.10
27	12.84	13.33	16.70	17.46	19.00	19.73	19.46	20.16	20.86	21.04	21.02	20.08
28	10.70	13.29	16.28	17.50	19.03	19.60	19.46	20.25	20.86	21.04	21.02	20.08
29	9.01		15.10	17.55	19.09	19.67	19.48	20.29	20.88	21.04	21.02	20.05
30	8.26		14.47	17.61	19.11	19.70	19.53	20.32	20.89	21.05	21.02	20.02
31	10.55		14.37		19.16		19.54	20.36		21.05		19.99

Auglaize County

Au-1. C. W. Manchester. At New Hampshire. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.64	15.35	15.10	14.90	14.92	15.38	15.87	16.14	16.38	17.04	.....	18.17
2	.....	15.28	15.10	14.92	14.91	15.48	15.79	16.13	16.43	17.06	.....	18.01
3	.....	.....	15.10	14.92	14.95	15.54	15.92	16.15	16.42	17.09	.....	18.01
4	.....	.....	15.04	14.98	15.01	15.64	15.91	16.20	16.45	17.04	.....	17.99
5	16.25	15.32	15.04	14.91	15.05	15.66	15.94	16.25	16.48	17.08	.....	18.00
6	16.29	15.26	15.05	14.87	15.06	15.72	15.87	16.28	16.51	17.06	.....	18.01
7	16.32	15.27	15.08	14.90	15.02	15.78	15.84	16.19	16.50	17.11	.....	18.03
8	16.28	15.24	15.06	14.93	15.02	15.86	15.88	16.16	16.53	17.15	.....	18.07
9	16.28	15.25	15.02	14.94	14.99	15.80	16.00	16.11	16.55	17.16	.....	18.09
10	16.27	15.28	14.98	14.95	15.05	15.85	16.05	16.09	16.58	17.21	.....	18.09
11	16.23	15.28	14.99	14.96	15.13	15.87	16.05	16.12	16.63	17.23	.....	.....
12	16.14	15.28	15.01	14.95	15.15	15.83	16.05	16.11	16.66	17.23	.....	.....
13	16.11	15.29	15.01	14.94	15.14	15.82	16.06	16.11	16.64	17.28	.....	.....
14	16.07	15.29	15.03	15.00	15.20	15.74	16.07	16.07	16.66	17.32	17.74	.....
15	16.04	15.18	15.06	14.91	15.22	15.74	16.07	16.06	16.69	17.33	17.77	.....
16	16.04	15.17	15.04	14.94	15.20	15.66	16.09	15.99	16.72	17.32	17.76	.....
17	15.59	15.24	15.03	14.93	15.26	15.65	16.07	15.96	16.79	17.36	17.79	18.19
18	15.91	15.29	15.04	14.88	15.27	15.75	16.06	15.99	16.71	17.37	17.79	18.19
19	15.81	15.26	15.05	14.94	15.30	15.78	16.11	16.01	16.73	17.41	17.77	18.16
20	15.79	15.27	15.04	14.97	15.28	15.81	16.11	16.03	16.79	17.46	17.75	18.17
21	15.72	15.23	15.05	15.00	15.27	15.81	16.12	16.24	16.78	17.47	17.80	18.21
22	15.75	15.17	14.96	14.94	15.22	15.84	16.07	16.02	16.81	17.44	17.80	18.16
23	15.70	15.16	14.98	14.89	15.23	15.86	16.12	16.05	16.79	17.47	17.90	18.22
24	15.65	15.11	15.06	14.94	15.24	15.88	16.18	16.13	16.80	17.46	17.86	18.30
25	15.64	15.11	15.07	15.02	15.26	15.81	16.21	16.19	.....	17.47	17.80	18.29
26	15.71	15.11	15.03	15.02	15.23	15.78	16.21	16.17	.....	17.46	17.83	18.26

Au-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	15.75	15.09	14.86	14.94	15.23	15.74	16.28	16.19	.....	17.50	17.87	18.27
28	.....	15.09	14.95	15.01	15.25	15.70	16.29	16.31	16.90	17.51	17.99	18.29
29	15.44		15.05	14.96	15.25	15.80	16.27	16.33	16.90	17.51	17.97	18.32
30	15.37		14.99	14.96	15.29	15.80	16.24	16.33	16.99	.....	18.06	18.34
31	15.38		14.92		15.31		16.08	16.32		.....		18.34

Au-2. City of St. Marys. In St. Marys. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.46	2.20	0.59	....	1.80	4.24	5.01	4.56	5.84	6.27	5.64	6.44
2	1.17	2.48	2.85	1.74	2.13	4.48	4.93	4.74	5.97	5.44	5.68	6.65
3	3.44	2.41	3.14	0.68	2.39	4.63	2.32	4.90	5.90	5.62	5.84	6.65
4	3.66	2.85	2.77	1.93	2.53	4.63	1.00	5.00	5.47	5.76	6.04	6.42
5	3.27	2.64	2.62	2.08	2.54	4.00	3.18	5.07	5.01	5.84	6.22	6.46
6	3.30	2.46	1.36	2.35	2.57	4.31	3.53	5.11	5.54	5.92	6.21	6.47
7	3.60	2.28	2.62	2.52	2.52	4.67	3.76	5.10	5.56	6.22	5.88	6.51
8	3.60	2.31	2.76	2.60	1.92	4.87	3.70	5.08	5.76	6.30	6.04	6.67
9	3.18	2.60	2.78	2.79	2.35	4.97	3.71	5.08	5.89	6.31	6.09	6.68
10	4.00	2.84	2.56	2.10	2.80	5.00	3.70	5.13	5.93	6.24	6.08	6.58
11	4.12	2.98	2.67	2.58	3.06	4.83	3.78	5.13	5.93	6.26	6.14	6.35
12	4.08	2.88	2.57	2.57	3.22	4.18	3.80	5.12	5.93	6.44	6.17	6.51
13	4.07	2.75	1.92	2.60	3.34	....	3.86	5.10	5.87	6.54	6.06	6.66
14	3.98	2.48	2.18	2.77	3.22	4.52	3.86	5.13	5.96	6.54	6.10	6.69
15	3.85	2.22	.86	2.80	2.36	4.60	4.41	5.14	5.98	6.56	6.21	6.69
16	3.43	2.06	.74	2.81	3.05	4.56	4.57	5.15	5.94	6.20	6.28	6.67
17	3.44	2.44	.64	2.16	3.76	4.55	4.67	5.12	5.96	6.07	6.34	6.58
18	3.45	1.01	.58	2.40	3.99	4.57	4.71	5.04	5.92	6.10	6.45	6.39
19	3.10	.61	.55	4.74	4.01	4.56	4.77	5.16	5.86	6.06	6.44	6.13
20	3.47	+.31	+.22	4.81	4.19	4.45	4.83	5.24	6.04	5.99	6.34	6.12
21	3.41	.20	+.17	2.78	4.00	4.52	4.83	5.32	6.03	5.95	6.59	5.94
22	3.45	.17	+.12	2.71	2.75	4.67	4.62	5.28	5.93	5.95	6.61	....
23	3.45	.20	.20	2.58	3.43	4.71	2.05	5.26	6.12	6.00	6.38	....
24	3.03	.20	.24	1.84	3.76	4.67	1.76	5.46	6.20	6.06	6.33	....
25	3.32	.20	.32	2.42	3.94	4.70	4.07	5.57	6.18	6.06	5.54	....
26	3.32	.18	.25	2.52	4.02	4.69	4.55	5.60	6.01	6.13	5.78	....
27	2.94	+.60	+.14	2.50	4.08	4.54	4.71	5.59	6.03	6.14	6.13	....
28	2.31	+.20	+.60	2.61	3.91	....	4.81	5.53	5.89	6.02	6.14	5.34
29	1.94		+.33	2.58	3.14	....	4.82	5.60	6.05	5.96	6.19	5.53
30	1.83		+.24	2.56	2.83	4.95	4.77	5.63	6.22	5.12	6.35	5.57
31	1.72		.....		3.88		4.36	5.67		5.58		5.56

Belmont County

B-1. City of Martins Ferry. Well 7, at waterworks. Records available: 1948-49. June 1, 34.82.

Lowest daily water level, from recorder graph.

Day	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.
1	27.90	.....	33.10	.....	33.34	.....	34.85
2	27.98	.....	33.80	.....	33.96	.....	35.29
3	29.61	27.71	.....	.....	34.31	.....	35.17
4	31.21	28.94	32.52	.....	35.05	.....	35.17
5	31.54	29.72	32.78	.....	35.45	.....	34.78
6	29.30	29.63	32.58	.....	35.17	.....	35.49
7	25.01	30.27	31.90	.....	35.20	.....	35.27
8	26.35	31.54	31.37	.....	35.63	.....	35.56
9	26.65	31.85	30.89	.....	35.72	.....	35.60
10	29.51	33.25	31.45	.....	35.92	.....	35.60
11	30.90	33.61	31.52	.....	35.42	.....	35.65
12	31.60	33.68	30.92	.....	35.05	.....	35.27
13	32.30	33.96	30.57	.....	35.93	.....	35.27
14	32.97	34.37	32.12	.....	35.85	.....	35.25
15	33.74	33.90	33.00	.....	35.80	.....	35.00
16	33.96	31.88	32.80	.....	35.61	.....	35.23
17	33.90	27.44	33.44	.....	35.97	.....	35.15
18	34.42	27.45	33.88	.....	35.93	.....	35.07
19	33.78	29.50	34.25	.....	36.44	.....	34.97
20	33.85	30.43	34.03	.....	36.27	.....	35.05

B-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.
21	33.67	30.92	34.50	.....	35.90	.....	35.15
22	33.77	31.75	34.01	.....	34.39	.....	35.13
23	32.70	31.17	33.85	.....	33.02	.....	.....
24	31.35	29.13	32.45	33.10	32.11	.....	.....
25	28.76	28.85	30.15	32.83	30.45	34.95	.....
26	.....	29.65	29.77	33.04	31.12	35.42	.....
27	.....	30.82	30.20	35.23	31.54	35.33	.....
28	.....	32.05	31.04	33.35	31.98	35.42	.....
29	.....	.....	31.35	32.96	32.30	35.59	.....
30	.....	.....	31.80	31.91	32.95	35.48	.....
31	.....	.....	.....	.....	34.46	.....	.....

Butler County

12-1. Village of Trenton. Municipal water-supply well. Records available: 1939-49. Feb. 22, 28.82.

25-5. Middletown Waterworks. In Middletown. Records available: 1941-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.00	18.93	21.62	22.14	24.43	26.64	27.72	28.37	30.25	30.88	32.17	33.84
2	28.80	19.40	21.84	22.25	24.57	26.94	27.86	28.49	30.27	30.91	32.31	33.92
3	28.77	19.75	22.04	22.26	24.67	27.17	27.80	28.60	30.27	30.91	32.40	34.00
4	28.81	20.15	22.27	22.38	24.63	27.38	27.60	28.81	30.27	30.96	32.47	34.02
5	28.40	20.43	22.37	22.45	24.88	27.94	27.72	28.80	30.27	31.00	32.55	33.94
6	28.80	20.73	22.31	22.77	25.12	27.52	27.73	28.78	30.07	31.03	32.55	34.06
7	16.22	20.84	22.99	22.97	25.15	27.68	27.74	28.78	29.92	31.08	32.60	34.12
8	17.05	21.07	22.66	23.17	25.11	27.87	27.78	28.87	29.85	31.12	32.72	34.17
9	17.88	21.42	22.85	23.27	25.16	28.12	27.90	28.96	29.86	31.18	32.82	34.28
10	18.63	21.77	23.00	23.25	25.32	28.30	27.42	29.15	29.90	31.00	32.92	34.35
11	19.08	21.97	23.04	23.31	25.46	28.35	27.14	29.27	29.90	31.02	32.98	34.36
12	19.63	22.10	23.06	23.42	25.68	28.31	27.25	29.37	29.92	31.10	33.03	34.33
13	20.05	22.07	23.00	23.63	25.77	28.12	27.44	29.39	30.08	31.14	33.05	34.30
14	20.47	22.23	22.96	23.76	25.86	28.16	27.60	29.46	30.12	31.20	33.03	34.36
15	20.75	22.24	23.06	23.92	25.92	28.19	27.73	29.54	30.17	31.25	33.04	34.45
16	20.94	21.30	23.13	23.05	26.15	28.17	27.79	29.51	30.22	31.27	33.13	34.52
17	21.15	19.17	23.24	23.88	26.34	27.98	27.72	29.53	30.30	31.35	33.24	34.57
18	21.23	19.53	23.42	23.91	26.53	27.64	27.72	29.52	30.32	31.42	33.31	34.57
19	21.23	19.80	23.45	23.98	26.66	27.28	27.98	29.52	30.38	31.53	33.35	34.52
20	20.55	19.99	23.42	24.02	26.75	27.07	28.15	29.64	30.38	31.69	33.35	34.58
21	20.36	20.30	23.38	24.09	26.82	27.07	28.31	29.65	30.38	31.72	33.32	34.65
22	20.64	20.57	23.50	24.15	26.76	27.22	28.39	29.60	30.43	31.76	33.42	34.68
23	20.72	20.67	23.47	24.17	26.57	27.37	28.30	29.68	30.44	31.74	33.53	34.68
24	20.71	20.82	23.42	24.12	26.53	27.55	28.15	29.75	30.44	31.68	33.54	34.60
25	19.66	21.08	23.38	24.09	26.40	27.58	27.95	29.99	30.47	31.71	33.55	34.44
26	19.47	21.20	23.38	24.17	26.39	27.52	28.03	30.17	30.48	31.84	33.63	34.15
27	19.47	21.19	23.23	24.26	26.49	27.42	28.05	30.32	30.54	31.90	33.63	33.97
28	18.90	21.38	22.86	24.47	26.62	27.35	28.12	30.33	30.61	31.90	33.64	33.93
29	17.74	.....	22.27	24.53	26.62	27.41	28.30	30.12	30.67	31.94	33.69	33.77
30	17.65	.....	21.84	24.54	26.54	27.73	28.35	30.07	30.75	31.94	33.76	33.60
31	18.35	.....	21.95	.....	26.50	.....	28.30	30.14	.....	32.06	.....	33.53

29-1. Young Men's Christian Association. In Middletown. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	24.40	May 19	35.30	Aug. 2	39.98	Oct. 18	43.30
Mar. 8	32.03	24	36.21	9	41.68	25	43.13
15	32.50	31	36.18	16	31.36	Nov. 1	43.65
22	32.93	June 7	37.53	30	41.86	8	43.57
29	31.93	14	38.15	Sept. 6	41.18	15	44.88
Apr. 5	31.98	21	37.95	13	40.53	22	44.91
12	31.25	28	39.38	20	41.88	29	44.54
19	32.28	July 5	36.67	27	42.20	Dec. 6	45.32
26	33.08	12	36.34	Oct. 4	42.83	20	45.94
May 3	33.65	19	39.28	11	43.44	27	44.71
10	34.67	26	38.27	.....	.....	.....	.....

29-2. Young Men's Christian Association. In Middletown. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	31.60	Apr. 12	24.67	July 5	29.30	Oct. 11	33.39
11	23.41	19	25.13	12	29.94	18	33.78
25	23.20	26	25.54	19	29.45	25	34.16
Feb. 1	21.52	May 3	25.90	26	29.80	Nov. 1	34.45
8	22.82	10	26.66	Aug. 2	30.41	8	34.89
15	23.88	19	27.52	16	31.59	15	35.25
22	22.62	24	27.92	30	32.26	22	35.61
Mar. 1	23.31	31	27.92	Sept. 6	32.15	29	35.90
8	24.05	June 7	28.96	13	32.23	Dec. 6	36.25
15	24.55	14	29.64	20	32.60	13	36.62
22	24.88	21	28.98	27	32.81	20	36.79
29	24.12	28	29.41	Oct. 4	33.26	27	36.46
Apr. 5	24.14						

33-1. Prairie State Paper Mills. In Middletown. Records available: 1939-49.

Jan. 4	36.23	Apr. 5	24.75	July 5	30.58	Oct. 4	34.94
11	32.43	12	24.89	12	30.48	11	35.26
18	29.77	19	25.18	19	30.61	18	35.75
25	28.23	26	25.56	26	31.04	25	35.99
Feb. 1	25.60	May 3	26.50	Aug. 2	31.56	Nov. 1	36.27
8	24.88	10	26.70	9	32.13	8	36.55
15	25.17	19	27.42	16	32.90	15	36.90
22	24.79	24	27.97	23	33.35	22	37.28
Mar. 1	24.99	31	28.39	30	33.73	29	37.47
8	24.74	June 7	29.17	Sept. 6	33.79	Dec. 6	37.70
15	25.14	14	29.85	13	34.13	13	37.99
22	25.28	21	30.13	20	34.32	20	38.45
29	25.26	28	30.55	27	34.54	27	38.32

36-13. American Rolling Mill Co. In Middletown. Records available: 1938-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	111.48	110.67	106.57	101.01	98.76	98.00
2	111.33	110.75	106.56	100.95	98.57	97.82
3	111.06	110.74	106.60	100.55	98.57	97.97
4	111.26	110.32	106.45	100.51	98.65	98.04
5	111.61	110.27	106.33	99.92	98.29	98.05
6	111.88	110.10	105.80	99.73	98.26	97.70
7	112.08	109.94	105.35	99.60	98.50	97.83
8	112.14	109.97	105.11	99.92	98.07	98.16
9	111.73	110.05	105.07	99.90	97.70	98.42
10	111.62	110.13	105.08	99.43	97.80	98.72
11	111.73	110.15	105.02	99.29	98.50	98.85
12	111.97	110.00	104.90	98.84	98.66	98.75
13	112.08	109.55	104.38	98.61	98.62	98.72
14	112.24	108.82	103.76	98.87	99.06	98.92
15	112.22	108.81	103.47	99.13	98.80	99.18
16	111.50	108.34	103.46	99.17	98.45	99.38
17	111.29	108.17	103.35	98.95	98.49	99.57
18	111.60	107.93	103.33	98.60	98.50	99.65
19	111.96	107.82	103.30	98.72	98.51	99.37
20	112.00	107.68	103.12	98.77	98.40	99.22
21	112.20	107.31	102.21	98.88	98.57	99.58
22	112.24	107.54	102.20	99.12	97.98	99.82
23	111.80	107.56	102.19	98.95	97.60	100.00
24	111.58	107.54	102.07	98.25	97.63	100.28
25	111.67	107.64	102.05	98.42	97.68	100.42
26	111.75	107.61	101.98	98.85	98.22	100.48
27	111.65	106.92	101.40	99.09	98.45	100.67
28	111.77	106.51	101.05	99.21	98.56	100.81
29	111.80		101.07	99.30	98.55	100.70
30	111.30		100.90	99.30	98.08	100.84
31	110.52		100.96		97.97	

36-13 --Continued.

Lowest daily water level, from recorder graph

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	100.86	100.93	104.04	105.03	105.21	107.17
2	100.80	101.13	104.17	104.58	105.68	106.62
3	100.37	101.42	104.22	104.30	105.97	106.15
4	100.05	101.68	104.11	104.43	106.29	105.87
5	99.54	101.92	103.52	104.57	106.42	105.99
6	99.62	102.00	103.58	104.80	106.20	106.15
7	99.85	102.01	103.77	104.98	105.90	106.52
8	100.05	102.02	103.97	105.11	106.28	106.77
9	100.25	102.17	104.15	105.02	106.35	106.93
10	100.39	102.40	104.22	104.67	106.13	107.10
11	100.50	102.65	103.90	104.86	106.23	107.08
12	100.45	102.90	103.80	104.94	106.26	107.06
13	100.55	103.00	104.07	105.14	106.35	107.30
14	100.67	102.94	104.21	105.33	106.47	107.50
15	100.96	102.74	104.32	105.48	106.50	108.02
16	100.92	103.01	104.49	105.55	106.67	108.35
17	100.00	103.12	104.54	105.60	107.12	108.48
18	99.72	103.30	104.15	105.50	107.38	108.47
19	99.90	103.50	104.38	105.04	107.48	108.49
20	100.12	103.55	104.72	104.51	107.37	108.56
21	100.39	102.92	104.93	104.27	107.29	108.86
22	100.64	102.93	105.15	104.18	107.37	109.30
23	100.70	103.28	105.30	104.05	107.58	109.55
24	100.90	103.50	105.35	104.48	107.57	109.64
25	100.95	103.58	104.82	104.78	107.72	109.11
26	100.85	103.75	104.28	105.04	107.80	108.42
27	101.27	103.78	104.50	105.14	107.80	108.56
28	101.42	103.32	104.68	105.41	107.78	108.87
29	101.50	103.35	105.38	105.52	107.60	109.22
30	101.48	103.57	105.02	105.48	107.52	109.51
31	101.07	103.81		104.65		109.77

79-2. Armco Steel Co. 2.5 miles north of Hamilton at New Miami. Records available: 1949.

Lowest daily water level, from recorder graph

Day	Sept.	Oct.	Nov.	Dec.	Day	Sept.	Oct.	Nov.	Dec.
1	.....	37.77	35.54	35.90	17	36.54	38.45	35.47	.....
2	.....	37.52	35.67	35.80	18	36.76	38.98	35.35	.....
3	.....	37.54	35.76	35.65	19	36.97	39.20	35.37	.....
4	.....	37.64	35.92	35.66	20	36.93	37.25	35.37	35.67
5	.....	37.00	35.94	35.43	21	36.77	36.93	35.35	35.52
6	.....	37.12	35.95	35.82	22	36.91	36.62	35.41	35.55
7	.....	37.17	35.88	35.94	23	36.97	36.25	35.47	35.32
8	.....	37.17	35.85	36.02	24	37.05	36.06	.....	35.30
9	.....	37.23	35.82	35.32	25	37.02	35.13	.....	35.12
10	.....	37.62	35.82	35.32	26	37.07	35.63	.....	34.97
11	.....	37.72	35.76	35.46	27	37.72	35.50	.....	34.93
12	.....	37.88	35.77	35.25	28	37.83	35.36	.....	34.79
13	35.60	38.25	35.77	35.27	29	37.86	35.20	35.76	35.40
14	36.42	38.30	35.79	.....	30	37.83	35.35	35.82	35.72
15	36.54	38.42	35.83	.....	31		35.57		36.00
16	36.48	38.42	35.47	.....				

85-7. Hamilton Waterworks. In Fairfield Township. Records available: 1939-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.16	17.60	19.70	20.03	22.87	.....	27.79	28.48	29.62	29.71	29.31	29.08
2	26.92	17.87	.....	20.05	22.82	.....	27.81	28.66	29.63	29.55	29.63	29.20
3	27.04	18.57	.....	20.22	24.00	.....	27.83	28.79	29.72	29.47	29.80	29.24
4	25.65	18.38	.....	20.95	24.15	.....	27.63	.....	29.78	29.53	29.87	29.11
5	23.10	18.32	.....	21.07	24.48	.....	27.85	.....	29.84	29.78	29.95	29.17
6	18.05	18.09	.....	21.33	24.67	.....	27.85	.....	29.57	29.95	29.69	29.27
7	16.66	18.19	.....	20.04	25.32	28.58	27.86	.....	28.67	30.00	29.74	29.36
8	16.70	19.05	20.43	20.31	25.55	28.67	27.32	.....	28.67	30.10	29.86	29.47
9	16.70	19.55	20.67	20.54	25.29	.....	28.50	29.33	28.67	29.92	29.95	29.45
10	16.70	20.25	20.73	20.62	25.38	.....	28.50	29.44	28.73	30.20	29.90	29.50

85-7 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	18.20	20.77	20.28	21.22	25.42	.....	.....	29.53	29.57	30.35	29.95	29.29
12	.....	20.65	.....	21.60	25.27	.....	28.07	29.62	28.38	29.95	30.42	29.18
13	.....	.....	.....	21.61	25.43	.....	28.25	29.69	28.37	30.07	29.92	29.34
14	.....	.....	.....	21.65	26.05	27.27	28.37	29.47	29.30	30.58	30.17	29.48
15	.....	19.00	20.40	.....	26.07	27.28	28.55	29.00	29.26	30.65	29.98	29.57
16	.....	18.84	.....	22.45	25.96	26.23	26.68	29.44	29.20	30.83	30.01	29.56
17	.....	18.93	.....	22.67	26.13	26.17	28.77	29.65	29.02	30.91	30.07	29.73
18	19.23	17.87	.....	.....	26.13	26.29	28.77	29.65	28.97	31.04	29.16	29.46
19	18.86	18.08	.....	22.73	26.52	25.44	28.82	29.49	29.07	31.10	29.87	29.35
20	18.61	18.30	19.71	22.72	26.64	26.07	29.05	29.56	29.28	30.86	29.90	29.46
21	18.69	18.56	.....	22.93	25.72	26.30	29.05	29.02	29.36	30.60	29.87	29.06
22	18.88	18.56	19.78	23.02	25.50	26.52	28.50	.....	29.45	30.37	.....	29.13
23	19.02	18.65	19.70	23.00	25.45	26.73	28.45	29.60	29.52	30.00	.....	29.79
24	18.62	18.79	20.03	22.92	25.56	26.85	27.52	29.65	29.53	29.84	.....	29.68
25	17.79	19.24	20.30	22.67	25.53	26.85	28.27	29.88	30.35	29.82	.....	29.57
26	17.80	19.20	20.33	22.92	25.65	25.32	28.50	29.72	30.32	30.02	.....	29.43
27	17.66	18.95	19.60	22.92	25.62	25.95	28.58	29.82	30.42	29.71	.....	29.20
28	16.60	19.34	18.56	23.36	25.52	27.47	28.70	29.77	29.30	27.12	.....	29.26
29	16.33	.....	18.52	22.90	25.55	27.82	28.90	29.34	29.10	28.25	28.42	29.20
30	16.70	.....	18.43	22.92	25.50	27.77	28.96	29.44	29.41	28.87	28.50	29.42
31	17.23	.....	19.56	.....	25.78	.....	28.56	29.51	.....	28.94	.....	29.63

86-7. City of Hamilton. In Fairfield Township. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	13.02	Apr. 5	5.79	July 5	10.90	Oct. 11	13.98
11	9.28	12	6.26	12	10.95	18	14.30
18	8.74	19	6.74	19	11.41	25	14.39
25	7.38	26	7.10	26	11.71	Nov. 1	14.45
Feb. 1	5.52	May 3	7.48	Aug. 2	12.05	8	14.65
8	5.62	10	7.96	16	12.68	15	14.91
16	5.84	19	8.58	23	12.91	22	14.91
22	5.52	24	9.03	30	13.16	29	15.10
Mar. 1	5.76	31	9.39	Sept. 6	13.28	Dec. 6	15.21
8	6.03	June 7	10.03	13	13.39	13	15.38
15	6.25	14	10.42	20	13.50	20	15.44
22	6.34	21	10.34	27	13.61	27	15.34
29	5.92	28	10.66	Oct. 4	13.75	.....	.....

104-2. McGreevy Dairy Co. At Dixie Highway and Laurel Ave., in Hamilton. Records available: 1942-49. No measurement made in 1949.

B-1. Ohio State Highway Department. Along State Highway 4 in Fairfield Township. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	35.55	Apr. 5	29.27	July 5	30.09	Oct. 11	33.32
11	35.61	12	29.16	12	30.27	18	33.60
18	35.60	19	29.15	19	30.46	25	33.82
25	35.18	26	29.15	26	30.60	Nov. 1	34.07
Feb. 1	32.57	May 3	29.17	Aug. 2	30.80	8	34.33
8	31.07	10	29.22	9	31.05	15	34.60
15	30.57	17	29.26	16	31.24	22	34.84
22	30.05	24	29.35	23	31.53	29	35.11
Mar. 1	29.63	31	29.42	30	31.80	Dec. 6	35.36
8	29.63	June 7	29.54	Sept. 6	32.02	13	35.62
15	29.38	14	29.68	13	32.29	20	35.86
22	29.37	21	29.79	20	32.53	27	36.10
29	29.35	28	29.92	Oct. 4	33.02	.....	.....

B-4. A. H. Kollstadt. In Fairfield Township. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	25.99	Feb. 15	22.46	Apr. 5	22.18	May 19	25.41
11	20.05	22	21.34	12	23.16	24	25.70
18	22.10	Mar. 1	21.89	19	23.73	31	25.97
25	19.90	8	22.83	26	23.94	June 7	26.46
Feb. 1	19.40	22	23.04	May 3	24.33	14	26.75
8	21.66	29	21.69	10	24.88	21	25.77

B-4 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 28	26.10	Aug. 16	27.81	Oct. 4	28.71	Nov. 15	29.37
July 5	26.42	23	27.95	11	28.76	29	29.60
12	26.34	30	28.11	18	28.90	Dec. 6	29.68
19	27.06	Sept. 6	28.16	25	28.96	13	29.74
26	27.00	13	28.29	Nov. 1	29.11	20	29.63
Aug. 2	27.42	20	28.57	8	29.27	27	29.15
9	27.79	27	28.59				

B-11. Fred Bandtel. In Fairfield Township. Records available:

1942-49.

Jan. 4	30.02	Apr. 5	20.01	July 5	25.78	Oct. 4	33.00
11	26.13	12	20.43	12	26.58	11	33.38
18	24.86	19	21.37	19	27.48	18	33.89
25	22.93	26	21.65	26	27.90	25	34.18
Feb. 1	21.59	May 3	22.31	Aug. 2	28.50	Nov. 1	34.48
8	21.35	10	23.72	9	29.15	8	34.85
15	20.99	17	23.30	16	29.69	15	35.20
22	20.30	24	23.70	23	30.18	22	35.59
Mar. 1	20.75	31	24.23	30	30.70	29	35.86
8	20.84	June 7	24.65	Sept. 6	31.25	Dec. 6	36.03
15	20.95	14	25.32	13	31.63	13	36.68
22	20.72	21	25.33	20	32.21	20	36.70
29	19.91	28	25.33	27	32.49	27	36.97

B-23. Carl L. Schiering. In Fairfield Township. Records available: 1943-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.08	14.47	15.32	15.65	17.92	20.22	20.92	22.00	23.05	23.64	24.27	.....
2	21.04	14.07	15.40	15.60	18.02	20.30	20.95	22.06	23.07	23.66	24.28	.....
3	21.03	14.14	15.50	15.68	18.11	20.37	20.98	22.10	23.10	23.67	24.30	.....
4	20.87	14.32	15.56	15.84	18.18	20.43	21.02	22.14	23.12	23.73	24.32	.....
5	20.82	14.48	15.95	15.86	18.25	20.50	21.06	22.20	23.13	23.74	24.34	.....
6	19.25	14.60	15.78	15.96	18.33	20.57	21.10	22.25	23.12	23.76	24.35	24.82
7	18.37	14.76	15.87	16.03	18.43	20.66	21.15	22.32	23.10	23.78	24.35	24.94
8	17.83	14.97	15.97	16.14	18.51	20.72	21.18	22.35	23.07	23.79	24.38	24.94
9	17.60	15.11	16.03	16.24	18.90	20.78	21.18	22.40	23.11	23.80	24.38	24.94
10	17.52	15.25	16.07	16.35	18.97	20.85	21.14	22.44	23.15	23.80	24.41	24.94
11	17.48	15.37	16.07	16.40	18.78	20.90	21.12	22.48	23.18	23.84	24.43	24.94
12	17.47	15.50	16.10	16.51	18.86	20.95	21.14	22.53	23.22	23.85	24.44	24.94
13	17.46	15.63	16.12	16.60	18.95	20.99	21.14	22.57	23.24	23.87	24.46	24.95
14	17.43	15.70	16.13	16.67	19.04	21.00	21.25	22.60	23.26	23.88	24.47	24.95
15	17.43	15.69	16.20	16.79	19.13	21.02	21.32	22.62	23.30	23.90	24.50	24.95
16	17.46	15.26	16.20	16.88	19.21	21.03	21.40	22.63	23.33	23.94	24.50	24.95
17	17.46	14.90	16.24	16.94	19.28	20.97	21.47	22.64	23.37	23.95	24.52	24.95
18	17.45	14.73	16.32	17.03	19.34	20.84	21.52	22.64	23.40	24.00	24.54	24.96
19	17.34	14.63	16.40	17.10	19.40	20.74	21.57	22.64	23.42	24.02	24.55	24.97
20	17.24	14.74	16.43	17.12	19.49	20.68	21.62	22.67	23.47	24.04	24.57	24.96
21	17.04	14.77	16.46	17.17	19.55	20.70	21.65	22.70	23.47	24.06	24.58	24.96
22	16.89	14.90	16.50	17.24	19.64	20.75	21.67	22.74	23.48	24.08	24.62	24.94
23	16.83	14.94	16.50	17.31	19.70	20.80	21.67	22.82	23.49	24.07	24.63	24.90
24	16.78	14.93	16.50	17.42	19.72	20.86	21.63	22.86	23.51	24.08	24.63	24.87
25	16.15	15.03	16.50	17.47	19.75	20.89	21.62	22.90	23.54	24.12	24.66	24.85
26	15.55	15.07	16.57	17.56	19.80	20.92	21.72	22.94	23.56	24.13	24.67	24.83
27	15.25	15.10	16.47	17.94	19.86	20.92	21.76	22.97	23.57	24.15	24.70	24.80
28	14.84	15.22	16.20	17.72	19.92	20.87	21.82	22.98	23.59	24.18	24.74	24.73
29	14.26		15.91	17.77	20.00	20.87	21.87	22.99	23.61	24.20	24.72	24.64
30	13.99		15.70	17.84	20.06	20.90	21.93	23.00	23.62	24.22	.....	24.58
31	13.85		15.60		20.17		21.97	23.02				24.56

B-30-D. City of Hamilton. On Pleasant Ave., in Hamilton. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	33.02	Apr. 5	28.50	July 5	29.47	Oct. 4	31.86
11	32.85	12	28.38	12	29.64	11	32.04
18	32.49	19	28.28	19	29.81	18	32.17
25	32.04	26	28.20	26	29.97	25	32.33
Feb. 1	32.33	May 3	28.37	Aug. 2	30.14	Nov. 1	32.50
8	30.78	10	28.20	9	30.33	8	32.67
15	30.32	19	28.24	16	30.54	15	32.81
22	29.91	24	28.33	23	30.74	22	32.98
Mar. 1	29.53	31	28.52	30	30.94	29	33.12
8	29.23	June 7	28.73	Sept. 6	31.13	Dec. 6	33.28
15	29.01	14	28.96	13	31.33	13	33.40
22	28.83	21	29.15	20	31.50	20	33.56
29	28.69	28	29.32	27	31.70	27	33.62

B-30-M. City of Hamilton. On Pleasant Ave., in Hamilton. Records available: 1943-49.

Jan. 4	32.36	Apr. 5	27.12	July 5	30.05	Oct. 4	32.74
11	31.15	12	27.25	12	30.26	11	32.95
18	30.25	19	27.49	19	30.47	18	33.10
25	29.56	26	27.73	26	30.68	25	33.25
Feb. 1	28.33	May 3	27.96	Aug. 2	30.90	Nov. 1	33.42
8	27.65	10	28.23	9	31.14	8	33.57
15	27.60	19	27.54	16	31.40	15	33.72
22	27.40	24	28.84	23	31.62	22	33.88
Mar. 1	27.28	31	29.13	30	31.82	29	34.01
8	27.31	June 7	29.42	Sept. 6	32.02	Dec. 6	34.15
15	27.43	14	29.71	13	32.22	13	34.28
22	27.53	21	29.80	20	32.38	20	34.37
29	27.45	28	29.90	27	32.58	27	34.42

B-30-S. City of Hamilton. On Pleasant Ave., in Hamilton. Records available: 1943-49.

Jan. 4	32.98	Apr. 5	28.08	July 5	30.13	Oct. 4	32.66
11	32.23	12	28.03	12	30.32	11	32.85
18	31.48	19	28.08	19	30.49	18	32.93
25	30.88	26	28.14	26	30.67	25	33.12
Feb. 1	30.00	May 3	28.29	Aug. 2	30.87	Nov. 1	33.30
8	29.35	10	28.45	9	31.08	8	33.45
15	28.98	19	28.64	16	31.32	15	33.62
22	28.69	24	28.90	23	31.53	22	33.78
Mar. 1	28.46	31	29.14	30	31.73	29	33.92
8	28.33	June 7	29.39	Sept. 6	31.93	Dec. 6	34.05
15	28.27	14	29.65	13	32.14	13	34.18
22	28.27	21	29.80	20	32.30	20	34.26
29	28.22	28	29.98	27	32.47	27	34.35

B-40. Federal Works Agency. In Fairfield Township. Records available: 1944-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	49.77	41.15	40.05	39.28	41.10	43.35	44.58	47.53	50.25	52.25	53.75	55.35
2	49.72	41.43	40.05	39.30	41.40	43.47	44.62	47.69	50.28	52.22	53.80	55.48
3	49.78	41.03	40.16	39.42	41.52	43.57	44.65	47.87	50.24	52.22	53.94	55.47
4	49.77	40.94	40.05	39.53	41.61	43.59	44.69	47.99	50.27	52.23	54.00	55.39
5	49.27	40.99	39.82	39.39	41.60	43.62	44.79	48.07	50.37	52.29	54.18	55.40
6	48.23	40.96	40.30	39.44	41.56	43.67	44.91	48.13	50.50	52.33	54.14	55.38
7	47.40	41.03	40.45	39.50	41.63	43.97	45.10	48.18	50.49	52.50	54.02	55.57
8	46.80	40.94	40.23	39.72	41.63	44.12	45.27	48.22	50.64	52.57	54.12	55.70
9	46.38	41.04	40.07	39.85	41.71	44.13	45.32	48.34	50.73	52.62	54.17	55.74
10	46.33	41.22	40.16	39.90	41.98	44.18	45.50	48.48	50.81	52.57	54.12	55.57
11	46.05	41.29	40.16	39.78	42.00	44.16	45.54	48.53	50.86	52.60	54.22	55.53
12	45.78	40.98	40.12	39.72	42.05	44.17	45.62	48.57	50.88	52.84	54.27	55.77
13	45.57	41.01	40.13	39.72	42.08	44.27	45.78	48.67	50.95	52.90	54.26	55.90
14	45.37	41.01	40.09	39.82	42.17	44.30	45.92	48.78	51.05	52.87	54.34	55.92
15	45.33	40.55	40.22	40.12	42.24	44.38	46.09	48.86	51.06	52.91	54.50	55.92

B-40 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	45.12	40.42	40.22	40.28	42.34	44.38	46.20	48.87	51.08	52.95	54.51	55.94
17	45.19	40.27	40.05	40.27	42.42	44.37	46.32	48.82	51.18	53.07	54.58	55.89
18	45.03	40.05	40.28	40.43	42.44	44.42	46.44	48.84	51.22	53.13	54.70	55.91
19	44.83	39.80	40.44	40.60	42.38	44.42	46.53	49.05	51.34	53.12	54.67	55.97
20	44.83	39.95	40.44	40.68	42.50	44.42	46.70	49.20	51.45	53.15	54.71	55.92
21	44.27	39.94	40.22	40.57	42.50	44.37	46.75	49.24	51.46	53.15	54.96	55.83
22	44.13	39.82	40.16	40.51	42.67	44.53	46.82	49.24	51.45	53.35	54.80	56.08
23	44.00	39.92	40.34	40.57	42.80	44.60	46.90	49.37	51.68	53.36	54.78	56.32
24	43.57	39.76	40.35	40.97	42.92	44.58	46.90	49.50	51.77	53.47	54.78	56.38
25	43.15	39.95	40.34	41.02	42.98	44.68	46.92	49.61	51.82	53.43	55.02	56.31
26	42.47	39.95	40.34	40.90	43.00	44.74	47.26	49.65	51.81	53.62	55.04	56.07
27	42.00	39.75	39.72	41.04	43.02	44.72	47.16	49.67	51.74	53.62	55.07	56.30
28	41.21	39.96	39.36	41.18	43.14	44.55	47.25	49.66	51.84	53.54	55.07	56.37
29	41.42		39.33	41.13	43.22	44.45	47.30	49.89	52.07	53.57	55.07	56.37
30	41.42		39.16	41.11	43.22	44.51	47.42	49.92	52.22	53.52	55.27	56.40
31	40.98		39.95		43.27		47.52	49.87		53.76		56.36

Pit D. Paul Benninghofen gravel pit. Symmes Lake, in Fairfield Township. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	13.85	Apr. 5	12.70	June 28	14.28	Sept. 20	16.20
11	9.46	12	13.70	July 5	15.18	Oct. 4	16.30
18	10.45	19	13.60	12	14.28	11	16.32
25	7.70	26	13.76	19	15.60	18	16.45
Feb. 1	9.88	May 3	14.05	26	14.86	Nov. 1	16.50
8	12.40	10	14.75	Aug. 2	15.61	8	16.60
15	11.48	17	15.10	9	16.02	15	16.70
22	11.59	24	14.86	16	15.58	22	16.80
Mar. 1	12.11	31	15.39	23	15.90	29	16.90
8	13.14	June 7	15.88	30	15.80	Dec. 6	16.97
15	12.50	14	15.68	Sept. 6	15.42	20	16.30
22	12.84	21	13.86	13	16.08	27	15.38
29	9.90						

117. Anna Magie. At Symmes, in Fairfield Township. Records available: 1938-49.

Jan. 11	21.59	Apr. 5	18.47	June 28	23.96	Oct. 11	27.58
18	21.25	12	18.82	Aug. 2	27.82	18	27.78
25	19.81	19	19.37	9	28.18	25	27.98
Feb. 1	18.05	26	19.80	16	26.64	Nov. 1	28.13
8	18.23	May 3	20.33	23	25.56	8	28.24
15	18.14	10	20.95	30	26.53	15	28.40
22	17.89	17	21.58	Sept. 6	26.68	22	28.70
Mar. 1	18.14	24	22.13	13	27.40	Dec. 6	28.85
8	18.51	31	22.59	20	28.95	13	29.09
15	18.82	June 7	23.11	27	27.30	20	29.16
22	19.00	14	23.70	Oct. 4	27.42	27	29.05
29	18.57	21	24.02				

T-50. Mary Gerber. On River Rd., in Fairfield Township. Records available: 1939-49.

Jan. 4	13.47	Apr. 12	10.14	July 12	13.27	Oct. 11	15.10
11	9.25	19	10.68	19	13.49	18	15.21
18	9.29	26	10.96	26	13.57	25	15.30
25	8.64	May 3	11.30	Aug. 2	13.80	Nov. 1	15.41
Feb. 1	7.12	10	11.68	9	14.00	8	15.52
8	8.35	19	12.06	23	14.25	15	15.63
15	9.20	24	12.38	30	14.41	22	15.73
22	8.81	31	12.61	Sept. 6	14.55	29	15.85
Mar. 1	9.18	June 7	12.91	13	14.60	Dec. 6	15.91
15	10.09	14	13.16	20	14.77	13	16.01
22	10.32	21	12.94	27	14.89	20	16.01
29	9.70	28	13.04	Oct. 4	14.96	27	15.85
Apr. 5	9.53	July 5	13.19				

T-51. Miami Conservancy District. On River Road, in Hamilton. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	13.15	Apr. 5	13.56	July 5	16.00	Oct. 4	17.06
11	10.10	12	14.49	12	15.21	11	16.96
18	10.66	19	14.06	19	16.34	18	17.14
25	8.05	26	14.58	26	15.84	25	17.03
Feb. 1	10.70	May 3	14.74	Aug. 2	16.38	Nov. 1	17.27
8	13.30	10	15.43	9	16.72	8	17.40
15	11.10	19	15.60	16	16.22	15	17.48
22	12.53	24	15.31	23	16.65	22	17.55
Mar. 1	13.02	31	16.02	30	16.47	29	17.60
8	14.08	June 7	16.45	Sept. 6	15.87	Dec. 6	17.65
15	13.23	14	16.26	13	16.90	13	17.45
22	13.42	21	14.85	20	16.83	20	16.99
29	10.22	28	15.12	27	17.03	27	15.72

150-2. Harry A. Morris. At Flockton. Records available: 1938-49.							
Jan. 5	1.17	Apr. 12	3.51	July 12	13.20	Oct. 4	13.32
11	2.00	19	3.82	19	13.68	11	13.23
18	1.33	26	4.25	26	13.82	18	13.50
25	1.49	May 3	4.69	Aug. 2	13.75	25	13.25
Feb. 1	2.58	10	5.37	9	13.80	Nov. 1	13.21
8	2.10	17	6.08	16	13.87	8	13.18
15	1.26	24	7.37	23	13.83	15	13.19
22	2.03	31	8.48	30	13.87	22	13.18
Mar. 1	2.83	June 7	9.62	Sept. 6	13.78	29	13.10
8	3.03	14	9.87	13	13.63	Dec. 13	13.23
15	2.87	21	11.27	20	13.44	20	13.32
22	2.66	28	11.50	27	13.30	27	13.48
Apr. 5	3.05	July 5	12.48				

151-1. Harry A. Morris. At Flockton. Records available: 1940-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.68	4.35	4.38	3.57	5.92	8.03	8.84	12.32	15.05	17.12	19.03	20.24
2	13.62	4.47	4.41	3.62	6.15	8.14	8.89	12.47	15.09	17.16	18.80	20.35
3	13.66	4.39	4.53	3.81	6.29	8.24	8.95	12.64	15.14	17.20	18.92	20.35
4	13.67	4.48	4.45	3.93	6.37	8.25	9.06	12.77	15.17	17.26	18.93	20.41
5	12.85	4.56	4.32	3.73	6.38	8.29	9.18	12.87	15.27	17.32	19.20	20.45
6	10.78	4.56	4.70	3.93	6.37	8.34	9.31	12.96	15.39	17.35	19.01	20.45
7	9.83	4.70	4.81	4.06	6.45	8.59	9.50	13.02	15.42	17.44	19.04	20.57
8	9.28	4.65	4.63	4.22	6.45	8.71	9.67	13.10	15.53	17.51	19.10	20.66
9	9.22	4.82	4.55	4.35	6.52	8.75	9.78	13.25	15.62	17.54	19.12	20.67
10	9.18	5.03	4.39	4.41	6.72	8.82	9.94	13.37	15.67	17.57	19.16	20.69
11	8.87	5.12	4.37	4.32	6.75	8.82	10.01	13.45	15.74	17.60	19.22	20.71
12	8.66	4.90	4.35	4.30	6.82	8.85	10.16	13.52	15.78	17.74	19.25	20.81
13	8.52	5.01	4.38	4.38	6.86	8.92	10.31	13.62	15.86	17.78	19.29	20.87
14	8.40	5.01	4.37	4.48	6.95	8.98	10.20	13.72	15.94	17.84	19.34	.....
15	8.38	4.42	4.56	4.72	6.99	9.02	10.63	13.78	15.98	17.87	19.47	.....
16	8.26	3.45	4.56	4.87	7.08	9.02	10.75	13.78	16.06	17.93	19.51	.....
17	8.24	3.63	4.48	4.87	7.15	8.80	10.92	13.71	16.12	18.01	19.57	.....
18	8.05	3.57	4.73	5.03	7.17	8.80	11.07	13.70	16.19	18.09	19.64	.....
19	7.50	3.59	4.86	5.25	7.15	8.81	11.22	13.87	16.27	18.12	19.62	.....
20	7.44	3.85	4.87	5.32	7.25	8.82	11.36	13.96	16.40	18.17	19.72	.....
21	6.98	3.86	4.73	5.28	7.24	8.82	11.42	14.06	16.45	18.19	19.82	.....
22	6.93	3.84	4.63	5.31	7.37	8.95	11.43	14.10	16.45	18.30	19.80	.....
23	6.83	3.93	4.79	5.37	7.47	9.02	11.50	14.24	16.60	18.35	19.85	.....
24	6.50	3.82	4.80	5.72	7.64	9.05	11.53	14.35	16.67	18.40	19.85	.....
25	4.85	4.10	4.83	5.77	7.68	9.02	11.58	14.45	16.73	18.41	19.95	.....
26	4.46	4.11	4.83	5.70	7.72	9.07	11.73	14.52	16.75	18.60	19.98	.....
27	4.10	3.98	3.30	5.81	7.75	9.00	11.86	14.56	16.77	18.63	20.04	.....
28	3.36	4.28	3.10	5.93	7.85	8.72	11.97	14.57	16.85	18.72	20.05	.....
29	3.85		3.18	5.90	7.92	8.67	12.04	14.75	16.98	18.77	20.12	.....
30	....		3.15	5.93	7.93	8.72	12.17	14.79	17.08	18.78	20.20	.....
31	....		....		7.96		12.28	14.86		18.97		.....

158-1. Ralph Miller. On Seward Road. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	29.48	Apr. 12	22.61	July 5	27.03	Sept. 27	33.84
18	24.65	19	23.58	12	27.68	Oct. 4	34.22
25	20.53	26	24.06	19	28.50	11	34.69
Feb. 1	21.59	May 3	24.62	26	29.06	18	35.12
8	22.22	10	25.03	Aug. 2	29.65	25	35.47
15	19.63	17	25.43	9	31.35	Nov. 1	35.76
22	21.52	24	25.79	16	30.95	8	36.10
Mar. 1	22.39	31	26.18	23	31.39	15	36.46
8	22.70	June 7	26.63	30	31.89	22	36.77
15	22.70	14	27.01	Sept. 6	32.47	29	37.08
22	22.77	21	26.83	13	32.96	Dec. 6	37.36
29	20.78	28	26.74	20	33.45	13	37.78
Apr. 5	21.90						

158-2. Ralph Miller. On Seward Road. Records available: 1942-49.

Jan. 18	0.95	Apr. 26	3.28	July 19	5.08	Oct. 11	5.71
Feb. 1	2.15	May 3	3.77	26	4.10	18	5.55
8	2.04	10	4.17	Aug. 2	4.25	25	5.49
15	1.05	17	4.40	9	4.84	Nov. 1	6.02
22	1.00	24	3.71	16	4.97	8	6.37
Mar. 1	1.94	31	4.40	23	5.05	15	6.71
8	2.09	June 7	4.06	30	5.17	22	7.11
15	1.95	14	4.75	Sept. 6	5.16	29	7.33
22	1.02	21	4.11	13	5.52	Dec. 6	7.72
29	1.55	28	3.19	20	5.50	13	6.95
Apr. 5	2.16	July 5	4.10	27	5.31	20	6.30
12	2.76	12	4.60	Oct. 4	5.59	27	5.62
19	2.99						

160-1. Orin James. On Seward Road, in Union Township. Records available: 1940-49.

Jan. 5	20.42	Mar. 29	12.95	June 21	17.92	Sept. 27	23.41
12	17.95	Apr. 5	12.90	July 12	19.98	Oct. 11	24.24
18	16.00	12	13.39	19	18.73	25	25.65
26	13.52	19	15.23	26	19.29	Nov. 1	25.30
Feb. 1	13.67	26	14.64	Aug. 2	19.63	8	25.69
9	13.59	May 3	15.20	9	21.00	15	26.20
16	12.75	10	15.56	16	21.01	22	27.33
22	13.50	24	17.28	23	21.32	29	27.12
Mar. 1	13.21	31	18.60	30	22.00	Dec. 6	28.15
8	13.90	June 7	17.50	Sept. 6	22.36	13	28.90
15	13.69	14	17.55	20	23.20	27	27.69
22	14.33						

160-2. Orin James. 0.9 mile east of Flockton, in Union Township. Records available: 1938-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.70	1.43	1.52	1.10	2.17	4.27	3.72	6.74	8.97	10.46	11.30	9.13
2	1.86	1.56	1.58	1.09	2.32	4.37	3.82	6.80	9.03	10.53	11.29	9.02
3	1.87	1.56	1.32	1.27	2.50	4.48	3.92	6.87	9.09	10.59	11.26	8.94
4	1.72	1.42	1.27	1.37	2.67	4.59	4.05	6.94	9.15	10.64	11.23	8.86
5	.11	.83	1.23	1.37	2.83	4.95	4.16	7.02	9.20	10.67	11.19	8.75
6	.60	.86	1.00	1.05	2.97	4.82	4.27	7.12	9.25	10.70	11.17	8.63
7	.82	.73	1.24	1.25	3.08	4.95	4.40	7.20	9.28	10.73	11.13	8.54
8	1.00	.91	1.15	1.43	3.17	5.09	4.54	7.30	9.32	10.76	11.08	8.43
9	1.17	.92	1.15	1.57	3.21	5.22	4.67	7.42	9.37	10.80	11.04	8.34
10	1.21	1.19	.31	1.62	3.28	5.34	4.80	7.53	9.42	10.83	10.99	8.25

160-2 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	0.90	1.39	0.76	1.61	3.36	5.42	4.93	7.63	9.48	10.88	10.94	8.14
12	.66	1.28	1.07	1.61	3.44	5.47	5.06	7.73	9.55	10.93	10.90	7.96
13	.89	1.22	1.26	1.55	3.52	5.53	5.20	7.82	9.62	10.97	10.84	7.53
14	1.03	1.13	1.23	1.17	3.60	5.55	5.59	7.92	9.68	11.02	10.77	6.90
15	1.12	.21	1.23	1.18	3.65	5.55	5.47	8.02	9.74	11.05	10.68	6.42
16	1.07	.64	1.40	1.37	3.71	5.53	5.60	8.09	9.79	11.08	10.65	6.06
17	.47	.90	1.20	1.39	3.78	5.25	5.70	8.14	9.85	11.12	10.57	5.78
18	.54	1.03	1.01	1.02	3.84	5.93	5.82	8.16	9.90	11.17	10.48	5.67
19	.65	1.04	1.15	1.27	3.89	4.75	5.91	8.19	9.95	11.18	10.40	4.89
20	1.07	.62	1.23	1.38	3.92	4.64	6.02	8.23	10.00	11.20	10.28	4.20
21	1.03	.78	1.28	1.46	3.92	4.64	6.10	8.23	10.05	11.21	10.18	....
22	.60	.80	1.18	1.50	3.92	4.59	6.15	8.33	10.09	11.22	10.10	....
23	.69	.70	.82	1.52	3.89	4.62	6.19	8.40	10.13	11.24	10.02	....
24	.01	.76	1.00	1.72	3.86	4.68	6.22	8.47	10.17	11.26	9.92	....
25	.35	1.01	1.18	1.83	3.90	4.68	6.26	8.54	10.20	11.27	9.80	....
26	.10	1.07	1.18	1.91	3.92	4.52	6.34	8.62	10.23	11.29	9.70	....
27	.24	1.10	.42	1.89	3.93	4.35	6.40	8.69	10.26	11.31	9.60	2.72
28	.37	1.26	.87	1.97	3.97	3.85	6.48	8.76	10.30	11.32	9.48	2.70
29	1.15		1.07	2.12	4.03	3.58	6.57	8.82	10.34	11.32	9.26	2.71
30	1.47		1.09	2.17	4.10	3.62	6.63	8.86	10.40	11.32	9.24	2.74
31	1.42		1.09		4.18		6.68	8.92		11.31		2.78

165-1. E. C. Shepherd. 0.7 mile north of Port Union. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	37.44	Apr. 5	32.67	June 28	37.85	Oct. 4	41.32
12	35.70	12	32.99	July 5	37.82	11	41.62
19	35.54	19	34.72	19	38.82	18	41.80
26	34.30	26	35.13	26	39.10	25	42.35
Feb. 2	34.33	May 3	35.45	Aug. 2	39.56	Nov. 1	42.19
9	34.20	10	36.00	9	39.81	8	42.29
16	33.10	17	36.87	16	40.13	15	42.45
Mar. 1	33.37	24	36.87	23	40.45	22	42.78
8	33.50	31	37.40	30	40.40	29	43.93
15	33.22	June 7	38.28	Sept. 13	40.66	Dec. 6	43.35
22	33.29	21	38.15	20	40.94	28	42.64

165-2. E. C. Shepherd. 0.7 mile north of Port Union. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	11.85	Apr. 5	5.23	July 5	11.31	Oct. 4	14.00
12	10.38	12	6.05	12	11.67	11	14.34
19	7.08	19	6.84	19	11.75	18	14.31
26	4.55	26	7.26	26	11.93	25	14.50
Feb. 2	5.23	May 3	7.76	Aug. 2	12.18	Nov. 1	14.62
9	5.45	10	8.15	9	12.45	8	14.65
16	3.58	19	8.65	16	12.54	15	14.63
23	4.70	24	8.97	23	12.88	22	14.68
Mar. 1	5.03	31	9.57	30	13.00	29	14.59
8	5.48	June 7	10.10	Sept. 6	13.17	Dec. 6	14.57
15	5.04	14	10.36	13	13.33	13	14.55
22	5.39	21	10.62	20	13.46	20	14.29
29	4.70	28	10.82	27	13.68	28	14.13

168-1. M. Haughbers. In Port Union, in Union Township. Records available: 1940-48. No measurement made in 1949.

175. J. W. Margonett. At Rialto. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	4.58	Apr. 5	6.21	July 5	11.45	Oct. 4	11.20
12	5.85	12	6.69	12	11.00	11	11.06
19	5.24	19	7.44	19	11.17	18	11.19
26	4.70	26	8.39	26	11.05	25	11.29
Feb. 2	6.03	May 3	9.24	Aug. 2	11.09	Nov. 1	11.40
9	6.17	10	9.75	9	11.33	8	11.56
16	5.00	19	10.38	16	11.23	15	11.45
23	5.50	24	10.30	23	11.49	22	11.46
Mar. 1	6.01	31	10.61	30	11.19	29	11.55
8	5.98	June 7	11.00	Sept. 6	10.73	Dec. 6	11.58
15	6.10	14	10.97	13	11.78	13	11.27
22	6.20	21	10.82	20	10.96	20	11.00
29	5.22	28	10.34	27	11.05	28	10.50

180. Fox Paper Co. At Crescentville, in Union Township. Records available: 1938-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.34	5.54	6.60	5.83	8.33	12.31	13.22	14.94	12.33	16.06	17.00	18.12
2	8.42	5.72	6.65	5.95	8.60	12.47	13.20	15.00	12.79	16.00	16.94	18.30
3	8.50	5.67	6.79	6.27	8.82	12.60	13.22	15.16	13.22	15.95	17.12	18.30
4	8.53	5.91	6.72	6.46	9.03	12.66	13.20	15.27	13.36	15.90	17.14	18.06
5	6.66	6.07	6.62	6.43	9.17	12.76	13.25	15.24	13.34	15.92	17.42	18.07
6	6.45	6.10	7.07	6.67	9.27	12.92	13.30	15.15	13.27	15.87	17.37	18.02
7	6.16	6.32	7.24	6.77	9.58	13.07	13.47	15.05	12.40	16.08	17.17	18.11
8	5.95	6.30	7.08	7.00	9.67	13.27	13.62	14.93	12.46	16.17	17.15	18.36
9	6.23	6.51	7.01	7.17	9.88	13.33	13.89	14.93	12.80	16.23	17.27	18.42
10	6.32	6.77	7.08	7.26	10.20	13.39	13.77	15.05	13.07	16.14	17.16	18.17
11	6.32	6.88	7.07	7.25	10.27	13.35	13.82	15.10	13.35	16.13	17.22	18.06
12	6.24	6.69	7.00	7.25	10.38	13.36	13.27	15.07	13.47	16.33	17.30	18.26
13	6.27	6.81	7.01	7.07	10.52	13.46	13.88	15.11	13.75	16.47	17.22	18.44
14	6.61	6.81	7.02	7.11	10.65	13.51	13.96	15.21	14.03	16.42	17.32	18.36
15	6.58	6.26	7.07	7.24	10.77	13.61	14.09	15.27	14.15	16.43	17.44	18.23
16	6.62	5.85	6.94	7.47	10.91	13.60	14.21	15.27	14.22	16.41	17.47	18.08
17	6.72	5.65	6.96	7.49	11.02	13.59	14.06	15.17	14.49	16.54	17.57	17.78
18	6.67	5.50	7.19	7.59	11.08	13.60	14.35	14.95	14.65	16.62	17.70	17.45
19	6.52	5.42	7.32	7.80	11.07	13.52	14.42	14.98	14.86	16.59	17.66	16.88
20	6.52	5.63	7.35	7.87	11.26	13.35	14.52	15.05	15.06	16.60	17.58	16.30
21	6.26	5.64	7.16	7.73	11.26	13.20	14.57	15.08	15.10	16.56	17.93	15.76
22	6.32	5.66	7.12	7.62	11.50	13.18	14.68	15.00	15.00	16.77	17.97	15.60
23	6.30	5.83	7.28	7.62	11.63	13.25	14.77	15.05	15.39	16.80	17.61	15.86
24	5.87	5.80	7.30	7.97	11.76	13.22	14.75	15.14	15.52	16.94	17.60	15.92
25	5.41	6.15	7.32	8.04	11.81	13.35	14.72	15.24	15.59	16.87	17.82	15.78
26	5.09	6.20	7.32	7.99	11.84	13.41	14.72	15.26	15.57	17.05	17.86	15.45
27	4.87	6.12	6.62	8.10	11.86	13.40	14.80	15.25	15.47	17.07	17.85	15.11
28	4.62	6.37	5.98	8.24	12.02	13.32	14.85	15.17	15.52	16.89	17.85	15.17
29	5.01		5.70	8.25	12.11	13.26	14.83	11.52	15.82	16.91	17.76	15.00
30	5.09		5.55	8.30	12.10	13.20	14.85	11.66	16.02	16.78	18.00	15.00
31	5.18		5.50		12.20		14.94	11.82		17.00		14.87

Champaign County

Ch-1. Ohio Water Resources Board test well. 3 miles west of Urbana, on south side of U. S. Highway 36. Records available: 1948-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.70	6.13	6.87	7.14	7.54	8.02	7.84	8.33	8.26	....	8.59	8.79
2	7.77	6.32	6.93	7.18	7.56	8.04	7.88	8.35	8.28	....	8.60	8.80
3	7.80	6.45	7.00	7.23	7.59	8.05	7.91	8.37	8.32	....	8.61	8.80
4	6.84	6.58	7.04	7.28	7.62	8.07	7.94	8.39	8.33	....	8.61	8.81
5	6.63	6.68	7.08	7.29	7.64	8.08	7.97	8.40	8.18	....	8.63	8.81

Ch-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	4.94	6.75	7.16	7.32	7.62	8.10	7.98	8.42	8.17	....	8.64	8.82
7	5.20	6.84	7.21	7.36	7.69	8.12	7.90	8.43	8.18	8.40	8.64	8.83
8	5.40	6.90	7.24	7.40	7.70	8.14	7.96	8.40	8.21	8.41	8.65	8.84
9	5.58	6.97	7.25	7.43	7.72	8.15	8.00	8.42	8.24	8.42	8.66	8.85
10	5.69	7.04	7.25	7.46	7.74	8.16	8.04	8.44	8.27	8.43	8.66	8.85
11	5.73	7.10	....	7.48	7.76	8.15	8.05	8.45	8.30	8.44	8.67	8.85
12	5.76	7.14	7.15	7.49	7.77	8.16	8.08	8.40	8.32	8.44	8.67	8.84
13	5.79	7.18	7.17	7.51	7.79	8.16	8.11	8.42	8.35	8.45	8.68	8.84
14	5.86	7.19	7.16	7.53	7.81	8.16	8.15	8.45	8.37	8.46	8.68	8.84
15	5.88	7.11	7.12	7.53	7.82	8.14	8.17	8.46	8.38	8.47	8.69	8.86
16	5.87	6.06	7.13	7.52	7.83	7.18	8.19	8.44	8.40	8.48	8.70	8.87
17	6.62	6.35	7.17	7.52	7.88	7.00	8.22	8.46	8.42	8.48	8.70	8.87
18	6.59	6.39	7.21	7.49	7.90	7.08	8.23	8.43	8.41	8.49	8.71	8.87
19	5.90	6.51	7.25	7.30	7.90	7.21	8.25	8.46	8.34	8.50	8.71	8.66
20	6.01	6.65	7.26	7.27	7.91	7.32	8.26	8.47	8.37	8.51	8.72	8.64
21	6.21	6.74	7.24	7.29	7.92	7.40	8.28	8.49	8.39	8.51	8.73	8.64
22	6.38	6.76	7.22	7.30	7.92	7.48	7.98	8.50	8.39	8.52	8.74	8.59
23	6.44	6.47	7.09	7.31	7.82	7.54	8.04	8.52	8.41	8.53	8.74	8.53
24	6.37	6.45	7.08	7.38	7.85	7.59	8.13	8.54	8.42	8.54	8.74	8.52
25	5.75	6.53	7.12	7.40	7.89	7.66	8.17	8.55	8.43	8.54	8.75	8.52
26	5.77	6.61	7.14	7.44	7.92	7.69	8.21	8.56	8.43	8.55	8.76	8.52
27	5.45	6.67	7.13	7.44	7.93	7.71	8.24	8.57	8.44	8.56	8.77	8.40
28	5.00	6.78	6.93	7.47	7.95	7.74	8.27	8.57	8.40	8.56	8.77	8.29
29	5.40		6.98	7.50	7.96	7.79	8.28	8.44	8.28	8.57	8.77	8.23
30	5.65		7.02	7.52	7.98	7.81	8.29	8.46	8.29	8.57	8.79	8.25
31	5.90		7.06		8.00		8.31	8.44		8.59		8.29

Clark County

C1-1. Ohio Water Resources Board test well. 1 mile southwest of New Moorefield. Records available: 1948-49.

	Water level		Water level		Water level		Water level
Jan. 14	3.12	Feb. 28	3.22	Mar. 18	3.21	July 25	3.54
15	3.13	Mar. 1	3.22	Apr. 20	3.25	26	3.55
16	3.10	2	3.23	21	3.30	27	3.55
17	2.90	5	3.25	22	3.30	28	3.56
18	2.99	6	3.25	23	3.32	29	3.56
19	2.80	7	3.27	24	3.35	30	3.55
20	2.96	8	3.27	25	3.38	31	3.56
Feb. 19	3.10	9	3.27	26	3.39	Aug. 1	3.58
20	3.15	10	3.15	27	3.38	20	3.65
21	3.16	11	2.95	July 18	3.60	21	3.66
22	3.16	12	3.05	19	3.60	22	3.67
23	2.90	13	3.10	20	3.60	23	3.68
24	3.00	14	3.12	21	3.60	24	3.70
25	3.03	15	3.17	22	3.60	25	3.70
26	3.13	16	3.20	23	3.60	26	3.72
27	3.19	17	3.21	24	3.60	27	3.72

C1-2. City of Springfield drilled test well in Snyder Park about 1800 ft. north-northwest junction of Mad River and Duck Creek. Records available: 1949.

Oct. 25	6.74	Nov. 6	6.85	Nov. 19	6.87	Dec. 2	6.99
26	6.76	7	6.86	20	6.87	3	6.97
27	6.77	8	6.84	21	6.90	4	6.96
28	6.78	9	6.84	22	6.90	5	7.00
29	6.78	10	6.86	23	6.92	6	7.00
30	6.78	11	6.86	24	6.92	7	7.00
31	6.82	12	6.86	25	6.93	8	7.02
Nov. 1	6.82	13	6.84	26	6.94	9	7.05
2	6.83	14	6.85	27	6.94	10	7.03
3	6.84	15	6.86	28	6.96	11	7.02
4	6.85	16	6.87	29	6.97	12	6.88
5	6.85	17	6.87	30	6.98	13	6.79
		18	6.88	Dec. 1	6.99	14	6.81

C1-2 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 15	6.86	Dec. 20	6.55	Dec. 24	6.50	Dec. 28	6.17
16	6.90	21	6.55	25	6.57	29	6.30
17	6.92	22	6.24	26	6.60	30	6.45
18	6.90	23	6.38	27	5.98	31	6.52
19	6.50						

Darke County

D-1. Greenville Water Department. Northwest of city of Greenville on State Highway 71. Equipped with automatic water-stage recorder. Records available: 1949. June 30, 20.54.

Lowest daily water level, from recorder graph

	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.69	.....	.....	27.16	28.61	.....
2	17.11	.....	.....	27.24	28.83	.....
3	17.40	.....	.....	27.16	28.92	.....
4	19.50	28.70	.....	27.37	29.00	.....
5	19.22	28.70	.....	27.49	29.16	.....
6	17.08	22.70	.....	27.76	29.02	.....
7	16.26	23.70	.....	27.87	29.80	.....
8	.....	23.78	24.47	27.90	29.13	.....
9	.....	22.80	.....	27.83	29.13	30.67
10	.....	.....	.....	27.79	29.08	.....
11	.....	.....	.....	28.13	29.18	.....
12	.....	.....	25.03	28.11	29.22	.....
13	16.82	.....	24.99	28.10	29.10	.....
14	18.10	.....	25.20	28.15	29.05	.....
15	17.88	.....	24.55	28.09	29.21	30.03
16	17.92	.....	25.10	28.06	29.21	.....
17	16.05	.....	25.40	28.22	29.30	.....
18	18.85	.....	25.46	28.33	29.40	.....
19	17.68	.....	25.50	28.40	29.35	.....
20	18.00	.....	25.90	28.40	29.28	.....
21	18.82	.....	25.89	28.59	29.32	.....
22	19.88	.....	26.00	28.60	29.40	29.98
23	20.07	.....	26.50	28.54	29.47	.....
24	21.21	.....	26.66	28.48	29.46	.....
25	21.60	.....	26.73	28.70	29.50	.....
26	20.50	.....	26.60	28.71	29.53	.....
27	21.87	.....	26.44	28.49	29.50	.....
28	22.43	.....	26.72	28.65	29.50	.....
29	.....	.....	27.06	28.70	29.49	30.17
30	.....	.....	27.10	28.60	29.74	.....
31	.....	.....	.....	28.52	.....	.....

Delaware County

D1-1. Oscar Case. 2 miles north of Delaware. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.84	8.70	8.40	9.62	9.53	14.19	12.47	15.16	16.78	17.40	.....	18.77
2	11.10	8.98	8.57	9.66	10.02	14.36	12.52	15.27	16.82	17.43	.....	18.79
3	11.31	8.94	8.91	9.76	10.37	14.48	12.59	15.45	16.83	17.47	.....	18.81
4	12.10	9.31	8.90	9.94	10.56	14.51	12.63	15.59	16.84	17.48	.....	18.82
5	11.23	9.62	8.79	9.90	10.70	14.48	12.78	15.67	16.82	17.49	.....	18.82
6	10.26	9.62	9.56	9.93	10.74	14.52	12.90	15.73	16.86	17.49	.....	18.84
7	9.74	9.91	9.94	9.99	11.00	15.10	13.16	15.77	16.86	17.53	.....	18.85
8	9.66	9.90	9.85	10.25	11.05	15.15	13.35	15.74	16.86	17.57	.....	18.87
9	9.69	10.13	9.83	10.50	11.32	15.20	13.41	15.80	16.90	17.60	.....	18.88
10	9.76	10.21	10.16	10.62	11.72	15.24	13.60	15.84	16.93	17.61	.....	18.91
11	9.64	10.46	10.20	10.50	11.84	15.20	13.63	15.83	16.95	17.60	.....	18.92
12	9.05	10.18	10.07	10.43	12.02	14.99	13.52	15.90	16.98	17.62	.....	18.92
13	8.81	10.25	9.90	10.33	12.13	14.75	13.48	15.97	16.96	17.67	.....	18.93
14	8.92	10.24	9.58	10.52	12.46	14.57	13.56	16.03	16.99	17.69	18.48	18.94
15	8.90	.....	9.48	10.70	12.66	14.45	13.74	16.10	17.00	.....	18.51	18.96

Dl-1 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	8.71	....	9.48	10.81	12.77	14.45	13.88	16.13	17.01	....	18.52	18.98
17	8.77	....	9.39	10.83	12.91	14.45	13.98	16.13	17.04	....	18.54	18.99
18	8.64	....	9.77	10.10	12.99	14.37	14.10	16.11	17.06	....	18.56	18.99
19	8.46	....	....	9.96	12.94	13.98	14.22	16.21	17.06	....	18.56	19.01
20	8.47	....	....	9.07	13.15	13.46	14.36	16.30	17.11	....	18.59	19.02
21	8.11	8.94	9.96	9.51	13.15	13.09	14.53	16.34	17.13	....	18.60	19.03
22	8.28	8.57	9.80	9.19	13.25	12.93	14.69	16.41	17.12	....	18.62	19.04
23	8.17	8.40	10.06	9.17	13.47	13.00	14.85	16.45	17.15	....	18.64	19.05
24	7.68	8.98	9.98	9.62	13.56	12.98	14.83	16.51	17.23	....	18.65	19.07
25	7.75	7.84	9.56	9.74	13.66	13.16	14.78	16.56	17.27	....	18.66	19.08
26	7.60	7.83	9.53	8.66	13.65	13.38	14.78	16.59	17.29	....	18.67	19.10
27	7.56	7.63	9.25	9.04	13.72	13.38	14.88	16.62	17.28	....	18.68	....
28	7.35	7.98	9.50	9.29	13.89	13.10	14.95	16.61	17.24	....	18.73	19.10
29	7.93	....	9.56	9.34	14.00	12.70	14.95	16.65	17.29	....	18.74	19.10
30	8.06	....	9.42	9.45	14.08	12.44	15.01	16.70	17.36	....	18.76	19.11
31	8.75	....	9.25	....	14.10	....	15.13	16.79	....	....	....	19.12

Dl-3. Corps of Engineers, U. S. Army. About 3.5 miles northeast of Delaware. Records available: 1948-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	35.17	32.93	34.35	34.70	34.94	36.04	36.15	36.60	36.41	.....	36.70	36.95
2	35.32	33.16	34.46	34.78	35.09	36.08	36.17	36.57	36.38	.....	36.66	37.04
3	35.45	33.31	34.58	34.94	35.15	36.12	36.28	36.87	36.36	.....	36.70	37.04
4	35.50	33.54	34.56	35.02	35.22	36.14	.....	36.67	36.42	.....	36.73	36.88
5	34.85	33.67	34.68	34.97	35.27	36.16	36.30	36.72	36.35	.....	36.78	36.86
6	33.42	33.65	34.80	35.08	35.29	36.20	36.35	36.74	36.30	.....	36.75	36.86
7	33.88	33.80	34.95	35.04	35.40	36.35	36.34	.....	36.08	.....	36.68	36.91
8	34.20	33.89	34.92	35.00	35.42	36.34	36.10	36.76	36.18	.....	36.74	36.94
9	34.53	34.11	34.95	35.13	35.48	36.34	35.98	36.82	36.31	.....	36.76	36.96
10	34.53	34.13	35.06	35.17	35.57	36.35	36.01	36.87	36.39	36.56	36.70	36.85
11	34.51	34.16	35.02	35.20	35.60	36.29	35.88	36.87	36.45	36.55	36.73	36.81
12	34.55	34.29	35.02	35.21	35.63	36.20	35.88	36.81	36.48	36.64	36.75	36.86
13	34.59	34.44	35.04	35.26	35.67	36.22	36.03	36.77	36.55	36.66	36.69	36.83
14	34.74	34.43	35.00	35.25	34.72	36.22	36.16	36.77	36.57	36.60	36.70	36.68
15	34.71	34.02	34.97	35.12	35.75	36.20	36.27	36.78	36.60	36.61	36.70	36.70
16	34.69	32.67	34.96	35.03	35.77	36.22	36.32	36.72	36.61	36.60	36.67	36.76
17	.....	33.10	35.02	34.84	35.80	36.07	36.39	36.69	.....	36.65	36.66	36.75
18	34.21	33.45	35.18	34.73	35.81	35.95	36.48	36.74	.....	36.67	36.71	36.67
19	33.43	33.65	35.24	34.60	35.81	36.02	36.52	36.84	36.55	36.65	36.65	36.51
20	33.04	33.98	35.26	34.68	35.87	36.10	36.56	36.90	36.58	36.66	36.73	36.27
21	33.37	34.02	35.22	34.77	35.83	36.02	36.58	36.91	36.53	36.63	36.82	36.25
22	33.61	34.03	35.15	34.83	35.82	36.19	36.50	36.75	36.53	36.71	36.82	36.97
23	33.60	33.63	35.16	34.74	35.78	36.23	36.45	36.77	36.65	36.69	36.77	36.14
24	33.40	33.55	34.97	34.71	35.72	36.11	36.45	36.82	36.66	36.70	36.74	36.25
25	32.92	33.72	35.12	34.78	35.74	36.10	36.49	36.83	.....	36.65	36.83	36.25
26	32.48	33.78	35.11	34.86	35.81	36.12	36.56	36.82	.....	36.73	36.84	36.23
27	32.21	33.90	35.05	34.86	35.84	36.17	36.59	36.82	.....	36.72	36.85	.....
28	31.22	34.17	34.13	34.56	35.92	36.17	36.63	.....	.....	36.65	36.75	35.57
29	30.90	.....	34.41	34.75	35.94	36.22	36.63	36.73	.....	36.66	36.83	35.79
30	31.35	.....	34.55	34.85	35.97	36.27	.....	36.53	.....	36.61	36.93	35.88
31	32.48	.....	34.62	.....	36.00	.....	.....	36.50	.....	36.70	.....	35.95

Fairfield County

F-1. Charles E. Howdysshell. At West Rushville. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.29	9.99	9.24	9.49	10.95	12.23	13.16	13.07	13.96	14.95	15.64	16.26
2	12.22	9.96	9.24	9.48	11.03	12.28	13.16	13.06	14.01	14.98	15.67	16.42
3	12.21	9.91	9.25	9.46	11.13	12.33	13.16	13.10	14.07	14.99	15.69	16.42
4	12.18	9.81	9.26	9.50	11.20	12.35	13.19	13.12	14.09	14.99	15.78	16.41
5	12.08	9.78	9.26	9.49	11.26	12.38	13.20	13.13	14.09	14.99	15.85	16.42

F-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	12.00	9.78	9.30	9.45	11.32	12.41	13.21	13.17	14.13	15.00	15.86	16.43
7	11.96	9.78	9.38	9.49	11.37	12.50	13.18	13.20	14.13	15.06	15.85	16.43
8	11.90	9.78	9.38	9.58	11.41	12.58	13.21	13.20	14.17	15.10	15.86	16.43
9	11.82	9.77	9.38	9.66	11.45	12.62	13.17	13.22	14.21	15.12	15.90	16.52
10	11.78	9.77	9.40	9.70	11.54	12.67	13.18	13.26	14.26	15.13	15.91	16.49
11	11.71	9.81	9.45	9.73	11.61	12.66	13.16	13.29	14.29	15.15	15.93	16.47
12	11.61	9.83	9.48	9.78	11.68	12.68	13.16	13.31	14.32	15.16	15.95	16.46
13	11.51	9.81	9.50	9.78	11.78	12.71	13.17	13.31	14.32	15.22	15.94	16.50
14	11.42	9.82	9.52	9.88	11.84	12.70	13.19	13.35	14.37	15.26	15.93	16.51
15	.....	9.79	9.55	9.95	11.91	12.76	13.21	13.39	14.38	15.28	15.97	16.53
16	.....	9.82	9.55	10.06	11.90	12.78	13.26	13.43	14.41	15.30	16.01	16.55
17	.....	9.16	9.55	10.10	11.92	12.79	13.26	13.43	14.46	15.33	16.02	16.57
18	.....	9.85	9.57	10.18	11.95	12.87	13.24	13.45	14.47	15.35	16.06	16.57
19	.....	9.74	9.66	10.28	11.95	12.89	13.26	13.51	14.50	15.37	16.06	16.52
20	.....	9.72	9.69	10.36	11.98	12.93	13.28	13.60	14.57	15.39	16.06	16.53
21	11.10	9.72	9.69	10.40	11.98	12.95	13.30	13.66	14.61	15.44	16.08	16.50
22	11.11	9.68	9.69	10.44	11.97	13.02	13.25	13.72	14.61	15.46	16.10	16.47
23	11.11	9.57	9.76	10.48	12.02	13.04	13.26	13.77	14.62	15.47	16.10	16.56
24	11.04	9.55	9.79	10.63	12.03	13.07	13.21	13.81	14.70	15.50	16.10	16.59
25	10.94	9.45	9.86	10.68	12.07	13.08	13.19	13.88	14.74	15.53	16.13	16.59
26	10.90	9.40	9.87	10.70	12.06	13.13	13.15	13.90	14.76	15.57	16.15	16.55
27	10.74	9.34	9.82	10.74	12.09	13.09	13.14	13.92	14.77	15.59	16.18	16.53
28	10.56	9.24	9.80	10.84	12.10	13.08	13.14	13.85	14.76	15.61	16.19	16.56
29	10.35		9.78	10.88	12.15	13.11	13.11	13.90	14.80	15.63	16.17	16.62
30	10.22		9.69	10.94	12.16	13.13	13.09	13.93	14.87	15.62	16.21	16.68
31	10.15		9.57		12.19		13.07	13.95		15.63		16.69

F-2. Pickerington Creamery. 0.5 mile east of Pickerington. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.26	.....	20.72	20.57	20.53	21.02	21.72	22.16	22.51	22.52	22.43	22.55
2	21.24	.....	20.72	20.58	20.54	21.04	21.73	22.18	22.51	22.61	22.46	22.57
3	21.28	.....	20.72	20.58	20.56	21.07	21.74	22.18	22.52	22.67	22.47	22.57
4	21.30	.....	20.73	20.58	20.60	21.07	21.75	22.18	22.52	22.67	22.47	22.55
5	21.26	.....	.....	20.58	20.65	21.10	21.77	22.18	22.52	22.63	22.49	22.56
6	21.28	.....	.....	20.55	20.67	21.18	21.92	22.16	22.62	22.58	22.50	22.57
7	21.29	20.95	20.73	20.57	20.70	21.32	21.99	22.16	22.67	22.59	22.52	22.56
8	21.31	20.96	20.73	20.59	20.70	21.34	22.06	22.20	22.67	22.65	22.56	22.56
9	21.31	20.97	20.70	20.62	20.66	21.34	22.20	22.21	22.69	22.65	22.60	22.56
10	21.31	20.98	20.64	20.62	20.71	21.33	22.24	22.27	22.71	22.64	22.60	22.55
11	21.27	20.98	20.66	20.60	20.72	21.33	22.32	22.30	22.71	22.62	22.57	22.54
12	21.21	20.96	20.70	20.62	20.78	21.32	22.24	22.30	22.73	22.62	22.56	22.50
13	21.21	20.96	20.69	20.62	20.80	21.28	22.50	22.27	22.74	22.60	22.55	22.48
14	21.21	20.93	20.60	20.60	20.81	21.28	22.47	22.27	22.75	22.59	22.48	22.50
15	21.21	20.64	20.60	20.60	20.81	21.31	22.46	22.27	22.74	22.58	22.45	22.52
16	21.19	20.86	20.83	20.60	20.81	21.29	22.44	22.28	22.69	22.58	22.50	22.54
17	21.14	20.86	20.83	20.60	20.94	.....	22.38	22.60	22.67	22.58	22.51	22.54
18	21.07	20.85	20.81	20.56	21.03	21.30	22.32	22.40	22.65	22.56	22.52	22.53
19	21.10	20.84	.....	20.54	21.04	21.31	22.33	22.43	22.57	22.57	22.52	22.47
20	21.09	.....	.....	20.53	21.04	21.33	22.33	22.44	22.54	22.57	22.49	22.48
21	21.08	20.81	20.70	20.47	21.00	21.39	22.33	22.45	22.55	22.56	22.50	22.51
22	21.07	20.80	20.70	20.45	20.98	21.42	22.58	22.48	22.54	22.56	22.50	22.57
23	21.03	20.76	20.67	20.45	20.94	21.47	22.20	22.50	22.54	22.57	22.52	22.58
24	.....	20.74	20.69	.....	20.94	21.72	22.19	22.52	22.56	22.55	22.53	22.57
25	.....	20.73	20.70	20.43	20.97	21.72	22.08	22.52	22.56	22.52	22.49	22.57
26	.....	20.72	20.70	20.44	20.96	21.75	22.12	22.62	22.56	22.51	22.50	22.54
27	.....	20.67	20.58	20.46	20.96	21.48	22.10	22.65	22.55	22.22	22.51	22.45
28	.....	20.81	20.60	20.51	20.97	21.56	22.10	22.60	22.56	22.49	22.51	22.42
29	.....		20.60	20.53	20.97	21.14	22.14	22.55	22.52	22.50	22.50	22.47
30	.....		20.58	20.53	20.97	21.18	22.14	22.53	22.52	22.50	22.54	22.52
31	.....		20.55		20.98		22.14	22.52		22.45		22.53

Fayette County

Fa-1. Martha L. Slagle. 2 miles north of Jasper Mills. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.64	5.61	5.61	5.74	6.17	7.02	7.36	7.74	7.42	8.26	8.55	9.19
2	6.63	5.70	5.58	5.79	6.22	7.26	8.38	7.60	8.27	8.20	8.55	9.34
3	6.73	5.68	5.67	5.80	6.27	7.09	7.56	7.65	7.98	8.09	8.62	9.34
4	6.74	5.55	5.60	5.90	6.29	7.69	8.07	8.10	7.48	8.07	8.70	9.28
5	6.24	5.57	5.58	5.88	6.37	7.87	8.89	7.72	7.40	8.03	8.72	9.25
6	6.10	5.55	5.58	5.86	6.51	7.75	8.54	7.82	7.39	8.00	8.72	9.31
7	6.11	5.68	5.71	6.56	6.49	7.32	8.96	7.79	7.42	8.09	8.72	9.30
8	6.17	5.66	5.62	6.05	6.60	8.19	7.70	9.08	7.43	8.16	8.72	9.78
9	6.24	5.69	5.59	6.62	6.49	7.94	8.71	8.36	7.48	8.21	8.80	10.50
10	6.26	5.62	5.56	6.22	6.61	7.92	7.71	8.33	7.49	8.21	8.80	9.62
11	6.23	5.82	5.53	6.00	6.62	8.07	7.62	9.09	6.72	8.22	8.83	9.44
12	6.09	5.79	5.59	5.95	6.67	7.50	7.42	8.65	6.73	8.22	8.97	9.35
13	6.02	5.91	5.59	5.90	6.69	7.24	7.32	7.98	7.64	8.22	8.90	9.36
14	6.00	5.94	5.61	5.87	6.88	7.15	8.44	8.04	7.67	8.42	8.79	9.35
15	6.10	5.61	5.68	5.89	6.75	7.23	8.80	8.06	7.67	8.44	8.84	9.40
16	6.11	5.57	5.67	5.89	7.06	7.23	7.81	7.90	7.60	8.60	8.84	9.98
17	5.98	5.61	5.86	5.84	6.96	7.07	8.23	7.84	7.61	8.60	8.84	9.50
18	5.78	5.56	5.84	5.84	7.27	7.06	7.67	7.82	7.57	8.56	9.02	9.44
19	5.76	5.54	5.84	5.86	7.05	7.10	7.76	8.60	7.58	8.58	9.02	9.43
20	5.76	5.55	5.78	5.87	6.85	7.14	7.76	8.34	7.73	8.58	8.92	9.40
21	5.65	5.53	5.77	5.89	6.76	7.26	7.48	7.38	7.70	8.54	8.98	9.32
22	5.64	5.48	5.76	5.91	6.71	7.24	7.45	8.62	7.66	8.28	9.02	9.34
23	5.60	5.47	5.81	6.02	6.78	7.28	7.49	8.72	7.71	8.31	9.02	10.03
24	5.52	5.40	5.85	6.06	6.77	8.05	7.61	8.38	7.76	8.32	9.04	10.12
25	5.51	5.40	5.94	6.06	6.90	8.60	7.70	8.55	7.80	8.32	9.00	9.68
26	5.48	5.42	5.94	6.00	6.90	7.43	7.94	8.18	7.80	8.34	9.02	9.44
27	5.45	5.42	5.63	6.12	6.90	7.50	7.60	7.93	7.80	8.34	9.06	9.41
28	5.37	5.42	5.64	6.19	6.97	7.20	9.00	7.69	7.78	8.52	9.04	9.46
29	5.44		5.80	6.22	6.96	7.09	8.47	7.46	7.88	8.57	9.06	9.48
30	5.50		5.76	6.18	6.96	7.19	8.47	7.43	7.95	8.55	9.19	9.50
31	5.53		5.66		6.96		7.76	7.40		8.56		9.93

Franklin County

Fr-1. L. E. Keller. Grove City. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	78.11	77.73	76.95	76.67	76.34	77.09	77.58	78.32
2	78.10	77.78	76.95	75.82	76.45	77.12	77.64	78.25
3	78.78	77.77	77.01	76.80	76.55	77.18	77.61	78.36
4	78.78	77.30	77.00	76.82	76.57	77.23	77.57	78.46
5	78.62	77.38	76.72	76.77	76.57	77.10	77.54	78.50
6	78.64	77.37	76.79	76.51	76.57	77.07	77.51	78.60
7	78.63	77.50	77.08	76.55	76.47	77.23	77.67	78.53
8	78.48	77.49	77.05	76.66	76.47	77.36	77.82	78.45
9	78.63	77.51	76.91	76.88	76.44	77.40	77.87	78.42
10	78.68	77.53	76.70	76.88	76.59	77.38	77.94	78.49
11	78.72	77.72	76.82	76.80	76.65	77.35	78.06	.....
12	78.72	77.71	76.88	76.75	76.68	77.22	77.99	.....
13	78.58	77.47	76.94	76.49	76.70	77.20	78.03	.....
14	78.39	77.47	76.95	76.42	76.79	77.21	78.05	.....
15	78.35	77.27	77.04	76.42	76.80	77.19	78.08	.....
16	78.35	77.35	77.04	76.47	76.87	77.18	78.15	.....
17	78.27	77.59	76.86	76.60	76.94	77.22	78.14	.....
18	78.32	77.58	76.83	76.55	76.91	77.39	78.12	.....
19	78.40	77.54	77.10	76.73	76.85	77.36	78.10	.....
20	78.50	77.44	77.12	76.78	76.83	77.30	78.11	.....
21	78.43	77.44	77.05	76.78	76.82	77.37	78.12	.....
22	78.30	77.31	76.85	76.64	76.67	77.24	78.16	.....
23	78.29	77.27	76.87	76.50	76.94	77.29	78.27	.....
24	78.05	77.25	76.87	76.60	76.91	77.29	78.28	.....
25	78.06	77.06	76.91	76.60	77.02	77.22	78.20	.....

Fr-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
26	78.04	77.09	76.91	76.48	76.94	77.35	78.22	.....
27	77.86	77.02	76.70	76.40	76.99	77.42	78.22	.....
28	77.56	76.77	76.83	76.54	77.02	77.41	78.20	.....
29	77.90		76.90	76.52	77.12	77.45	78.18	.....
30	77.97		76.84	76.42	77.10	77.58	78.14	.....
31	77.83		76.67		77.09		78.32	.....

Fr-2. Hilliard High School. At Hilliard. Records available: 1946-49.
 June 1, 21.65. Measurement discontinued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1	23.60	21.70	21.31	21.62	20.99	17	22.60	21.62	21.22	21.29	21.53
2	23.50	21.73	21.31	21.66	21.00	18	22.60	21.60	21.25	21.19	21.56
3	23.49	21.69	21.35	21.72	21.09	19	22.54	21.62	21.37	25.25	21.62
4	23.45	21.56	21.35	21.78	21.14	20	22.54	21.54	21.37	25.25	21.64
5	23.26	21.59	21.24	21.78	21.19	21	22.42	21.52	21.30	21.24	21.62
6	23.14	21.58	21.33	21.75	21.19	22	22.32	21.47	21.25	21.17	21.53
7	23.09	21.53	21.38	21.75	21.21	23	22.29	21.42	21.31	21.06	21.65
8	23.07	21.57	21.35	21.73	21.19	24	22.05	21.39	21.31	21.16	21.63
9	23.07	21.59	21.30	21.74	21.21	25	22.00	21.31	21.31	21.16	21.65
10	23.04	21.65	21.26	21.73	21.27	26	21.97	21.31	21.31	21.10	21.64
11	23.03	21.65	21.27	21.74	21.28	27	21.88	21.29	21.26	21.06	21.65
12	22.88	21.64	21.33	21.55	21.32	28	21.72	21.25	21.40	21.09	21.65
13	22.81	21.58	21.33	21.41	21.34	29	21.87		21.44	21.03	21.65
14	22.76	21.50	21.32	21.32	21.40	30	21.88		21.44	21.01	21.65
15	22.76	21.49	21.32	21.27	21.45	31	21.72		21.40		.....
16	22.66	21.59	21.32	21.32	21.48						

Fr-3. R. C. Hann farm. South of Reese. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.93	9.30	9.78	10.37	10.65	11.54	10.08	11.88	.....	12.23	12.27	12.24
2	11.00	9.60	10.00	10.06	10.71	11.58	11.11	11.90	.....	12.24	12.28	12.29
3	11.11	9.81	10.11	10.23	10.76	11.62	11.14	11.93	.....	12.23	12.28	12.30
4	11.16	9.92	10.21	10.39	10.86	11.66	11.26	11.96	.....	12.23	12.28	12.22
5	11.30	9.96	10.28	10.47	10.94	11.66	11.37	11.98	.....	12.18	12.29	12.33
6	6.30	10.03	10.30	10.49	11.02	11.67	11.37	12.00	12.02	12.20	12.29	12.33
7	7.98	10.09	10.33	10.43	11.08	11.72	11.32	12.02	12.06	12.22	12.30	12.34
8	8.72	10.17	10.42	10.33	10.13	11.75	11.40	12.10	12.08	12.23	12.30	12.35
9	9.16	10.23	10.48	10.39	11.19	11.78	11.41	.....	12.08	12.24	12.30	12.35
10	9.49	10.31	10.48	10.50	11.23	11.80	11.32	.....	12.10	12.24	12.30	12.36
11	9.50	10.40	9.31	10.59	11.26	11.70	10.96	.....	12.12	12.24	12.30	12.36
12	9.42	10.51	9.45	10.67	11.30	11.90	10.72	.....	12.15	12.24	12.30	12.33
13	9.55	10.54	9.76	10.70	11.34	10.62	10.96	.....	12.17	12.24	12.30	12.25
14	9.71	10.54	9.99	10.65	11.38	10.14	11.14	.....	12.19	12.23	12.30	12.01
15	9.81	9.50	10.10	10.53	11.41	10.24	11.30	11.62	12.20	12.24	12.30	12.00
16	9.84	6.97	10.23	10.51	11.59	10.33	11.42	11.69	12.21	12.24	12.30	12.07
17	9.61	8.24	10.34	10.10	11.43	10.34	11.51	11.75	12.22	12.27	12.30	12.13
18	9.01	8.94	10.42	10.06	11.46	9.74	11.57	11.85	12.22	12.26	12.30	12.13
19	8.80	9.33	10.46	9.63	11.48	10.18	11.62	11.92	12.24	12.26	12.28	11.86
20	8.60	9.33	10.52	9.70	11.48	10.53	11.67	11.98	12.24	12.26	12.29	11.63
21	9.37	9.33	10.58	10.00	11.47	10.78	11.68	12.03	12.25	12.26	12.31	11.59
22	9.39	9.44	10.59	10.12	11.46	10.98	11.36	12.06	12.23	12.27	12.31	11.57
23	9.26	8.90	10.57	9.90	11.41	11.15	10.62	12.05	12.00	12.26	12.31	11.21
24	9.20	8.54	9.97	9.59	11.16	11.27	10.85	12.08	12.04	12.28	12.31	11.42
25	6.56	8.64	10.19	10.03	11.03	11.30	11.11	12.10	12.07	12.28	12.31	11.58
26	7.02	8.84	10.24	10.28	11.11	11.28	11.33	12.13	12.11	12.28	12.31	11.69
27	6.00	9.23	9.12	10.37	11.21	11.27	11.48	12.14	12.15	12.28	12.32	.....
28	5.30	9.54	8.91	10.20	11.30	10.76	11.60	12.14	12.16	12.28	12.33	10.98
29	6.71		9.41	10.32	11.36	10.70	11.70	12.02	12.18	12.28	12.34	11.30
30	8.14		9.74	10.52	11.42	10.90	11.76	.....	12.22	12.28	12.20	11.39
31	8.82		9.95		11.49		11.81	.....		12.28		11.54

Fr-5. R. C. Hann farm. South of Reese. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.25	16.13	18.52	19.04	19.60	20.65	20.25	21.05	21.33	21.27	21.70	21.63
2	20.28	16.59	18.77	19.09	19.73	20.70	20.33	21.08	21.36	21.28	21.70	21.68
3	20.33	17.00	19.06	19.22	19.79	20.75	20.36	21.12	21.38	21.29	21.70	21.71
4	20.37	17.37	19.10	19.37	19.88	20.78	20.47	21.15	21.38	21.30	21.70	21.71
5	20.37	17.67	19.21	19.48	19.97	20.80	20.61	21.17	21.38	21.28	21.71	21.81
6	17.10	17.90	19.28	19.53	18.05	20.80	20.62	21.18	21.38	21.28	21.71	21.82
7	16.50	18.15	19.31	19.53	20.11	20.87	20.55	21.21	21.39	21.29	21.71	21.82
8	16.95	18.34	19.37	19.41	20.19	20.89	20.63	21.27	21.41	21.30	21.70	21.83
9	17.39	18.50	19.44	19.34	20.24	20.93	20.68	21.17	21.42	21.31	21.71	21.84
10	17.80	18.65	19.45	19.44	20.28	20.96	20.66	21.19	21.43	21.31	21.71	21.85
11	18.09	18.79	18.60	19.55	20.32	20.96	20.48	21.20	21.44	21.30	21.71	21.86
12	18.28	18.92	18.26	19.64	20.37	19.91	19.60	21.20	21.48	21.30	21.72	21.84
13	18.45	19.04	18.56	19.70	20.32	19.77	20.19	20.90	21.50	21.30	21.72	21.82
14	18.63	19.14	18.84	19.70	20.44	19.34	20.35	20.70	21.52	21.32	21.72	21.82
15	18.78	19.15	19.03	19.60	20.47	19.18	20.55	20.84	21.54	.....	21.72	21.51
16	18.89	17.43	19.18	19.59	20.50	19.43	20.71	20.93	21.55	.....	21.72	21.57
17	18.91	16.53	19.31	19.41	20.52	19.47	20.82	21.01	21.56	21.67	21.72	21.62
18	18.87	17.03	19.41	19.19	20.55	19.10	20.89	21.10	21.57	21.67	21.72	21.63
19	18.78	17.50	19.46	19.02	20.58	19.13	20.93	21.17	21.57	21.67	21.72	21.42
20	18.83	17.79	19.51	18.63	20.59	19.54	20.98	21.24	21.57	21.67	21.71	21.27
21	18.05	18.00	19.58	18.84	20.60	19.88	20.99	21.29	21.59	21.67	21.72	21.10
22	18.25	18.19	19.62	19.04	20.60	20.14	20.83	21.33	21.59	21.67	21.73	21.10
23	18.36	18.19	19.62	19.04	20.59	20.34	22.15	21.36	21.47	21.68	21.73	20.75
24	18.37	17.35	19.16	18.77	20.47	20.48	20.96	21.38	21.38	21.68	21.73	20.78
25	17.89	17.54	19.05	18.87	20.30	20.54	20.24	21.41	21.40	21.69	21.73	21.00
26	17.16	17.67	19.15	19.13	20.19	20.50	20.48	21.43	21.43	21.70	21.73	21.18
27	17.16	17.95	18.85	19.29	20.27	20.51	20.65	21.45	21.17	21.70	21.74	.....
28	17.03	18.25	18.88	19.29	20.36	20.30	20.80	21.45	21.21	21.70	21.75	20.55
29	14.71		18.30	19.23	20.44	19.80	20.91	21.37	21.22	21.71	21.75	20.56
30	15.15		18.67	19.43	20.55	20.02	20.99	21.30	21.25	21.71	21.68	20.78
31	15.64		18.96		20.59		21.04	21.28		21.71		20.98

Fr-6. R. C. Hann farm. South of Reese. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.14	19.89	21.58	21.04	22.67	23.96	23.63	24.28	25.01	25.27	25.46	25.54
2	24.15	20.22	21.66	22.11	22.75	23.99	23.68	24.35	25.02	25.28	25.47	25.54
3	24.17	20.53	21.78	22.19	22.81	24.02	23.72	24.40	25.04	25.30	25.47	25.54
4	24.18	20.81	21.90	22.27	23.87	24.07	23.80	24.46	25.05	25.30	25.47	25.54
5	24.18	21.04	22.00	22.36	22.95	24.09	23.81	24.51	25.07	25.31	25.48	25.55
6	21.90	21.25	22.09	22.44	23.02	24.11	23.85	24.56	25.07	25.32	25.49	25.56
7	21.02	21.47	22.17	22.48	23.10	24.18	23.89	24.61	25.08	25.32	25.49	25.56
8	21.25	21.62	22.26	22.52	23.16	24.19	23.93	24.70	25.09	25.33	25.50	25.57
9	21.50	21.77	22.34	22.55	23.25	24.21	23.97	24.71	25.09	25.34	25.50	25.57
10	21.79	21.89	22.38	22.60	23.34	24.25	23.98	24.75	25.10	25.35	25.51	25.58
11	21.97	22.01	22.38	22.64	23.41	24.25	23.98	24.78	25.12	25.36	25.52	25.59
12	22.10	22.13	21.94	22.71	23.46	23.95	23.71	24.70	25.13	25.36	25.52	25.59
13	22.21	22.24	21.96	22.76	23.52	23.75	23.73	24.77	25.15	25.37	25.52	25.59
14	22.34	22.35	22.05	22.80	23.57	23.43	23.78	24.74	25.16	25.37	25.53	25.57
15	22.46	22.38	22.12	22.81	23.62	23.08	23.84	24.72	25.18	25.38	25.52	25.54
16	22.55	21.60	22.21	22.82	23.66	23.10	23.92	24.72	25.19	25.38	25.52	25.52
17	22.57	20.43	22.29	22.82	23.70	23.11	23.99	24.72	25.21	25.39	25.53	25.50
18	22.54	20.58	22.37	22.81	23.75	23.10	24.04	24.73	25.23	25.40	25.53	25.50
19	22.49	20.78	22.44	22.68	23.78	22.88	24.10	24.75	25.24	25.40	25.53	25.49
20	21.88	20.93	22.50	22.31	23.82	22.95	24.17	24.78	25.24	25.40	25.53	25.30
21	21.92	21.20	22.57	22.32	23.85	23.05	24.21	24.81	25.26	25.41	25.53	25.20
22	22.02	21.33	22.63	22.38	23.88	23.14	24.21	24.85	25.26	25.41	25.53	25.16
23	22.08	21.34	22.66	22.38	23.87	23.26	23.80	24.87	25.25	25.42	25.53	24.83
24	22.10	21.22	22.66	22.37	23.87	23.26	23.72	24.89	25.24	25.42	25.53	24.76
25	21.14	21.22	22.63	22.36	23.87	23.45	23.76	24.93	25.23	25.43	25.53	24.77
26	20.58	21.24	22.63	22.42	23.84	23.53	23.83	24.95	25.23	25.43	25.54	24.82
27	20.58	21.31	22.40	22.48	23.84	23.58	23.90	24.99	25.24	25.44	25.54	.....
28	20.07	21.43	21.75	22.50	23.85	23.58	23.98	25.00	25.24	25.45	25.55	24.64
29	19.09		21.78	22.53	23.88	23.57	24.06	25.00	25.25	25.45	25.55	24.63
30	19.21		21.86	22.60	23.92	23.59	24.13	25.00	25.26	25.46	25.55	24.65
31	19.54		21.95		23.93		24.20	25.00		25.46		24.71

Fr-8. City of Columbus. In Columbus. On Third Avenue. Records available: 1948-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	18.88	21.44	21.32	.....	.....	23.44	23.89	23.98	23.54	.....	24.82
2	.....	19.16	21.59	21.41	.....	.....	23.20	23.86	23.94	23.50	.....	24.89
3	.....	19.36	.....	21.59	.....	.....	23.24	23.84	23.80	23.64	24.60	24.90
4	.....	19.49	.....	21.74	.....	.....	23.24	23.74	23.74	23.71	24.62	24.94
5	20.12	19.58	.....	21.79	.....	23.35	23.28	23.84	23.65	23.80	24.66	24.95
6	18.52	19.61	.....	21.84	.....	23.41	23.27	23.91	23.55	23.86	24.66	24.96
7	.....	19.78	.....	21.84	.....	23.47	23.30	23.94	23.54	23.94	24.62	25.01
8	.....	19.65	22.06	21.57	.....	.....	23.31	24.01	23.03	23.00	24.68	25.03
9	.....	.....	22.08	21.79	.....	.....	22.34	24.06	23.28	23.00	24.70	25.05
10	20.93	.....	22.02	.....	.....	.....	22.47	24.08	23.46	24.01	24.71	25.07
11	20.88	20.09	21.65	.....	.....	.....	22.31	24.14	23.58	24.08	.....	25.06
12	21.05	19.90	21.69	.....	.....	23.42	22.64	24.02	23.72	24.10	.....	25.01
13	21.25	.....	21.75	.....	.....	23.33	22.78	23.62	23.82	24.14	.....	24.93
14	21.44	.....	21.76	.....	.....	23.40	22.98	23.80	23.93	24.17	24.72	24.93
15	21.58	18.44	21.75	.....	.....	23.48	23.16	23.88	23.97	24.20	24.75	24.85
16	21.60	16.28	21.77	.....	.....	23.48	23.31	.....	24.05	24.20	24.77	24.82
17	21.23	17.18	21.88	.....	.....	23.47	23.37	.....	24.10	24.25	24.78	24.84
18	.....	18.45	22.02	.....	.....	23.28	23.45	.....	24.10	24.26	24.78	24.84
19	19.41	18.85	22.10	.....	.....	23.01	23.56	.....	24.12	24.29	24.78	24.64
20	19.16	19.09	22.11	.....	.....	23.16	23.62	.....	24.12	24.32	24.80	24.46
21	19.80	.....	22.12	.....	.....	23.25	23.31	.....	24.16	24.34	24.82	23.91
22	20.55	19.16	22.12	.....	.....	23.36	23.38	24.14	24.04	24.36	24.83	23.79
23	20.55	18.12	22.02	.....	.....	23.48	23.43	24.20	24.00	24.36	24.86	22.69
24	19.95	18.15	21.63	.....	.....	23.59	23.46	24.26	24.10	24.36	24.86	22.81
25	19.16	18.19	21.81	.....	.....	23.56	23.54	24.29	24.10	24.40	24.82	22.81
26	19.12	18.40	21.84	.....	.....	23.63	23.64	24.32	24.14	24.45	24.84	22.81
27	18.65	.....	21.64	.....	.....	23.37	23.72	24.35	24.20	24.47	24.85	.....
28	17.45	.....	19.68	.....	.....	23.17	23.75	24.35	24.22	24.50	24.85	21.54
29	17.88	.....	20.71	.....	22.06	23.31	23.79	24.33	24.25	24.52	24.65	22.20
30	17.88	.....	21.12	.....	22.18	23.41	23.81	24.35	23.22	24.52	24.77	22.35
31	18.40	.....	21.33	.....	22.30	.....	23.88	24.35	.....	24.52	.....	22.34

Fr-10. Ohio State University. Records available: 1944-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.89	41.10	39.64	38.87	38.70	40.22	41.82	42.92	43.55	43.85	43.80	44.00
2	42.91	41.24	39.58	38.95	38.87	40.27	41.88	42.97	43.73	43.80	43.74	44.13
3	42.98	41.14	39.68	38.95	38.98	40.32	41.92	43.09	43.69	43.74	43.82	44.13
4	42.97	40.84	39.62	39.08	39.12	40.32	41.94	43.15	43.69	43.68	43.84	44.02
5	42.80	40.94	39.30	39.00	39.10	40.32	42.00	43.18	43.56	43.66	43.97	44.00
6	42.52	40.92	39.58	38.77	39.03	40.37	42.04	43.22	43.78	43.62	43.98	44.00
7	42.52	40.92	39.78	38.81	39.07	40.62	42.04	43.22	43.78	43.71	43.87	44.00
8	42.10	40.90	39.65	38.98	39.07	40.75	42.08	43.21	43.65	43.72	43.81	44.10
9	42.75	40.88	39.85	39.16	39.12	40.76	42.12	43.30	43.66	43.73	43.85	44.11
10	42.80	40.94	39.48	39.23	39.28	40.78	42.12	43.38	43.70	43.71	43.76	44.07
11	42.76	41.10	39.49	39.12	39.35	40.75	42.12	43.38	43.71	43.66	43.74	43.98
12	42.54	40.93	39.50	39.06	39.45	40.75	42.07	43.35	43.73	43.74	43.76	43.98
13	42.50	40.73	39.53	38.83	39.52	40.72	42.17	43.24	43.69	43.74	43.68	44.11
14	42.55	40.75	39.48	38.91	39.58	40.77	42.18	43.25	43.76	43.73	43.70	44.11
15	42.54	40.52	39.51	38.87	39.67	40.86	42.25	43.28	43.76	43.73	43.77	44.11
16	42.34	40.53	39.52	39.05	39.69	40.87	42.29	43.28	43.73	43.72	43.82	44.13
17	42.41	40.65	39.32	39.04	39.82	40.93	42.35	43.27	43.72	43.78	43.82	44.10
18	42.39	40.50	39.42	38.97	39.87	41.00	42.37	43.26	43.65	43.80	43.93	44.06
19	42.43	40.26	39.64	39.12	39.80	41.04	42.47	43.40	43.68	43.78	43.93	44.04
20	42.48	40.37	39.67	39.24	39.78	41.05	42.50	43.49	43.79	43.81	43.85	44.04
21	42.20	40.36	39.44	39.12	39.77	41.07	42.50	43.32	43.73	43.81	44.04	43.90
22	42.16	40.13	39.25	38.92	39.72	41.18	42.58	43.35	43.69	43.88	44.04	43.90
23	42.12	40.07	39.43	38.92	39.83	41.28	42.70	43.38	43.75	43.89	43.88	44.12
24	41.77	39.91	39.42	39.08	39.89	41.28	42.71	43.45	43.78	43.87	.....	44.20
25	41.82	39.81	39.37	39.15	40.00	41.35	42.74	43.40	43.79	43.87	43.84	44.20
26	41.68	39.80	39.37	38.92	39.88	41.56	42.77	43.40	43.77	43.93	43.84	44.02
27	41.48	39.62	39.13	38.83	39.92	41.57	42.83	43.40	43.72	43.93	43.85	44.03
28	40.95	39.49	39.12	38.96	39.95	41.61	42.87	43.40	43.62	43.87	43.85	44.09
29	41.31	.....	39.16	38.88	40.04	41.70	42.87	43.48	43.68	43.83	43.77	44.13
30	41.33	.....	38.98	38.82	40.03	41.75	42.87	43.50	43.80	43.79	43.92	44.13
31	41.05	.....	38.83	.....	40.07	.....	42.92	43.45	.....	43.80	.....	44.12

Fr-11. City of Columbus test well in Nelson Park, 15 feet from Alum Creek. Records available: 1949.

Lowest daily water level, from recorder graph											
Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	....	0.24	....	0.70	1.01	0.95	1.32	2.01	1.72	1.88	
2	....	.24	....	.63	.95	....	1.30	2.00	1.62	1.95	
3	....	....	0.30	.83	.99	....	1.20	1.50	1.70	1.93	
4	....	....	.33	.74	.97	....	1.18	1.36	1.70	1.77	
5	....	....	.30	.81	.81	....	1.14	1.34	1.80	1.78	
6	....	....	.26	.81	.81	....	1.22	1.36	1.75	1.76	
7	....	....	.28	.88	.96	....	1.20	1.38	1.63	1.83	
8	....	....	.28	.80	1.06	....	1.22	1.38	1.67	1.91	
9	....	....	.28	.78	.85	1.20	1.25	1.37	2.96	1.90	
10	....	....	.38	.75	.92	1.08	1.28	2.22	3.28	1.74	
11	....	....	.52	.73	.88	1.06	1.27	2.13	3.45	1.73	
12	....	....	.39	.76	.81	1.15	1.25	2.57	2.25	1.78	
13	....	....	.40	.62	.90	1.00	1.20	2.70	1.88	3.48	
14	....	.10	.40	.65	.82	1.05	1.26	2.70	1.84	3.93	
15	....	.18	.41	.65	.88	1.05	1.23	1.73	1.84	4.17	
16	....	.24	.46	.65	.93	1.05	1.22	1.56	1.83	4.33	
17	....	.24	.49	.66	1.00	1.03	1.25	1.58	1.80	2.06	
18	....	.20	.48	.69	.90	1.08	1.20	1.58	1.84	1.93	
19	....	.25	.41	.87	.91	1.13	1.26	1.58	1.81	1.98	
20	0.59	.27	.48	.69	1.06	1.20	1.34	1.54	1.78	1.89	
21	.72	.20	.45	.82	.93	1.19	1.30	2.07	1.92	1.74	
22	.65	....	.46	.83	.90	1.14	1.22	1.59	1.92	1.78	
23	.49	....	.56	.80	.96	1.19	1.29	1.60	1.75	1.94	
24	.41	....	.56	.88	1.03	1.20	1.34	2.73	1.74	1.94	
25	.36	....	.58	.76	.88	1.23	1.34	2.86	1.82	....
26	.36	....	.55	.80	.99	1.31	1.30	3.07	1.83	....
27	....	....	.56	.76	.95	1.30	1.21	2.10	1.82	1.74	
28	....	....	.58	.88	.92	1.13	1.70	1.80	1.82	1.77	
29	.27	....	.61	.88	1.00	1.16	2.01	1.72	1.73	1.75	
30	.14	....	.60	.91	1.06	1.30	2.17	1.64	1.74	1.76	
31	.07	....	.56	....	1.12	1.20	....	1.74	....	1.69	

Fulton County

Fn-1. City of Delta. In Delta. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	63.10	63.63	63.41	63.24	63.25	.....	63.70	63.63	63.71	64.00	63.60	63.56
2	63.19	63.81	63.39	63.29	63.33	63.45	63.72	63.58	63.80	63.89	63.37	63.86
3	63.36	63.66	63.52	63.33	63.50	63.52	63.72	63.70	63.73	63.76	63.52	63.87
4	63.35	63.27	63.36	63.43	63.55	63.49	63.61	63.78	63.60	63.65	63.62	63.53
5	63.14	63.38	62.82	63.33	63.50	63.41	63.57	63.82	63.60	63.74	63.83	63.54
6	62.82	63.37	63.36	62.98	63.40	63.33	63.53	63.82	63.72	63.58	63.76	63.57
7	62.86	63.29	63.54	62.98	63.43	63.62	63.63	63.77	63.78	63.61	63.52	63.54
8	63.04	63.25	63.31	63.23	63.40	63.77	63.67	63.66	63.63	63.67	63.45	63.75
9	63.42	63.37	63.12	63.43	63.36	63.76	63.62	63.64	63.72	63.56	63.52	63.92
10	63.70	63.54	63.14	63.54	63.56	63.71	63.67	63.67	63.80	63.60	63.39	63.74
11	63.69	63.74	63.16	63.42	63.57	63.58	63.71	63.67	63.78	63.48	63.39	63.59
12	63.40	63.38	63.28	63.26	63.44	63.45	63.73	63.64	63.76	63.66	63.42	63.65
13	63.22	63.33	63.34	62.94	63.38	63.38	63.52	63.64	63.60	63.74	63.24	63.83
14	63.36	63.33	63.34	62.93	63.47	63.37	63.50	63.67	63.68	63.75	63.18	63.85
15	63.35	63.20	63.47	62.98	63.51	63.44	63.53	63.67	63.67	63.75	63.26	63.89
16	63.32	63.33	63.47	63.20	63.51	.....	63.60	63.69	63.56	63.68	63.35	63.83
17	63.54	63.66	63.27	63.20	63.57	63.46	63.53	63.62	63.54	63.69	63.36	63.73
18	63.53	63.46	63.40	63.20	63.47	63.60	63.52	63.46	63.43	63.73	63.51	63.60
19	63.86	63.33	63.62	63.48	63.31	63.63	63.50	63.65	63.49	63.71	63.47	63.67
20	63.99	63.70	63.65	63.57	63.39	63.53	63.53	63.76	63.66	63.66	63.30	63.61
21	63.69	63.70	63.33	63.45	63.33	63.44	63.56	63.82	63.60	63.56	63.74	63.23
22	63.78	63.40	63.09	63.26	63.08	63.42	63.71	63.79	63.49	63.54	63.75	63.27
23	63.78	63.53	63.36	63.15	63.24	63.44	63.86	63.63	63.61	63.71	63.41	63.80
24	63.56	63.37	63.40	63.57	63.40	63.27	63.82	63.71	63.73	63.80	63.40	64.06
25	63.73	63.52	63.30	63.61	63.43	63.30	63.69	63.79	63.80	63.78	63.44	64.05
26	63.60	63.56	63.34	63.31	63.36	63.38	63.64	63.71	63.79	63.93	63.50	63.67
27	63.46	63.33	62.95	63.53	63.42	63.46	63.67	63.63	63.60	63.96	63.40	63.64
28	63.20	63.28	63.33	63.67	63.47	63.50	63.63	63.53	63.49	63.79	63.40	63.79
29	63.78		63.36	63.58	63.53	63.56	36.64	63.50	63.63	63.68	63.17	63.99
30	63.86		63.29	63.38	63.49	63.64	63.61	63.53	63.90	63.51	63.41	63.06
31	63.50		63.04		.....		63.67	63.47		.....		63.97

Fn-2. Village of Wauseon. 2 miles south of Wauseon. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	57.30	.....	57.16	57.02	57.14	57.64	57.60	57.80	58.13	57.90	57.98
2	57.44	57.44	.....	57.18	57.07	57.20	57.66	57.55	57.87	58.04	57.68	58.25
3	57.25	57.36	.....	57.24	57.28	57.26	57.66	57.68	57.79	57.96	57.82	58.25
4	57.20	57.01	.....	57.30	57.27	57.27	57.57	57.74	57.70	57.87	57.92	57.96
5	56.96	57.12	.....	57.21	57.24	57.20	57.55	57.79	57.67	57.96	58.10	57.99
6	56.76	57.04	.....	56.88	57.22	57.13	57.51	57.77	57.80	57.83	58.04	57.99
7	56.87	57.04	.....	56.87	57.22	57.40	57.59	57.74	57.74	57.86	57.84	57.99
8	57.02	57.00	57.71	57.10	57.22	57.55	57.64	57.64	57.70	57.91	57.82	58.22
9	57.34	57.03	57.62	57.22	57.16	57.56	57.58	57.64	57.79	57.89	57.86	58.30
10	57.59	57.25	57.51	57.27	57.33	57.49	57.62	57.68	57.85	57.83	57.75	58.13
11	57.50	57.35	57.50	57.20	57.34	57.37	57.64	57.69	57.83	57.70	57.78	58.02
12	57.33	57.17	57.54	57.08	57.20	57.29	57.56	57.63	57.80	57.87	57.80	58.08
13	57.15	57.05	57.56	56.82	57.20	57.22	57.45	57.64	57.68	57.97	57.63	58.23
14	57.24	57.00	57.48	56.78	57.24	57.20	57.46	57.68	57.75	57.96	57.59	58.25
15	57.24	56.96	57.57	56.86	57.24	57.25	57.50	57.69	57.74	58.00	57.69	58.27
16	57.15	57.00	57.52	57.00	57.26	57.25	57.54	57.72	57.65	57.94	57.76	58.23
17	57.31	57.35	57.30	56.97	57.27	57.24	57.49	57.64	57.64	57.94	57.78	58.13
18	57.26	57.22	57.39	56.88	57.21	57.36	57.46	57.49	57.66	58.00	.....	58.04
19	57.48	57.06	57.59	57.28	57.06	57.40	57.46	57.66	57.59	57.98	.....	58.10
20	57.56	57.44	57.54	57.36	57.10	57.33	57.51	57.77	57.74	57.88	.....	58.04
21	57.43	57.44	57.22	.....	57.03	57.26	57.53	57.85	.....	57.80	58.12	57.72
22	57.44	57.19	57.06	57.11	56.76	57.26	57.66	57.77	57.53	57.81	58.13	57.75
23	57.43	57.28	57.30	56.98	56.96	57.27	57.77	57.70	57.73	57.94	57.86	58.22
24	57.28	57.20	57.30	57.25	57.13	57.16	57.74	57.78	57.82	58.07	57.85	58.44
25	57.42	57.31	57.23	57.26	57.14	57.23	57.65	57.84	57.87	58.04	57.87	58.41
26	57.34	57.81	57.26	57.08	57.11	57.32	57.60	57.78	57.86	58.15	57.92	58.12
27	57.20	57.22	56.90	57.28	57.12	57.40	57.64	57.72	57.66	58.18	57.82	58.08
28	56.97		57.23	57.38	57.13	57.45	57.65	57.63	57.60	58.02	57.83	58.21
29	57.50		57.24	57.33	57.23	57.50	57.60	.....	57.76	57.94	57.64	58.38
30	57.53		57.22	57.12	57.22	57.57	57.58	57.63	58.03	57.79	57.86	58.42
31	57.17		57.00		57.15		57.65	57.57		57.90		58.35

Geauga County

Ge-1. Village of Chardon. In Chardon. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	53.40	53.45	52.97	52.48	52.25	52.21	53.93	54.79	55.74	57.19	57.47	57.87
2	53.62	53.47	52.96	52.51	52.29	52.23	53.95	54.70	55.83	57.13	57.39	58.00
3	.....	53.33	53.03	52.45	52.46	52.32	53.92	54.78	55.81	57.04	57.57	58.03
4	53.80	53.99	52.90	52.56	52.49	52.31	53.91	54.83	55.81	56.90	57.70	57.75
5	53.64	53.15	52.46	52.44	52.39	52.33	53.94	54.86	55.90	57.04	57.77	57.84
6	53.28	53.15	52.97	52.34	52.27	52.31	53.97	54.86	55.99	56.97	57.82	57.90
7	53.40	54.15	53.13	52.34	52.42	52.60	54.15	54.86	55.96	57.17	57.74	57.95
8	53.60	54.10	52.91	52.57	52.42	52.75	54.22	54.84	55.94	57.23	57.86	58.18
9	53.84	53.20	52.60	52.77	52.37	52.72	54.22	54.87	56.12	57.22	57.90	58.34
10	53.97	53.26	52.30	52.82	52.58	52.60	54.29	54.97	56.25	57.20	57.81	58.18
11	53.92	53.51	52.62	52.62	52.59	52.47	54.31	54.98	56.32	57.16	57.91	58.07
12	53.60	53.23	52.73	52.46	52.49	52.45	54.24	54.93	56.35	57.34	57.96	58.09
13	53.44	53.12	52.83	52.18	52.48	52.46	54.24	54.97	56.24	57.41	57.81	58.22
14	53.69	53.11	52.80	52.31	52.51	52.54	54.24	55.05	56.34	57.37	57.74	58.12
15	53.68	53.08	52.86	52.27	52.55	52.61	54.29	55.10	56.34	57.31	57.88	58.13
16	53.58	53.10	52.85	52.62	52.56	52.63	54.35	55.10	56.38	57.38	57.92	.....
17	53.69	53.36	52.67	52.62	52.63	52.68	54.36	55.05	56.49	57.50	57.90	.....
18	53.69	53.22	52.78	52.54	52.62	52.85	54.43	54.84	56.46	57.54	57.96	58.10
19	.....	53.02	53.03	52.60	52.54	52.95	54.46	54.98	56.44	57.53	57.90	58.23
20	.....	53.26	53.04	52.88	52.62	53.01	54.53	55.08	56.60	57.52	57.83	58.21
21	.....	53.26	52.70	52.72	52.57	53.00	54.57	55.03	56.60	57.48	58.19	58.04
22	.....	52.95	52.48	52.52	52.26	53.07	54.68	55.01	56.44	57.58	58.22	58.16
23	.....	53.09	52.76	52.37	52.44	53.14	54.82	54.82	56.57	57.66	57.95	58.62
24	53.56	52.96	52.78	52.76	52.36	53.15	54.84	54.89	56.75	57.79	57.95	58.80
25	53.66	53.02	52.59	52.80	52.43	53.26	54.74	54.95	56.82	57.75	57.99	58.77
26	53.56	53.07	52.63	52.45	52.23	53.42	54.74	54.95	56.80	57.76	58.06	58.37
27	53.38	52.86	52.26	52.56	52.26	53.58	54.78	54.97	56.61	57.80	57.97	58.35
28	53.30	52.67	52.67	52.68	52.27	53.64	54.78	55.01	56.56	57.60	57.97	58.47
29	53.55		52.68	52.60	52.30	53.74	54.75	55.26	56.80	57.51	57.64	58.61
30	53.61		52.50	52.40	52.30	53.83	54.70	55.36	57.11	57.43	57.73	58.66
31	53.44		52.30		52.20		54.80	55.34		57.46		58.54

Ge-2. D. L. Cameron. 5 miles southwest of Burton. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.91	13.00	12.43	11.40	11.49	12.59	13.96	14.58	14.84	15.22	15.42	15.59
2	13.99	13.08	12.43	11.43	11.73	12.70	13.97	14.41	14.85	15.22	15.41	15.41
3	14.01	13.01	12.50	11.50	11.84	12.78	14.01	14.43	14.84	15.23	15.41	15.58
4	14.06	13.02	12.45	11.63	11.91	12.81	14.04	14.47	14.86	15.23	15.42	.....
5	14.00	13.08	12.22	11.62	11.96	12.89	14.06	14.50	14.89	15.24	15.43	.....
6	13.72	13.06	12.28	11.51	12.01	12.98	13.98	14.52	14.94	15.25	15.42	15.30
7	13.78	13.06	12.37	11.47	12.16	13.15	14.02	14.54	14.94	15.28	15.42	15.28
8	13.82	13.04	12.24	11.49	12.19	13.18	14.05	14.56	14.92	15.27	.....	15.29
9	13.84	12.97	12.13	11.62	12.30	13.21	14.04	14.62	14.94	15.28	15.47	15.25
10	13.86	13.03	12.18	11.66	12.45	13.23	.....	14.62	14.97	15.29	15.46	15.22
11	13.81	13.16	12.21	11.62	12.47	13.28	.....	14.62	14.99	15.29	15.48	15.16
12	13.75	12.88	12.25	11.63	12.55	13.32	14.05	14.64	14.99	15.32	15.48	.....
13	13.74	12.85	12.28	11.62	12.58	13.37	14.10	14.67	15.05	15.32	15.47	15.12
14	13.88	12.79	12.16	11.76	12.69	13.40	14.15	14.70	15.06	15.32	15.47	15.10
15	13.84	13.40	12.20	11.78	12.73	13.46	14.19	14.70	15.06	15.43	15.51	15.10
16	13.80	12.48	12.16	11.90	12.82	13.47	14.22	14.73	15.08	15.34	15.51	15.11
17	13.81	12.62	12.15	11.90	12.87	13.50	14.22	14.73	15.09	15.36	15.51	15.11
18	13.54	12.50	12.24	.....	12.89	13.55	14.22	14.76	15.09	15.35	15.52	15.07
19	13.72	12.46	12.33	.....	12.90	13.58	14.27	14.80	15.10	15.35	15.48	14.99
20	13.74	12.69	12.32	.....	12.75	13.60	14.26	14.83	15.14	15.36	15.50	14.94
21	13.56	12.68	12.18	.....	12.55	13.63	14.21	14.85	15.13	15.38	15.50	14.93
22	13.57	12.53	12.01	.....	12.45	13.69	14.15	14.88	15.13	15.40	15.47	14.87
23	13.54	12.47	11.84	.....	.....	13.73	14.18	14.89	15.15	15.40	15.50	14.89
24	13.35	12.33	11.80	.....	.....	13.77	14.20	14.94	15.16	15.40	15.50	14.88
25	13.34	12.37	11.74	.....	.....	13.78	14.23	14.95	15.17	15.40	15.47	.....
26	13.17	12.35	11.74	11.43	.....	13.79	14.29	14.95	15.17	15.39	15.47	.....
27	13.04	12.20	11.51	11.43	.....	13.78	14.32	14.99	15.18	15.39	15.47	14.68
28	12.90	12.31	11.49	11.42	.....	13.85	14.34	14.97	15.17	15.39	15.46	14.67
29	13.07	.....	11.50	11.38	.....	13.88	14.35	14.93	15.19	15.39	.....	14.68
30	13.07	.....	11.50	11.45	.....	13.92	14.35	14.90	15.21	15.39	15.39	14.66
31	12.93	.....	11.47	.....	12.51	.....	14.31	14.90	.....	15.43	.....	14.62

Ge-3. Village of Chagrin Falls. About 3 miles southeast of Chagrin Falls in municipal well field. Drilled well in sandstone. Records available: 1948-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	61.98	53.71	55.61	56.00	42.73	43.57	47.30	57.32	47.02	56.45	54.82	54.75
2	.....	.....	48.55	56.00	51.80	53.85	45.90	47.50	51.80	46.35	45.73	52.55
3	.....	.....	51.80	46.21	54.90	56.60	54.60	55.10	57.02	54.15	44.35	55.40
4	.....	57.60	56.22	44.95	45.10	52.03	57.50	57.80	.....	55.46	43.75	45.60
5	.....	49.42	48.00	47.20	43.50	53.50	48.70	49.00	.....	46.20	43.26	43.65
6	.....	.....	46.75	57.38	52.40	45.50	55.50	.....	.....	54.60	53.41	53.90
7	.....	.....	54.80	45.61	55.70	53.05	57.45	.....	.....	56.31	55.00	55.80
8	.....	.....	58.00	44.33	.....	55.96	47.00	58.30	.....	46.35	45.35	45.40
9	.....	58.21	48.00	45.90	.....	46.60	55.80	47.71	.....	44.70	43.80	54.95
10	.....	49.12	53.25	45.78	.....	55.15	58.35	57.01	.....	51.15	43.10	56.70
11	.....	55.00	56.10	52.70	55.50	56.60	47.60	58.31	.....	56.00	42.51	46.00
12	.....	57.76	57.60	54.80	46.50	46.45	56.00	56.60	.....	46.01	52.10	44.10
13	.....	49.49	46.75	45.25	43.90	55.25	58.50	57.92	.....	55.65	43.38	47.66
14	.....	54.70	55.10	43.83	42.90	57.08	47.80	53.70	.....	56.80	42.40	56.45
15	.....	56.80	57.95	43.30	54.25	46.68	56.30	55.52	.....	46.30	53.25	45.90
16	.....	48.87	47.95	47.30	56.50	53.88	58.25	48.20	56.50	44.60	54.80	44.22
17	.....	47.85	46.55	55.11	45.80	56.30	47.61	56.70	48.40	52.20	44.75	43.41
18	.....	50.89	54.80	44.41	53.33	46.55	56.70	58.31	45.85	54.98	52.15	.....
19	.....	51.70	58.17	43.42	56.20	55.10	58.30	47.60	55.65	50.95	54.45	46.25
20	.....	47.59	48.51	48.03	46.70	56.88	56.45	55.90	57.42	53.10	44.10	54.64
21	58.80	47.21	46.70	55.05	44.35	53.00	58.43	58.20	47.01	50.90	43.10	56.21
22	61.30	51.68	54.30	45.10	43.01	56.65	47.68	54.65	54.65	52.30	55.80	45.92
23	52.30	53.68	57.02	43.50	51.40	47.50	46.02	56.76	57.05	45.30	55.60	44.42
24	58.25	47.99	47.32	42.93	54.80	55.65	44.96	57.20	47.20	53.70	45.10	52.60
25	50.85	52.96	46.10	42.85	46.70	57.10	55.90	56.45	45.48	55.17	43.08	54.67
26	55.80	54.95	47.80	51.80	.....	46.90	57.17	48.97	55.25	53.60	42.80	45.30
27	58.20	47.70	51.28	54.38	43.15	51.95	46.55	58.15	56.75	56.60	50.55	43.65
28	58.03	53.27	45.85	44.85	42.80	54.38	55.98	59.70	46.58	55.00	53.53	51.85
29	49.75	.....	45.20	43.36	53.00	47.80	57.60	55.71	42.85	57.18	51.20	54.80
30	51.30	.....	44.73	43.60	55.90	56.20	46.90	58.75	54.15	46.80	52.46	44.75
31	52.80	.....	53.20	.....	46.08	.....	55.40	49.60	.....	52.80	.....	43.47

Greene County

Gr-1. Xenia Water Works. About 2.8 miles north of Xenia. Records available: 1944-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.14	5.66	6.13	6.26	7.20	8.49	7.71	8.62	7.60	8.14	9.14	8.80
2	7.10	5.77	6.27	6.33	7.25	8.32	7.70	8.90	7.62	8.22	9.17	8.78
3	7.22	5.86	6.24	6.46	7.45	8.63	7.56	8.95	7.70	8.12	8.73	8.85
4	7.30	6.06	6.29	6.52	7.70	8.70	7.56	9.00	7.72	8.13	8.58	8.92
5	1.52	6.09	6.33	6.53	7.79	8.43	7.92	8.78	7.78	8.12	9.00	8.92
6	3.95	6.08	6.31	6.53	8.00	8.63	8.26	8.95	7.74	8.12	9.67	8.91
7	4.77	6.19	6.33	6.61	7.78	8.32	8.53	8.93	7.80	8.13	8.63	8.95
8	4.82	6.24	6.40	6.62	7.33	8.45	8.50	8.95	7.87	8.10	....	8.91
9	5.43	6.13	6.47	6.67	7.25	8.92	8.20	9.04	8.02	8.11	....	8.89
10	5.50	6.30	6.41	6.65	7.26	8.90	7.71	8.82	8.93	8.58	....	8.94
11	5.50	6.23	5.68	7.00	7.27	8.87	8.12	9.05	8.30	8.33	....	8.97
12	5.52	6.28	5.95	6.74	7.33	8.10	8.23	8.60	8.14	8.24	....	8.68
13	5.57	6.30	6.10	6.75	7.80	8.18	8.18	8.71	....	8.19	....	8.74
14	5.65	6.32	6.22	6.74	7.80	7.90	8.43	8.17	....	8.16	....	8.70
15	5.83	5.85	6.75	6.82	7.33	7.65	8.21	7.90	....	8.24	8.67	8.60
16	5.83	4.48	6.51	7.04	8.23	6.41	8.33	8.34	....	8.22	9.15	8.89
17	5.52	5.30	6.48	6.82	8.32	6.17	7.88	8.60	....	8.54	8.70	8.91
18	5.50	5.62	6.98	6.65	8.37	6.42	7.88	8.63	....	8.26	8.60	8.91
19	5.12	5.70	6.68	6.68	8.50	6.60	8.20	8.54	9.30	8.27	8.65	8.67
20	5.53	5.73	6.62	6.80	8.20	7.00	7.56	8.37	9.52	8.27	8.62	8.63
21	5.68	5.83	6.65	6.75	7.93	7.52	8.08	8.00	9.43	8.30	8.70	8.58
22	5.71	5.80	6.72	6.77	8.06	7.60	7.26	8.53	9.14	8.70	8.69	8.47
23	5.70	5.60	6.60	6.83	8.37	8.12	7.64	8.62	9.13	8.40	8.75	8.49
24	5.41	5.77	6.66	6.82	8.29	7.98	7.96	8.77	8.90	8.69	8.75	8.43
25	4.23	5.83	6.55	6.92	7.80	7.30	8.22	8.76	8.50	8.62	8.70	8.45
26	4.40	5.94	6.57	6.92	8.16	7.66	8.35	8.91	8.82	8.50	8.80	8.50
27	4.28	6.03	5.71	7.00	7.80	6.60	8.57	8.94	8.45	8.51	8.82	8.23
28	2.71	6.27	5.70	7.09	8.13	6.90	8.90	8.72	8.30	8.50	8.80	8.03
29	4.60		5.94	7.10	8.22	7.00	8.88	8.02	8.12	8.83	8.81	8.04
30	5.13		6.08	7.13	8.16	7.42	8.68	8.05	8.12	8.57	8.80	8.11
31	5.50		6.22		8.20		8.56	8.02		9.18		8.09

Hamilton County

H-1. Ohio Division of Water test well. 1800 feet from Whitewater River on Kirby Road. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 16	a23.46	Dec. 2	23.69	Dec. 12	23.63	Dec. 23	22.94
17	a23.47	3	23.71	13	23.42	24	22.98
18	a23.49	4	23.72	14	23.47	25	23.03
19	a23.50	5	23.75	15	23.59	26	23.05
20	a23.51	6	23.77	17	23.59	27	22.22
21	a23.52	7	23.78	18	23.61	28	22.39
22	a23.53	8	23.78	19	23.43	29	22.47
23	a23.54	9	23.81	20	23.29	30	22.50
24	a23.67	10	23.82	21	23.25	31	22.51
Dec. 1	23.68	11	23.82	22	23.02		

a Estimated.

T-8. St. Rita School for Deaf Children. Near crossing of Glendale-Milford Road and Pennsylvania railroad tracks. Records available: 1939-49.

Jan.	3	17.53	Mar.	28	11.95	June	20	16.59	Sept.	26	18.37
	10	11.57	Apr.	4	12.22		27	16.81	Oct.	3	18.03
	17	12.89		11	12.50	July	11	17.18		10	18.14
	24	13.71		18	13.11		18	17.35		17	18.61
	31	7.56		25	13.40	Aug.	1	17.63		24	18.70
Feb.	7	8.07	May	2	13.88		15	17.86		31	18.79
	14	9.84		9	14.35		22	17.97	Nov.	7	18.90
	21	8.42		16	14.83		29	17.05		14	18.98
	28	9.33		23	15.30	Sept.	5	18.14		21	19.06
Mar.	7	10.15	June	6	16.03		12	18.23	Dec.	5	19.29
	14	10.90		13	16.33		19	18.31		19	19.43
	21	11.61									

T-67. Emmit Ferris. In Sycamore Township. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	3.36	Apr. 4	2.34	July 11	4.96	Oct. 10	6.18
10	1.52	11	2.74	18	5.37	17	6.30
17	1.42	18	2.91	25	5.37	24	6.43
24	.20	25	3.10	Aug. 1	5.54	31	6.51
31	1.50	May 2	3.25	8	5.20	Nov. 7	6.77
Feb. 7	1.59	9	3.37	15	5.33	14	6.90
14	.86	16	3.70	22	5.79	21	7.04
21	1.41	24	3.87	29	5.55	29	7.12
28	2.21	30	4.21	Sept. 5	5.52	Dec. 5	7.28
Mar. 7	2.55	June 6	4.58	12	5.90	12	6.84
14	2.23	20	4.69	19	6.01	19	6.68
21	2.36	27	3.91	26	6.15	26	6.72
28	.84	July 5	3.90	Oct. 3	6.33		

T-74. Frederick Hauck. 0.5 mile east of Crescentville, in Sycamore Township. Records available: 1940-49.

Jan. 5	2.18	Apr. 6	6.03	July 13	10.54	Oct. 12	12.70
12	5.32	13	6.48	20	11.06	18	12.96
19	4.63	20	6.80	28	11.33	26	13.22
26	2.07	27	6.92	Aug. 3	11.60	Nov. 2	13.42
Feb. 2	5.17	May 2	7.10	10	11.32	9	13.64
9	5.92	11	7.16	17	10.44	16	13.84
16	3.30	18	7.64	24	11.56	23	14.02
23	5.01	25	8.03	31	11.21	30	14.18
Mar. 2	6.04	June 8	9.79	Sept. 14	11.50	Dec. 8	14.45
9	6.37	15	10.30	21	11.88	12	13.85
16	6.12	22	9.53	28	12.20	22	13.20
23	6.28	29	8.70	Oct. 5	12.43	29	12.88
30	4.62	July 6	9.94				

T-75. Frederick Hauck. 0.1 mile east of Crescentville. In Sycamore Township. Records available: 1940-49.

Jan. 5	1.65	Mar. 23	6.55	June 15	8.76	Aug. 31	9.38
12	5.72	30	5.32	22	8.59	Sept. 14	9.45
19	4.62	Apr. 6	6.60	29	8.33	21	9.66
26	2.40	13	6.98	July 6	8.69	28	10.88
Feb. 2	6.11	20	7.21	13	9.00	Oct. 5	10.04
9	6.51	27	7.35	20	9.29	26	10.52
16	3.71	May 2	7.59	28	9.46	Nov. 2	10.65
23	6.70	11	7.65	Aug. 3	9.64	9	10.87
Mar. 2	6.66	18	7.88	10	9.63	Dec. 15	10.88
9	6.67	25	8.02	17	9.48	29	10.13
16	6.64	June 8	8.60	24	9.80		

204-4. Albert Sorter Estate. In Sycamore Township. Records available: 1939-45, 1949. Oct. 31, 13.10.

Lowest daily water level, from recorder graph

Day	Mar.	Apr.	May	June	Sept.	Nov.	Dec.
1	....	6.47	8.44	10.06	....	13.12	13.67
2	7.15	6.80	8.46	10.11	....	13.13	13.71
3	7.25	7.01	8.47	10.12	....	13.15	13.74
4	7.33	7.11	8.50	10.12	....	13.17	13.77
5	7.40	7.27	8.50	10.13	....	13.18	13.80
6	7.45	7.33	8.52	10.14	....	13.20	13.82
7	7.50	7.40	8.53	10.16	....	13.24	13.85
8	7.56	7.45	8.54	10.18	....	13.24	13.90
9	7.60	7.55	8.55	....	....	13.26	13.93
10	7.60	7.65	8.57	....	....	13.28	13.95
11	7.08	7.70	8.67	....	....	13.30	13.98
12	6.92	7.73	8.70	....	....	13.33	14.00
13	7.01	7.82	8.77	....	....	13.35	14.01
14	7.12	7.85	8.87	....	....	13.36	14.01
15	7.19	7.87	8.94	....	....	....	14.05

204-4 --Continued.

Lowest daily water level, from recorder graph

Day	Mar.	Apr.	May	June	Sept.	Nov.	Dec.
16	7.27	7.92	9.02	.....	.....	13.47	14.04
17	7.35	7.96	9.08	.....	.....	13.47	14.05
18	7.39	7.99	9.13	.....	9.17	13.49	14.06
19	7.45	8.04	.....	.....	9.24	13.50	14.07
20	7.48	8.09	.....	.....	9.30	13.52	14.07
21	7.52	8.12	.....	.....	9.37	13.53	14.07
22	7.54	8.15	.....	.....	9.43	13.54	14.07
23	7.60	8.18	.....	.....	9.48	13.56	14.07
24	7.62	8.22	.....	.....	9.52	13.57	14.07
25	7.64	8.25	9.62	.....	9.57	13.57	14.07
26	7.65	8.27	9.67	.....	.....	13.59	14.07
27	6.05	8.34	9.74	.....	.....	13.60	14.07
28	4.37	8.35	9.79	.....	.....	13.62	14.06
29	5.10	8.38	9.85	.....	.....	13.64	14.04
30	5.67	8.42	9.91	.....	.....	13.67	14.04
31	6.07	.....	9.97	.....	.....	.....	14.02

207-3. Village of Glendale. At municipal water plant. Records available: 1938-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	55.36	47.95	42.25	43.05	42.94	47.32	49.41	50.40	52.89	54.38	55.74	57.94
2	53.68	46.47	43.75	42.65	43.33	48.08	51.57	50.42	52.69	54.33	56.04	58.10
3	53.09	.....	42.77	42.42	42.82	47.96	48.30	50.76	52.93	54.04	56.10	57.48
4	52.41	.....	41.62	41.73	43.43	50.83	47.79	50.73	51.82	54.19	56.27	59.35
5	52.55	.....	42.65	42.25	45.14	48.31	48.86	50.76	51.83	54.45	59.15	57.61
6	52.92	.....	40.48	42.37	45.40	48.43	49.60	50.86	51.81	54.55	55.25	.....
7	52.21	39.65	42.75	42.25	45.27	48.57	49.61	50.62	52.49	54.64	55.58	.....
8	52.17	44.12	42.69	42.67	44.20	48.24	49.82	50.88	52.63	56.65	55.66	.....
9	52.55	43.76	44.10	45.65	44.33	48.13	49.29	50.85	52.08	.....	56.67	53.81
10	53.35	43.80	42.36	43.08	44.85	48.55	49.63	50.78	54.55	50.60	56.37	57.97
11	52.15	44.07	41.89	43.04	45.84	48.03	49.35	51.33	52.67	54.91	56.55	57.47
12	51.44	46.07	45.31	42.27	45.00	47.44	48.97	51.09	53.21	55.63	55.85	57.88
13	51.75	42.45	42.20	42.26	45.35	48.27	47.84	53.50	53.35	55.78	55.43	58.15
14	51.60	43.31	42.30	43.28	45.25	48.09	48.53	51.09	53.51	54.80	56.05	58.59
15	53.40	42.96	42.51	43.02	45.09	47.99	47.72	51.08	54.08	55.31	56.89	58.65
16	50.87	43.96	42.45	42.80	45.56	47.96	49.95	50.88	53.75	54.94	56.63	58.64
17	51.39	43.87	42.77	42.43	45.85	47.87	48.45	51.46	53.67	55.13	56.44	58.99
18	50.83	44.77	42.03	42.46	45.94	51.08	49.51	51.33	53.27	55.24	56.44	58.76
19	50.68	43.12	42.32	42.37	46.46	47.30	49.11	51.57	52.98	55.38	55.87	58.93
20	51.12	43.80	41.87	42.47	45.95	47.94	49.55	51.35	53.93	55.55	56.65	58.95
21	50.32	44.34	42.71	42.67	46.02	48.52	49.33	51.53	53.87	55.67	51.85	58.64
22	50.12	44.03	41.84	42.97	47.30	48.90	49.85	51.42	53.86	58.37	56.95	59.16
23	49.11	44.62	41.95	44.63	45.91	50.24	50.27	51.87	53.98	55.58	57.22	59.51
24	49.85	43.38	41.96	42.89	45.59	50.99	49.15	51.55	56.35	55.18	55.87	59.58
25	49.55	44.53	42.56	43.07	45.92	50.77	49.91	51.40	53.82	55.87	56.99	60.59
26	49.67	47.85	43.32	42.89	45.51	48.86	47.87	.....	53.87	55.82	57.12	58.20
27	49.45	43.37	41.46	43.03	45.78	49.68	47.90	.....	54.00	56.18	57.18	58.58
28	49.39	42.07	41.76	43.25	45.48	49.20	47.93	.....	54.01	55.66	57.25	59.36
29	50.75	.....	42.42	43.15	45.29	49.15	48.06	47.24	54.67	55.87	57.63	59.53
30	50.81	.....	42.30	42.96	45.82	49.09	50.45	52.00	54.47	55.03	57.17	59.38
31	48.00	.....	42.08	.....	46.41	.....	48.19	52.28	.....	55.53	.....	58.93

212-1. Johns-Manville Corp. 1 mile southwest of Sharonville, in Sycamore Township. Records available: 1938-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	53.29	47.07	43.50	42.70	43.01	45.75	48.24	49.85	52.47	54.40	56.02	57.77
2	53.29	47.15	43.52	42.65	43.20	46.15	48.29	49.91	52.47	54.27	56.15	57.97
3	54.37	46.52	43.48	42.52	43.31	46.21	48.23	50.15	52.52	54.27	56.31	57.99
4	54.17	45.99	43.30	42.52	43.42	46.32	48.11	50.22	52.48	54.25	56.32	57.87
5	53.95	45.91	42.97	42.28	43.39	46.39	48.17	50.29	52.45	54.39	56.76	57.92

212-1 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	53.70	45.70	43.07	42.45	43.60	46.44	48.35	50.29	52.42	54.47	56.42	57.90
7	53.43	45.57	43.40	42.37	43.68	46.73	48.51	50.30	52.47	54.70	56.28	58.25
8	52.99	45.42	43.17	42.60	43.58	46.80	48.67	50.30	52.59	54.77	56.37	58.45
9	52.77	45.34	42.98	42.89	43.64	46.84	48.63	50.40	52.70	54.73	56.57	58.41
10	52.73	45.35	43.20	42.72	43.95	46.81	48.55	50.47	52.65	54.71	56.51	58.33
11	52.44	45.40	43.22	42.57	43.92	46.85	48.60	50.61	52.81	54.78	56.67	58.31
12	52.44	45.12	43.35	42.39	44.02	46.70	48.58	50.55	52.81	55.01	56.67	58.36
13	52.85	45.00	43.29	42.27	44.11	46.82	48.80	50.68	52.61	55.17	56.63	58.47
14	51.69	44.91	43.13	42.41	44.17	46.81	48.95	50.68	53.05	55.17	56.75	58.52
15	51.60	44.82	43.28	42.63	44.25	46.88	49.00	50.79	53.22	55.20	56.92	58.58
16	51.48	44.78	43.20	42.80	44.42	46.85	48.98	50.86	53.22	55.12	56.93	58.67
17	51.47	44.72	43.02	42.49	44.53	46.99	48.96	50.90	53.23	55.18	57.04	58.69
18	51.26	44.42	43.13	42.73	44.62	47.22	48.97	51.17	53.17	55.25	57.17	58.65
19	51.35	44.15	43.24	42.82	44.62	46.84	49.05	51.28	53.16	55.45	57.05	58.74
20	51.35	44.15	43.19	42.87	44.68	47.17	49.26	51.32	53.43	55.53	57.10	58.72
21	50.84	44.20	42.83	42.80	44.72	47.22	49.32	51.46	53.39	55.52	57.31	58.68
22	50.83	43.90	42.72	42.79	44.62	47.47	49.47	51.45	53.42	55.73	57.30	58.95
23	50.60	43.90	42.96	42.80	44.86	47.65	49.67	51.62	53.64	55.65	57.21	59.27
24	50.30	43.85	42.91	43.02	45.10	47.99	49.73	51.72	53.82	55.72	57.28	59.25
25	50.25	43.80	42.95	43.07	45.22	47.97	49.53	51.81	53.83	55.70	57.37	59.17
26	49.45	43.87	42.85	43.97	45.27	47.81	49.59	51.91	53.83	55.82	57.42	58.97
27	48.90	43.55	42.60	43.01	45.32	48.00	49.73	51.91	53.83	55.86	57.57	59.14
28	48.20	43.47	42.73	43.13	45.47	48.05	49.75	51.87	53.90	55.87	57.52	59.23
29	48.10		42.83	43.07	45.50	48.12	49.77	51.99	54.26	55.88	57.60	59.32
30	48.03		42.76	43.06	45.54	48.12	49.83	51.97	54.35	55.82	57.65	59.37
31	47.20		42.38		45.57		49.86	52.07		56.10		59.40

214-3. Tennessee Corp. In Sycamore Township. Records available: 1939-49.

Lowest daily water level, from recorder graph											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Dec.
1	27.52	11.29	15.41	18.08	20.62	23.08	25.10	26.59	27.86	.....
2	27.52	11.69	15.59	18.13	20.72	23.16	25.15	26.63	27.89	.....
3	27.52	12.01	15.78	18.22	20.81	23.25	25.21	26.67	27.93	.....
4	27.50	12.40	15.94	18.27	20.90	23.32	25.22	26.72	27.95	.....
5	27.50	12.75	16.12	18.31	20.97	23.38	25.22	26.76	.....	.....
6	18.15	13.06	16.34	18.40	21.04	23.45	25.35	26.80	.....	.....
7	17.57	13.33	16.51	18.48	21.12	23.52	25.41	26.85	.....	.....
8	17.34	13.61	16.66	18.59	21.20	23.61	25.46	26.88	.....	.....
9	17.21	13.90	16.77	18.68	21.27	23.68	25.52	26.92	.....	.....
10	17.17	14.22	16.97	18.75	21.34	23.75	25.56	26.95	.....	.....
11	.....	14.45	17.12	18.89	21.42	23.82	25.59	26.99	.....	.....
12	.....	14.71	17.29	18.95	21.49	23.89	25.63	27.03	.....	.....
13	.....	14.95	17.43	19.05	21.57	23.97	25.67	27.07	.....	.....
14	.....	15.12	17.54	.....	21.65	24.02	25.72	27.12	.....	.....
15	.....	15.20	17.67	19.25	21.72	24.08	25.77	27.17	.....	.....
16	.....	13.29	.....	19.34	21.79	24.14	25.82	27.21	.....	.....
17	17.64	12.92	.....	19.42	21.37	24.24	25.89	27.25	.....	30.25	
18	17.71	12.93	.....	19.50	21.94	24.30	25.93	27.29	.....	28.17	
19	17.92	12.14	.....	19.56	22.01	24.37	25.97	27.33	.....	27.34	
20	18.02	13.41	.....	19.64	22.09	24.44	26.03	27.37	.....	.....
21	18.10	13.62	18.36	19.70	22.15	24.47	26.08	27.40	.....	.....
22	18.22	13.85	18.49	19.75	22.26	24.55	26.13	27.48	.....	.....
23	18.30	14.10	18.62	19.85	22.37	24.62	26.17	27.52	.....	.....
24	18.32	14.30	18.70	20.00	22.45	24.67	26.22	27.56	.....	.....
25	12.60	14.56	18.81	20.13	22.52	24.74	26.27	27.60	.....	.....
26	12.00	14.75	18.85	20.20	22.61	24.81	26.30	27.64	.....	.....
27	11.92	14.97	18.74	20.29	22.69	24.89	26.35	27.67	.....	.....
28	11.20	15.22	18.14	20.38	22.77	24.95	26.39	27.72	.....	.....
29	10.30		17.96	20.45	22.85	25.00	26.43	27.77	.....	.....
30	10.57		17.93	20.53	22.94	25.05	26.47	27.80	.....	.....
31	10.85		17.97		23.01		26.52	27.82	.....	.....

215-2. Pennsylvania Railroad Co. 1.3 miles north of Lockland, on H. F. Pittman farm, in Sycamore Township. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	29.62	Apr. 4	26.28	July 11	28.65	Oct. 10	30.55
17	29.09	11	26.25	18	28.75	24	31.10
24	28.67	18	26.31	25	28.82	31	30.75
31	27.87	25	26.47	Aug. 1	28.96	Nov. 7	31.00
Feb. 7	26.72	May 2	26.64	8	29.25	14	30.75
14	26.45	9	26.95	22	29.64	21	30.95
21	26.31	23	27.35	29	29.77	28	30.95
28	26.28	June 6	27.86	Sept. 5	29.85	Dec. 5	30.85
Mar. 7	26.24	13	28.08	12	29.90	12	30.95
14	26.25	20	28.29	19	30.03	19	31.05
21	26.32	27	28.41	26	30.13	26	31.03
28	26.33	July 5	28.51	Oct. 3	30.21		

216-C. Wright Aeronautical Corp. In Lockland. Records available: 1941-49.

Jan. 3	86.17	Apr. 4	81.85	July 5	81.85	Oct. 3	86.40
10	86.50	11	81.36	11	82.01	10	86.56
17	86.17	18	81.29	18	82.14	17	86.99
24	85.73	25	81.23	Aug. 1	82.43	24	86.77
31	85.17	May 2	80.88	8	81.64	31	86.66
Feb. 7	84.60	9	80.67	15	82.89	Nov. 7	86.67
14	84.04	16	90.23	22	84.69	14	86.98
21	83.98	23	90.01	29	84.95	21	87.55
28	83.29	30	90.13	Sept. 5	84.48	28	87.00
Mar. 7	83.13	June 6	80.81	12	84.50	Dec. 5	87.55
14	82.66	13	81.01	19	84.63	12	88.15
21	82.20	20	81.38	26	85.89	19	88.41
28	82.07	27	81.57				

216-E. Wright Aeronautical Corp. In Lockland. Records available: 1941-49.

Lowest daily water level, from recorder graph											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	67.95	66.90	64.39	62.70	61.67	61.95	63.32	63.96	69.29	70.50	70.50
2	67.92	66.92	64.35	62.71	61.82	62.02	63.35	63.97	69.38	70.77	71.20
3	68.02	66.67	64.31	62.69	61.97	62.12	63.30	64.12	69.27	69.86	71.40
4	.....	66.15	64.14	62.78	61.99	62.11	63.20	64.27	66.50	70.07	69.05
5	.....	66.07	63.72	62.58	61.94	62.04	63.22	64.34	66.10	70.22	69.03
6	.....	65.98	63.99	62.28	61.79	62.06	63.21	64.32	66.15	70.17	68.87
7	.....	65.94	64.17	62.28	61.75	62.35	63.31	64.24	66.06	70.48	68.55
8	.....	65.87	63.96	62.43	61.68	62.55	63.46	64.21	66.82	70.65	71.07
9	.....	65.82	63.63	62.54	61.63	62.56	63.50	64.26	69.04	68.35	71.33
10	68.28	65.93	63.64	62.55	61.83	62.60	63.45	64.33	66.63	69.90	71.37
11	68.27	66.05	63.70	62.36	61.86	62.47	63.51	64.41	66.31	70.44	71.50
12	67.98	65.69	63.71	62.18	61.90	62.35	63.51	64.31	66.20	70.86	69.15
13	67.82	65.44	63.74	61.82	61.87	62.36	63.47	64.32	66.02	71.09	68.86
14	67.78	65.42	63.65	61.90	61.84	62.41	63.43	64.32	68.78	71.12	68.86
15	67.77	65.25	63.71	62.10	61.83	62.44	63.54	64.45	69.05	71.16	68.88
16	67.63	65.33	63.69	62.26	61.93	62.47	63.67	67.31	69.20	68.62	71.42
17	67.86	65.60	63.87	62.24	62.01	62.63	63.54	67.55	66.70	70.67	71.75
18	67.83	65.42	63.45	62.24	61.97	62.75	63.64	67.80	66.36	70.92	71.94
19	.....	65.12	63.62	62.42	61.84	62.75	63.67	68.00	66.28	71.02	69.50
20	.....	65.15	63.58	62.47	61.86	62.75	65.88	68.35	.....	71.07	69.14
21	.....	65.15	63.23	62.25	61.77	62.69	66.21	68.42	.....	71.05	69.46
22	.....	64.92	62.92	62.01	61.81	62.77	66.54	68.13	.....	68.70	69.50
23	.....	64.96	63.15	61.94	61.93	62.82	66.73	68.44	.....	68.48	69.05
24	67.40	64.75	63.12	62.19	62.05	62.71	64.48	68.61	.....	68.47	69.03
25	67.56	64.72	63.09	62.26	62.10	62.86	64.12	68.73	.....	68.38	69.26
26	67.38	64.72	63.09	62.00	62.01	62.96	64.05	68.79	.....	71.00	69.32
27	67.19	64.38	62.80	61.95	62.07	63.01	64.10	68.80	.....	71.18	69.27
28	66.97	64.33	63.01	62.08	62.07	63.54	64.08	66.02	69.79	71.20	69.27
29	67.40		63.07	62.00	62.01	63.22	64.36	68.52	70.17	71.27	69.19
30	67.40		62.87	61.84	.....	63.26	63.93	68.72	70.44	68.72	69.44
31	66.76		62.49		.....		63.99	.....		68.52	

236-4. B. I. du Pont de Nemours Co. In Lockland. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	128.77	Apr. 4	127.14	June 27	125.39	Oct. 3	126.83
10	128.75	11	127.01	July 11	125.54	10	125.67
17	128.44	18	126.98	18	126.35	17	125.64
Feb. 7	127.90	25	127.09	25	125.44	31	126.46
21	127.71	May 2	126.55	Aug. 1	125.13	Nov. 7	126.54
28	127.33	9	126.18	8	125.25	14	126.88
Mar. 7	127.61	16	126.35	22	125.44	21	127.48
14	127.43	23	125.93	29	125.53	Dec. 5	126.82
21	127.32	June 6	125.43	Sept. 12	126.42	12	127.39
28	127.14	20	125.89	26	126.22	19	127.05

237-3. Village of Wyoming. At municipal water plant. Records available: 1938-49.

Lowest daily water level, from recorder graph						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	147.90	147.57	147.05	145.68	143.30	145.08
2	147.92	147.74	147.03	144.80	144.92	145.18
3	148.02	147.66	147.03	145.78	145.28	145.20
4	148.05	147.60	146.23	145.22	145.92	144.37
5	147.83	147.67	144.78	144.88	145.88	144.57
6	147.88	147.36	144.35	145.00	145.22	144.94
7	147.90	147.40	145.78	144.93	144.20	145.39
8	147.92	147.06	145.63	145.08	143.28	145.44
9	145.85	146.95	145.50	144.04	144.68	145.78
10	145.65	147.53	145.92	145.68	145.15	145.85
11	146.67	147.32	146.02	144.65	145.22	145.79
12	147.23	147.10	145.09	144.18	145.30	145.72
13	147.32	147.22	144.34	.....	145.31	145.71
14	147.55	147.19	145.33	.....	144.27	145.68
15	147.55	147.03	146.12	144.45	143.35	145.72
16	147.54	147.00	145.72	.....	144.87	145.70
17	147.67	147.67	145.63	.....	145.11	145.60
18	147.28	147.62	146.02	144.57	145.13	144.15
19	148.17	147.40	145.27	144.87	144.95	143.62
20	148.27	147.70	144.43	144.98	145.10	144.92
21	147.91	147.67	145.12	145.30	144.25	145.17
22	148.02	146.93	145.15	145.37	142.78	145.40
23	147.92	147.35	145.53	144.35	144.73	145.15
24	147.63	147.33	145.36	144.88	145.05	145.11
25	147.73	147.37	145.53	145.12	145.08	144.40
26	147.56	147.36	144.00	145.13	145.54	143.30
27	147.50	146.38	145.22	145.38	145.53	144.70
28	147.35	147.75	145.28	145.57	144.65	144.93
29	147.87		145.22	145.45	145.61	145.05
30	147.81		145.31	144.50	144.86	145.23
31	147.34		145.24		145.02	

Lowest daily water level, from recorder graph						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	145.52	144.67	144.83	144.44	143.86	146.06
2	145.55	145.05	144.80	143.33	143.61	146.47
3	143.66	145.32	143.90	144.13	143.95	146.04
4	144.75	145.48	144.15	144.20	143.67	144.77
5	144.89	145.57	144.39	144.13	144.12	146.24
6	144.94	144.55	144.58	143.77	144.08	145.87
7	145.12	.....	144.44	143.87	144.80	145.70
8	145.42	144.67	144.66	144.07	143.94	146.25
9	145.47	145.04	144.68	143.75	143.92	146.26
10	144.52	145.25	144.53	143.90	144.72	145.55
11	144.95	145.32	144.39	143.88	144.76	145.70
12	145.19	145.06	144.11	143.95	144.63	145.61
13	145.33	144.82	144.18	144.12	143.35	145.60
14	145.22	144.53	144.42	143.98	144.57	145.24
15	145.44	144.68	144.37	143.98	144.79	145.37

237-3 --Continued.

Lowest daily water level, from recorder graph						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	144.90	144.76	144.38	143.82	144.62	145.02
17	144.45	144.62	144.15	144.17	144.89	144.81
18	145.06	144.47	.....	144.27	144.97	145.75
19	145.33	144.48	144.07	144.00	144.23	144.94
20	145.48	144.43	144.42	144.05	143.43	144.92
21	145.42	144.57	144.42	143.85	145.18	144.97
22	145.70	144.70	144.28	144.05	145.15	144.70
23	145.78	144.84	144.32	144.02	145.25	145.03
24	144.00	144.82	144.15	144.17	144.35	145.26
25	144.83	144.89	.....	143.78	145.07	144.35
26	145.02	144.86	144.01	144.27	144.52	144.77
27	145.28	144.58	144.12	144.11	143.40	145.17
28	145.40	144.36	144.03	143.92	145.59	145.32
29	145.40	144.61	144.08	143.66	146.02	145.17
30	144.85	144.66	144.35	143.06	145.75	145.20
31	144.67	144.55		143.77		145.21

241-3. Gardner-Richardson Co. On South Cooper Ave., in Lockland.
Records available: 1938-49.

Lowest daily water level, from recorder graph						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	134.37	134.05	133.41	133.15	132.22	131.36
2	134.15	134.15	133.37	133.15	132.32	131.35
3	134.11	133.93	133.41	133.07	132.40	131.42
4	134.08	133.80	133.27	133.14	132.41	131.32
5	133.77	133.87	132.93	132.90	132.27	131.16
6	133.80	133.84	133.35	132.72	132.12	131.05
7	133.80	133.80	133.62	132.75	132.06	131.22
8	133.87	133.69	133.16	132.97	132.05	131.34
9	134.26	133.81	132.93	133.08	131.92	131.30
10	134.31	134.00	133.18	133.08	132.12	131.22
11	134.29	134.14	133.25	132.70	132.10	131.08
12	133.97	133.77	133.33	132.58	132.08	130.91
13	133.94	133.67	133.33	132.40	132.07	131.32
14	134.04	133.65	133.18	132.52	132.14	131.32
15	134.03	133.63	133.30	132.88	132.15	131.26
16	133.84	133.80	133.27	133.07	131.92	131.25
17	134.01	133.95	133.07	133.05	132.00	131.38
18	133.93	133.72	133.36	132.90	131.95	131.50
19	134.35	133.47	133.68	133.01	131.84	131.41
20	134.37	133.68	133.62	133.05	131.84	131.20
21	134.00	133.66	132.90	132.80	131.81	130.60
22	134.16	133.47	132.88	132.57	131.75	130.53
23	134.07	133.58	133.17	132.58	131.84	130.56
24	133.75	133.36	133.25	132.87	131.90	130.43
25	133.98	133.60	133.30	132.88	131.92	130.48
26	133.85	133.64	133.30	132.56	131.84	130.54
27	133.82	133.37	133.07	132.53	131.84	130.47
28	133.92	133.35	133.26	132.65	131.81	130.40
29	134.43		133.30	132.52	131.72	130.37
30	134.43		133.08	132.35	131.63	130.35
31	133.84		133.78		131.38	

Lowest daily water level, from recorder graph						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	130.41	129.00	130.29	130.97	131.12	131.50
2	130.37	129.07	130.32	130.78	131.10	131.75
3	130.26	129.22	130.24	130.51	131.30	131.75
4	130.06	129.37	130.20	130.42	131.35	131.45
5	129.92	129.38	130.09	130.50	131.64	131.43
6	129.86	129.39	130.11	130.52	131.57	131.22
7	129.85	129.35	130.05	130.78	131.13	131.35
8	129.91	129.52	130.20	130.88	131.18	131.65
9	129.88	129.25	130.31	130.91	131.32	131.74
10	129.72	129.37	130.40	130.77	131.22	131.49

241-3 --Continued.

Lowest daily water level, from recorder graph						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	129.95	129.42	130.38	130.72	131.32	131.36
12	129.53	129.40	130.27	131.00	131.42	131.48
13	129.40	129.45	130.25	131.08	131.25	131.65
14	129.35	129.50	130.37	131.07	131.35	131.67
15	129.36	129.50	130.38	131.09	131.55	131.68
16	129.40	129.56	130.37	131.05	131.57	131.68
17	129.48	129.55	130.46	131.06	131.67	131.61
18	129.17	129.55	130.58	131.12	131.84	131.65
19	129.10	129.77	130.39	131.10	131.80	131.78
20	129.05	129.84	130.55	131.07	131.57	131.86
21	129.07	129.97	130.55	131.04	131.66	131.81
22	129.08	129.82	130.48	131.23	131.68	131.95
23	129.15	129.85	130.70	131.24	131.24	132.27
24	129.08	129.92	130.83	131.25	131.19	132.32
25	129.90	130.03	130.82	131.10	131.26	132.17
26	128.84	130.03	130.52	131.28	131.30	131.62
27	130.87	129.98	130.44	131.30	131.40	131.52
28	128.86	129.89	130.48	131.12	131.40	131.62
29	128.82	129.96	130.76	131.12	131.13	131.52
30	128.85	129.98	130.94	130.98	131.35	131.51
31	129.01	129.92		131.12		131.40

246-1. National Distillers Corp. Wayne Ave. and 78th St., in Carthage. Records available: 1944-49.

Lowest daily water level, from recorder graph						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	113.12	110.18	109.80	112.87	114.27
2	.....	113.39	110.50	109.15	113.42	114.58
3	111.30	113.02	110.57	106.80	114.30	114.82
4	114.18	113.39	110.52	106.60	113.94	114.18
5	114.58	112.18	107.69	109.42	114.03	111.66
6	114.90	110.00	108.97	109.42	114.21	114.40
7	115.11	110.68	111.91	109.40	113.50	114.58
8	114.76	113.02	102.80	109.68	110.31	115.02
9	112.36	110.24	102.34	108.97	113.74	115.09
10	113.33	109.98	102.53	106.90	114.22	115.29
11	112.87	110.20	113.03	109.17	114.30	114.91
12	112.44	108.72	112.20	109.26	114.52	111.85
13	113.12	108.22	109.00	110.69	114.64	114.32
14	110.89	110.83	112.00	111.12	111.30	113.89
15	.....	112.50	102.65	111.91	110.87	113.68
16	.....	112.98	102.04	108.99	114.11	114.20
17	112.82	113.36	102.84	108.16	114.50	114.34
18	112.61	112.17	102.45	112.00	114.80	112.50
19	113.82	110.49	110.02	111.96	114.74	111.97
20	.....	109.40	110.00	112.70	114.69	114.63
21	.....	111.48	111.00	112.46	113.09	114.46
22	.....	108.42	110.45	112.91	111.30	115.13
23	.....	110.70	110.70	109.34	114.20	115.30
24	110.55	110.93	110.06	109.42	114.78	115.55
25	111.71	110.56	108.90	112.29	114.86	114.91
26	111.12	110.50	108.22	112.96	115.36	112.33
27	111.00	107.72	107.01	113.14	115.32	116.80
28	110.71	110.10	107.87	113.60	113.87	115.70
29	.....		108.84	113.57	111.58	115.72
30	.....		110.02	113.13	110.97	116.48
31	102.05		110.12	113.90	113.90	

Lowest daily water level, from recorder graph						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	116.49	112.72	115.67	113.80	113.78	102.52
2	115.87	113.00	113.38	113.12	115.12	114.63
3	112.40	113.17	113.00	114.41	115.52	112.20
4	111.72	113.50	112.32	114.68	115.55	111.71
5	114.40	113.47	112.28	114.95	114.52	114.07

246-1 --Continued.

Lowest daily water level, from recorder graph

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	114.32	112.78	112.62	114.88	115.82	113.63
7	114.80	109.24	112.80	115.05	114.90	113.86
8	115.03	113.18	113.95	113.92	115.38	113.40
9	113.48	113.48	113.20	113.16	117.31	113.88
10	110.85	113.90	112.95	114.60	116.63	111.22
11	114.35	114.03	112.61	113.42	116.82	110.85
12	114.67	114.23	113.85	113.92	117.02	112.10
13	114.65	113.92	113.63	115.12	113.45	111.75
14	114.58	111.45	114.52	114.12	116.06	110.68
15	114.82	114.13	114.52	113.54	116.55	110.58
16	113.40	114.60	114.71	113.26	116.88	111.85
17	110.62	114.92	113.55	114.61	117.07	110.46
18	113.67	115.02	112.62	114.83	117.23	110.14
19	113.17	115.20	112.90	114.80	117.12	110.10
20	113.30	115.06	114.28	115.17	114.22	.....
21	113.35	112.00	114.31	115.42	116.95	.....
22	113.22	114.52	113.29	114.25	117.05	.....
23	102.14	114.75	114.60	113.48	114.72	.....
24	110.60	114.92	113.44	113.79	114.59	.....
25	110.16	115.28	112.80	115.17	117.17	.....
26	109.72	115.52	114.39	115.23	114.98	109.53
27	112.73	113.10	114.88	114.19	114.04	111.20
28	112.56	112.23	114.63	114.18	115.03	111.29
29	112.33	112.53	114.97	114.10	114.90	.....
30	109.67	115.12	114.25	113.22	114.92	109.60
31	110.00	115.42		113.70		109.50

252. National Distillers Corp. In Carthage. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	111.02	Mar. 28	110.25	July 11	111.26	Oct. 10	114.25
10	111.01	Apr. 4	110.25	18	111.44	17	114.22
17	110.97	18	110.01	25	111.19	24	124.65
24	110.96	25	110.35	Aug. 1	111.04	31	124.55
31	110.37	May 2	110.22	8	111.06	Nov. 7	125.02
Feb. 7	109.70	9	110.25	15	111.21	14	118.55
14	110.55	16	110.45	22	111.40	21	114.77
21	110.54	23	110.57	29	111.63	28	115.20
28	110.42	June 6	110.74	Sept. 12	111.84	Dec. 5	116.10
Mar. 7	110.49	13	112.55	19	111.67	12	115.31
14	110.35	20	111.05	26	112.15	19	115.75
21	110.84	27	111.15	Oct. 3	112.70	29	115.46

265. Cities Service Oil Co. In Cincinnati. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	135.35	Apr. 4	132.30	July 4	133.06	Oct. 3	134.64
10	133.80	11	131.95	11	132.79	10	134.59
17	133.55	18	131.97	18	132.51	17	134.83
24	133.15	25	132.09	25	132.71	24	134.03
31	132.87	May 2	131.81	Aug. 1	132.91	31	134.63
Feb. 7	133.03	9	131.54	8	133.17	Nov. 7	134.50
14	132.75	16	131.97	15	133.45	14	134.42
21	133.50	23	132.35	22	133.75	21	134.51
28	132.67	30	132.40	29	133.90	28	133.60
Mar. 7	133.39	June 6	132.42	Sept. 5	134.02	Dec. 5	133.61
14	132.80	13	132.61	12	134.21	12	133.29
21	132.15	20	132.86	19	134.34	19	133.07
28	132.30	27	133.07	26	134.57	26	132.82

270-A-4. Procter & Gamble Co. In Ivorydale. Records available: 1939-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	90.50	90.27	89.86	89.46	88.88	90.23	91.25	90.47	91.64	92.14	91.66	90.24
2	90.47	90.27	89.82	89.46	89.02	90.42	90.95	90.62	91.70	91.32	91.82	90.27
3	90.57	90.00	89.82	89.40	89.05	90.50	90.34	90.94	91.68	91.48	91.95	90.22
4	90.59	90.07	89.71	89.49	89.02	90.52	90.02	91.09	90.94	91.68	92.02	89.94
5	90.41	90.08	89.61	89.42	88.93	89.92	89.85	91.27	90.50	91.80	92.12	90.09
6	90.49	90.05	89.86	89.30	88.85	90.14	89.72	91.27	91.06	91.93	91.50	89.95
7	90.48	90.15	89.95	89.30	88.81	90.61	89.60	90.44	91.27	92.05	91.47	89.93
8	90.51	.....	89.70	89.37	88.82	90.77	89.94	90.80	91.56	92.02	91.67	89.99
9	90.64	.....	89.57	89.41	88.88	90.84	89.72	91.07	91.70	91.44	91.75	89.97
10	90.63	.....	89.75	89.38	88.90	90.92	89.45	91.22	91.75	91.49	91.70	89.75
11	90.57	.....	89.75	89.22	89.10	90.90	89.42	91.20	91.23	91.57	91.81	89.65
12	90.33	.....	89.71	89.15	89.36	90.16	89.27	91.33	91.19	91.96	91.87	89.74
13	90.32	.....	89.70	89.12	89.57	90.43	89.19	91.40	91.55	92.03	91.20	89.88
14	90.37	89.88	89.64	89.15	89.62	90.68	89.15	90.70	91.68	92.02	91.28	89.79
15	90.35	90.00	89.75	89.28	89.27	90.91	89.14	90.96	91.74	92.02	91.57	89.72
16	90.35	90.08	89.70	89.33	89.49	91.03	89.12	91.12	91.80	91.35	91.65	89.71
17	90.54	90.16	89.52	89.27	89.77	91.19	89.04	91.22	91.85	91.64	91.73	89.57
18	90.44	89.98	89.67	89.25	89.94	91.25	89.47	91.39	91.07	91.73	91.84	89.50
19	90.69	89.83	89.75	89.28	90.08	90.51	89.62	91.55	91.31	91.80	91.82	89.52
20	90.69	89.93	89.70	89.27	90.25	91.15	89.75	91.30	91.62	91.86	91.06	89.41
21	90.31	90.02	89.47	89.11	90.25	90.62	89.85	90.96	91.72	91.87	91.12	89.38
22	90.43	89.92	89.45	88.97	89.53	90.61	90.32	91.00	91.75	91.85	91.02	89.57
23	90.36	89.97	89.56	88.73	90.05	90.96	90.22	91.30	92.03	91.43	90.55	89.65
24	90.29	89.82	89.54	89.16	90.36	91.09	89.98	91.47	92.07	91.71	90.48	89.64
25	90.37	89.95	89.50	89.21	90.40	91.08	90.12	91.58	91.46	91.73	90.46	89.52
26	90.22	89.95	89.47	89.03	90.51	90.37	90.50	91.63	91.46	91.95	90.45	89.24
27	90.22	89.72	89.46	89.04	90.52	90.58	90.72	91.47	91.55	91.96	90.30	89.37
28	90.32	89.86	89.53	89.13	90.57	90.88	90.86	90.74	91.79	91.87	90.38	89.43
29	90.50		89.58	89.02	89.92	91.04	90.95	91.13	92.02	91.88	90.14	89.35
30	90.50		89.38	88.92	89.72	91.22	90.90	91.31	92.14	91.26	90.20	89.34
31	90.17		89.27		90.01		90.23	91.31		91.62		89.27

270-T7. Procter & Gamble Co. In Ivorydale. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	125.15	Apr. 11	122.95	July 11	123.74	Oct. 10	126.33
10	125.15	18	122.77	18	123.28	17	126.41
17	124.88	25	122.86	25	123.68	24	126.42
31	124.28	May 2	122.51	Aug. 1	124.05	31	125.76
Feb. 7	124.17	9	122.48	8	124.40	Nov. 7	125.70
14	124.15	16	123.05	15	124.84	14	125.48
21	124.08	23	123.54	22	125.28	21	125.32
28	123.53	30	123.97	29	125.32	28	124.50
Mar. 7	123.49	June 6	123.90	Sept. 5	125.60	Dec. 5	124.35
14	123.32	13	124.19	12	125.84	12	123.90
21	123.01	20	124.33	19	118.63	19	123.61
28	124.93	27	124.60	26	126.38	26	123.31
Apr. 4	123.15	July 4	124.49	Oct. 3	126.45		

298-2. Hudepohl Brewing Co. At Stone and 6th Sts., in Cincinnati. Records available: 1944-48. No measurement made in 1949.

301-A. Palace Theater. At Vine and 6th Sts., in Cincinnati. Records available: 1944-48. No measurement made in 1949.

315-3. Globe-Wernicke Co. In Norwood. At Norwood and Carthage Aves. Records available: 1938-48.

300-3. Union Central Life Insurance Co. In Cincinnati. Records available: 1946-49. No measurement made in 1949.

Hancock County

Ha-2. R. E. Ascham. 3.5 miles west of Findlay. Records available: 1947-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.06	1.49	1.51	1.43	2.24	2.73	3.40	....	3.73	5.83	6.15	6.55
2	2.06	1.62	1.63	1.53	1.55	2.85	3.46	4.86	3.80	5.79	6.12	6.60
3	2.23	1.59	1.73	1.74	1.78	2.94	3.48	4.10	3.85	5.78	6.18	6.60
4	2.28	1.55	1.68	1.86	1.97	2.98	3.54	4.28	3.89	5.72	6.24	6.49
5	1.46	1.56	1.63	1.84	2.12	3.03	3.56	4.38	4.27	5.78	6.30	6.50
6	.96	1.52	1.94	1.92	2.24	3.10	3.57	4.43	4.58	5.74	6.28	6.50
7	1.16	1.58	....	2.02	2.44	3.25	3.56	4.46	4.63	5.79	6.20	6.55
8	1.17	....	1.97	2.22	2.52	3.32	3.62	4.49	4.74	5.82	6.29	6.60
9	1.50	....	1.97	2.40	....	3.33	3.62	4.57	4.88	5.83	6.30	6.64
10	1.58	....	....	2.45	2.84	3.34	....	4.65	4.96	5.81	6.25	6.56
11	1.59	1.87	....	2.43	2.87	3.36	3.61	4.68	5.02	5.80	6.30	6.29
12	1.66	1.75	2.03	2.43	....	3.37	3.64	4.62	5.05	5.89	6.32	6.47
13	1.72	1.73	2.06	2.47	2.98	3.32	3.70	4.69	5.10	5.92	6.20	6.54
14	1.93	1.44	1.96	2.53	3.0	3.36	3.32	4.74	5.18	5.88	6.25	6.52
15	1.93	.48	1.90	2.42	3.10	3.36	3.97	4.80	5.20	5.91	6.27	6.52
16	1.82	.48	1.91	2.40	3.06	3.03	4.08	4.84	5.22	5.91	6.30	6.52
17	1.36	.78	1.96	2.40	3.10	2.33	4.14	4.84	5.27	5.96	6.30	6.52
18	1.39	.74	1.90	1.98	3.11	2.67	4.20	3.61	5.28	6.00	6.34	6.50
19	.75	.78	2.00	2.10	3.10	2.80	4.25	3.80	5.33	5.98	6.34	6.25
20	1.04	1.08	....	2.14	2.73	2.92	4.29	3.99	5.42	5.98	6.32	5.79
21	1.13	1.12	1.80	2.16	2.74	2.98	3.49	4.31	5.40	5.78	6.47	5.55
22	1.31	.54	1.69	2.14	2.10	3.12	3.62	4.46	5.39	5.97	6.47	4.62
23	1.35	.54	1.86	1.87	1.08	3.16	3.69	4.58	5.54	6.02	6.37	4.73
24	.60	.59	1.89	....	1.33	3.23	3.70	4.71	5.60	6.07	6.36	5.37
25	.76	.80	1.97	2.20	1.51	3.31	3.82	4.77	5.64	6.05	6.45	5.64
26	.50	....	1.99	....	1.80	3.35	....	4.83	5.64	6.14	6.47	5.64
27	.30	1.99	....	....	1.99	3.42	....	4.86	5.58	6.14	6.48	4.37
28	.50	1.35	....	2.04	2.19	3.49	....	4.87	5.58	6.06	6.48	4.41
29	.85	....	1.53	2.11	2.40	3.55	....	4.96	5.65	....	6.42	4.55
30	....	....	1.61	2.20	2.50	3.58	....	4.98	5.79	6.07	6.52	4.66
31	1.23	....	1.48	....	2.63	....	....	3.47	....	6.15	....	4.98

Ha-3. City of Findlay Water Dept. 11 miles east of Findlay. Records available: 1947-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.06	8.33	6.57	6.30	6.25	6.24	15.42	18.42	18.67	18.93	....	19.08
2	13.10	7.97	6.54	6.30	6.20	6.35	16.27	18.43	18.74	18.90	....	19.12
3	13.09	7.52	6.62	6.31	6.21	6.41	16.76	18.45	....	18.88	....	19.10
4	13.05	7.58	6.53	6.36	6.22	6.40	17.00	18.48	....	18.87	....	19.10
5	12.61	7.50	6.50	6.27	6.26	6.37	16.85	18.50	....	18.88	....	19.10
6	12.69	....	6.61	6.32	6.22	6.39	16.95	18.50	18.73	18.87	....	19.09
7	12.32	....	6.77	6.31	6.30	6.52	16.55	18.50	18.70	18.90	....	19.15
8	12.41	....	6.60	6.40	6.30	6.54	17.32	18.51	18.59	18.90	17.34	19.14
9	12.50	7.22	6.55	6.46	6.35	6.53	17.66	18.54	18.70	18.89	17.24	19.14
10	12.59	7.30	6.63	6.49	6.44	6.52	17.90	18.50	18.72	18.88	16.62	19.11
11	12.52	7.34	6.62	6.40	6.43	6.49	17.98	18.51	18.73	18.88	18.14	19.14
12	12.20	7.12	6.67	6.33	....	6.48	18.05	18.52	....	18.94	18.58	19.23
13	12.01	7.13	6.68	6.39	6.40	6.48	18.12	18.54	....	18.94	18.72	19.23
14	12.04	7.12	6.63	6.43	6.42	6.50	18.21	18.56	18.64	18.92	18.79	19.20
15	12.01	6.80	6.66	6.42	6.47	6.47	18.25	18.58	18.69	18.92	18.94	19.21
16	12.10	6.32	6.58	6.47	6.46	5.77	18.30	18.58	18.70	18.93	....	19.20
17	12.10	6.50	6.59	6.43	6.49	5.82	18.30	18.58	18.72	....	....	19.20
18	11.90	6.45	6.63	6.32	6.45	6.00	18.30	18.60	18.73	....	....	19.20
19	11.39	6.50	6.70	6.39	6.40	6.04	18.30	18.61	18.74	18.89	....	....
20	11.41	6.70	6.68	6.40	6.44	6.10	18.38	18.64	18.79	18.92	18.91	....
21	11.14	6.70	6.52	6.33	....	6.16	18.38	18.64	18.78	18.92	18.94	....
22	11.26	6.53	6.44	6.29	....	6.24	18.42	18.60	18.78	19.00	18.93	....
23	11.23	6.52	6.57	6.23	....	6.30	18.48	18.60	18.82	....	18.93	....
24	10.93	6.40	6.55	6.43	....	6.35	18.42	18.63	18.83	....	18.91	....
25	10.80	6.50	6.54	6.44	....	7.41	18.40	18.65	18.82	....	19.00	....

Ha-3 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	10.05	6.50	6.54	6.34	5.92	6.29	18.41	18.64	18.82	19.00	18.99	.....
27	9.40	6.33	6.17	6.38	6.00	8.78	18.41	18.63	18.82	19.00	19.04	.....
28	9.86	6.50	6.28	6.38	6.08	12.73	18.40	18.62	18.86	18.95	19.01	.....
29	9.88		6.50	6.28	6.12	14.54	18.40	18.68	18.90	.....	19.02	.....
30	9.71		6.22	6.27	6.20	15.28	18.40	18.69	18.92	.....	19.09	.....
31	8.92		6.14		6.24		18.44	18.50		.....		.....

Hardin County

Hn-1. Village of Alger. In Alger. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	7.07	6.83	6.27	7.71	8.33	8.65	.....	9.55	10.63	11.15
2	....	7.17	6.75	7.04	7.80	8.35	8.70	.....	10.63	10.61	11.25
3	....	7.03	6.83	7.08	7.87	8.03	9.13	.....	10.85	10.61	11.25
4	....	6.45	6.93	6.98	7.93	8.70	9.25	.....	10.70	10.67	11.23
5	....	6.32	6.57	6.78	7.74	8.80	9.02	.....	10.21	10.83	10.64
6	....	6.41	6.67	6.77	7.83	8.60	9.03	10.14	10.25	10.90	11.12
7	....	6.32	6.68	6.55	7.97	8.38	9.18	9.90	10.19	10.70	11.03
8	....	7.15	6.73	6.55	8.62	8.34	9.15	10.15	10.22	10.78	11.04
9	....	7.27	6.93	7.09	9.00	8.45	9.11	10.24	10.17	10.78	11.20
10	....	6.95	6.00	7.55	9.12	8.52	9.33	10.27	10.06	10.83	11.20
11	....	7.14	7.10	7.42	8.53	8.42	9.70	10.05	10.10	10.68	11.10
12	....	6.94	7.22	7.42	8.44	8.40	9.50	10.36	10.08	10.73	11.20
13	....	7.00	7.07	7.18	8.27	8.24	9.63	10.34	10.08	10.68	11.20
14	....	6.72	7.37	7.61	8.20	8.22	9.27	10.40	10.31	10.33	.....
15	....	7.28	6.92	6.77	7.77	8.65	9.60	10.30	10.52	11.06	.....
16	....	7.40	6.62	7.28	7.56	8.51	9.75	10.30	10.45	11.16	.....
17	7.36	7.26	7.35	7.55	7.46	8.81	9.47	10.34	10.49	10.15	.....
18	7.26	7.26	7.05	8.14	7.43	8.30	9.40	10.30	10.46	11.06	.....
19	6.68	6.95	7.14	8.10	7.45	8.40	.....	10.12	10.56	11.11	.....
20	6.56	7.85	7.18	7.70	7.84	8.42	.....	10.48	10.51	10.60	.....
21	6.93	7.09	7.17	7.68	7.50	8.70	.....	10.40	9.63	11.05	.....
22	7.04	7.39	7.05	7.52	7.67	8.51	9.72	10.14	10.20	11.11	.....
23	6.73	7.07	7.08	7.62	7.87	8.90	9.75	10.07	10.22	10.72	.....
24	5.77	6.75	7.18	7.50	7.66	8.72	10.45	10.29	9.61	10.60	.....
25	6.94	6.60	7.27	....	7.61	8.85	10.22	10.96	10.28	10.80	.....
26	6.50	6.91	7.26	7.67	7.67	9.00	10.15	10.98	10.25	10.70	.....
27	6.82	6.45	6.92	7.68	7.42	9.25	9.91	10.71	10.27	10.84	11.21
28	6.95	6.70	7.04	7.68	7.64	9.15	9.62	10.44	10.27	10.84	11.21
29		7.17	7.18	7.70	7.89	9.13	9.65	10.40	10.16	11.15	11.16
30		7.13	6.63	7.66	8.17	9.10	.....	10.43	10.25	11.12	11.23
31		6.77		7.57		9.07	.....		10.60		11.18

Hn-2. Edward Abaier. In Dola. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.28	16.63	.....	13.07	.....	11.11	9.87	9.94	9.98	10.80	11.57	11.62
2	18.33	16.68	.....	13.07	.....	11.10	9.87	9.86	10.07	10.54	11.41	12.21
3	18.33	16.17	.....	13.11	.....	11.11	9.79	9.90	9.90	10.65	11.68	12.21
4	18.26	16.30	.....	13.19	.....	11.05	9.69	9.98	9.83	10.65	11.81	12.01
5	18.11	16.32	.....	13.09	.....	10.92	9.67	10.01	9.72	10.71	11.98	12.08
6	18.02	15.91	.....	12.90	.....	10.85	9.75	10.19	9.83	10.61	11.90	12.13
7	18.10	16.17	.....	12.90	.....	11.11	9.88	10.10	9.81	10.72	11.67	12.16
8	18.16	16.05	14.22	13.20	.....	11.22	9.95	9.98	9.63	10.77	11.67	12.39
9	18.32	16.09	14.33	13.41	.....	11.22	9.92	10.02	9.77	10.82	11.71	12.47
10	18.32	16.08	14.37	13.48	.....	11.22	9.88	10.05	9.96	10.78	11.53	12.34
11	18.23	16.15	14.39	13.39	.....	11.10	9.90	10.06	10.04	10.69	11.40	12.31
12	18.10	15.82	14.44	13.38	.....	10.95	9.96	10.09	10.02	10.86	11.40	12.39
13	18.08	15.93	14.38	12.94	.....	10.74	9.63	10.12	9.96	11.03	11.29	12.70
14	18.03	15.87	14.35	13.00	.....	10.46	9.67	10.21	9.97	11.00	11.36	12.70
15	17.93	15.71	14.40	13.13	.....	10.50	9.72	10.37	10.03	11.06	11.46	12.72

Hn-2 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	17.86	15.71	14.13	13.39	.....	10.39	9.74	10.34	10.02	11.04	11.51	12.64
17	17.89	.....	13.99	13.36	.....	10.10	9.75	10.12	10.03	11.17	11.60	12.59
18	17.84	.....	14.28	13.56	.....	10.13	9.79	9.99	9.93	11.22	11.75	12.57
19	17.85	.....	14.41	13.51	.....	10.10	9.82	10.00	10.03	11.23	11.66	12.64
20	17.85	.....	14.38	13.53	.....	9.90	9.82	10.13	10.24	11.08	11.57	12.59
21	17.48	.....	14.10	13.34	.....	9.70	9.88	10.14	10.24	11.01	11.81	12.40
22	17.62	.....	13.65	13.03	.....	9.64	9.99	10.05	10.19	11.20	11.81	12.55
23	17.53	.....	14.05	13.04	.....	9.57	10.23	9.93	10.41	11.36	11.68	12.99
24	17.22	.....	14.05	13.28	.....	9.56	10.22	9.97	10.55	11.59	11.64	13.13
25	17.30	.....	13.73	13.18	.....	9.60	10.12	10.02	10.65	11.56	11.73	13.07
26	16.97	.....	13.73	12.77	11.12	9.73	10.09	9.93	10.62	11.68	11.78	12.59
27	16.04	.....	13.28	12.70	11.18	9.76	10.12	9.94	10.44	11.72	11.80	12.57
28	16.68	.....	13.24	12.72	11.19	9.76	10.17	9.92	10.36	11.57	11.80	12.68
29	17.02	.....	13.24	12.66	11.19	9.76	10.14	9.95	10.54	11.54	11.57	12.68
30	16.50	.....	13.08	.....	11.16	9.91	10.02	9.85	10.80	11.36	11.69	12.66
31	16.58	.....	12.77	.....	11.08	.....	10.03	9.85	.....	11.55	.....	12.57

Henry County

Hy-1. A. F. Beam. 2 miles north of Deshler. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.48	20.31	20.15	20.09	20.25	20.61	20.77	21.28	21.51	21.60	21.67	21.82
2	20.48	20.34	20.14	20.12	20.26	20.62	20.79	21.27	21.55	21.58	21.69	.....
3	20.50	20.31	20.17	20.14	20.34	20.62	20.81	21.33	21.51	21.55	21.71	.....
4	20.50	20.20	20.13	20.16	20.35	20.64	20.80	21.39	21.50	21.50	21.74	.....
5	20.42	20.24	20.01	20.14	20.36	20.63	20.83	21.45	21.40	21.53	21.79	21.86
6	20.35	20.24	20.12	20.09	20.34	20.65	20.83	21.47	21.41	21.51	21.77	.....
7	20.37	20.23	20.17	20.06	20.37	20.71	20.91	21.47	21.40	21.53	21.73	21.82
8	20.40	20.22	20.14	20.14	20.37	20.71	20.97	21.46	21.38	21.54	21.76	21.92
9	20.50	20.24	20.09	20.20	20.37	20.75	20.96	21.47	21.39	21.54	21.76	21.95
10	20.56	20.31	20.09	20.21	20.44	20.79	20.98	21.52	21.39	21.53	21.73	21.93
11	20.55	20.31	20.09	20.20	.....	20.77	20.99	21.52	21.39	21.51	21.75	21.89
12	20.49	20.26	20.13	20.14	20.50	20.77	20.97	21.41	21.39	21.50	21.75	21.87
13	20.46	20.21	20.13	20.09	20.55	20.75	20.98	21.43	21.38	21.52	21.72	21.91
14	20.47	20.22	20.13	20.13	20.58	20.74	21.00	21.44	21.39	21.53	21.72	21.93
15	20.47	20.08	20.16	20.07	20.61	20.73	21.03	21.45	21.39	21.55	21.75	.....
16	20.40	20.12	20.16	20.16	20.63	20.70	21.04	21.46	21.40	21.55	21.78	.....
17	20.43	20.24	20.11	20.15	20.64	20.62	21.04	21.46	21.40	21.55	21.77	.....
18	20.44	20.19	20.13	20.13	20.64	20.67	21.04	21.32	21.37	21.57	21.70	21.91
19	20.44	20.17	20.21	20.23	20.63	20.69	21.14	21.39	21.36	21.57	21.70	21.88
20	20.47	20.27	20.20	20.25	20.55	20.66	.....	21.45	21.40	21.60	21.70	21.87
21	20.43	20.27	20.13	20.24	20.54	20.67	21.14	21.48	21.40	21.60	21.80	21.80
22	20.45	20.19	20.10	20.19	20.37	20.67	21.17	21.49	21.40	21.58	21.80	21.75
23	20.45	20.18	20.17	20.18	20.45	20.70	21.24	21.49	21.40	21.62	21.69	21.85
24	20.36	20.17	20.17	20.29	20.50	20.70	21.23	21.54	21.51	21.63	21.69	21.88
25	20.38	20.19	20.16	20.30	20.49	20.70	21.23	21.56	21.54	21.64	21.78	21.88
26	20.37	20.19	20.10	20.24	20.51	20.70	21.23	21.56	21.54	21.66	21.79	21.79
27	20.30	20.15	20.05	20.27	20.54	.....	21.24	21.56	21.49	21.68	21.79	21.75
28	20.25	20.12	20.15	20.34	20.57	.....	21.27	21.55	21.41	21.67	21.79	21.78
29	20.40	.....	20.16	20.32	20.60	.....	21.28	21.42	21.46	21.67	21.73	21.83
30	20.40	.....	20.14	20.28	20.60	20.73	21.27	21.44	21.55	21.63	21.80	21.83
31	20.32	.....	20.07	.....	20.60	.....	21.27	21.47	.....	21.69	.....	21.83

Huron County

Hu-2. City of New London. In New London. Records available: 1947-49

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.56	14.08	13.70	13.40	13.53	13.96	14.25	14.57	14.86	15.11	15.35
2	14.08	13.70	13.50	13.55	13.93	14.29	14.60	14.86	15.10	15.40
3	14.08	13.70	13.54	13.56	13.94	14.31	14.60	14.86	15.12	15.42
4	14.06	13.73	13.56	13.57	13.97	14.35	14.61	14.85	15.13	15.38
5	14.85	.....	13.96	13.71	13.56	13.56	13.99	14.37	14.61	14.85	15.17	15.40

Hu-2 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	14.75	.....	14.01	13.59	13.54	13.56	14.00	14.39	14.64	14.84	15.17	15.40
7	14.82	14.58	14.03	13.59	13.53	13.61	13.99	14.41	14.63	14.86	15.15	15.38
8	14.85	.....	13.89	13.61	13.53	13.68	14.02	14.41	14.61	.....	15.16	15.44
9	14.90	.....	13.84	13.67	13.52	13.73	14.03	14.42	14.65	.....	15.17	15.48
10	14.94	.....	13.77	13.69	13.51	13.74	14.02	14.43	14.67	14.86	15.19	15.47
11	14.94	.....	13.72	13.66	13.52	13.75	14.04	14.44	14.69	14.86	15.19	15.44
12	14.90	14.36	13.75	13.62	13.52	13.74	14.03	14.40	14.69	14.90	15.18	15.43
13	14.80	14.36	13.76	13.54	13.52	13.73	14.04	14.41	14.69	14.92	15.16	.....
14	14.84	14.36	13.87	13.49	13.53	13.73	14.06	14.43	14.71	14.92	15.13	15.48
15	14.80	14.26	13.89	13.44	13.55	13.70	14.09	14.45	14.71	14.93	15.18	15.49
16	14.79	14.27	13.89	13.49	13.56	13.70	14.11	14.47	14.71	14.93	15.18	15.50
17	14.81	14.32	13.85	13.49	13.52	13.73	14.12	14.45	14.72	14.95	15.22	15.50
18	14.82	.....	13.85	13.49	13.51	13.78	14.13	14.50	14.71	14.94	15.24	15.49
19	14.79	.....	13.91	13.55	13.49	13.79	14.14	14.55	14.70	14.95	15.25	15.47
20	14.84	14.39	13.91	13.57	13.43	13.78	14.16	14.57	14.75	14.95	15.25	15.47
21	14.82	14.39	13.87	13.56	13.43	13.77	14.08	14.57	14.75	14.94	15.25	15.42
22	14.79	14.33	13.83	13.53	13.37	13.81	14.12	14.56	14.74	14.94	.....	15.40
23	.....	14.30	13.83	13.48	13.41	13.82	14.17	14.58	14.76	14.95	.....	15.50
24	14.62	14.28	13.83	13.53	13.43	13.82	14.18	14.62	14.80	15.02	.....	15.57
25	14.65	14.25	13.81	13.54	13.46	13.84	14.18	14.64	14.80	15.02	.....	15.57
26	14.64	14.25	13.81	13.47	13.45	13.86	.....	14.65	14.80	15.05	.....	15.53
27	14.53	14.21	13.69	13.43	13.47	13.88	14.22	14.65	14.82	15.07	.....	15.48
28	14.38	14.04	14.78	13.48	13.48	13.92	14.25	14.64	.....	15.05	.....	15.50
29	14.51	.....	13.79	13.47	13.51	13.94	14.26	14.58	.....	15.04	15.26	.....
30	14.53	.....	13.77	13.44	13.52	13.96	14.26	.....	14.84	15.02	15.30	15.57
31	14.52	.....	13.70	.....	13.51	.....	14.26	14.48	.....	15.99	.....	15.57

Hu-3. Willard Water Dept. In Willard. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	44.95	42.80	41.27	39.07	37.72	38.61	41.39	42.73	42.61	41.20	40.26	39.87
2	44.80	.....	41.20	39.05	38.17	38.75	41.66	42.85	42.68	40.95	40.15	40.12
3	45.21	42.80	41.20	38.62	38.25	39.01	41.66	42.90	42.65	41.07	40.27	40.00
4	44.90	42.31	41.10	39.42	38.11	38.94	41.95	42.90	42.45	40.93	40.11	.....
5	44.73	42.21	40.88	39.42	38.13	38.91	42.16	42.92	42.36	40.93	40.21	39.75
6	44.58	42.18	40.90	39.13	38.13	39.05	41.89	42.85	42.65	40.75	39.92	39.80
7	44.60	42.11	41.10	39.00	38.03	39.83	41.75	44.87	42.42	40.96	39.98	.....
8	44.52	42.11	40.87	39.07	37.81	39.96	41.82	42.82	42.30	40.95	39.95	39.95
9	44.32	42.11	40.67	39.25	38.12	39.47	41.38	42.87	.....	40.77	40.02	40.03
10	44.48	42.10	40.73	38.97	38.09	39.69	41.71	43.07	42.19	40.80	39.95	39.90
11	44.79	42.33	40.77	38.95	38.01	39.95	41.82	43.00	42.19	40.71	40.05	39.70
12	44.32	42.10	40.75	38.94	38.15	39.67	41.79	43.67	42.19	40.83	39.93	39.80
13	44.12	41.88	40.61	38.76	38.23	39.75	41.90	42.82	42.10	40.88	39.70	39.96
14	44.20	41.85	40.61	38.75	38.29	39.77	41.85	42.82	42.01	40.77	39.78	39.97
15	44.01	41.61	40.60	38.69	38.01	39.87	42.03	42.97	41.90	40.72	39.81	40.46
16	.....	41.80	40.50	38.57	38.39	39.85	42.18	43.10	41.97	40.57	39.72	40.70
17	43.72	42.03	40.48	38.47	38.50	.....	42.11	42.69	41.72	40.82	39.78	40.92
18	43.77	41.71	40.49	38.58	38.72	.....	42.27	42.56	41.49	40.85	39.90	41.06
19	43.71	41.67	40.62	38.72	38.58	.....	42.55	42.72	41.58	40.66	39.63	41.29
20	43.60	41.69	40.40	38.68	38.30	40.05	42.55	42.75	41.63	40.64	39.40	41.31
21	43.37	41.75	40.32	38.64	38.45	40.06	42.22	43.20	41.40	40.65	39.77	41.36
22	43.19	41.60	40.29	38.39	38.32	40.42	42.39	43.05	41.40	40.53	39.73	41.70
23	42.97	41.66	.....	38.38	38.73	40.53	42.50	42.94	41.28	40.55	39.60	41.97
24	43.20	41.39	40.54	38.31	38.59	40.93	42.23	43.02	41.25	40.77	39.51	42.23
25	43.05	41.38	39.75	38.42	38.45	40.59	42.67	43.06	41.27	40.64	39.58	42.22
26	42.83	41.42	39.68	38.35	38.32	40.37	42.83	43.11	42.10	40.63	39.57	42.22
27	42.63	41.08	39.33	38.30	38.29	40.13	42.95	43.25	41.03	40.52	39.50	42.37
28	42.52	41.17	39.39	38.35	38.39	.....	43.21	.....	41.02	40.59	39.52	42.45
29	42.50	.....	39.22	38.25	38.27	40.88	43.25	.....	41.03	40.41	40.43	42.72
30	42.37	.....	39.08	38.05	38.20	41.03	43.27	42.90	41.18	40.32	39.85	42.81
31	42.33	.....	39.05	.....	38.59	.....	43.03	42.62	.....	40.37	.....	42.87

Jackson County

J-1. City of Jackson. In city well field, south of Keystone Road, about 4.5 miles south of Jackson. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 1948		Nov. 22	19.90	Dec. 6	19.89	Dec. 19	19.65
9	19.82	23	19.91	7	19.88	20	19.70
10	19.97	24	19.88	8	19.96	21	19.90
11	20.00	25	19.93	9	19.96	22	20.00
12	19.96	26	19.88	10	20.04	23	20.02
13	19.93	27	19.94	11	20.00	24	19.98
14	19.93	28	19.92	12	19.91	25	20.12
15	19.92	29	19.70	13	19.97	26	20.12
16	19.90	30	19.80	14	20.00	27	19.97
17	19.92	Dec. 1	19.89	15	19.92	28	19.95
18	19.92	2	19.85	16	19.40	29	19.90
19	19.85	3	19.81	17	19.67	30	19.94
20	19.92	4	19.88	18	19.69	31	19.93
21	19.97	5	19.81				

Lowest daily water level, from recorder graph, 1949

Day	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.90	20.00	.....	22.71	.....	.....	23.32	23.52	24.22	23.62	24.70
2	19.97	20.06	.....	22.60	23.00	.....	23.32	23.51	23.95	23.62	24.90
3	20.00	19.97	.....	22.90	23.03	.....	23.32	23.51	23.82	24.30	24.91
4	19.99	19.80	.....	22.95	23.00	.....	23.34	23.50	23.72	24.65	24.65
5	19.91	19.84	.....	22.90	22.98	.....	23.34	23.50	23.48	24.79	24.30
6	19.77	19.84	.....	22.82	22.98	.....	.....	23.50	23.42	24.79	24.18
7	19.80	19.92	.....	22.74	23.05	.....	.....	23.50	23.21	24.82	24.72
8	19.90	19.90	.....	22.86	23.10	23.50	23.40	23.50	23.20	24.90	25.00
9	20.00	19.91	.....	22.76	23.08	23.50	23.40	23.52	23.20	24.92	25.02
10	20.01	20.05	.....	22.82	23.08	23.49	23.40	22.19	23.19	24.93	25.02
11	20.00	20.12	.....	22.90	23.04	23.49	23.40	19.81	23.18	24.66	24.56
12	19.86	19.98	.....	22.92	23.04	23.48	23.40	22.90	.....	24.30	24.00
13	19.25	19.91	.....	22.82	23.06	23.49	23.40	23.13	.....	24.12	.....
14	19.92	19.91	.....	22.90	23.07	23.48	23.41	23.12	.....	23.82	.....
15	19.91	19.40	.....	22.92	23.07	23.52	23.42	23.21	.....	23.84	.....
16	19.87	19.78	.....	23.00	23.08	23.53	23.42	23.52	.....	23.83	.....
17	19.96	19.98	.....	23.01	.....	23.53	23.42	23.48	.....	23.75	.....
18	19.94	19.90	.....	23.00	22.18	23.53	23.42	23.55	.....	24.32	.....
19	20.11	19.80	.....	22.92	22.18	23.53	23.42	23.62	.....	24.79	.....
20	20.12	19.90	.....	22.90	22.18	23.53	23.43	23.72	.....	24.97	.....
21	19.92	19.90	.....	22.90	22.17	23.53	.....	23.72	.....	25.04	24.82
22	19.91	19.80	.....	22.88	22.18	23.54	23.45	23.70	23.61	25.06	24.92
23	19.86	19.85	.....	23.01	22.20	23.31	23.43	23.66	23.61	25.10	25.03
24	19.72	.....	.....	22.93	22.19	23.31	23.43	23.66	23.60	25.10	25.17
25	19.70	.....	.....	23.00	22.20	23.31	23.43	.....	23.60	25.12	25.18
26	19.70	.....	22.75	22.92	.....	23.32	23.43	.....	23.59	25.12	25.13
27	19.62	.....	22.75	22.98	.....	23.32	23.43	23.28	23.59	.....	24.50
28	19.65	.....	22.75	22.98	.....	23.33	23.49	23.27	23.56	24.20	24.70
29	20.01	.....	22.80	23.00	.....	23.35	23.55	23.28	23.62	20.70	.....
30	20.05	.....	22.76	22.98	.....	23.31	23.54	24.22	23.62	23.85	.....
31	19.90	.....	.....	.....	.....	23.32	23.53	.....	23.62	.....	25.20

Jefferson County

Je-1. Steubenville Pottery Co. Three miles north of Steubenville. Records available: 1947-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	45.33	45.41	.....	44.95	.....	44.76	.....
2	45.37	45.34	.....	44.84	.....	.....	.....
3	45.10	44.35	.....	44.68	.....	.....	.....
4	45.18	45.26	.....	44.50	.....	.....	.....
5	44.17	45.20	.....	44.53	.....	.....	.....

Je-1 --Continued.

Lowest daily water level, from recorder graph											
Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	.....	.....	.....	.....	45.26	45.34	.....	44.94	.....	.....	45.43
7	.....	44.15	.....	.....	45.34	44.42	.....	44.55	.....	.....	45.36
8	.....	44.82	.....	.....	45.22	45.44	.....	45.08	.....	.....	45.27
9	.....	45.49	.....	.....	45.12	45.45	.....	44.48	.....	.....	.....
10	.....	45.42	.....	.....	.....	44.56	.....	45.00	.....	.....	.....
11	.....	45.04	.....	.....	.....	45.61	44.44	44.05	.....	.....	.....
12	.....	44.47	.....	.....	.....	45.46	45.15	44.97	.....	44.56	.....
13	.....	44.42	.....	.....	44.27	45.67	45.12	44.78	.....	45.87	.....
14	43.57	44.53	.....	.....	45.13	45.89	44.50	44.43	.....	44.65	.....
15	45.48	45.04	.....	.....	45.12	.....	44.97	.....	.....	44.36	.....
16	45.62	44.62	44.30	.....	45.09	.....	45.39	.....	.....	44.36	.....
17	45.02	42.65	44.24	.....	45.12	.....	45.28	.....	.....	44.47	.....
18	44.38	41.00	44.07	.....	44.95	.....	45.40	.....	.....	44.46	.....
19	44.36	41.66	44.00	44.22	43.98	45.44	.....	.....	.....	44.64	.....
20	.....	42.02	43.77	44.06	43.95	46.23	.....	.....	.....	.....	45.60
21	.....	42.56	43.60	44.22	.....	46.38	.....	.....	.....	.....	46.08
22	.....	.....	43.92	44.07	44.42	46.27	44.44	.....	.....	.....	46.93
23	.....	.....	44.56	45.53	45.24	46.47	45.56	.....	.....	.....	47.12
24	.....	.....	.....	45.22	45.34	45.44	45.38	.....	.....	.....	46.28
25	.....	.....	.....	45.44	45.25	46.12	45.44	.....	.....	.....	45.54
26	.....	.....	.....	45.73	44.24	46.02	45.27	.....	.....	.....	45.59
27	.....	.....	.....	46.22	45.38	.....	45.27	.....	.....	.....	45.71
28	.....	.....	.....	46.50	45.41	.....	44.21	.....	.....	.....	.....
29	.....	.....	.....	46.28	45.34	.....	44.67	.....	44.44	.....	.....
30	.....	.....	.....	46.23	45.58	.....	.....	.....	44.27	.....	.....
31	.....	.....	.....	45.70	.....	.....	44.48	.....	44.64	.....	.....

Knox County

K-1. City of Mount Vernon. In Mount Vernon. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.21	6.03	6.76	....	8.86	9.32	10.60	8.66	8.78	7.58	7.96	8.28
2	6.61	6.35	7.34	....	10.07	9.79	11.11	10.26	8.82	6.81	8.01	8.98
3	7.13	6.10	9.11	....	11.00	7.78	10.40	9.61	7.66	9.30	7.98	6.53
4	7.14	....	8.32	....	11.12	....	11.11	9.87	10.66	8.73	8.60	6.62
5	6.88	....	8.40	....	11.10	....	12.15	11.02	7.81	8.04	8.26	5.88
6	7.05	....	6.73	....	....	....	12.20	10.69	10.28	7.48	6.72	6.30
7	8.71	....	7.50	9.80	....	....	11.16	9.00	11.04	....	7.97	6.13
8	7.23	8.55	8.17	9.58	....	7.58	10.88	10.65	8.56	....	9.91	6.49
9	7.71	8.95	8.40	9.30	....	9.11	9.72	11.41	8.61	....	8.31	8.20
10	7.25	8.40	7.26	8.70	....	8.90	8.54	11.89	7.80	....	8.17	....
11	8.72	8.35	7.06	9.37	....	7.60	10.50	11.32	7.70	....	8.03	....
12	7.26	7.52	7.91	9.53	11.32	6.73	9.56	11.11	7.99	....	8.01	....
13	7.09	6.51	6.78	9.70	....	8.22	9.29	8.45	8.42	....	6.45	....
14	....	8.20	8.00	9.86	....	8.40	10.20	7.16	7.93	....	7.78	....
15	....	6.89	8.30	9.71	....	8.95	10.20	9.60	7.73	....	7.51	....
16	....	7.00	7.66	8.90	....	7.97	9.51	8.61	8.47	....	7.99	7.50
17	....	6.80	8.21	8.52	10.70	7.90	8.96	8.91	7.60	....	8.06	8.12
18	....	7.10	7.45	9.20	12.15	8.03	10.96	10.15	7.16	....	8.16	7.18
19	....	6.45	7.27	9.17	11.59	9.09	8.80	9.35	8.62	....	8.88	10.68
20	....	6.18	6.47	9.49	11.23	10.13	8.83	7.30	8.20	....	8.19	9.02
21	....	6.76	7.26	9.12	9.79	10.23	9.77	9.89	9.63	....	8.46	8.31
22	....	6.36	7.57	10.42	8.90	8.49	9.47	9.06	7.69	....	8.32	8.00
23	....	8.27	7.25	8.88	11.30	8.91	8.86	9.26	7.42	....	8.22	7.86
24	....	8.31	7.30	9.00	11.05	9.12	8.81	9.26	7.26	....	7.90	7.59
25	....	7.60	8.33	9.13	9.73	9.96	8.92	9.28	6.16	7.68	8.07	6.51
26	....	6.93	6.80	9.41	9.73	9.79	9.59	9.33	7.22	....	8.26	6.88
27	6.52	5.98	6.06	10.50	10.81	10.88	10.50	9.30	8.22	7.79	8.33	7.40
28	7.85	6.65	8.10	9.68	9.81	14.13	10.79	8.30	7.57	8.05	8.22	7.63
29	6.60	....	7.48	9.68	9.63	12.90	10.42	10.79	8.36	8.01	8.33	7.40
30	5.34	....	7.02	9.13	8.86	13.03	9.80	8.30	9.61	6.60	8.32	7.40
31	5.85	....	7.65	....	8.93	....	8.36	8.92	....	7.85	....	7.17

Lake County

L-1. Village of Mentor. In municipal well field, at Mentor. Records available: 1948-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.15	19.19	18.49	18.60	18.59	18.30	19.80	19.33	18.72	18.52	19.14	18.98
2	19.10	19.15	18.43	18.50	18.62	18.44	19.73	18.55	18.92	18.54	19.19	18.90
3	19.12	19.18	18.38	18.63	18.66	18.53	19.56	18.62	19.02	18.58	19.16	18.80
4	19.11	19.18	18.40	18.63	18.75	18.56	19.50	18.67	19.02	18.63	19.00	18.80
5	19.02	19.13	18.43	18.57	18.61	18.60	19.60	18.65	18.79	18.58	19.05	18.84
6	19.02	19.08	18.50	18.53	18.81	18.52	19.81	18.66	18.92	18.68	19.05	18.91
7	19.50	19.04	18.48	18.32	18.86	18.44	20.17	18.70	18.95	18.71	19.13	18.91
8	19.40	19.02	18.47	18.40	18.81	18.38	20.02	18.67	18.92	18.63	19.12	18.82
9	19.56	19.13	18.41	18.48	18.78	18.57	18.98	18.80	18.72	18.62	19.20	18.78
10	19.51	19.14	18.32	18.40	18.83	18.61	18.92	18.86	18.76	18.72	19.20	18.75
11	19.47	19.11	18.34	18.53	18.80	18.88	18.71	19.08	18.80	18.81	19.22	18.74
12	19.30	19.15	18.42	18.64	18.75	18.83	18.74	19.13	18.82	18.81	19.02	18.72
13	19.30	19.18	18.40	18.63	18.81	18.74	18.78	18.92	19.21	18.72	19.01	18.72
14	19.40	19.02	18.35	18.61	18.91	18.60	18.76	18.83	19.27	18.72	18.99	18.70
15	19.33	18.98	18.35	18.46	18.94	18.61	18.72	18.78	19.02	19.12	19.02	18.70
16	19.36	19.01	18.23	.....	19.02	18.69	18.82	18.90	18.73	19.41	18.90	18.75
17	.....	19.08	18.20	18.60	19.01	18.81	19.02	18.93	18.70	19.50	18.93	18.70
18	.....	19.50	18.20	18.60	18.90	18.82	18.70	18.90	18.76	19.40	19.00	18.72
19	.....	18.95	18.23	18.77	18.70	18.84	18.67	18.66	18.60	19.30	19.09	18.80
20	.....	18.92	18.32	18.82	18.61	18.90	18.73	18.72	18.60	19.11	19.10	18.82
21	.....	18.90	18.40	18.80	18.98	18.93	18.80	18.72	18.50	19.25	19.09	18.72
22	19.35	18.73	18.43	18.99	18.72	19.08	18.82	18.63	18.47	19.20	19.12	18.75
23	19.36	18.70	18.28	18.97	18.75	19.06	18.68	18.86	18.62	19.13	19.10	18.71
24	19.29	18.62	18.22	18.98	18.82	19.10	18.55	19.00	18.61	19.11	19.10	18.70
25	19.33	18.58	18.13	18.74	18.60	19.14	18.36	19.05	18.62	19.21	19.00	18.70
26	19.29	18.53	18.22	18.82	18.41	19.12	18.42	19.20	18.63	19.15	19.00	18.69
27	19.23	18.61	18.30	18.82	18.68	19.16	18.51	19.33	18.72	18.99	19.05	18.70
28	19.26	18.62	18.42	18.64	18.66	18.82	18.51	19.36	18.81	19.05	18.98	18.71
29	19.24		18.48	18.70	18.68	18.78	18.52	19.11	18.74	19.05	19.01	18.70
30	19.25		18.50	18.60	18.70	19.00	18.50	18.96	18.60	19.01	18.98	18.61
31	19.20		18.50		18.68		18.31	18.91		19.15		18.60

Lawrence County

La-1. Crystal Ice Co. In Ironton. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.28	46.98	45.38	46.02	46.83	47.53	49.28	49.65	49.78	49.92	49.33	49.54
2	48.30	46.70	45.15	46.03	46.86	47.56	49.33	49.72	49.78	49.91	49.33	49.49
3	48.31	46.36	.....	46.08	46.88	47.60	49.39	49.74	49.78	49.90	49.35	49.20
4	48.31	46.25	.....	46.11	46.90	47.62	49.43	49.75	49.79	49.90	49.33	49.22
5	48.28	46.11	.....	46.10	46.73	47.63	49.47	49.59	49.80	49.93	49.37	49.20
6	48.20	45.94	.....	46.16	46.74	47.65	49.49	49.56	49.80	49.93	49.25	.....
7	48.20	45.81	.....	46.18	47.16	47.70	49.51	49.55	49.84	49.93	49.22	.....
8	48.16	45.69	.....	46.22	47.37	47.71	49.54	49.94	49.85	49.90	49.15	.....
9	48.11	45.81	45.01	46.53	46.92	47.73	49.60	49.95	49.87	49.92	49.12	.....
10	48.09	45.94	45.14	46.62	46.90	47.76	49.59	49.57	49.88	49.93	49.25	.....
11	48.05	45.95	45.20	46.60	47.02	47.70	49.60	49.57	49.89	49.93	49.34	.....
12	47.93	45.91	45.23	46.62	46.97	47.80	49.63	49.57	49.88	49.94	49.38	.....
13	47.78	45.90	45.26	46.61	46.91	47.83	49.44	48.57	49.39	49.94	49.41	.....
14	47.65	45.89	45.29	46.65	46.89	47.86	49.45	49.57	49.89	49.96	49.42	49.72
15	47.60	45.93	45.31	46.67	46.88	47.88	49.45	49.61	49.85	49.97	49.45	49.62
16	47.48	45.87	45.33	46.69	46.91	47.92	49.45	49.62	49.86	49.91	49.47	49.66
17	47.48	45.92	45.34	46.69	46.93	47.94	49.46	49.62	49.86	49.90	49.47	49.68
18	47.71	45.83	45.38	46.71	47.04	47.97	49.46	49.62	49.85	49.88	49.49	49.71
19	47.76	45.73	45.42	46.74	47.14	47.98	49.48	49.64	49.87	49.88	49.48	49.70
20	47.78	45.65	45.38	46.76	47.20	48.00	49.50	49.65	49.88	49.88	49.49	49.52
21	47.78	45.63	45.19	46.78	47.22	48.01	49.50	49.65	49.88	49.88	49.51	49.30
22	47.80	45.55	45.10	46.77	47.18	48.02	49.56	49.66	49.89	49.91	49.51	49.30
23	47.79	45.50	44.83	46.79	47.19	48.03	49.55	49.67	49.90	49.90	49.48	49.20
24	47.79	45.43	44.87	46.81	.....	48.24	49.55	49.69	49.91	49.91	49.49	49.13
25	47.77	45.40	45.21	46.67	.....	48.70	49.56	49.69	49.92	49.79	49.53	49.06

La-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	47.66	45.37	45.42	46.76	.....	48.75	49.54	49.73	49.93	49.54	49.53	49.18
27	47.62	45.31	45.68	46.70	.....	48.81	49.53	49.70	49.93	49.45	49.53	49.28
28	47.54	45.36	45.63	46.80	.....	48.89	49.53	49.73	49.93	49.42	49.53	49.34
29	47.51		45.91	46.82	.....	49.07	49.55	49.74	49.92	49.39	49.54	49.37
30	47.43		45.94	46.82	.....	49.20	49.61	49.74	49.94	49.36	49.56	49.62
31	47.26		45.97		.....		49.59	49.74		49.36		49.65

Logan County

Lo-1. Ohio State Grange. 2 miles west of Bellefontaine. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.05	14.78	14.50	13.79	14.26	15.53	16.00	16.50	17.32	18.14	18.77	19.63
2	19.07	14.88	14.50	13.86	14.32	15.64	16.04	16.59	17.34	18.12	18.77	19.77
3	19.11	14.82	14.62	14.00	14.39	15.69	16.05	16.66	17.33	18.12	18.78	19.77
4	19.09	14.85	14.56	14.05	14.44	15.73	16.06	16.71	17.36	18.11	18.89	19.77
5	18.75	14.88	14.45	13.98	14.44	15.76	16.08	16.74	.....	18.13	18.93	19.78
6	17.84	14.88	14.78	14.17	14.43	15.81	16.08	16.77	17.49	18.11	18.93	19.79
7	17.37	15.05	14.69	14.17	14.60	15.95	16.06	16.81	17.54	18.20	18.89	19.88
8	17.18	15.03	14.75	14.36	14.62	16.02	15.97	16.83	17.57	18.21	18.93	19.92
9	17.08	15.18	14.63	14.41	14.68	16.02	15.95	16.87	17.58	18.21	18.95	19.94
10	17.07	15.23	14.73	14.46	14.81	16.03	16.05	16.92	.....	18.20	18.95	19.94
11	16.94	15.34	14.73	14.42	14.83	16.03	16.11	16.93	17.60	18.20	19.01	19.95
12	16.73	15.18	14.77	14.37	14.84	16.04	16.16	16.79	17.60	18.31	19.02	20.02
13	16.66	15.27	14.79	14.31	14.91	16.09	16.21	16.51	17.66	18.34	19.02	20.03
14	16.77	15.27	14.74	14.35	15.01	16.09	16.30	16.56	17.68	18.34	19.06	20.04
15	16.75	14.90	14.65	14.45	15.10	16.01	16.39	16.61	17.68	18.34	19.02	20.06
16	16.61	14.44	14.63	14.56	15.15	15.73	16.43	16.61	17.73	18.38	19.05	20.08
17	16.56	14.54	14.57	14.56	15.19	15.37	16.47	16.59	17.77	18.40	19.08	20.13
18	16.41	14.44	14.70	14.37	15.16	15.26	16.49	16.67	17.80	18.44	19.22	20.17
19	16.84	14.44	14.78	14.41	15.11	15.32	16.50	16.61	17.86	18.45	19.21	20.17
20	16.84	14.73	14.73	14.41	15.16	15.36	16.52	16.94	17.89	18.47	19.30	20.17
21	15.60	14.72	14.46	14.33	15.18	15.43	16.54	16.94	17.83	18.47	19.37	20.14
22	15.79	14.57	14.25	14.33	15.29	15.57	16.19	16.93	17.83	18.58	19.37	20.23
23	15.78	14.37	14.05	14.32	15.36	15.61	16.09	16.95	17.95	18.60	19.37	20.29
24	15.51	14.22	13.97	14.37	15.39	15.74	16.08	17.00	17.97	18.64	19.38	20.30
25	15.35	14.34	14.14	14.48	15.40	15.86	16.08	17.03	17.96	18.64	19.45	20.29
26	15.20	14.34	14.16	14.32	15.40	15.91	16.20	17.08	17.98	18.72	19.45	20.22
27	14.74	14.22	13.68	14.32	15.44	15.89	16.27	17.06	17.96	18.72	19.50	20.22
28	14.20	14.38	13.34	14.26	15.51	15.85	16.32	17.09	18.00	18.69	.....	20.22
29	14.53		13.41	14.21	15.57	15.86	16.37	17.17	18.06	18.70	19.59	20.17
30	14.58		13.43	14.22	15.58	15.93	16.45	17.17	18.13	18.68	19.62	20.17
31	14.53		13.50		15.56		16.50	17.20		18.77		20.16

Lorain County

Ln-1. Village of Lagrange. In municipal well field, on west side of State Highway 301, about 1.5 miles north of Lagrange. Records available: 1948-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.28	.....	23.50	26.05	25.00	25.85	30.30	28.87	31.55	25.47	30.70	31.05
2	17.37	.....	24.30	24.70	26.80	23.80	31.70	30.44	29.89	30.52	31.70	30.65
3	19.16	21.90	25.73	14.92	16.10	25.30	31.80	29.50	29.69	26.58	31.18	31.20
4	26.53	25.39	21.20	24.68	25.10	21.62	30.68	32.10	31.61	30.11	30.80	29.60
5	20.30	27.19	22.90	26.22	17.60	29.95	31.32	32.55	29.43	30.95	31.50	31.08
6	15.90	27.20	21.85	24.60	26.00	28.00	28.98	32.23	30.10	31.55	30.32	28.74
7	16.85	27.15	23.05	25.50	27.80	27.48	.....	33.03	25.73	32.40	31.62	30.90
8	26.62	24.50	21.40	13.00	15.90	28.72	.....	27.25	30.95	32.20	30.40	29.85
9	19.30	25.90	22.71	12.40	25.09	28.08	.....	32.80	31.38	32.50	31.30	30.60
10	24.71	21.90	14.00	24.53	17.33	27.55	.....	33.32	24.20	30.92	29.02	28.28
11	21.68	24.48	23.30	26.40	26.10	24.20	.....	31.70	24.60	30.95	31.95	32.00
12	26.48	21.10	22.40	21.52	26.20	30.60	27.30	32.70	30.25	28.25	31.52	32.30
13	23.70	23.53	23.40	25.20	26.35	28.28	23.60	31.62	30.52	28.35	31.80	31.40
14	25.35	23.00	16.35	27.10	28.00	24.82	26.43	30.95	28.00	31.25	28.18	28.55
15	13.20	25.80	22.20	27.90	26.95	27.52	23.10	31.31	30.72	31.70	31.10	31.10

Ln-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	17.78	26.70	23.40	26.28	28.70	26.70	31.45	30.22	29.52	31.00	28.55	28.65
17	25.05	27.80	22.00	19.50	26.10	27.74	21.60	30.18	32.00	31.45	30.85	31.09
18	26.70	24.80	23.00	25.10	29.13	28.38	27.15	29.00	31.11	26.70	30.47	30.58
19	25.28	26.04	18.40	18.70	27.36	28.90	25.43	31.45	31.12	27.20	30.73	31.92
20	26.50	25.00	22.83	24.72	29.00	30.62	28.00	30.00	30.74	30.20	27.50	30.67
21	13.50	25.70	13.70	25.50	27.10	29.24	31.00	31.22	31.40	30.40	30.60	31.72
22	15.70	24.13	14.73	24.08	29.65	28.44	31.18	31.30	31.45	26.43	27.80	28.53
23	24.20	18.70	18.55	22.90	28.05	29.63	27.68	31.00	31.27	24.40	30.95	31.47
24	26.45	22.70	20.00	25.65	26.30	.....	24.80	32.12	31.02	26.75	31.03	30.28
25	23.50	24.10	23.60	24.00	25.70	.....	29.50	31.71	29.69	27.68	31.30	28.50
26	24.68	20.08	25.75	16.30	22.20	.....	28.80	31.55	28.65	.....	30.15	31.45
27	22.30	14.75	15.70	24.35	23.95	29.06	30.15	32.52	29.12	24.40	31.25	31.45
28	24.30	21.70	17.30	15.55	21.10	24.65	30.15	32.60	29.54	26.55	31.43	31.22
29	.....	.....	24.62	22.12	20.25	29.80	.....	30.50	29.50	29.62	31.53	31.13
30	.....	.....	25.60	22.00	27.45	31.80	.....	30.90	29.50	29.65	29.55	31.10
31	.....	.....	25.65	.....	23.70	.....	.....	26.83	.....	30.71	.....	30.73

Lucas County

Lu-1. State Hospital. In Toledo. Detroit Ave. and Arlington St.
 Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	90.82	89.66	88.97	88.18	87.58	89.69
2	90.85	89.78	88.94	88.24	87.58	90.25
3	90.90	89.63	89.02	88.23	87.78	.....
4	90.80	89.14	88.85	88.35	87.78	.....
5	90.71	89.26	88.37	88.20	.....	.....
6	90.36	89.25	88.75	87.84	.....	.....
7	90.35	89.15	88.92	87.84	.....	91.32
8	90.51	.....	.....	87.99	.....	92.39
9	90.84	.....	.....	88.25	.....	93.55
10	91.07	89.54	88.50	88.33	.....	93.74
11	91.02	89.68	88.50	88.20	.....	93.82
12	90.57	89.44	88.64	88.02	.....	93.25
13	90.31	89.25	88.67	87.68	.....	92.60
14	90.35	89.26	88.67	87.69	.....	92.94
15	90.35	89.08	88.75	87.53	.....	.....
16	90.17	89.12	88.74	.....	.....	.....
17	90.30	89.47	88.52	.....	.....	.....
18	90.30	89.16	.....	87.78	.....	.....
19	.....	89.10	.....	88.08	87.19	.....
20	90.56	89.44	.....	88.16	87.23	.....
21	90.28	89.43	.....	88.06	87.16	92.05
22	90.26	89.14	88.05	87.85	86.89	92.04
23	90.25	89.18	88.46	87.70	.....	91.88
24	89.91	89.09	88.45	88.07	87.26	92.43
25	90.03	89.10	88.37	88.10	87.36	92.44
26	89.95	.....	88.38	.....	87.28	92.13
27	89.77	.....	88.02	87.96	88.14	91.99
28	.....	88.84	88.35	88.14	89.25	93.37
29	.....	.....	88.37	87.98	89.78	92.40
30	.....	.....	.....	87.77	89.63	92.72
31	89.45	.....	.....	.....	89.20	.....

Lowest daily water level, from recorder graph

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	93.02	99.20	102.00	104.84	105.10	98.57
2	93.16	100.59	102.41	103.48	104.53	98.56
3	92.98	101.38	102.50	102.26	104.70	97.96
4	92.45	102.00	101.39	103.28	.....	97.78
5	92.50	.....	99.85	103.70	.....	97.63
6	93.53	.....	99.46	.....	.....	97.33
7	95.15	.....	99.89	.....	.....	97.38
8	95.95	.....	100.40	.....	.....	97.41
9	96.28	.....	100.72	.....	.....	97.14
10	95.94	100.91	100.78	.....	.....	96.81

Lu-1.--Continued.

Lowest daily water level, from recorder graph						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	95.55	101.55	100.44	.....	.....	96.57
12	96.46	102.00	99.23	.....	.....	96.69
13	97.00	102.07	100.62	.....	.....	96.63
14	97.50	100.90	100.98	.....	.....	.....
15	97.85	100.10	.....	.....	.....	96.38
16	98.04	101.24	.....	.....	.....	96.34
17	96.95	101.56	.....	.....	.....	96.12
18	95.48	.....	.....	103.92	.....	95.90
19	96.65	.....	.....	105.10	.....	95.84
20	.....	.....	102.06	105.35	.....	95.74
21	98.38	.....	102.58	105.28	.....	95.28
22	99.00	.....	103.03	105.12	100.70	95.07
23	99.48	99.98	103.76	105.12	100.50	.....
24	98.22	100.85	103.99	105.04	100.25	.....
25	97.63	101.25	102.95	105.70	99.70	.....
26	99.15	102.00	101.33	.....	99.70	.....
27	100.07	102.00	102.40	106.60	99.18	94.94
28	100.74	100.85	103.37	106.73	99.17	95.05
29	101.12	100.10	104.00	106.84	98.58	95.13
30	101.33	100.38	104.53	106.75	98.56	95.13
31	100.20	101.00	.....	105.58	.....	95.05

Lu-2. Henry Miller. Succor and Dorr Sts., in Toledo. Records available: 1946-49. Measurement discontinued.

Lowest daily water level, from recorder graph								
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	.....	61.90	60.83	61.28	.....	61.65	64.94	65.32
2	64.00	61.97	60.84	61.31	.....	61.89	65.06	65.38
3	64.04	61.95	60.90	61.22	.....	62.12	64.94	65.44
4	64.07	61.76	60.87	61.09	.....	62.21	64.62	65.44
5	63.96	61.80	60.72	60.92	.....	62.20	64.98	65.55
6	63.76	61.78	60.78	60.74	.....	62.26	65.15	65.69
7	63.72	61.69	60.85	60.73	.....	64.66	65.05	.....
8	63.74	61.68	60.56	60.84	.....	62.97	64.82	.....
9	63.80	61.80	60.56	60.94	.....	63.18	64.68	.....
10	63.91	61.92	61.00	60.99	.....	63.21	64.41	.....
11	63.90	61.99	61.07	61.02	.....	63.22	64.42	.....
12	63.82	61.96	61.15	61.04	.....	63.15	64.57	.....
13	63.70	61.82	61.14	60.98	.....	63.15	64.88	.....
14	63.64	61.32	61.16	60.97	.....	63.23	65.02	.....
15	63.64	61.50	61.33	60.93	.....	63.12	65.11	.....
16	63.49	61.35	61.34	61.02	.....	63.06	65.37	.....
17	63.54	61.49	61.34	61.01	.....	62.97	65.32	.....
18	63.56	61.40	61.42	60.88	.....	62.97	65.00	.....
19	63.30	61.22	61.53	.....	.....	62.97	65.06	.....
20	63.44	61.14	61.53	.....	.....	62.92	65.23	.....
21	63.38	61.13	61.40	.....	.....	62.98	65.23	.....
22	63.03	61.01	61.29	.....	.....	63.14	65.02	.....
23	62.92	60.96	61.34	.....	61.52	63.20	64.98	.....
24	62.59	60.97	61.40	.....	61.52	63.30	64.90	.....
25	62.55	60.92	61.44	.....	61.50	63.39	64.87	.....
26	62.54	60.95	61.45	.....	61.23	63.39	64.98	.....
27	62.46	60.90	61.30	.....	61.22	63.44	65.33	.....
28	62.04	60.68	61.37	.....	61.20	63.70	65.54	.....
29	62.24	.....	61.47	.....	61.21	64.02	65.62	.....
30	62.26	.....	61.50	.....	61.11	64.51	65.66	.....
31	62.02	.....	61.44	.....	61.38	.....	65.56	.....

Madison County

M-1. Max A. Chenoweth. In Mount Sterling. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.92	24.35	.....	23.90	24.21	25.28	25.40	.....	.....	26.32	26.35	.....
2	25.89	24.40	.....	24.01	24.32	25.35	25.44	.....	.....	26.32	26.31	.....
3	26.00	24.31	.....	23.96	24.37	25.42	25.43	.....	.....	26.27	26.38	.....
4	25.99	24.24	.....	24.09	24.48	25.36	25.49	.....	.....	26.21	26.37	.....
5	25.57	24.25	.....	24.09	24.57	25.29	25.53	.....	.....	.....	26.52	.....

M-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	25.91	24.17	.....	23.98	24.58	25.26	25.54	25.98	.....	.....	26.48	.....
7	25.75	24.34	24.13	24.06	24.56	25.37	25.60	25.98	.....	.....	.....	.....
8	25.65	24.32	24.11	24.17	24.56	25.42	25.64	25.95	.....	.....	.....	.....
9	25.65	24.40	24.08	24.24	24.54	25.46	25.64	25.97	.....	.....	.....	.....
10	25.63	24.47	23.94	24.26	24.64	25.49	25.56	26.00	.....	.....	.....	.....
11	25.60	24.54	23.91	24.28	24.76	25.43	25.60	26.25	.....	.....	.....	.....
12	25.37	24.42	23.97	.....	24.78	25.38	25.60	26.32	.....	.....	.....	.....
13	25.34	24.44	23.93	.....	24.82	25.21	.....	26.30	.....	26.23	26.32	.....
14	25.27	.....	24.07	.....	24.83	25.26	.....	.....	.....	26.29	26.38	.....
15	25.21	.....	24.08	.....	24.79	25.49	.....	.....	.....	26.27	26.47	.....
16	25.20	.....	24.06	.....	24.83	25.50	.....	.....	.....	26.24	26.48	.....
17	25.16	.....	24.04	.....	24.94	25.42	.....	.....	.....	26.29	26.51	.....
18	25.14	.....	24.10	.....	25.02	25.48	.....	.....	.....	26.33	26.63	.....
19	25.06	.....	24.27	.....	.....	25.49	.....	.....	.....	26.30	26.56	.....
20	25.07	.....	24.26	24.25	.....	25.53	.....	.....	.....	26.38	26.47	.....
21	24.96	24.42	24.24	24.19	.....	25.54	.....	.....	.....	.....	.....	.....
22	24.97	24.36	24.21	24.13	.....	25.60	.....	.....	.....	.....	.....	.....
23	.....	24.32	24.26	24.09	.....	25.55	.....	.....	.....	.....	.....	.....
24	.....	24.26	24.26	24.16	.....	25.54	.....	.....	.....	.....	.....	.....
25	.....	24.28	24.33	24.24	.....	25.52	.....	.....	.....	.....	.....	.....
26	.....	24.28	24.30	24.30	.....	25.50	.....	.....	.....	.....	.....	.....
27	.....	24.15	23.91	24.27	25.10	25.18	.....	.....	26.14	.....	.....	.....
28	24.13	24.17	23.97	24.21	25.17	25.18	.....	.....	26.12	.....	.....	.....
29	24.36	.....	23.99	24.20	25.17	25.26	.....	.....	26.20	.....	.....	.....
30	24.36	.....	23.95	24.22	25.18	25.34	.....	.....	26.27	26.28	.....	.....
31	24.20	.....	23.87	.....	25.25	.....	.....	.....	.....	26.37	.....	.....

Mahoning County

Ma-1. Village of Canfield. 1 mile south of village. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.57	32.26	32.38	31.06	31.12	32.03	32.90	32.93	34.76	35.55	36.29	36.03
2	33.50	32.30	32.19	31.11	31.17	32.06	32.96	33.05	34.77	35.79	36.22	36.30
3	33.53	32.30	31.98	31.26	31.17	32.06	33.00	33.10	34.73	35.98	36.24	36.31
4	33.50	32.22	32.00	31.26	.....	32.04	33.00	33.17	34.72	36.01	36.25	37.12
5	33.28	32.26	31.78	31.21	31.20	31.99	33.04	33.58	34.72	36.12	36.20	37.16
6	33.29	32.25	31.67	31.10	31.20	31.99	33.03	33.73	34.75	36.40	36.10	36.55
7	33.29	32.26	31.70	31.06	31.20	32.07	32.90	33.72	34.76	36.40	36.06	36.30
8	33.24	32.27	31.65	31.10	31.20	32.12	32.93	33.52	34.81	36.40	36.12	36.22
9	33.25	32.50	31.60	31.19	31.20	32.14	33.00	33.42	34.83	36.40	36.13	36.09
10	33.30	32.49	31.52	31.19	31.12	32.15	32.96	33.39	34.86	36.37	34.10	36.00
11	33.29	32.48	31.50	31.19	31.25	31.81	32.82	33.40	34.87	36.50	36.16	35.92
12	33.22	32.47	31.37	31.22	31.42	32.03	32.82	33.38	34.80	36.43	36.20	35.93
13	33.22	32.36	31.37	31.23	31.84	32.16	33.00	33.34	34.82	36.43	36.20	35.92
14	33.30	32.33	31.37	31.23	31.72	32.23	33.00	33.33	34.88	36.42	36.13	35.82
15	33.30	32.10	31.37	31.20	31.60	32.32	33.20	33.34	34.90	36.53	36.10	35.75
16	33.20	32.12	31.37	31.27	31.71	32.33	33.97	33.36	34.90	36.50	36.10	35.72
17	33.22	32.26	31.33	31.35	31.72	32.35	34.20	33.68	34.87	36.53	36.09	35.70
18	33.20	32.26	31.33	31.28	31.68	32.40	34.44	34.00	34.90	36.50	36.04	35.70
19	32.71	32.28	31.40	31.30	31.64	32.41	34.20	34.11	35.00	36.33	36.03	35.67
20	32.83	32.45	31.49	31.30	31.50	32.47	33.93	34.35	35.10	36.32	36.00	35.56
21	32.88	32.45	31.43	31.29	31.43	32.48	33.56	34.40	35.10	36.35	36.00	35.67
22	32.84	32.30	31.40	31.23	31.42	32.50	33.58	34.52	35.10	36.33	35.96	35.70
23	32.83	32.12	31.15	31.23	31.22	32.57	33.55	34.53	35.00	36.20	35.88	35.70
24	32.50	32.10	31.19	31.22	31.48	32.60	33.50	34.60	35.26	36.30	35.83	35.62
25	32.56	31.98	31.22	31.24	31.59	32.60	33.47	34.66	35.34	36.53	35.82	35.62
26	32.56	31.98	31.22	31.25	31.67	32.61	33.40	34.70	35.44	36.55	35.81	35.75
27	32.29	31.90	31.15	31.20	31.73	32.50	33.40	34.73	35.50	36.55	35.80	35.75
28	32.09	32.03	31.12	31.21	31.78	32.60	33.40	34.74	35.52	36.45	35.80	35.74
29	32.27	.....	31.16	31.18	31.81	32.65	33.38	34.73	35.53	36.50	35.89	35.69
30	32.30	.....	31.22	31.17	32.10	32.90	33.37	34.76	35.58	36.46	36.07	35.64
31	32.27	.....	31.22	.....	32.10	.....	32.73	34.73	.....	.....	.....	35.60

Ma-3. Tod Hotel. In Youngstown. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.73	26.71	26.62	26.88	27.05	27.37	27.75	26.79	27.20	27.67	27.62	27.56
2	26.74	26.72	26.63	26.90	27.02	27.43	27.49	26.77	27.36	27.66	27.64	27.60
3	26.76	26.71	26.63	26.87	27.14	27.50	27.28	26.81	27.39	27.58	27.69	27.61
4	26.77	26.71	26.63	26.87	27.21	27.53	27.16	26.83	27.38	27.57	27.72	27.60
5	26.76	26.77	26.59	26.87	27.27	27.47	27.01	26.86	27.29	27.57	27.74	27.55
6	26.69	26.77	26.58	26.86	27.32	27.44	26.90	26.91	27.23	27.57	27.74	27.53
7	26.68	26.71	26.63	26.88	27.38	27.51	26.80	26.84	26.29	27.62	27.69	27.53
8	26.72	26.73	26.63	26.90	27.38	27.58	26.77	26.85	27.35	27.64	27.70	27.58
9	26.74	26.72	26.60	26.91	27.33	27.58	26.78	26.80	27.41	27.61	27.73	27.61
10	26.76	26.72	26.60	26.91	27.31	27.56	26.67	26.82	27.42	27.46	27.73	27.62
11	26.77	26.73	26.63	26.89	27.31	27.56	26.79	26.87	27.42	27.47	27.73	27.62
12	26.76	26.72	26.63	26.90	27.28	27.55	26.74	26.88	27.40	27.41	27.73	27.58
13	26.78	26.65	26.64	26.91	27.26	27.51	26.80	26.93	27.40	27.43	27.70	27.57
14	26.87	26.61	26.63	26.98	27.25	27.54	26.63	26.86	27.35	27.44	27.60	27.57
15	26.89	26.56	26.61	27.06	27.27	27.56	26.68	26.86	27.41	27.45	27.61	27.57
16	26.88	26.50	26.58	27.14	27.27	27.57	26.73	26.90	27.45	27.44	27.63	27.57
17	26.88	26.53	26.55	27.14	27.33	27.62	26.66	26.84	27.46	27.31	27.63	27.56
18	26.90	26.53	26.59	27.12	27.37	27.65	26.70	26.84	27.45	27.29	27.67	27.53
19	26.93	26.52	26.63	27.16	27.41	27.65	26.75	26.98	27.42	27.39	27.67	27.48
20	26.97	26.52	26.63	27.17	27.47	27.61	26.75	27.09	27.43	27.45	27.64	27.46
21	26.97	26.53	26.60	27.19	27.46	27.58	26.74	27.11	27.44	27.50	27.63	27.43
22	26.93	26.53	26.56	27.20	27.43	27.56	26.79	27.19	27.44	27.51	27.58	27.39
23	26.93	26.60	26.69	27.21	27.41	27.61	26.82	27.24	27.49	.....	27.57	27.45
24	26.87	26.62	26.76	27.19	27.45	27.63	26.81	27.21	27.54	.....	27.58	27.50
25	26.85	26.70	26.65	27.19	27.47	27.68	26.80	27.19	27.56	27.60	27.56	27.50
26	26.86	26.73	26.91	27.13	27.47	27.70	26.77	27.19	27.54	27.65	27.57	27.46
27	26.82	26.71	26.87	27.08	27.48	27.66	26.77	27.15	27.53	27.68	27.56	27.38
28	26.77	26.59	26.82	27.14	27.48	27.68	26.69	27.06	27.53	27.68	27.53	27.35
29	26.80	26.62	26.54	27.14	27.46	27.71	26.67	26.96	27.58	27.68	27.50	27.39
30	26.81	.....	26.84	27.09	27.41	27.73	26.71	27.02	27.65	27.67	27.51	27.40
31	26.79	.....	26.85	.....	27.34	.....	26.73	26.97	.....	27.60	.....	27.41

Marion County

Mn-1. Village of Larue. In Larue. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	7.34	7.97	....	....	11.32	9.02	9.76	9.99	10.17	10.25	10.61
2	....	7.64	8.11	....	8.52	11.21	9.13	9.73	9.99	10.16	10.20	10.65
3	....	7.81	8.32	....	....	10.20	9.08	9.89	9.97	10.17	10.26	10.65
4	....	7.91	8.30	....	....	10.05	9.20	9.93	9.95	10.14	10.24	10.57
5	7.50	8.08	8.27	8.31	....	9.91	9.28	9.96	10.00	10.13	10.30	10.61
6	6.70	8.11	8.40	8.38	8.87	9.79	9.40	9.97	10.12	10.05	10.28	10.54
7	6.87	8.23	8.58	8.45	8.94	9.90	9.25	9.91	10.08	10.16	10.26	10.52
8	7.11	8.30	8.63	8.57	8.91	9.90	9.24	9.83	10.14	10.16	....	10.64
9	7.23	8.46	8.61	8.67	9.05	10.06	9.38	9.81	10.19	10.10	10.29	10.62
10	7.37	8.66	8.64	8.73	9.20	9.98	9.39	9.87	10.16	10.10	10.31	10.61
11	7.35	8.80	8.61	8.73	9.15	10.00	9.49	9.83	10.11	10.05	10.29	10.54
12	7.41	8.83	8.65	....	9.23	10.00	9.46	9.81	10.20	10.10	10.28	10.55
13	7.52	8.83	8.56	8.91	9.27	9.84	9.51	9.85	10.20	10.15	10.24	10.62
14	7.66	8.80	8.50	8.96	9.28	9.83	9.58	9.96	10.25	10.15	10.28	10.66
15	7.67	8.53	8.46	....	9.26	9.68	9.64	9.80	10.23	10.13	10.29	10.64
16	7.65	7.40	8.50	....	9.32	9.32	9.70	9.84	10.26	10.13	10.25	10.64
17	7.54	7.23	8.42	....	9.43	8.65	9.68	9.79	10.25	10.25	10.27	10.60
18	7.39	7.41	....	....	9.43	8.27	9.71	9.77	....	10.34	10.33	10.56
19	7.00	7.56	....	8.38	9.43	8.40	9.86	9.80	10.27	10.30	10.30	10.54
20	6.94	....	....	6.15	9.41	8.64	9.97	9.85	10.45	10.33	10.24	10.52
21	7.15	7.95	....	8.30	....	8.85	9.70	9.90	10.93	10.25	10.39	10.50
22	7.21	7.85	....	8.32	....	9.03	9.79	9.93	10.35	10.22	10.46	10.38
23	7.34	7.60	....	....	9.20	9.16	9.79	10.00	10.33	10.18	10.37	10.37
24	7.24	7.34	....	....	9.22	9.21	9.77	10.06	10.33	10.35	10.35	10.40
25	7.06	7.25	....	....	9.30	9.33	9.85	10.10	10.24	10.26	10.35	10.40
26	6.97	7.30	....	....	9.26	9.35	8.90	....	10.31	10.27	10.37	10.40
27	6.70	7.45	....	....	9.27	9.31	9.89	10.15	10.31	10.33	10.29	10.40
28	6.26	7.74	....	....	9.32	10.65	9.91	10.06	10.19	10.23	10.36	10.16
29	6.46	....	....	....	9.39	10.16	9.92	10.05	10.17	10.18	10.36	10.03
30	6.67	....	....	....	9.43	9.16	9.90	10.07	10.16	10.08	10.56	....
31	7.00	....	....	....	....	....	9.82	9.99	....	10.21	....	....

Medina County

Md-1. Village of Lodi. In Lodi. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.33	16.88	15.47	.....	17.44	.....	18.80	18.24	24.03	23.76	18.26	17.93
2	17.37	16.38	.....	16.02	.....	.....	21.50	18.12	20.60	23.57	18.20	18.01
3	17.20	.....	.....	.....	.....	.....	24.27	18.10	22.88	25.67	18.20	18.01
4	17.48	.....	15.15	15.80	.....	17.57	19.17	18.03	20.00	19.15	18.18	17.98
5	17.31	17.03	15.70	.....	.....	17.57	25.44	18.10	23.22	18.82	18.12	17.88
6	16.96	.....	15.65	.....	.....	.....	25.07	18.12	25.32	18.76	17.97	17.81
7	17.16	.....	15.52	.....	16.38	.....	23.32	.....	24.32	18.60	17.82	17.86
8	17.21	.....	15.60	.....	.....	.....	18.93	.....	20.00	18.60	17.85	17.90
9	16.78	.....	15.16	16.20	.....	17.69	24.56	.....	24.10	18.53	17.85	17.90
10	16.62	.....	.....	.....	.....	17.69	.....	.....	27.30	24.07	17.85	17.89
11	16.83	.....	.....	.....	.....	.....	18.53	.....	27.30	23.28	17.90	17.87
12	16.87	17.02	15.42	.....	.....	17.81	18.56	.....	23.57	18.50	25.50	17.76
13	16.90	.....	15.49	.....	.....	17.58	18.47	23.82	19.80	22.30	18.25	23.82
14	16.86	.....	15.48	.....	.....	.....	18.49	21.00	19.55	23.30	18.05	17.97
15	17.10	.....	15.46	.....	18.54	.....	18.43	20.31	23.20	25.55	18.00	17.81
16	16.85	.....	15.35	17.42	.....	.....	21.22	27.41	23.53	19.10	18.03	17.81
17	17.00	.....	15.53	.....	.....	.....	18.53	21.07	24.90	18.61	18.03	17.66
18	16.79	16.99	.....	.....	.....	17.50	18.50	26.80	20.00	18.55	18.03	17.61
19	16.79	16.90	14.70	.....	.....	.....	18.39	26.00	24.66	18.47	18.03	23.71
20	16.63	.....	.....	.....	.....	.....	18.41	20.17	25.80	18.40	17.96	17.67
21	16.82	15.62	.....	.....	18.38	.....	18.35	25.69	25.94	18.40	17.97	17.44
22	17.49	15.52	.....	.....	.....	17.40	18.29	20.12	26.25	18.32	17.92	17.40
23	17.00	15.78	.....	16.79	18.25	17.99	18.21	20.02	23.06	22.98	23.47	17.40
24	17.05	15.22	.....	15.28	.....	18.12	18.22	19.93	25.80	18.54	18.02	23.02
25	17.22	15.67	.....	.....	.....	24.21	18.11	25.81	19.78	18.31	17.93	18.20
26	16.80	15.61	16.02	.....	.....	18.52	18.10	23.70	26.27	18.33	18.01	22.06
27	16.92	15.60	.....	.....	.....	18.52	18.18	24.50	21.50	18.34	18.04	17.33
28	16.92	15.50	16.49	.....	.....	18.58	22.95	24.02	19.30	18.45	17.94	22.81
29	17.12	.....	.....	.....	.....	24.78	23.00	24.38	19.04	18.36	17.96	23.44
30	16.80	.....	.....	16.74	.....	22.93	18.50	25.06	25.22	18.33	17.96	20.66
31	16.90	.....	.....	.....	.....	.....	18.38	25.04	.....	18.29	.....	23.15

Mercer County

Mr-1. S. O. Self. 4 miles southeast of Rockford. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.81	9.55	9.33	9.21	9.20	9.39	9.44	9.52	9.55	9.64	9.44	9.58
2	9.81	9.57	9.35	9.22	9.24	9.42	9.47	9.55	9.60	9.63	9.40	9.65
3	9.84	9.49	9.37	9.23	9.34	9.45	9.55	9.62	9.55	9.55	9.45	9.66
4	9.83	9.39	9.18	9.28	9.32	9.46	9.51	9.69	9.54	9.44	9.50	9.58
5	9.68	9.45	9.23	9.26	9.35	9.50	9.53	9.67	9.51	9.48	9.52	9.59
6	9.67	9.41	9.36	9.13	9.32	9.48	9.53	9.66	9.60	9.42	9.49	9.59
7	9.69	9.41	9.36	9.19	9.35	9.57	9.46	9.64	9.54	9.46	9.43	9.57
8	9.74	9.35	9.27	9.27	9.35	9.64	9.52	9.64	9.57	9.48	9.44	9.63
9	9.86	9.43	9.20	9.28	9.37	9.66	9.50	9.65	9.57	9.46	9.45	9.64
10	9.87	9.51	9.23	9.28	9.41	9.63	9.55	9.69	9.58	9.43	9.41	.....
11	9.81	9.49	9.23	9.27	9.42	9.60	9.53	9.68	9.58	9.41	9.39	.....
12	9.73	9.37	9.26	9.22	9.41	9.58	9.49	9.66	9.57	9.46	9.44	.....
13	9.71	9.42	9.25	9.15	9.40	9.53	9.49	9.60	9.51	9.47	9.35	.....
14	9.72	9.38	9.26	9.20	9.43	9.49	9.49	.....	9.55	9.48	9.37	9.64
15	9.72	9.34	9.25	9.19	9.43	9.41	9.53	.....	9.53	9.48	9.40	9.64
16	9.69	9.46	9.24	9.27	9.41	9.32	9.58	.....	9.52	.....	9.44	9.64
17	9.72	9.45	9.22	9.26	9.43	9.35	9.57	9.60	9.53	.....	9.44	9.62
18	9.71	9.35	9.31	9.21	9.43	9.43	9.55	9.62	9.48	.....	9.47	9.60
19	9.76	9.42	9.34	9.29	9.37	9.44	9.53	9.68	9.50	9.47	9.47	9.60
20	9.79	9.48	9.28	9.29	9.32	9.44	9.54	9.74	9.58	9.47	9.43	9.58
21	9.64	9.42	9.20	9.28	9.32	9.43	9.52	9.78	9.53	9.47	9.56	9.50
22	9.73	9.38	9.20	9.22	9.24	9.50	9.53	9.76	9.48	9.46	9.58	9.50
23	9.69	9.33	9.23	9.21	9.31	9.47	9.59	9.74	9.51	9.46	9.45	9.64
24	9.63	9.30	9.20	9.30	9.30	9.46	9.56	9.73	9.54	9.50	9.44	9.71
25	9.63	9.38	9.24	9.36	.....	9.47	9.57	9.75	9.56	9.48	9.47	9.70

Mr-1 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	9.58	9.32	9.18	9.25	9.34	9.51	9.56	9.73	9.55	9.50	9.50	9.63
27	9.54	9.25	9.15	9.27	9.36	9.43	9.59	9.72	9.49	9.51	9.49	9.63
28	9.52	9.33	9.25	9.33	9.39	9.45	9.59	9.61	9.50	9.44	9.49	9.67
29	9.65		9.30	9.26	9.41	9.41	9.47	9.55	9.52	9.53	9.48	9.70
30	9.65		9.22	9.24	9.39	9.43	9.52	9.54	9.61	9.54	9.55	9.70
31	9.48		9.00		9.39		9.56	9.48		9.43		9.68

Miami County

Mi-1. Troy Sunshade Co. In Troy. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.94	9.00	9.65	10.55	10.60	11.76	11.48	10.93	11.57	11.97	12.83	13.37
2	11.49	9.17	9.84	10.55	11.00	11.93	11.25	11.08	11.72	11.62	12.94	13.43
3	11.74	9.26	9.97	10.04	11.35	12.05	11.07	11.18	11.25	12.03	12.52	13.17
4	11.81	9.58	10.31	10.20	11.54	12.03	10.32	11.27	10.95	12.22	12.53	13.07
5	11.41	9.52	10.04	10.40	11.63	11.25	11.10	11.32	10.62	12.05	12.25	13.15
6	10.80	9.75	9.43	10.54	11.69	11.70	11.32	11.02	11.20	12.20	12.07	13.30
7	10.84	9.74	9.82	10.85	11.60	11.93	11.43	11.17	11.44	12.12	12.47	13.38
8	10.77	9.37	10.12	11.07	11.07	11.98	11.52	11.62	11.58	12.04	12.75	13.50
9	10.07	9.57	10.22	11.47	11.23	12.02	11.28	11.94	11.18	11.67	12.93	13.57
10	10.17	9.82	10.25	10.67	11.82	12.08	11.00	12.17	11.32	11.83	13.07	13.32
11	10.27	10.05	10.28	10.57	11.72	11.95	11.15	12.35	11.00	11.97	13.18	13.07
12	10.31	10.00	10.14	.....	11.82	11.34	11.35	12.44	11.50	12.47	13.03	13.35
13	10.32	9.45	9.70	.....	11.90	11.68	11.44	12.02	11.82	12.22	12.60	13.50
14	10.51	9.60	9.90	.....	11.87	11.85	11.70	11.60	11.76	12.30	12.84	13.66
15	10.44	9.61	10.36	.....	11.13	11.93	11.77	11.87	11.72	12.27	13.06	13.75
16	9.62	9.81	10.37	.....	11.60	11.64	11.32	12.16	11.	11.95	13.18	13.77
17	9.48	9.73	10.39	.....	11.87	11.42	11.07	12.32	11.57	12.17	13.30	13.62
18	10.03	10.03	11.24	10.57	12.02	11.13	11.32	11.93	11.18	12.25	13.45	13.36
19	9.80	9.95	10.87	11.08	12.09	10.78	11.52	11.96	11.45	12.46	13.37	13.35
20	9.78	9.26	10.15	11.16	12.11	10.55	11.66	11.58	11.62	12.37	13.07	13.51
21	10.01	9.40	10.18	11.28	12.07	11.24	11.90	11.25	11.04	12.41	13.11	13.59
22	9.95	9.57	10.36	11.02	11.30	11.35	11.93	11.52	11.90	12.32	13.28	13.63
23	9.23	9.70	10.48	11.01	11.57	11.46	11.52	11.82	12.03	11.93	13.32	13.70
24	9.26	9.76	10.57	10.35	11.81	11.48	11.24	12.01	11.88	12.26	13.12	13.72
25	9.40	10.10	11.18	10.55	11.90	11.21	11.02	12.04	11.43	12.44	13.15	13.04
26	9.37	10.02	10.87	10.98	11.97	10.87	11.07	12.03	11.87	12.57	12.93	12.82
27	9.29	9.24	9.95	11.15	12.03	11.02	11.07	11.67	11.88	12.47	12.73	13.02
28	9.17	9.42	10.13	11.30	11.98	11.17	11.07	11.42	12.00	12.47	13.01	13.17
29	9.05		10.38	11.35	11.20	11.32	11.10	11.47	12.10	12.35	13.32	13.24
30	8.56		10.51	11.27	10.89	11.44	11.00	11.54	12.08	12.04	13.37	13.03
31	8.67		10.51		11.52		10.87	11.42		12.84		12.75

Montgomery County

Mt-1. Dayton Water Department. In Dayton. Records available: 1942-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.90	3.85	7.27	11.13	8.35	.....	10.40	8.62	11.34	8.10	10.55	8.07
2	7.57	4.10	5.90	11.65	7.95	.....	5.65	7.90	11.32	9.10	12.70	8.21
3	8.50	4.30	6.82	11.95	8.53	12.57	3.09	9.76	8.40	6.85	10.15	7.35
4	8.55	4.64	7.52	12.00	9.10	10.45	5.53	8.58	8.41	7.60	9.00	6.84
5	6.35	4.67	7.65	8.02	9.47	7.60	6.45	9.27	10.58	8.15	7.78	9.55
6	2.15	4.52	7.50	8.00	9.87	4.27	8.20	9.50	13.60	....	8.68	11.35
7	5.05	5.35	7.64	9.40	9.82	4.15	8.36	9.03	13.80	14.22	12.17	13.10
8	6.72	5.43	8.47	10.28	9.62	3.45	11.75	11.25	11.32	11.05	13.57	11.25
9	7.63	5.52	8.56	9.98	8.55	5.22	13.30	11.73	7.57	9.33	12.84	7.32
10	8.10	5.92	8.50	8.53	8.83	6.78	13.64	9.25	6.97	13.27	12.32	7.41
11	7.95	5.87	7.61	8.20	8.82	4.80	15.23	8.14	6.50	14.48	12.50	7.40
12	4.50	5.07	7.62	10.13	9.48	6.50	14.12	7.95	6.10	12.35	13.05	6.77
13	3.77	3.37	7.70	10.52	10.04	11.90	8.02	6.33	6.57	14.65	8.75	8.36
14	3.96	3.55	8.85	10.06	10.04	13.28	7.77	5.95	5.75	11.40	12.20	9.17
15	3.95	3.48	9.28	9.50	9.82	6.95	6.75	4.57	9.59	9.11	14.77	9.28

Mt-1 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	3.93	2.40	9.90	.....	9.66	9.50	6.94	6.50	10.36	9.36	....	9.94
17	4.45	4.96	9.90	.....	11.22	11.03	5.56	6.15	8.50	11.16	....	7.77
18	5.66	5.70	9.37	.....	11.45	11.30	6.85	11.77	7.37	10.90	8.95	7.20
19	5.10	6.16	9.03	.....	10.70	12.22	7.70	13.88	8.23	9.55	8.45	....
20	....	5.00	8.93	.....	10.52	14.32	8.89	8.90	6.30	9.45	8.37	....
21	....	4.57	8.93	.....	8.82	15.43	10.85	5.70	9.17	8.40	8.40	....
22	....	5.01	8.93	10.72	8.56	8.20	11.58	5.50	12.18	10.25	9.55	....
23	....	4.47	8.93	10.47	9.30	4.85	14.65	7.00	10.02	11.12	9.88	15.00
24	....	6.10	7.47	9.60	10.85	4.28	14.97	9.05	9.75	11.02	....	14.48
25	....	6.20	7.70	9.80	10.50	3.35	8.25	8.02	7.81	9.50	8.30	11.90
26	5.29	6.32	8.12	10.48	10.57	3.40	6.34	6.80	10.94	8.96	8.31	....
27	4.03	6.12	8.03	11.06	10.67	7.40	7.27	10.42	11.44	9.75	7.98	....
28	4.56	7.40	9.18	11.38	....	11.43	7.95	9.00	10.05	9.74	5.27	....
29	3.90	....	9.45	10.92	....	....	6.84	10.27	9.48	9.15	6.13	....
30	4.30	....	10.16	9.50	....	....	8.54	12.24	9.25	9.78	7.45	....
31	3.20	....	10.50	....	....	....	8.62	9.25	....	8.43	....	....

Mt-2. Dayton Power & Light Co. 118 East Fourth St. Records available: 1942-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.81	23.77	23.85	24.35	26.15	29.03	30.85	34.67	34.30	32.61	32.32	31.47
2	27.61	23.85	23.98	24.35	26.17	29.31	30.87	34.84	34.27	32.43	32.27	31.65
3	27.54	23.86	24.12	24.20	26.38	29.60	30.72	34.98	34.25	32.17	32.30	31.77
4	27.63	23.96	24.20	24.13	27.65	29.72	30.45	35.13	34.13	32.07	32.34	31.87
5	27.64	23.97	24.20	24.18	26.95	29.72	30.55	35.25	33.80	32.00	32.34	31.97
6	27.55	23.83	24.12	24.34	27.32	29.78	30.62	35.29	35.65	31.98	32.20	31.90
7	27.33	23.81	24.13	24.47	27.50	30.05	30.60	35.25	33.68	32.00	32.02	32.02
8	27.14	23.95	24.24	24.62	27.49	30.22	30.48	35.18	33.70	32.04	32.10	32.09
9	26.78	24.10	24.34	24.63	27.57	30.42	30.46	35.35	33.70	32.00	32.18	32.16
10	26.37	24.27	24.50	24.57	27.68	30.67	30.48	35.50	33.70	32.00	32.28	32.16
11	26.18	24.37	24.57	24.54	27.77	30.78	30.17	35.65	33.52	32.17	32.42	32.07
12	26.07	24.37	24.57	24.75	27.90	30.70	30.29	35.79	33.16	32.30	32.45	31.96
13	26.02	24.27	24.44	25.00	28.11	30.75	30.47	35.55	33.32	32.35	32.44	32.05
14	25.95	24.24	24.27	25.20	28.18	30.94	30.67	35.81	33.32	32.38	32.27	32.12
15	25.94	24.37	24.39	25.32	28.17	31.13	30.87	35.70	33.28	32.37	32.52	32.17
16	25.77	24.37	24.44	25.33	28.23	31.22	30.97	35.84	33.28	32.24	32.37	32.22
17	25.60	24.30	24.50	25.28	28.47	31.27	30.97	35.97	33.25	32.10	32.38	32.22
18	25.58	24.19	24.58	25.26	28.77	31.23	31.10	34.11	33.10	32.24	32.58	32.13
19	25.53	.....	24.58	25.35	29.03	31.08	31.22	34.22	33.02	32.34	31.98	32.00
20	25.58	.....	24.45	25.38	29.15	30.80	31.50	34.20	33.00	32.46	31.80	32.12
21	25.42	23.74	24.30	25.36	29.15	30.90	31.72	34.08	33.02	33.08	31.58	32.22
22	25.37	23.89	24.45	25.47	29.06	31.04	32.12	33.72	33.07	33.08	31.60	32.28
23	25.15	23.99	24.52	25.52	29.05	31.16	32.17	33.84	33.08	33.02	31.68	32.28
24	24.90	23.96	24.57	25.51	29.22	31.30	32.11	33.97	33.05	32.72	31.70	32.25
25	24.90	24.07	24.66	25.46	29.20	31.31	32.02	34.13	32.77	32.57	31.55	32.05
26	24.89	24.07	24.66	25.65	29.18	31.25	32.20	34.24	32.53	32.62	.....	31.82
27	24.80	23.86	24.54	25.88	29.15	31.97	32.35	34.25	32.57	32.67	.....	31.58
28	24.62	23.71	24.32	26.01	29.10	30.90	32.53	34.20	32.62	32.74	31.64	31.54
29	24.63	.....	24.29	26.15	29.90	30.85	32.73	34.08	32.69	32.74	31.64	31.53
30	24.24	.....	24.27	26.17	29.71	30.84	32.79	34.21	32.64	32.64	31.55	31.54
31	23.78	.....	24.32	.....	29.78	.....	32.77	34.30	.....	32.37	.....	31.52

Mt-3. State Highway Department. In Dayton. Records available: 1945-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.22	40.57	41.28	41.39	43.43	43.82	44.62	.....	45.03	45.57	46.07	46.70
2	42.78	40.87	41.37	41.30	43.70	44.26	44.62	44.75	45.09	45.57	46.10	46.74
3	43.62	41.04	41.55	38.83	43.40	44.38	44.62	44.77	45.12	45.57	46.10	46.75
4	44.20	41.45	41.78	39.41	44.02	44.39	43.82	44.78	45.12	45.58	46.11	46.75
5	44.14	41.36	41.79	41.30	44.32	43.70	44.27	44.79	45.08	45.64	46.12	46.76
6	42.95	40.20	40.78	41.92	44.50	43.77	44.60	44.80	44.60	45.66	46.12	46.77
7	41.65	40.77	40.63	42.35	44.50	44.32	44.60	44.80	44.67	45.69	46.07	46.84
8	41.47	41.42	41.17	42.65	43.38	44.62	44.60	44.80	44.73	45.71	45.98	46.86
9	40.30	41.97	41.53	42.53	43.28	44.62	44.61	44.80	44.82	45.71	46.07	46.88
10	40.97	42.27	41.72	39.65	43.89	44.62	44.41	44.60	44.88	45.71	46.12	46.90

Mt-3 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	41.58	42.47	41.96	41.10	44.30	44.62	43.85	44.53	44.89	45.72	46.21	46.90
12	42.00	42.47	41.96	41.99	44.58	44.35	44.28	44.52	44.90	45.78	46.28	46.90
13	42.85	41.12	40.63	42.61	44.58	44.23	44.60	44.30	44.92	45.81	46.30	46.91
14	42.75	41.68	41.11	43.02	44.58	44.60	44.60	44.07	44.97	45.84	46.32	46.93
15	42.70	41.98	41.63	43.15	44.07	44.60	44.60	44.55	45.05	45.85	46.36	46.95
16	41.67	41.57	41.82	42.96	43.43	44.60	44.61	44.59	45.15	45.85	46.41	46.96
17	42.13	41.97	41.84	41.56	43.86	44.60	44.47	44.62	45.22	45.87	46.46	46.97
18	42.46	41.05	42.07	41.74	44.20	44.59	44.30	44.64	45.23	45.88	46.52	46.97
19	42.67	42.07	41.92	42.17	44.34	43.82	44.58	44.67	45.24	45.92	46.55	46.97
20	42.27	40.85	40.33	42.54	44.57	43.65	44.60	44.71	45.27	45.92	46.56	46.98
21	42.26	41.47	41.19	42.92	44.57	44.14	.....	44.71	45.33	45.92	46.57	47.02
22	42.52	41.05	41.95	43.17	43.62	44.62	.....	44.71	45.37	45.92	46.58	47.04
23	41.25	42.23	42.11	43.17	43.42	44.62	.....	44.60	45.42	45.92	46.62	47.06
24	41.72	41.55	42.05	41.82	43.95	44.62	.....	44.65	45.45	45.92	46.64	47.07
25	41.93	41.77	42.44	42.07	44.09	44.62	.....	44.72	45.45	45.91	46.65	47.07
26	42.04	41.67	42.45	42.85	44.24	44.54	.....	44.80	45.45	46.03	46.65	46.27
27	42.03	40.32	40.56	43.76	44.39	44.34	.....	44.85	45.47	46.05	46.65	45.88
28	41.72	40.80	40.14	43.57	44.39	44.59	.....	44.85	45.50	46.06	46.65	45.88
29	41.21		40.46	43.72	43.14	44.60	.....	44.87	45.53	46.07	46.63	45.90
30	39.79		40.95	43.72	42.30	44.61	.....	44.89	45.56	46.07	46.68	45.90
31	40.12		41.47		43.09		.....	44.98		46.07		45.90

Mt-5. Kuhns Bros. Co. 1800 McCall Street. In Dayton. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	37.16	35.99	36.22	36.60	.....	.....	39.70	40.88	.....	41.88	42.40
2	.....	37.03	36.07	36.21	36.66	38.00	.....	39.75	40.91	.....	41.93	42.45
3	.....	36.92	36.10	36.18	36.69	38.04	.....	39.79	40.93	.....	41.93	42.45
4	.....	36.77	36.07	36.18	36.72	38.08	.....	39.83	40.94	.....	41.96	42.47
5	41.02	36.71	36.09	36.13	36.75	38.12	.....	39.87	40.96	.....	41.96	42.50
6	40.61	36.62	36.12	36.12	36.78	38.18	.....	39.91	40.96	.....	41.96	42.50
7	40.38	36.54	36.16	36.12	36.82	38.23	.....	39.95	40.96	.....	41.99	42.54
8	40.21	36.59	36.14	36.14	36.80	38.28	.....	39.98	.....	.....	42.01	42.56
9	40.06	36.55	36.14	36.16	36.91	38.36	.....	.....	.....	.....	42.02	42.56
10	39.93	36.45	.....	36.17	36.95	38.42	.....	40.04	.....	.....	42.04	42.59
11	40.11	36.45	36.19	36.15	37.00	38.44	38.98	40.09	.....	.....	42.07	42.60
12	39.92	36.39	36.20	36.14	37.02	38.47	39.00	40.13	.....	41.54	42.07	42.63
13	39.67	36.38	36.20	36.15	37.07	38.53	39.02	40.17	.....	41.56	42.09	42.65
14	39.75	36.38	36.21	36.17	37.13	38.56	39.05	40.20	.....	41.57	42.10	42.65
15	39.66	36.35	36.24	36.21	37.18	38.59	39.09	40.25	.....	41.60	42.13	42.69
16	39.55	36.30	36.22	.....	37.23	38.58	39.11	40.29	41.10	41.61	42.14	42.69
17	39.47	36.31	36.22	.....	37.27	.....	39.13	40.35	41.13	41.64	42.15	42.70
18	.....	36.26	36.27	36.29	37.33	.....	39.19	40.40	41.64	41.66	42.17	42.72
19	38.97	36.23	36.29	36.33	37.37	.....	39.22	40.44	41.17	44.69	42.18	42.75
20	38.90	36.23	36.30	36.35	.....	38.67	39.26	40.48	41.19	44.71	42.20	42.76
21	38.78	36.21	36.28	36.36	.....	38.70	39.30	40.51	41.18	44.73	42.23	42.76
22	38.69	36.18	36.27	36.38	.....	38.73	39.34	40.54	41.20	44.76	42.23	42.78
23	38.60	36.15	36.30	36.39	37.57	38.75	39.38	40.58	41.22	44.76	42.26	42.79
24	38.48	36.01	36.31	36.44	37.60	38.81	39.41	40.62	41.23	44.79	.....	.....
25	38.37	36.02	36.30	36.46	37.64	38.82	39.42	40.66	41.24	44.81	42.30	.....
26	38.22	36.02	36.27	36.47	37.69	38.87	39.46	40.69	41.26	44.81	42.30	.....
27	38.02	35.97	36.23	36.51	37.73	38.83	39.49	40.72	41.29	41.81	42.31	42.79
28	37.85	35.99	36.25	36.54	37.77	.....	39.53	40.74	41.30	41.84	42.33	42.78
29	37.68		36.24	36.56	37.81	.....	39.57	40.79	41.33	41.85	42.35	42.78
30	37.51		36.20	36.58	37.84	.....	39.60	40.82	41.35	41.85	42.37	42.80
31	37.30		36.17		.....		39.64	40.85		41.88		42.79

Mt-6. City of Dayton. Third and Ludlow Sts. In municipal building. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.84	24.93	25.60	25.90	28.00	32.54	34.62	37.86	36.72	33.63	33.17	33.02
2	28.70	25.13	25.73	26.01	28.23	33.02	34.69	36.10	36.92	33.53	33.07	33.10
3	28.77	25.30	25.86	25.81	28.72	33.42	34.23	36.26	37.23	33.41	32.95	33.19
4	28.87	25.50	25.94	26.00	30.46	33.70	33.99	36.33	35.62	33.43	32.93	33.08
5	28.67	25.62	26.16	26.96	30.90	32.03	34.30	36.46	35.23	33.42	32.97	33.11

Mt-6 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	28.20	25.54	26.03	26.29	31.23	33.65	34.52	36.55	35.32	33.62	32.86	33.13
7	27.50	25.60	26.08	26.50	31.40	33.97	34.62	35.62	35.13	33.76	32.85	33.33
8	27.03	25.72	26.13	26.67	29.55	34.13	34.55	36.03	34.97	33.87	33.03	33.32
9	26.73	25.85	26.30	26.76	31.14	34.32	34.56	36.61	35.00	33.53	33.04	33.40
10	26.49	25.01	26.40	26.60	29.62	34.47	33.58	36.78	34.85	34.93	33.15	33.42
11	26.42	25.24	26.35	26.87	29.72	34.67	33.80	36.97	34.50	35.50	33.30	33.31
12	26.56	25.21	26.40	27.00	29.68	33.98	33.96	37.13	34.69	35.33	33.41	33.40
13	26.65	25.13	26.25	27.22	30.08	34.54	34.05	37.27	34.89	33.78	33.23	33.41
14	26.75	26.34	26.12	28.36	31.52	34.76	34.20	37.54	34.45	33.67	33.13	33.41
15	26.83	26.30	26.12	27.30	29.93	34.73	34.40	37.72	34.32	33.61	33.13	33.32
16	26.75	26.00	26.19	27.42	31.73	34.83	34.63	37.23	34.37	33.47	33.10	33.42
17	26.66	25.60	26.26	27.22	32.20	34.59	34.23	37.35	34.36	33.41	33.01	33.49
18	26.52	25.27	26.32	27.11	32.53	34.34	34.65	37.41	34.24	33.60	33.00	33.41
19	26.49	25.29	26.43	27.16	32.74	33.54	34.90	37.38	34.38	33.58	33.02	33.41
20	26.32	25.22	26.26	27.32	31.25	33.79	35.12	37.97	34.58	33.69	32.91	33.47
21	26.03	25.23	26.32	27.43	32.03	33.96	35.33	37.40	34.55	33.81	32.78	33.52
22	26.06	25.40	26.39	27.00	30.82	34.23	35.47	36.59	34.54	33.81	32.77	33.50
23	25.90	25.38	26.30	27.70	31.13	34.35	35.50	36.92	34.19	33.62	32.82	33.36
24	25.82	25.40	26.33	27.53	32.76	34.50	34.80	37.03	34.05	33.33	32.84	33.22
25	25.73	25.53	26.51	27.53	30.99	34.62	35.15	37.29	33.89	33.36	32.85	33.07
26	25.73	25.53	26.53	27.78	30.80	34.06	35.32	37.47	33.73	33.43	32.91	32.83
27	25.50	25.40	26.30	28.10	30.71	34.39	.....	37.60	33.73	33.50	32.82	32.64
28	25.34	25.50	25.10	28.24	30.55	34.59	.....	37.07	33.80	33.55	32.86	32.54
29	25.02		25.63	28.32	30.39	34.50	.....	37.20	33.78	33.62	32.96	32.35
30	24.79		25.65	28.39	30.13	34.50	.....	37.33	33.74	33.50	33.04	32.31
31	24.70		25.89		30.70		.....	37.49		33.20		32.26

Mt-10. West Carrollton Parchment Co. West Carrollton. Records available: 1945, 1948-49. Measurement discontinued.

Lowest daily water level, from recorder graph							
Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	.....	.....	20.37	20.74	.....	22.75	24.32
2	.....	.....	20.63	20.67	21.21	23.12	23.58
3	.....	.....	20.82	19.49	21.74	23.59	23.08
4	.....	.....	20.85	20.07	22.05	23.50	22.50
5	23.50	.....	19.91	20.35	22.22	22.31	22.50
6	23.13	.....	19.42	20.70	22.45	23.22	23.00
7	22.34	19.20	20.07	20.94	22.33	23.60	23.12
8	21.73	19.66	20.51	21.19	21.72	23.66	23.30
9	20.26	20.02	20.81	20.64	22.01	23.90	23.81
10	20.51	20.24	20.88	19.75	22.27	23.90	22.69
11	20.73	20.43	20.93	20.54	22.50	23.67	23.26
12	20.87	20.31	20.28	20.95	22.63	22.45	23.78
13	.....	19.42	19.70	21.23	22.80	23.07	24.03
14	21.23	20.05	20.23	21.41	22.04	23.37	24.12
15	20.72	20.34	20.72	21.58	21.54	23.62	24.32
16	20.02	20.31	20.84	21.22	21.97	23.63	.....
17	20.40	20.20	21.05	20.32	22.48	24.17	.....
18	20.82	20.15	21.50	21.05	22.77	24.01	.....
19	20.79	19.81	21.49	21.44	22.91	22.60	.....
20	20.82	18.73	20.84	21.50	22.93	23.13	.....
21	20.67	19.51	21.07	21.62	22.78	23.59	.....
22	.....	19.90	21.32	21.72	21.85	23.93	.....
23	.....	20.01	21.51	21.60	22.30	24.00	.....
24	.....	20.03	21.60	20.87	22.66	24.09	.....
25	.....	20.44	21.51	21.54	22.84	23.53	.....
26	.....	20.34	20.97	21.97	23.04	22.47	.....
27	.....	19.17	19.58	22.10	23.10	23.17	.....
28	.....	19.92	19.92	22.24	22.93	23.47	.....
29	.....	.....	20.18	22.30	21.69	23.72	.....
30	.....	.....	20.24	21.90	21.10	23.78	.....
31	.....	.....	20.23	.....	22.17	.....	.....

Mt-36. U. S. Air Force. At Wright Field, Dayton. Records available: 1946-49.

Lowest daily water level, from recorder graph											
Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	16.57	18.30	18.82	19.50	18.82	18.43	18.85	19.63	19.41	18.68
2	.....	16.27	18.25	18.74	19.55	18.50	18.59	19.33	19.29	19.62	18.88
3	.....	16.43	18.52	18.83	19.98	18.26	18.26	19.07	19.37	19.75	18.90
4	.....	16.65	18.62	18.68	19.72	17.68	18.64	18.84	19.45	19.90	18.82
5	.....	16.89	18.62	18.74	19.49	17.85	18.74	18.77	19.37	19.50	18.86
6	.....	17.05	18.20	18.95	19.15	18.13	18.75	19.12	19.88	19.38	19.30
7	.....	17.12	17.63	18.95	19.66	18.27	18.65	19.46	19.80	19.65	19.52
8	.....	17.53	18.00	19.00	18.39	18.34	19.05	19.72	19.66	19.97	19.35
9	.....	17.78	18.25	19.07	18.32	18.85	19.18	19.64	19.23	20.30	19.57
10	.....	17.33	18.30	18.75	18.40	18.97	19.35	19.22	19.68	20.34	19.51
11	16.18	17.03	18.10	18.54	18.25	19.37	19.18	19.80	20.00	20.37	19.45
12	16.13	16.80	18.18	18.77	18.06	19.77	18.98	19.81	20.18	20.48	19.52
13	16.05	16.99	18.12	18.83	18.46	19.62	18.81	19.84	20.50	20.39	19.38
14	15.79	17.03	18.23	18.78	18.75	19.65	18.50	19.54	20.30	20.12	19.21
15	15.80	17.28	18.57	18.86	18.21	19.13	18.68	19.53	20.00	20.78	19.37
16	14.62	17.34	18.51	18.88	17.98	18.64	18.57	19.70	20.00	20.97	19.17
17	14.06	17.56	18.45	19.21	16.42	18.35	18.47	19.02	20.28	20.41	19.04
18	14.86	17.67	18.30	19.38	16.72	18.53	18.49	18.92	20.54	19.47	19.31
19	15.30	17.73	18.03	19.63	17.44	18.90	18.98	19.04	20.35	19.12	19.25
20	15.45	17.76	18.15	19.71	18.22	18.70	18.82	19.24	20.10	18.70	19.09
21	15.55	17.60	18.22	19.20	18.73	18.94	18.52	18.96	19.71	18.71	19.39
22	15.68	17.83	18.50	19.00	18.89	19.13	18.57	19.51	19.44	18.96	19.56
23	15.42	17.84	18.36	19.93	18.33	19.11	18.47	19.73	19.62	18.67	20.00
24	15.44	17.67	18.32	18.95	17.97	19.45	18.61	19.50	19.42	18.65	20.30
25	15.97	17.80	18.27	19.08	17.44	19.46	18.75	19.52	19.58	18.67	20.21
26	16.15	17.77	18.81	19.23	17.10	19.80	18.64	19.76	19.38	18.62	20.21
27	16.32	17.60	18.38	19.82	17.10	19.62	18.70	19.78	19.41	18.61	19.82
28	16.35	17.43	18.68	19.35	17.67	19.60	18.79	19.87	19.38	18.50	19.97
29	.....	17.63	18.82	19.24	18.23	19.60	18.97	19.72	19.30	18.35	20.35
30	.....	17.72	18.85	19.25	18.25	18.56	19.14	20.05	19.50	18.42	20.53
31	.....	17.91	.....	19.38	.....	18.32	19.11	.....	19.40	.....	20.34

Mt-49. E. F. Stenger. In Whitfield. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.04	.....	12.53	12.61	.....	14.61	15.15	.....	16.56	16.97	17.45	.....
2	16.03	11.60	12.59	12.62	13.59	14.66	15.16	.....	16.58	16.97	17.48	.....
3	16.04	.....	12.63	12.62	13.65	14.72	15.16	.....	16.60	16.98	17.52	.....
4	16.04	.....	12.65	12.68	13.70	14.73	15.17	15.94	16.58	17.01	17.55	.....
5	15.22	.....	12.66	12.69	13.74	14.73	15.18	15.98	16.52	17.03	17.55	.....
6	14.30	.....	12.71	12.78	13.79	14.81	15.24	15.99	16.47	17.05	17.55	.....
7	13.24	11.97	12.75	.....	13.81	14.88	15.28	15.99	16.50	17.08	17.56	.....
8	13.19	12.05	12.76	12.90	13.82	14.93	15.25	16.04	16.54	17.08	17.59	.....
9	13.11	12.15	12.82	12.92	13.92	14.98	15.22	16.08	16.55	17.07	17.61	.....
10	13.16	12.26	12.82	12.93	13.98	15.02	15.19	16.12	16.58	17.09	17.63	.....
11	13.18	.....	12.78	12.99	14.02	15.03	15.22	16.18	16.57	17.11	17.63	.....
12	13.23	.....	12.76	13.02	14.06	15.01	15.27	16.22	16.58	17.13	17.64	.....
13	13.29	.....	12.75	13.07	14.11	15.04	15.30	16.22	16.63	17.16	17.64	.....
14	13.36	.....	12.73	13.09	14.12	15.08	15.35	16.21	16.63	17.18	17.65	.....
15	13.36	.....	12.76	13.15	14.11	15.10	15.39	16.24	16.69	17.18	17.68	.....
16	13.36	11.93	12.79	13.17	14.14	15.06	15.40	16.28	16.92	17.18	17.72	18.14
17	13.34	11.96	12.81	13.16	14.19	14.93	15.40	16.30	16.93	17.20	17.74	18.14
18	13.32	12.03	12.86	13.21	14.24	14.87	15.46	16.26	16.90	17.23	17.75	18.08
19	13.21	12.08	12.88	13.22	14.27	14.84	15.52	16.24	16.92	17.24	17.75	18.08
20	13.07	12.17	12.88	13.26	14.33	14.88	15.53	16.26	16.95	17.25	17.75	18.08
21	12.98	12.24	12.88	13.28	14.34	14.92	15.59	16.28	16.97	17.25	17.75	18.08
22	12.99	12.25	12.86	13.32	14.32	15.00	15.57	16.32	16.99	17.28	17.75	18.06
23	12.98	12.25	12.85	13.32	14.31	15.05	15.56	16.37	16.81	17.31	17.81	18.05
24	12.92	12.27	12.86	13.33	14.35	15.09	15.54	16.41	16.81	17.34	17.81	18.05
25	12.61	12.36	12.91	13.40	14.38	15.08	15.61	16.45	16.81	17.37	17.84	17.99
26	12.44	12.36	12.91	13.44	14.43	15.09	15.66	16.47	16.84	17.40	17.84	17.96
27	.....	12.36	12.78	13.49	14.47	15.06	15.70	16.47	16.87	17.40	17.84	17.88
28	.....	12.47	12.57	13.52	14.48	15.10	15.77	16.43	16.89	17.42	17.86	17.86
29	.....	.....	12.51	.....	14.48	15.12	15.77	16.44	16.91	17.42	17.88	17.85
30	.....	.....	12.51	.....	14.48	15.14	.....	16.48	16.93	17.42	17.91	17.86
31	.....	.....	12.55	.....	14.50	.....	.....	17.52	.....	17.44	.....	17.85

Mt-50. Hugo Thompson, 3 miles northeast of Dayton. Records available: 1947-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	27.01	27.04	27.82	29.50	30.53	.....	31.88	32.51	33.03	33.55
2	.....	.....	27.01	27.05	27.83	29.54	30.55	31.07	31.89	32.53	33.04	33.57
3	.....	28.06	26.97	27.05	27.93	29.60	30.56	31.09	31.91	32.54	33.02	33.58
4	.....	28.01	26.97	27.07	27.99	29.66	30.57	31.13	31.95	32.56	33.03	33.59
5	33.54	27.99	26.92	27.07	28.03	29.68	30.60	31.18	31.96	32.59	33.03	33.59
6	33.44	27.83	26.97	27.07	28.06	29.68	30.61	31.19	31.99	32.60	33.07	33.59
7	33.19	27.72	26.98	27.07	28.06	29.68	30.64	31.23	32.01	32.61	33.10	33.64
8	.....	27.71	26.97	27.07	28.16	29.91	30.64	31.25	32.01	32.63	33.11	33.64
9	.....	27.63	26.94	27.14	28.16	29.05	30.63	31.28	32.03	32.65	33.17	33.64
10	.....	27.63	26.96	27.14	28.17	29.05	30.62	31.21	32.03	32.65	33.18	33.65
11	.....	27.58	26.97	27.14	28.34	30.07	30.62	31.24	32.03	32.65	33.20	33.70
12	31.84	27.58	26.96	27.14	28.38	30.13	30.62	31.26	32.10	32.70	33.21	33.71
13	31.82	27.57	26.99	27.19	28.43	30.17	30.66	31.29	32.13	32.71	33.21	33.71
14	31.70	27.57	26.99	27.26	28.49	30.22	30.67	31.31	32.16	32.71	33.21	33.78
15	31.61	27.55	26.99	27.26	28.55	30.24	30.68	31.34	32.16	32.73	33.21	33.78
16	31.49	27.55	27.02	27.28	28.61	30.20	30.70	31.37	32.19	32.76	33.29	33.79
17	31.42	27.55	27.02	27.28	28.66	30.21	30.73	31.50	32.21	32.78	33.30	33.80
18	31.37	27.42	27.03	27.38	28.73	30.23	30.75	31.51	32.23	32.79	33.31	33.81
19	31.25	27.33	27.05	27.41	28.76	30.23	30.78	31.54	32.25	32.83	33.33	33.82
20	31.22	.....	27.05	27.43	28.76	30.24	30.80	31.57	32.27	32.84	33.34	33.84
21	31.15	.....	27.05	27.42	28.76	30.24	30.83	31.60	32.34	32.84	33.34	33.84
22	30.95	.....	27.06	27.44	28.96	30.34	30.85	31.62	32.35	32.87	33.34	33.86
23	30.84	.....	27.12	27.44	29.03	30.36	30.87	31.64	32.35	32.88	33.41	33.87
24	30.64	27.07	27.12	.....	29.06	30.37	30.88	31.67	32.38	32.89	33.41	33.87
25	30.52	27.09	27.12	.....	29.13	30.43	30.89	31.69	32.39	32.89	33.43	33.87
26	30.32	27.09	27.12	.....	29.16	30.48	30.91	31.72	32.40	32.95	33.43	33.88
27	.....	27.05	27.12	27.69	29.22	30.48	.....	31.75	32.42	32.96	33.43	33.88
28	.....	27.01	27.13	27.69	29.28	30.50	.....	31.76	32.45	32.97	33.49	33.89
29	.....	.....	27.13	27.72	29.33	30.51	.....	31.79	32.47	32.97	33.51	33.89
30	.....	.....	27.10	27.72	29.37	30.52	.....	31.82	32.50	33.00	33.54	33.89
31	.....	.....	27.05	.....	29.42	.....	.....	31.86	.....	33.02	.....	33.89

Muskingum County

Mu-1. Zanesville Water Department. In Zanesville. Records available: 1942-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.40	.....	22.29	23.46	23.13	22.60	25.81	27.20	27.47	26.53	27.03	28.60
2	26.40	.....	22.46	23.37	22.92	22.95	25.68	27.09	27.32	26.44	27.08	28.60
3	26.36	.....	22.71	23.15	23.05	23.32	25.54	26.91	27.29	26.52	27.38	28.71
4	26.45	.....	22.84	23.07	23.17	23.64	25.60	26.92	27.22	26.56	27.45	28.72
5	26.54	.....	23.02	23.05	23.41	23.82	25.70	26.65	27.06	26.35	27.54	28.74
6	26.60	.....	23.10	23.18	23.58	24.00	26.41	26.62	27.01	26.40	27.65	28.77
7	26.65	.....	23.18	23.28	23.72	25.22	26.55	26.70	26.98	26.48	27.42	29.57
8	26.58	23.24	23.38	23.40	23.73	25.30	26.34	26.47	27.06	26.52	27.50	29.74
9	26.37	.....	23.50	23.45	23.62	25.42	26.55	26.89	26.95	26.53	27.57	30.00
10	26.22	.....	23.63	23.45	23.66	26.62	26.57	26.95	26.82	26.45	27.69	30.10
11	26.03	.....	23.73	23.27	23.72	25.70	26.17	27.32	26.70	26.75	27.77	30.17
12	26.08	.....	23.83	23.30	23.75	25.60	26.32	27.65	26.61	26.77	27.97	30.23
13	26.12	.....	23.84	23.36	23.94	25.27	26.05	27.68	26.58	26.94	28.34	29.95
14	26.28	.....	23.83	23.47	24.15	25.27	26.30	27.32	26.62	26.45	28.38	29.91
15	26.07	24.27	23.87	23.55	24.11	25.36	26.08	27.36	26.31	27.00	28.10	29.90
16	26.43	24.30	23.97	23.57	24.14	25.46	26.17	27.08	26.30	27.27	28.15	29.10
17	26.44	24.29	24.11	23.45	24.14	25.46	26.22	27.17	26.30	26.87	28.00	29.15
18	26.56	24.05	24.11	23.23	23.52	25.47	25.94	27.17	26.41	26.68	28.03	.....
19	26.67	23.65	24.33	23.33	23.58	25.49	25.73	27.03	26.42	26.58	28.07	.....
20	26.71	23.38	24.34	23.36	23.73	25.40	26.47	27.17	26.51	26.68	28.11	29.30
21	26.70	23.42	24.34	23.37	23.60	25.70	26.48	27.24	26.55	27.19	27.92	29.60
22	26.70	23.03	24.54	23.40	23.59	25.95	26.51	26.93	26.55	27.43	28.08	29.69
23	26.67	23.02	24.58	23.42	23.39	25.97	26.47	27.10	26.58	27.92	28.16	29.77
24	26.51	22.91	24.58	23.59	23.98	26.04	26.77	27.12	26.38	27.81	28.30	29.77
25	26.45	22.65	24.53	23.12	23.85	26.25	26.56	27.65	26.34	27.80	28.42	29.81

Mu-1 --Continued.

Lowest daily water level, from recorder graph											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
26	26.36	22.45	24.50	23.10	23.78	26.02	26.73	27.82	26.37	27.04	28.52 29.47
27	26.13	22.25	24.35	23.18	23.88	25.82	26.87	28.24	26.32	27.07	28.57 29.48
28	25.72	22.10	24.05	23.23	23.88	25.82	27.40	28.22	26.33	27.17	28.48 29.49
29	25.30		23.96	23.25	23.73	25.66	27.63	27.89	26.42	27.13	28.60 29.52
30	24.72		23.77	23.22	23.45	25.80	26.70	27.54	26.42	27.14	28.47 29.98
31	.....		23.58		23.46		27.21	27.54		27.00	30.20

Mu-2. Ohio Water Resources Board. In Zanesville. Records available: 1947-49.

Lowest daily water level, from recorder graph											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
1	7.16	....	5.77	5.82	6.60	7.56	7.57	7.69	8.02	8.10	8.08 8.07
2	7.20	....	5.89	5.96	6.65	7.59	7.61	7.74	8.05	8.10	8.03 8.12
3	7.28	....	5.97	6.10	6.70	7.43	7.65	7.77	8.07	8.10	7.98 8.12
4	7.30	....	6.03	6.20	6.76	7.45	7.68	7.61	8.08	8.10	7.98 8.15
5	7.71	....	6.07	6.22	6.80	7.45	7.71	7.69	8.07	8.08	8.04 8.15
6	5.70	....	6.13	6.20	6.83	7.48	7.76	7.73	7.94	8.05	8.06 8.15
7	5.77	....	6.21	....	6.89	7.55	7.77	7.76	7.95	8.09	8.08 8.15
8	6.08	....	6.26	....	6.91	7.58	7.75	7.80	7.96	8.09	8.10 8.18
9	6.38	6.08	6.28	....	6.95	7.57	7.74	7.83	8.00	8.10	8.20 8.18
10	6.55	6.21	6.27	....	7.01	7.58	7.69	7.85	8.02	8.10	8.20 8.18
11	6.55	6.50	5.80	....	7.14	7.57	7.43	7.86	8.03	8.10	8.22 8.16
12	6.47	6.56	5.97	....	7.14	7.34	7.53	7.86	8.06	8.12	8.22 8.13
13	6.60	6.41	6.10	6.44	7.14	7.33	7.59	7.71	8.06	8.12	8.22 8.00
14	6.78	6.41	6.17	6.44	7.14	7.28	7.65	7.75	8.06	8.12	8.22 7.82
15	6.85	6.29	6.25	6.45	7.14	7.30	7.71	7.76	8.07	8.13	8.16 7.87
16	6.86	5.24	6.29	6.44	7.14	7.37	7.74	7.76	8.06	8.14	8.18 7.91
17	6.60	5.45	6.32	6.35	7.16	7.38	7.76	7.80	8.08	8.15	8.18 7.92
18	6.22	5.56	6.36	6.32	7.18	7.34	7.72	7.84	8.08	8.15	8.19 7.92
19	6.08	5.63	6.43	6.18	7.20	7.35	7.76	7.90	8.06	8.15	8.19 7.67
20	6.27	5.54	6.48	6.28	7.19	7.42	7.80	7.93	8.10	8.14	8.19 7.58
21	6.30	5.51	6.50	6.36	7.20	7.47	7.79	7.96	8.10	8.14	8.23 7.61
22	6.28	5.52	6.50	6.36	7.18	7.57	7.52	7.96	8.10	8.10	8.23 7.62
23	6.10	5.02	6.34	6.29	7.07	7.62	7.21	7.98	7.99	8.08	8.21 7.64
24	5.97	5.14	6.22	6.26	7.03	7.64	7.36	8.00	8.03	8.06	8.20 7.72
25	6.18	5.13	6.30	6.35	7.06	7.67	7.38	....	8.05	8.06	8.22 7.75
26	6.19	5.27	6.30	6.43	7.10	7.67	7.47	....	8.05	8.04	8.24 7.75
27	4.76	5.43	5.44	6.45	7.15	7.57	7.55	....	8.05	8.04	8.24 7.73
28	4.46	5.60	5.56	6.46	7.20	7.49	7.61	....	8.05	8.03	8.24 7.59
29	4.67		5.63	6.52	7.25	7.49	7.64	....	8.04	8.03	8.13 7.64
30	....		5.72	6.59	7.28	7.52	7.67	....	8.08	8.05	8.06 7.68
31	....		5.74		7.31		7.67	8.02		8.08	7.70

Paulding County

P-1. E. A. Green. In Tipton. Records available: 1946-49.

Lowest daily water level, from recorder graph											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
1	4.28	....	3.85	3.53	3.83	2.99	3.09	3.35	4.30	4.61	4.50 4.37
2	4.68	3.54	3.44	3.95	3.45	3.46	3.36	2.94	4.13	4.16	3.87 4.85
3	4.30	3.52	3.86	3.60	3.47	3.07	3.36	3.00	4.46	4.17	3.92 4.54
4	4.27	3.97	3.78	4.07	3.94	3.43	3.09	3.42	4.11	4.10	3.94 4.53
5	4.14	3.54	3.88	3.57	3.48	3.05	3.09	3.11	4.01	4.59	4.04 4.93
6	4.39	4.02	....	3.92	3.87	3.01	3.46	3.50	4.08	4.13	4.41 4.78
7	4.55	3.52	....	3.48	3.47	3.53	2.97	3.10	4.40	4.16	3.96 4.56
8	4.04	3.61	....	3.56	3.47	3.16	3.46	3.08	4.17	4.20	3.94 5.01
9	4.43	4.08	3.44	4.02	3.84	3.58	2.98	3.49	4.08	4.67	3.96 4.73
10	4.22	3.87	3.83	4.05	3.47	3.22	3.05	3.56	4.10	4.25	4.37 5.05
11	4.61	4.09	3.48	3.64	3.51	3.18	2.95	3.87	4.55	4.21	3.94 4.64
12	4.56	3.67	....	4.05	3.88	3.60	2.95	3.50	4.14	4.10	4.32 5.03
13	4.05	3.66	....	3.87	3.51	3.10	3.32	3.97	4.09	4.56	3.89 5.17
14	4.46	4.09	....	3.92	3.47	3.09	2.89	3.55	4.13	4.20	3.92 4.85
15	4.01	3.40	....	3.44	3.97	3.04	3.29	3.99	4.04	4.17	3.94 4.88

P-1 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	3.90	3.45	3.60	4.03	3.47	2.96	2.97	3.63	3.65	4.13	4.38	5.25
17	4.42	3.89	3.63	3.54	3.53	3.27	3.25	3.58	3.98	4.11	4.00	4.85
18	3.94	3.57	4.23	3.48	3.98	2.99	3.36	4.04	3.63	4.13	4.07	5.08
19	3.81	3.96	....	3.60	3.50	2.99	3.08	3.65	3.77	4.11	4.43	5.14
20	3.77	3.67	....	4.04	3.38	2.96	2.92	4.04	4.11	4.15	4.07	4.79
21	3.76	4.04	....	3.60	3.33	3.30	2.84	3.78	3.76	4.28	4.22	4.53
22	4.20	3.54	....	3.93	2.93	2.93	2.90	4.11	3.76	4.39	4.58	4.53
23	3.65	3.55	3.66	3.48	2.92	3.22	3.39	4.15	3.90	4.02	4.20	4.95
24	3.68	3.88	3.67	3.57	3.41	2.85	2.95	3.85	4.29	4.08	4.52	4.77
25	3.66	3.74	4.10	4.05	3.43	2.82	3.33	4.20	3.95	4.05	4.21	5.07
26	3.98	3.48	3.67	3.49	3.04	2.90	2.93	4.29	4.38	4.04	4.60	4.65
27	4.15	3.41	3.58	3.48	3.47	3.31	3.07	3.90	3.95	4.07	4.27	4.66
28	3.63	3.37	3.96	3.56	3.08	2.93	3.07	4.24	4.32	4.42	4.29	4.59
29	3.92	....	3.63	3.95	3.00	2.95	3.40	3.90	4.01	4.02	4.27	4.61
30	4.02	....	4.05	3.47	....	3.37	2.94	3.91	4.14	3.94	4.30	4.96
31	3.86	....	3.52	....	....	....	2.90	4.30	....	3.94	....	4.58

Portage County

Po-1. Edward Tiddle. In Windham. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.23	19.66	19.18	18.09	17.17	17.44	18.40	19.31	19.74	20.12	20.51	20.85
2	20.26	19.66	19.15	18.08	17.19	17.47	18.45	19.52	....	20.11	20.52	20.85
3	20.26	19.61	19.11	18.01	17.19	17.51	18.45	19.36	....	20.11	20.54	20.83
4	20.24	19.58	19.09	18.00	17.12	17.51	18.48	19.37	....	20.12	20.57	....
5	20.19	19.58	19.05	17.93	17.12	17.53	18.53	19.37	19.78	20.21	....	20.84
6	20.13	19.55	19.01	17.81	17.12	17.55	18.57	....	19.78	....	20.55	20.84
7	20.14	19.57	19.00	17.77	17.12	17.63	18.60	....	19.78	....	20.57	20.87
8	20.15	19.52	18.93	17.78	17.12	17.69	18.64	19.38	19.84	....	20.60	20.88
9	20.16	19.53	18.89	17.78	17.12	17.71	18.65	19.42	....	....	20.59	20.89
10	20.16	19.53	18.84	17.77	17.16	17.71	18.67	19.46	....	20.21	20.62	20.88
11	20.13	19.53	18.82	17.70	17.16	17.72	18.72	19.47	....	20.30	20.62	20.89
12	20.08	19.49	18.79	17.65	17.16	17.75	18.68	19.45	19.84	....	....	20.91
13	20.07	19.48	18.75	17.55	17.16	17.78	18.71	19.48	19.84	....	20.62	20.92
14	20.10	19.47	18.72	17.59	17.19	17.80	18.76	19.49	19.86	....	20.65	20.93
15	20.09	19.43	18.67	17.54	17.20	17.85	18.84	19.50	19.91	....	20.66	20.94
16	20.07	19.42	18.67	17.59	17.22	17.88	18.86	19.52	....	20.33	20.68	20.96
17	20.08	19.43	18.60	17.57	17.24	17.93	18.92	19.49	....	20.40	20.70	....
18	20.07	19.38	18.55	....	17.23	17.97	18.93	19.52	....	....	20.71	20.97
19	20.07	19.37	18.57	....	17.19	17.98	18.97	19.53	19.93	....	....	20.97
20	20.07	19.38	18.56	17.55	17.24	18.00	19.03	19.56	19.96	....	20.72	20.96
21	19.98	19.35	18.47	17.50	17.24	18.00	19.06	19.58	19.95	....	20.73	20.96
22	....	19.30	18.40	17.43	17.22	18.07	19.10	19.57	19.96	....	20.73	21.00
23	....	19.32	18.49	17.40	17.29	18.11	19.15	19.60	20.00	20.44	20.74	21.02
24	19.91	19.28	18.46	17.46	17.30	18.14	19.19	19.62	20.03	20.45	20.77	21.02
25	19.92	19.26	18.40	17.44	17.31	18.21	19.20	19.63	20.04	....	20.77	21.00
26	19.85	19.23	18.37	17.31	17.30	18.24	19.22	19.63	20.04	20.46	....	....
27	19.82	19.21	18.30	17.34	17.32	18.25	19.27	19.64	20.02	20.46	20.80	....
28	19.77	19.17	18.29	17.31	17.35	18.28	19.26	19.64	20.05	20.37	20.79	....
29	19.79	....	18.27	17.25	17.39	18.33	19.28	19.67	20.10	20.47	20.78	....
30	19.78	....	18.19	17.21	17.41	18.36	19.29	19.68	20.12	....	20.81	....
31	19.64	....	18.12	....	17.42	....	19.30	19.68	....	....	....	....

Po-2. City of Kent. Water Department. In Kent. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	18.58	19.00	18.11	18.91	20.12	19.40	20.04	....	21.05	21.80	
2	18.63	17.54	18.46	19.16	19.91	....	19.98	18.58	21.10	21.90	
3	18.64	18.11	18.60	19.25	19.35	....	18.70	....	21.15	21.96	
4	18.70	18.87	18.76	19.28	19.51	....	18.71	....	21.25	20.55	
5	17.90	18.70	18.90	19.10	19.20	20.05	....	18.20	....	21.26	21.78	

Po-2.--Continued.

Lowest daily water level, from recorder graph											
Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	17.45	17.40	18.95	19.25	19.62	20.20	18.12	19.42	20.30	21.15	21.90
7	17.86	18.59	18.92	19.11	19.72	20.00	19.09	19.31	20.42	21.07	22.06
8	19.10	18.63	19.04	17.30	18.66	20.08	19.52	19.50	19.44	21.26	22.07
9	19.13	18.59	17.69	19.15	20.06	20.11	20.06	19.63	18.98	21.27	22.14
10	19.09	18.56	17.52	19.51	20.19	19.61	20.50	18.39	.....	21.40	22.01
11	19.10	18.61	18.82	19.60	20.09	19.66	.....	18.10	.....	21.74	21.25
12	18.90	18.57	18.86	19.62	19.89	19.74	.....	19.44	.....	21.61	21.96
13	17.60	17.11	18.91	19.90	19.82	19.83	20.33	19.51	.....	20.10	22.17
14	18.82	18.40	18.96	19.90	19.68	19.96	19.52	19.43	.....	21.28	22.20
15	18.83	18.51	18.91	19.92	19.69	20.11	20.51	.....	19.30	21.32	22.22
16	18.81	18.51	17.46	19.88	20.01	20.13	20.51	.....	19.10	21.45	22.40
17	18.83	18.60	18.41	20.49	19.94	20.12	20.51	.....	20.81	21.50	21.41
18	18.86	18.64	18.62	20.52	19.60	19.67	20.56	18.00	20.74	21.54	21.00
19	18.64	17.43	18.69	20.60	19.60	19.74	.....	19.31	20.85	21.49	21.84
20	17.44	16.88	18.77	20.55	20.25	19.48	20.56	19.33	20.96	21.33	21.80
21	18.42	18.16	18.80	19.46	20.74	19.08	20.40	19.40	21.00	21.50	21.68
22	18.24	18.08	18.73	18.80	20.50	19.19	21.08	.....	20.83	21.60	21.70
23	18.17	16.70	17.21	19.25	20.66	18.81	20.87	.....	.....	21.75	20.90
24	.....	17.99	16.86	19.24	20.86	18.72	.....	.....	.....	21.71	20.46
25	.....	17.97	18.40	19.20	20.92	19.20	.....	.....	.....	21.19	20.52
26	17.30	17.63	18.52	19.15	19.72	19.38	.....	19.66	.....	20.15	20.30
27	18.15	18.21	18.61	19.22	19.84	19.60	20.52	.....	20.98	20.02	21.20
28	18.44	18.87	18.65	17.88	19.97	19.73	20.56	.....	21.01	21.31	21.20
29		18.91	18.65	17.55	20.00	19.88	20.13	.....	21.02	21.51	21.30
30		18.95	17.42	18.40	20.10	18.54	20.15	.....	21.00	21.68	20.35
31		18.98		18.77		19.11	20.10		20.91		20.15

Putnam County

Pu-1. City of Columbus Grove. In Columbus Grove. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.83	16.03	15.03	15.51	16.48	16.81	19.02	18.60	17.08	15.06	16.17	15.10
2	16.12	16.22	14.54	15.46	16.92	16.55	19.34	18.40	16.28	15.68	15.97	15.23
3	16.63	16.23	14.85	14.66	16.55	16.00	19.73	18.11	16.02	16.39	15.63	15.23
4	16.57	16.28	14.82	16.00	16.88	17.55	20.39	18.00	15.50	16.22	15.40	14.98
5	16.40	15.99	14.69	16.71	16.73	16.10	20.55	17.97	15.27	16.16	14.80	15.55
6	16.66	15.18	14.42	16.89	16.60	17.20	19.78	17.98	15.10	15.61	15.46	15.10
7	16.59	16.13	14.88	.....	16.66	18.00	19.03	17.13	15.28	15.78	15.72	15.17
8	17.03	16.20	14.95	.....	16.10	18.03	19.15	17.38	15.46	16.30	15.22	15.20
9	16.51	16.30	15.20	.....	16.78	18.04	19.10	18.31	15.48	15.71	15.20	15.55
10	16.65	16.03	14.98	16.67	16.82	18.02	19.77	18.72	15.62	16.32	14.87	15.69
11	16.36	16.57	15.30	17.08	17.01	18.11	19.30	18.38	15.48	15.68	15.38	15.43
12	16.82	16.58	15.17	17.21	17.40	18.82	18.56	17.89	16.07	15.51	15.25	15.90
13	16.55	15.47	15.36	17.07	17.38	.....	18.89	17.50	15.92	15.52	14.80	16.30
14	17.15	16.44	15.36	16.96	17.27	.....	19.20	17.44	15.42	15.36	15.03	16.60
15	16.36	16.05	15.28	16.86	16.97	.....	19.51	17.11	15.90	15.39	15.03	16.16
16	16.33	15.70	15.35	17.22	17.60	.....	19.69	17.10	16.24	14.84	14.99	16.29
17	16.50	15.85	15.45	16.47	18.00	.....	19.09	17.40	16.32	15.12	14.86	15.91
18	16.45	16.10	15.20	16.95	18.28	.....	19.40	17.37	15.47	15.42	15.08	.....
19	16.24	15.78	15.62	17.14	18.00	17.24	20.19	17.96	16.35	15.70	14.83	15.48
20	16.42	13.98	16.33	17.00	17.48	17.86	20.02	17.75	16.20	15.60	14.93	15.41
21	16.41	14.67	15.50	16.99	17.33	17.61	19.17	16.72	16.43	15.61	15.20	14.60
22	16.40	15.05	15.00	17.06	16.11	17.07	19.75	17.66	16.11	15.82	15.28	14.61
23	15.80	14.80	14.89	16.82	16.70	17.56	19.56	18.00	16.26	15.59	15.28	14.60
24	16.02	14.16	15.12	16.37	16.36	17.77	17.82	18.14	16.48	16.16	14.99	14.55
25	16.17	13.76	15.00	16.83	16.19	17.83	18.46	18.10	16.11	15.96	15.10	15.05
26	16.12	13.89	15.48	16.88	16.17	17.99	18.43	18.26	16.50	15.82	15.03	14.62
27	15.91	14.25	15.41	16.86	15.92	18.50	18.52	18.53	16.23	15.65	14.68	14.38
28	15.59	14.48	15.62	17.10	16.33	18.79	18.92	17.34	16.16	15.46	15.17	14.86
29	15.40		15.41	17.03	15.78	18.11	19.30	17.60	16.10	15.59	15.20	14.39
30	15.93		14.85	16.83	16.19	18.31	19.08	17.52	16.23	15.37	15.20	14.50
31	15.71		14.79		16.44		18.31	17.20	16.38	15.81		14.55

Richland County

R-2. Village of Lexington. In Lexington. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.70	24.90	25.35	25.49	25.86	26.28	26.68	26.81	27.25	27.39	27.61	27.72
2	26.69	24.93	25.36	25.50	25.87	26.32	26.65	26.83	27.26	27.39	27.61	27.73
3	26.68	24.94	25.38	25.53	25.89	26.34	26.65	26.85	27.28	27.40	27.63	27.73
4	26.68	25.04	25.38	25.56	25.91	26.36	26.68	26.88	27.28	27.40	27.63	27.75
5	26.83	25.14	25.40	25.57	25.93	26.38	26.70	26.90	27.29	27.40	27.64	27.75
6	26.51	25.21	25.46	25.59	25.95	26.41	26.71	26.92	27.29	27.40	27.64	27.75
7	26.43	25.36	25.49	25.61	25.98	26.45	26.65	26.94	27.30	27.41	27.64	27.75
8	26.38	25.38	25.50	25.65	26.01	26.48	26.58	26.96	27.31	27.42	27.66	27.77
9	26.34	25.46	25.51	25.70	26.04	26.50	26.56	26.99	27.32	27.43	27.66	27.77
10	26.33	25.55	25.53	25.73	26.07	26.52	26.53	27.01	27.33	27.43	27.67	27.77
11	26.30	25.62	25.55	25.76	26.10	26.54	26.43	27.03	27.34	27.44	27.68	27.77
12	26.27	25.68	25.58	25.78	26.13	26.55	26.39	27.03	27.35	27.45	27.68	27.74
13	26.25	25.74	25.59	25.81	26.16	26.55	26.38	27.04	27.36	27.46	27.68	27.72
14	26.23	25.76	25.60	25.83	26.19	26.55	26.39	27.05	27.37	27.46	27.68	27.71
15	26.23	25.72	25.63	25.85	26.21	26.55	26.42	27.07	27.38	27.47	27.68	27.70
16	26.22	25.56	25.64	25.86	26.19	26.55	26.45	27.08	27.39	27.48	27.68	27.71
17	26.21	25.50	25.65	25.86	26.21	26.55	26.47	27.09	27.40	27.49	27.69	27.72
18	26.21	25.48	25.67	25.86	26.23	26.57	26.49	27.11	27.40	27.49	27.69	27.72
19	26.12	25.46	25.70	25.86	26.25	26.58	26.52	27.13	27.38	27.50	27.69	27.68
20	26.09	25.47	25.72	25.86	26.25	26.60	26.54	27.15	27.39	27.51	27.69	27.66
21	26.03	25.48	25.73	25.86	26.26	26.61	26.56	27.17	27.40	27.51	27.70	27.63
22	25.97	25.46	25.73	25.86	26.25	26.63	26.58	27.19	27.41	27.53	27.70	27.56
23	25.94	25.42	25.72	25.83	26.18	26.65	26.61	27.22	27.42	27.54	27.70	27.52
24	25.88	25.41	25.72	25.83	26.15	26.67	26.63	27.24	27.43	27.55	27.70	27.49
25	25.80	25.36	25.73	25.84	26.14	26.69	26.65	27.26	27.44	27.56	27.70	27.47
26	25.73	25.35	25.73	25.84	26.15	26.71	26.68	27.28	27.45	27.57	27.70	27.45
27	25.59	25.33	25.64	25.83	26.17	26.72	26.71	27.30	27.46	27.58	27.70	27.39
28	25.37	25.32	25.53	25.83	26.19	26.73	26.73	27.30	27.45	27.59	27.70	27.34
29	25.19		25.49	25.84	26.22	26.75	26.75	27.29	27.39	27.59	27.70	27.28
30	24.98		25.48	25.85	26.24	26.72	26.77	27.30	27.38	27.60	27.72	27.26
31	24.93		25.47		26.27		26.79	27.28		27.61		27.23

R-3. Volsard Factory. In Shiloh. Records available: 1946-47, 1949.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	26.52	25.71	25.46	25.20	26.11	27.40	27.78	.....	.....	29.00	.....
2	.....	26.31	26.16	25.50	25.33	26.21	27.46	28.05	.....	.....	27.92	.....
3	.....	25.80	25.90	25.56	25.40	26.18	27.74	28.18	28.04	28.09	28.09	.....
4	.....	26.22	25.82	26.04	25.52	25.97	27.56	28.26	28.22	28.06	28.13	.....
5	.....	.....	25.64	25.76	25.60	26.12	27.59	28.37	28.44	28.07	27.38	.....
6	.....	25.94	25.58	25.26	25.60	26.28	27.50	28.36	28.20	27.95	28.13	.....
7	.....	26.28	26.22	25.46	25.40	26.62	27.59	28.36	28.27	28.25	28.09	.....
8	.....	26.07	26.06	25.62	25.40	26.58	27.26	28.32	28.24	28.17	28.00	.....
9	.....	25.91	25.72	25.87	25.57	.....	.....	28.40	28.39	28.18	28.16	.....
10	.....	26.16	25.82	25.84	25.63	26.58	27.22	28.50	28.39	28.22	27.96	.....
11	.....	26.22	26.04	25.71	25.63	26.62	27.33	28.55	.....	28.12	27.72	.....
12	.....	26.28	25.97	25.22	.....	26.57	27.30	28.54	.....	28.25	28.18	.....
13	27.04	25.96	25.90	24.82	.....	26.67	27.37	28.36	27.86	28.37	27.88	.....
14	26.76	26.26	26.29	25.05	.....	26.63	27.38	28.16	27.84	28.32	27.97	.....
15	27.18	25.90	26.02	24.97	25.60	26.63	27.56	.....	27.94	28.28	27.68	.....
16	26.75	26.32	25.90	24.84	25.95	26.59	27.58	.....	27.85	28.27	.....	.....
17	27.26	26.27	26.12	25.22	25.86	26.60	27.41	.....	27.94	28.39	.....	.....
18	26.94	26.36	25.76	25.14	25.88	26.38	27.53	.....	27.90	28.37	.....	28.30
19	27.56	26.44	26.38	25.80	25.60	26.64	27.75	.....	27.86	28.27	.....	28.30
20	.....	26.52	26.22	25.80	25.86	26.89	28.65	.....	28.15	28.00	.....	28.23
21	.....	26.23	25.39	25.63	25.47	26.64	28.58	.....	.....	28.25	.....	28.03
22	.....	26.34	25.42	25.60	25.41	26.98	28.27	.....	.....	28.29	.....	28.19
23	.....	26.24	25.30	25.43	25.68	26.99	28.20	.....	.....	28.41	.....	28.21
24	.....	26.04	25.67	25.71	25.85	27.04	27.97	.....	.....	28.14	.....	28.61
25	.....	25.85	25.81	25.77	25.57	27.14	27.92	.....	27.90	28.17	.....	28.61
26	.....	26.16	25.61	25.53	25.77	27.10	27.93	.....	28.22	.....	.....	28.18
27	.....	25.86	25.66	25.54	25.77	27.14	28.20	.....	27.97	.....	.....	28.16
28	.....	25.90	25.63	25.70	25.98	27.20	28.47	.....	27.89	.....	.....	28.35
29	26.58		26.07	25.48	25.64	27.21	28.37	.....	28.07	.....	.....	28.20
30	26.43		26.02	25.28	25.87	27.24	28.10	.....	.....	.....	.....	28.54
31	26.18		25.56		25.98		.....	.....	.....	.....	.....	28.34

R-4. Mansfield Water Department. At North Main St. pumping station. In Mansfield. Records available: 1942-47, 1949.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.00	37.34	36.37	36.72	.....	35.17	40.50	34.40	.....	40.67	39.63	42.43
2	.....	37.80	36.80	36.73	.....	35.17	40.92	35.97	.....	40.45	40.70	42.87
3	.....	40.30	37.22	32.70	.....	33.32	32.55	30.70	.....	42.97	41.40	42.92
4	.....	41.60	37.28	33.75	37.25	33.17	29.10	29.20	.....	43.02	41.68	36.80
5	.....	39.17	37.15	35.56	37.05	30.98	36.75	28.63	.....	43.80	41.70	39.10
6	.....	36.14	36.12	36.05	38.32	31.10	38.60	28.22	.....	43.90	.....	41.55
7	.....	35.75	33.97	36.37	38.73	33.12	.....	27.69	40.40	44.46	.....	42.72
8	.....	37.37	35.75	36.37	33.60	37.06	.....	29.35	41.72	44.47	.....	43.20
9	.....	37.97	36.29	34.78	34.45	34.97	.....	30.18	42.66	37.40	41.75	43.46
10	.....	38.30	36.70	31.45	38.35	33.72	.....	29.95	42.69	40.17	41.98	43.50
11	.....	38.54	36.72	33.52	39.70	32.94	.....	30.18	40.30	42.98	42.21	38.00
12	.....	36.30	36.07	34.97	40.51	30.32	.....	30.20	39.40	43.80	42.21	39.50
13	39.78	37.10	32.60	35.57	40.52	30.70	40.17	29.82	41.98	44.20	46.20	41.60
14	40.07	36.30	33.72	35.93	40.50	32.12	40.18	27.85	42.73	44.40	38.70	42.73
15	40.03	37.50	36.36	35.72	33.70	33.06	40.33	35.17	42.98	44.34	41.35	42.82
16	.....	37.75	37.02	35.40	36.10	32.82	40.08	37.98	43.20	37.80	41.38	43.52
17	.....	38.08	37.46	31.97	38.65	33.22	33.42	38.90	43.20	40.60	42.05	43.58
18	.....	38.08	37.94	32.65	39.92	33.18	37.23	39.10	42.86	41.55	42.30	38.79
19	.....	37.81	37.99	35.14	40.52	30.75	39.43	39.95	41.68	38.20	42.30	39.90
20	.....	35.58	35.80	35.16	40.72	31.70	40.39	39.75	42.60	36.63	35.40	41.82
21	.....	36.24	35.10	35.16	40.77	34.38	40.54	31.90	43.25	36.40	38.30	42.48
22	.....	36.47	36.62	33.62	34.60	36.03	41.06	36.50	43.38	35.82	40.68	44.02
23	.....	35.70	37.52	30.47	34.54	40.20	40.95	39.14	43.54	32.80	41.82	44.20
24	.....	36.55	37.72	34.15	38.00	41.31	39.40	40.40	43.52	33.62	41.89	44.20
25	.....	37.30	37.73	36.23	39.65	37.18	37.72	.....	41.44	34.75	39.32	37.20
26	38.47	37.40	36.20	34.96	40.33	31.80	38.46	.....	40.72	35.13	39.98	33.20
27	38.61	35.05	33.85	35.15	40.43	32.28	38.67	.....	42.98	35.15	.....	34.91
28	38.50	35.25	33.70	35.32	36.00	33.23	38.95	.....	43.20	35.00	.....	34.94
29	38.62	.....	35.85	35.32	31.25	34.07	39.07	.....	43.10	34.67	.....	.....
30	36.72	.....	36.	35.24	29.58	37.60	38.78	.....	41.80	31.57	41.77	.....
31	35.15	.....	36.62	.....	30.10	.....	32.30	.....	.....	35.70	.....	.....

Ross County

Ro-1. Chillicothe Water Department. In Chillicothe. Records available: 1944-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.30	8.62	11.70	12.00	13.56	.....	15.70	.....	18.24	.....	.....	20.05
2	16.45	9.75	12.00	.....	13.67	.....	15.74	.....	.....	.....	.....	20.06
3	16.57	10.52	12.22	.....	.....	.....	15.75	.....	.....	.....	.....	20.07
4	16.65	11.08	12.38	.....	.....	.....	15.83	.....	.....	.....	.....	20.08
5	16.60	11.42	12.53	.....	.....	.....	.....	.....	.....	.....	.....	20.10
6	14.88	11.73	12.62	.....	.....	.....	.....	.....	18.25	.....	.....	20.11
7	12.32	12.01	12.94	.....	.....	.....	.....	.....	18.26	18.84	.....	20.13
8	10.05	12.11	12.78	.....	.....	15.95	.....	.....	18.15	18.85	.....	20.15
9	10.75	.....	12.88	.....	.....	16.02	.....	.....	18.12	18.88	.....	.....
10	11.58	12.60	12.89	.....	14.42	16.10	.....	.....	18.22	18.90	.....	.....
11	12.17	12.77	12.70	.....	14.52	16.13	.....	.....	18.27	18.93	.....	.....
12	12.58	12.95	12.36	.....	14.60	16.07	.....	16.65	18.31	18.96	19.76	20.18
13	12.86	13.12	12.50	13.57	14.67	15.85	.....	17.66	18.36	18.99	19.77	20.16
14	13.20	13.18	12.63	13.57	14.74	15.69	.....	17.52	.....	19.02	19.78	20.12
15	13.47	13.08	12.77	13.44	14.80	15.65	.....	17.42	.....	.....	19.80	.....
16	13.70	12.15	12.80	13.49	14.87	15.78	.....	17.43	.....	.....	19.81	.....
17	13.77	10.70	12.87	13.48	14.90	15.78	.....	17.57	.....	.....	19.82	.....
18	13.70	9.07	13.03	13.77	.....	15.57	.....	17.65	.....	.....	19.84	.....
19	13.44	9.88	13.13	13.17	.....	15.04	16.67	17.70	.....	.....	19.85	.....
20	12.80	10.27	13.20	12.92	.....	15.12	16.72	.....	18.62	.....	.....	19.90
21	12.53	10.61	13.27	.....	.....	15.30	16.79	.....	18.65	.....	.....	19.87
22	12.67	11.06	13.36	.....	.....	15.48	16.79	.....	18.67	.....	.....	19.76
23	12.92	11.12	13.37	.....	.....	.....	16.65	.....	18.67	.....	.....	19.70
24	12.95	10.88	13.32	.....	.....	.....	16.50	.....	18.63	.....	.....	19.55
25	12.27	10.83	13.07	13.14	.....	.....	16.58	17.94	18.67	.....	.....	19.52

Ro-1.--Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	10.73	10.90	13.08	13.27	.....	.....	16.68	17.99	18.69	.....	.....	19.57
27	9.33	11.08	12.71	13.42	.....	15.65	.....	18.04	18.72	.....	.....	19.63
28	8.68	11.39	11.94	13.47	.....	15.59	.....	18.09	.....	.....	.....	.....
29	7.40		11.47	13.40	.....	15.48	.....	18.12	.....	.....	.....	.....
30	5.80		11.55	13.44	.....	15.58	.....	18.15	.....	.....	.....	19.25
31	7.05		11.80	.....	.....	.....	.....	18.20	.....	.....	.....	19.35

Ro-2. Chillicothe Water Department. In Chillicothe. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	48.5	Feb. 27	35.28	May 9	37.22	Sept. 6	42.32
14	48.5	28	35.28	10	37.25	8	42.68
17	39.60	Mar. 21	36.86	23	38.06	14	42.40
18	38.70	24	36.42	June 16	39.45	26	39.76
23	38.73	27	35.91	July 25	40.50	Oct. 2	42.61
24	39.00	28	35.95	28	40.84	5	42.71
25	39.10	30	36.16	31	40.80	8	43.21
26	39.05	Apr. 11	36.80	Aug. 6	41.05	20	43.34
29	38.50	12	37.00	15	41.38	Nov. 7	43.36
30	38.55	17	37.03	16	41.36	15	43.85
Feb. 8	36.90	23	37.24	18	41.52	Dec. 1	44.11
9	37.00	24	37.22	24	41.74	4	44.13
11	36.80	May 2	37.22	27	41.29	19	44.28
13	37.65	8	37.30				

Ro-3. Mead Corp. well 7. In Chillicothe. Records available: 1941-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.67	30.35	27.97	27.88	.....	.....	33.18	34.28	36.78	38.93	40.47	41.81
2	37.53	30.21	28.12	27.62	.....	.....	33.30	34.07	36.94	38.99	40.61	41.90
3	37.04	30.19	28.26	27.82	.....	30.91	33.31	34.22	37.12	38.90	40.73	41.97
4	36.60	30.27	28.39	27.30	.....	31.08	33.14	34.36	37.20	38.75	40.86	41.99
5	36.62	30.30	28.35	27.16	.....	31.15	32.70	34.72	37.14	38.95	40.95	42.00
6	36.63	30.30	28.33	27.45	29.25	31.00	32.26	34.80	36.71	39.16	40.99	42.07
7	36.51	29.92	27.85	27.70	29.37	31.00	31.85	34.80	36.60	39.34	40.91	42.14
8	36.17	29.45	26.67	27.92	29.37	31.28	31.46	34.50	36.85	39.46	40.79	42.20
9	35.82	29.52	27.87	28.06	29.03	31.50	.....	34.45	37.05	39.52	40.92	42.27
10	35.52	29.61	28.08	28.06	29.98	31.61	30.50	34.67	37.25	39.44	41.03	42.32
11	35.12	29.80	28.17	27.72	.....	31.67	30.30	34.85	37.37	39.24	41.13	.....
12	35.33	30.07	28.25	27.63	.....	31.60	30.74	34.95	37.33	39.42	41.20	.....
13	35.50	30.22	28.30	27.89	29.82	31.37	31.10	34.97	37.16	39.57	41.25	.....
14	35.62	30.15	28.15	28.12	29.83	31.03	31.41	34.97	37.37	39.91	41.18	.....
15	35.50	29.82	27.95	28.33	.....	31.27	31.58	34.81	37.52	40.03	41.09	.....
16	35.50	29.83	28.12	28.45	.....	31.48	31.85	34.82	37.70	40.10	41.20	.....
17	35.28	29.58	28.25	28.43	.....	31.71	32.01	35.06	37.85	40.09	41.24	.....
18	24.75	29.17	28.47	28.03	.....	31.85	31.99	35.26	37.91	40.10	41.51	.....
19	34.57	28.66	28.60	27.97	.....	31.85	32.05	35.49	37.82	40.20	41.58	.....
20	34.55	28.49	28.48	28.16	30.10	31.85	32.33	35.62	37.74	40.32	41.64	.....
21	34.56	28.22	28.07	28.35	30.28	32.03	32.61	35.63	37.93	40.43	41.64	.....
22	34.54	27.75	28.03	28.72	30.28	32.22	33.00	37.46	38.10	.....	41.40	42.88
23	34.49	27.85	28.35	28.84	30.08	32.36	33.19	35.48	38.28	.....	41.53	42.88
24	34.37	27.86	28.55	28.84	.....	32.54	33.37	35.71	38.34	.....	41.61	42.92
25	33.95	28.20	28.71	28.56	.....	32.66	33.57	35.90	38.50	.....	41.70	42.92
26	33.78	28.28	28.77	28.44	.....	32.67	33.57	36.17	38.38	.....	41.76	42.57
27	33.35	28.30	28.61	28.67	.....	32.62	33.55	36.34	38.52	.....	41.78	42.22
28	32.87	28.16	27.97	28.88	.....	32.74	33.78	36.40	38.53	40.68	41.66	42.29
29	32.40		27.57	29.00	.....	32.90	33.91	36.30	38.69	40.75	41.58	42.40
30	31.82		27.70	.....	.....	31.05	34.10	36.58	38.80	40.76	41.70	42.53
31	31.08		27.78	.....	.....	.....	34.29	36.59	.....	40.61	.....	42.57

Ro-4. Chillicothe Paper Co. In Chillicothe. Records available: 1939-49.

Daily water level, from staff gage readings												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.4	25.8	22.9	23.6	24.3	26.4	28.7	27.1	33.5	35.5	34.3	35.9
2	...	25.6	23.0	23.2	22.2	26.2	28.8	29.7	34.1	35.0	35.0	36.1
3	30.0	26.4	23.0	...	23.9	26.5	...	30.0	34.5	31.7	34.8	36.1
4	32.0	26.3	23.5	20.2	24.6	26.4	...	30.3	...	35.4	34.6	34.7
5	32.7	25.4	22.8	21.9	24.6	26.6	...	30.7	...	36.2	34.7	34.6
6	32.7	25.1	...	22.4	24.9	24.1	...	30.2	29.3	36.2	34.3	35.8
7	32.5	23.3	20.8	23.3	24.5	26.4	...	...	33.7	36.3	33.0	35.9
8	32.6	24.8	22.8	23.4	24.9	27.1	...	26.9	33.8	36.4	34.9	35.9
9	32.0	25.4	23.2	23.6	22.8	27.5	...	30.3	34.0	36.3	35.0	36.5
10	28.0	25.2	23.3	23.3	24.7	27.6	...	31.0	34.3	32.2	35.2	36.2
11	30.4	24.7	23.1	21.1	24.9	27.4	24.1	31.3	33.8	35.8	34.5	35.8
12	31.5	24.6	23.3	23.2	24.3	...	26.5	31.3	29.9	36.2	34.8	34.4
13	31.7	24.1	23.2	23.6	25.6	24.1	26.8	30.9	33.7	36.5	34.7	36.6
14	31.2	22.6	20.9	23.7	25.8	26.4	27.1	...	34.2	...	33.1	36.5
15	30.5	24.7	23.1	23.9	25.7	27.0	27.4	27.4	34.5	35.8	35.0	36.6
16	...	25.4	23.1	24.2	23.0	27.5	27.6	31.2	34.2	35.9	34.8	36.4
17	27.3	24.7	23.2	23.5	24.7	27.5	27.8	31.6	35.2	32.7	35.1	36.2
18	29.7	24.1	23.6	21.3	25.0	27.1	25.1	31.8	34.3	36.4	34.7	36.0
19	30.0	24.1	23.4	23.5	25.4	...	27.9	32.1	30.8	36.9	34.9	34.8
20	30.1	...	...	23.4	26.1	24.8	28.6	31.0	34.1	36.8	35.5	36.0
21	29.7	20.8	21.1	23.9	26.0	27.3	28.8	...	34.4	38.0	33.5	36.9
22	30.0	23.0	23.5	24.2	...	27.9	29.1	27.9	34.6	33.7	35.3	36.8
23	30.6	23.0	24.6	24.7	23.9	27.7	29.6	31.5	35.1	35.2	35.5	37.0
24	27.6	22.9	24.1	24.1	25.4	26.1	29.3	31.8	35.5	33.4	35.5	37.7
25	29.9	23.6	24.1	21.7	25.9	28.1	26.6	32.2	34.6	33.5	35.8	...
26	29.2	23.6	25.6	23.9	26.2	...	29.5	32.5	32.3	36.6	35.2	...
27	28.8	23.2	...	23.6	26.6	24.8	29.7	33.0	35.2	34.8	...	34.6
28	28.4	21.1	20.7	23.8	26.7	28.0	29.9	32.2	35.4	34.5	34.2	35.4
29	27.7	...	23.2	24.2	25.8	28.7	30.2	28.4	35.3	34.5	35.1	36.0
30	...	...	23.7	24.6	24.1	28.7	30.3	32.5	35.7	34.2	35.5	35.8
31	24.1	...	23.1	...	26.2	...	29.9	33.2	...	32.8	...	35.6

Ro-5. Mead Corp. In Chillicothe. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	56.53	Apr. 3	44.50	July 3	52.93	Oct. 2	60.33
9	55.68	10	44.93	10	42.83	9	61.51
16	48.18	17	44.93	17	51.01	16	61.51
23	52.82	24	46.26	24	50.83	23	59.58
30	51.18	May 1	45.83	31	54.51	30	59.09
Feb. 6	49.51	8	47.27	Aug. 7	55.53	Nov. 6	57.27
13	47.09	15	47.68	14	55.83	13	58.31
20	46.59	22	47.83	21	52.51	20	58.18
27	45.76	29	49.18	28	53.06	27	58.03
Mar. 6	44.83	June 5	47.01	Sept. 4	57.53	Dec. 4	58.43
13	44.93	12	48.49	11	57.93	11	53.31
20	45.59	19	50.42	18	57.93	18	53.44
27	45.18	26	52.35	25	59.33	25	54.53

Sandusky County

S-1. City of Woodville. In Woodville. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	23.00	21.93	21.67	21.13	20.43	21.27	22.48	23.47	23.56	24.52	25.14
2	.....	23.03	21.83	21.62	21.17	20.56	21.32	22.55	23.32	23.63	24.52	25.14
3	.....	22.88	21.87	21.52	21.24	20.60	21.41	22.52	23.28	23.63	24.59	25.08
4	.....	22.92	21.50	21.57	21.06	20.62	21.36	22.72	23.28	23.70	24.65	25.06
5	.....	23.10	21.58	21.57	21.06	20.48	21.54	22.77	23.28	23.68	24.67	25.14
6	24.23	22.95	21.85	21.49	20.92	20.51	21.61	22.74	23.28	23.72	24.60	25.20
7	24.20	23.17	21.77	21.48	21.11	20.75	21.59	22.84	23.13	23.83	24.50	25.17
8	24.30	23.05	21.55	21.67	20.95	20.78	21.55	22.70	23.18	23.85	24.63	25.18
9	24.32	23.12	21.70	21.62	21.00	20.77	21.55	22.82	23.18	23.83	24.73	25.24
10	24.18	23.07	21.69	21.49	21.16	20.62	21.58	22.90	23.17	23.80	24.70	25.22

S-1 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	.....	23.14	21.90	21.23	21.17	20.60	21.62	22.99	23.17	23.89	24.70	25.19
12	.....	23.02	21.91	21.42	20.97	20.72	21.57	23.02	23.20	23.98	24.70	25.18
13	23.82	23.22	21.77	21.43	21.04	20.85	21.55	23.02	23.19	24.04	24.76	25.27
14	23.87	23.01	21.73	21.32	21.29	20.85	21.74	22.99	23.31	23.98	24.70	25.27
15	23.82	23.04	22.12	21.43	21.27	20.77	21.82	23.05	23.28	24.02	24.78	25.34
16	23.82	22.75	21.68	21.56	21.33	20.79	21.87	23.06	23.35	23.98	24.80	25.30
17	23.82	22.68	21.62	21.50	21.32	20.82	21.82	23.08	23.35	24.06	24.85	25.33
18	23.57	22.55	21.70	21.38	21.30	20.80	21.90	23.11	23.34	24.10	24.90	25.32
19	23.77	22.52	21.89	21.57	21.29	20.62	21.97	23.10	23.35	24.12	24.90	25.31
20	23.57	22.56	21.68	21.57	21.19	20.66	22.02	23.25	23.44	24.15	24.88	25.37
21	23.39	22.37	21.63	21.19	21.12	20.67	22.05	23.25	23.45	24.14	24.90	25.36
22	23.58	22.25	21.62	21.29	20.87	20.79	22.14	23.24	23.47	24.18	25.00	25.34
23	23.37	22.27	21.84	21.33	20.94	20.67	22.13	23.26	23.60	24.20	24.98	.....
24	23.50	21.98	21.67	21.52	20.70	20.72	22.13	23.30	23.63	24.25	25.01	.....
25	23.42	22.23	21.68	21.22	20.63	20.90	22.05	23.31	23.60	24.26	25.01	.....
26	23.38	22.07	21.58	21.22	20.50	20.87	22.25	23.39	23.55	24.38	24.96	.....
27	23.12	21.75	21.49	21.30	20.47	20.95	22.34	23.39	23.60	24.30	25.07	.....
28	23.28	21.96	21.68	21.25	20.50	20.94	22.43	23.29	23.65	24.35	25.03	.....
29	23.22		21.61	21.11	20.40	21.07	22.44	23.28	23.65	24.35	25.06	25.28
30	23.07		21.55	21.17	20.31	21.27	22.52	23.40	23.65	24.37	25.10	25.27
31	23.07		21.47		20.31		22.47	23.28		24.36		25.28

Seneca County

Se-1. Myers farm. 1.5 miles south of Green Springs. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	31.85	31.40	31.44	30.98	31.35	.....	32.18	32.38	32.73	32.80	33.09
2	31.79	31.78	31.09	30.81	31.29	31.51	.....	32.29	32.23	32.72	32.70	32.89
3	32.19	31.62	31.12	31.51	31.29	31.43	.....	32.12	32.67	33.45	32.75	33.01
4	31.90	31.43	31.03	31.31	31.20	31.65	.....	32.35	32.20	32.94	32.61	33.00
5	31.80	31.90	31.03	31.34	31.31	31.31	.....	32.35	32.42	32.75	32.92	33.00
6	31.91	31.56	31.01	31.30	31.28	31.53	31.43	32.42	32.21	32.52	32.72	32.60
7	32.00	31.84	31.16	31.06	31.64	31.25	32.35	32.36	32.31	32.29	33.02	32.61
8	31.72	31.80	31.31	31.10	31.40	31.27	.....	32.50	32.21	32.54	32.58	32.93
9	31.72	31.60	31.00	31.53	31.60	31.41	33.30	32.46	31.92	33.00	32.37	33.02
10	31.70	31.37	31.22	31.31	31.60	31.14	31.47	32.43	32.63	32.62	32.70	32.66
11	32.10	31.61	30.87	31.23	31.89	32.18	32.54	32.40	32.16	32.71	32.63	33.01
12	32.02	31.78	31.10	31.25	31.50	32.45	32.13	32.31	32.34	32.64	32.93	33.08
13	32.10	31.53	31.65	31.17	31.70	31.64	31.73	32.23	32.00	32.60	31.94	33.10
14	32.10	31.60	31.41	31.52	31.62	31.60	31.94	32.22	32.02	32.67	32.32	33.20
15	32.30	31.28	31.13	31.03	31.60	31.63	31.87	33.34	32.27	32.84	32.09	33.20
16	31.96	30.72	31.41	31.26	31.93	31.78	32.12	33.23	32.37	32.82	32.21	33.20
17	31.66	31.30	30.80	31.13	31.72	31.26	31.96	32.84	32.46	32.66	31.86	33.20
18	31.70	31.50	31.14	31.35	31.82	31.30	32.02	33.23	32.28	32.86	32.49	33.15
19	31.20	31.50	31.31	31.13	31.90	31.56	32.17	33.21	32.44	32.87	32.20	33.24
20	32.00	31.43	31.00	31.19	31.52	32.02	32.10	33.42	32.38	32.48	32.98	32.70
21	31.77	31.21	31.99	31.17	31.37	32.01	32.08	33.28	32.46	32.71	33.02	.....
22	31.95	31.20	31.47	31.23	31.45	31.94	31.82	32.98	32.19	32.51	32.92	.....
23	32.03	31.20	31.55	31.23	30.97	31.90	32.06	32.29	32.11	32.61	33.00	.....
24	31.78	31.54	31.64	31.13	30.53	31.21	31.71	32.25	32.62	32.80	32.84	.....
25	31.73	31.47	31.16	31.11	30.90	.....	32.21	32.53	32.43	32.41	32.77	33.00
26	31.57	31.25	31.10	31.22	30.97	31.32	32.11	32.45	32.69	32.49	33.20	32.99
27	31.62	31.91	31.50	30.97	31.08	31.72	32.18	32.35	32.47	32.60	33.01	33.27
28	31.33	30.97	30.71	30.92	31.08	31.70	32.47	32.29	32.50	32.52	33.09	33.18
29	31.50		31.13	31.08	31.14	31.35	32.51	32.40	32.30	32.08	33.00	33.07
30	31.92		30.99	31.20	31.21	.....	32.00	32.16	32.57	32.50	33.40	32.95
31	31.56		30.84		31.44		31.82	32.00		33.72		33.21

Shelby County

Sh-1. John Wenger. 3 miles east of Kettlersville. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	11.28	11.60	11.19	11.57	12.51	12.77	12.99	13.44	13.92	14.04	14.25
2	.....	11.39	11.65	11.32	11.60	12.61	12.79	12.97	13.51	13.92	14.04	14.31
3	.....	11.52	11.73	11.40	11.69	12.62	12.79	13.04	13.50	13.90	14.04	14.34
4	.....	11.66	11.75	11.53	11.76	12.63	12.83	13.08	13.53	13.85	14.04	14.32
5	.....	11.78	11.70	11.53	11.81	12.63	12.85	13.08	13.49	13.90	14.12	14.28
6	.....	11.79	11.77	11.52	11.87	12.67	12.85	13.11	13.53	13.85	14.13	14.29
7	.....	11.78	11.92	11.60	11.86	12.67	12.88	13.11	13.53	13.82	14.11	14.25
8	.....	11.90	11.92	11.68	11.88	12.74	12.86	13.13	13.52	13.90	14.07	14.34
9	.....	11.98	11.92	11.83	11.90	12.77	12.90	13.11	13.55	13.90	14.11	14.38
10	.....	12.05	11.88	11.92	11.96	12.78	12.84	13.14	13.59	13.90	14.11	14.38
11	11.85	12.17	11.69	11.95	12.05	12.79	12.86	13.19	13.64	13.88	14.08	14.33
12	11.82	12.17	11.93	11.94	12.00	12.77	12.85	13.17	13.64	13.88	14.13	14.30
13	11.75	12.15	11.95	11.89	12.10	12.72	12.88	13.20	13.68	13.93	14.11	14.37
14	11.78	12.17	11.95	11.90	12.13	12.75	12.87	13.19	13.70	13.95	14.08	14.38
15	11.79	11.93	11.93	11.88	12.18	12.76	12.86	13.21	13.71	13.95	14.08	14.39
16	11.74	11.53	11.89	12.00	12.21	12.73	12.90	13.25	13.72	13.95	14.11	14.39
17	11.64	11.51	11.79	12.00	12.26	12.63	12.90	13.25	13.76	13.95	14.13	14.39
18	11.55	11.52	11.77	11.90	12.28	12.57	12.91	13.20	13.75	13.98	14.16	14.38
19	11.07	11.55	11.83	11.87	12.28	.....	12.92	13.27	13.73	14.00	14.16	14.34
20	11.19	11.71	11.85	11.90	12.25	12.59	12.92	13.33	13.79	13.99	14.13	14.34
21	11.21	11.77	11.75	11.90	12.25	12.63	12.94	13.33	.....	13.97	14.19	14.30
22	11.42	11.77	11.57	11.89	12.18	12.66	12.88	13.33	13.71	14.00	14.24	14.23
23	11.46	11.66	11.48	11.80	12.27	12.69	12.87	13.31	13.72	14.02	14.19	14.37
24	11.38	11.57	11.58	11.80	12.26	12.69	12.87	13.35	13.76	14.02	14.19	14.45
25	11.22	11.41	11.58	11.87	12.33	12.69	12.88	13.36	13.81	14.03	14.14	14.45
26	11.22	11.46	11.59	11.85	12.35	12.75	12.90	13.40	13.84	14.10	14.18	14.41
27	10.96	11.46	11.30	11.80	12.34	12.74	12.93	13.42	13.81	14.10	.....	14.33
28	10.49	11.49	10.95	11.58	12.44	12.77	12.97	13.40	13.73	14.06	.....	14.38
29	10.82	.....	11.99	11.57	12.44	12.80	12.96	13.42	13.78	14.09	14.17	14.42
30	11.04	.....	11.04	11.57	12.49	12.80	12.95	13.46	13.86	14.02	14.20	14.44
31	11.12	.....	11.04	.....	12.51	.....	12.96	13.42	.....	14.04	.....	14.44

Stark County

St-1. Republic Steel Corporation. In Massillon. Records available: 1942-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	48.14	47.73	48.17	47.66	47.44	47.68	47.11	48.04	48.45	46.75	47.90
2	.....	48.15	47.77	48.17	47.60	47.52	47.68	47.19	48.04	48.36	46.68	47.98
3	.....	48.13	47.78	48.10	47.62	47.57	47.57	47.27	48.04	48.27	46.66	48.02
4	.....	48.13	47.80	48.04	47.62	47.57	47.48	47.34	48.04	48.20	46.64	48.05
5	.....	48.13	47.80	48.01	47.63	47.47	47.41	47.38	48.03	48.15	46.62	48.10
6	.....	48.08	47.77	48.02	47.64	47.46	47.36	47.40	48.10	48.10	46.58	48.18
7	.....	48.02	47.75	48.01	47.62	47.53	47.38	47.09	48.17	48.03	46.54	48.26
8	.....	48.03	47.77	48.03	47.58	47.57	47.42	47.31	48.22	47.98	46.50	48.32
9	.....	48.08	47.80	48.03	47.55	47.59	47.42	47.40	48.25	47.90	46.48	48.37
10	.....	48.12	47.85	47.97	47.62	47.62	47.36	47.44	48.27	47.83	46.52	48.45
11	.....	48.15	47.87	47.92	47.64	47.58	47.24	47.48	48.27	47.76	46.55	48.46
12	.....	48.14	47.87	47.95	47.67	47.50	47.18	47.52	48.27	48.66	46.57	48.49
13	.....	48.10	47.86	47.97	47.67	47.41	47.22	47.52	48.31	47.62	46.62	48.56
14	.....	48.04	47.80	47.99	47.67	47.45	47.26	47.44	48.34	47.56	46.72	48.62
15	.....	48.02	47.86	48.01	47.63	47.52	47.27	47.45	48.35	47.50	46.82	48.68
16	.....	47.98	47.89	48.01	47.60	47.65	47.28	47.53	48.35	47.44	46.91	48.75
17	48.70	47.93	47.92	47.97	47.66	47.67	47.20	47.57	48.35	47.38	47.00	48.76
18	48.70	47.78	47.97	47.68	47.69	47.66	47.12	47.64	48.23	47.34	47.08	48.80
19	48.75	47.78	47.99	47.90	47.72	47.57	47.13	47.70	48.21	47.27	.....	48.86
20	48.75	47.85	47.99	47.91	47.72	47.58	47.18	47.70	48.26	47.22	.....	48.86
21	48.72	47.81	47.95	47.94	47.69	47.51	47.22	47.65	48.30	47.18	.....	48.90
22	48.76	47.82	48.02	47.92	47.59	47.59	47.26	47.57	48.35	47.13	47.27	48.97
23	48.76	47.82	48.03	47.91	47.56	47.64	47.26	47.72	48.38	47.09	47.36	49.02
24	48.70	47.77	48.13	47.86	47.52	47.67	47.17	47.78	48.40	47.05	47.44	48.99
25	48.68	47.80	48.16	47.82	47.53	47.65	47.08	47.85	48.34	47.02	47.53	48.90

St-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	48.65	47.80	48.17	47.78	47.60	47.58	47.12	47.91	48.27	46.97	47.55	48.85
27	48.62	47.78	48.13	47.77	47.61	47.48	47.17	47.92	48.35	46.91	47.58	48.92
28	48.52	47.70	48.08	47.70	47.60	47.55	47.20	47.88	48.40	46.91	47.65	49.02
29	48.45		48.11	47.68	47.56	47.62	47.23	47.92	48.47	46.87	47.74	49.07
30	48.33		48.13	47.68	47.50	47.67	.....	47.97	48.48	46.82	47.63	49.12
31	48.18		48.15		47.41		.....	48.03		46.77		49.16

St-2. (Canton 20). Republic Steel Corporation. In Canton. At Leppert St. and Warner Rd. N.E. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	39.68	Aug. 24	35.35	Oct. 10	35.77	Nov. 28	34.60
Mar. 24	38.81	29	35.77	17	35.43	Dec. 5	34.35
Apr. 28	37.52	Sept. 5	35.64	24	35.35	12	32.68
June 13	36.52	19	35.93	Nov. 7	34.77	19	32.60
20	36.89	26	35.26	14	34.77	27	32.68

St-3. Ohio Power Co. In Canton. At Second and Savannah Sts. SE. Records available: 1939-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	46.21	45.71	45.20	44.79	44.37	.....	.....	43.52	43.27	43.00
2	.....	.....	46.20	45.69	45.19	44.77	44.37	.....	43.76	43.51	43.26	42.99
3	.....	46.69	46.18	45.68	45.17	44.75	44.36	.....	43.76	43.51	43.25	42.99
4	.....	46.68	46.16	45.66	45.16	44.73	44.34	.....	43.75	43.50	43.25	42.98
5	.....	46.66	46.14	45.64	45.14	44.72	44.33	43.99	43.74	43.49	43.23	42.97
6	.....	46.65	46.12	45.62	45.13	44.70	44.32	43.99	43.73	43.48	43.22	42.97
7	.....	46.62	46.11	45.61	.....	44.69	44.31	43.98	43.72	43.47	43.21	42.97
8	.....	46.61	46.09	45.59	45.10	44.68	44.30	43.97	43.72	43.47	43.20	42.96
9	.....	46.58	46.07	.....	45.08	44.68	44.28	43.96	43.70	43.46	43.19	42.95
10	.....	46.57	46.05	.....	45.07	44.67	44.26	43.95	43.76	43.46	43.18	42.94
11	.....	46.55	46.03	.....	45.06	44.65	44.25	43.94	43.71	43.45	43.17	42.94
12	47.13	46.53	46.01	.....	45.04	44.64	44.24	43.96	43.71	43.44	.....	42.93
13	47.12	46.51	46.00	45.50	.....	44.63	44.23	43.96	43.70	43.43	.....	42.93
14	47.10	46.50	45.98	45.49	.....	44.61	44.22	43.95	43.69	43.44	43.14	42.92
15	47.07	46.48	45.96	45.48	.....	44.60	44.21	43.94	43.68	43.44	43.14	42.91
16	47.05	46.46	45.94	45.46	.....	44.59	44.20	43.93	43.67	43.43	43.13	42.91
17	47.03	46.43	45.94	45.45	.....	44.54	44.19	43.92	43.65	43.42	43.12	42.90
18	47.01	46.42	45.92	45.43	.....	44.52	44.18	43.91	43.64	43.41	43.11	42.90
19	46.99	46.40	45.90	45.42	.....	44.51	44.17	43.90	43.64	43.40	43.10	42.89
20	.....	46.38	45.89	45.40	.....	44.50	44.16	43.89	43.63	43.39	43.09	42.88
21	.....	46.36	45.87	45.36	.....	44.49	44.15	43.89	43.62	43.38	43.10	42.84
22	.....	46.34	45.85	45.35	.....	44.47	44.15	43.87	43.61	43.36	43.10	42.83
23	.....	46.32	45.84	45.34	.....	44.48	44.15	43.86	43.61	43.35	43.09	42.82
24	.....	46.31	45.82	45.32	.....	44.48	44.14	43.85	43.57	43.34	43.09	42.82
25	.....	46.29	45.82	45.30	.....	44.47	44.13	43.84	43.57	43.34	43.08	42.81
26	.....	46.27	45.80	45.28	.....	44.45	44.12	43.88	43.56	43.33	43.07	42.80
27	.....	46.25	45.79	45.27	44.85	44.44	44.11	43.88	43.55	43.32	43.06	42.80
28	.....	46.23	45.77	45.25	44.85	44.43	44.10	43.86	43.54	43.31	43.02	42.80
29	.....		45.76	45.24	44.83	44.41	44.09	43.86	43.53	43.30	43.02	42.80
30	.....		45.74	45.22	44.82	44.40	.....	43.86	43.52	43.29	43.01	42.79
31	.....		45.72		44.81		.....	43.84		43.28		42.79

St-4. Adessi Bros. 2 miles north of Canton. Records available: 1941-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	11.62	11.33	11.84	12.56	13.47	14.29	14.46	15.04	15.82	16.81	17.76
2	.....	11.59	11.36	11.82	12.58	13.51	14.31	14.44	15.06	15.85	16.84	17.80
3	14.70	.....	11.42	11.87	12.61	13.55	14.33	14.46	15.08	15.90	16.88	17.82
4	14.72	.....	11.42	11.91	12.64	13.57	14.36	14.46	15.10	15.93	16.91	17.85
5	14.72	.....	11.44	11.91	12.66	13.60	14.37	14.50	15.14	15.94	16.95	17.89

St-4 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	13.61	.....	11.55	11.94	12.68	13.61	14.40	14.52	15.16	15.98	16.98	17.91
7	13.97	11.80	11.60	11.95	12.72	13.64	14.43	14.54	15.17	16.02	17.00	17.95
8	13.87	11.82	11.62	12.00	12.73	13.69	14.46	14.60	15.21	16.05	17.03	17.9
9	13.84	11.91	11.64	12.05	12.76	13.72	14.47	14.61	15.24	16.09	17.07	18.02
10	13.85	11.98	11.69	12.08	12.80	13.75	14.47	14.63	15.27	16.11	17.10	18.05
11	13.84	12.04	11.70	12.09	12.82	13.78	14.46	14.65	15.30	16.13	17.13	18.08
12	13.82	12.07	11.75	12.10	12.85	13.81	14.39	14.67	15.31	16.18	17.17	18.10
13	13.82	12.12	11.79	12.13	12.87	13.85	14.40	14.68	15.32	16.21	17.20	18.14
14	13.89	12.14	11.81	12.18	12.93	13.87	14.42	14.70	15.34	16.23	17.23	18.17
15	13.90	12.10	11.85	12.22	12.97	13.90	14.47	14.80	15.36	16.27	17.26	18.20
16	13.94	11.84	11.87	12.28	13.00	13.93	14.49	14.72	15.37	16.30	17.30	18.23
17	13.98	11.59	11.90	12.29	13.05	13.97	14.51	14.73	15.41	16.35	17.33	18.25
18	13.99	11.58	11.97	12.33	13.05	14.00	14.53	14.75	15.44	16.37	17.36	18.28
19	14.00	11.59	12.04	12.38	13.07	14.02	14.54	14.77	15.45	16.38	17.39	18.32
20	14.02	11.70	12.06	12.40	13.11	14.05	14.56	14.80	15.49	16.43	17.42	18.34
21	14.01	11.73	12.08	12.41	13.13	14.06	14.58	14.82	15.52	16.46	17.44	18.37
22	14.04	11.73	12.08	12.42	13.17	14.09	14.60	14.83	15.54	16.50	17.47	18.40
23	14.04	11.60	12.07	12.43	13.20	14.11	14.62	14.85	15.57	16.53	17.50	18.41
24	14.03	11.26	11.80	12.50	13.21	14.13	14.63	14.87	15.61	16.57	17.53	18.44
25	13.83	11.20	11.77	12.52	13.23	14.18	14.64	14.90	15.64	16.60	17.56	18.47
26	13.52	11.20	11.78	12.51	13.26	14.21	14.64	14.91	15.67	16.64	17.63	18.49
27	13.33	11.19	11.79	12.53	13.30	14.22	14.62	14.94	15.69	16.78	17.66	18.51
28	12.82	11.24	11.86	12.55	13.34	14.22	14.63	14.96	15.72	.....	17.69	18.54
29	12.21		11.86	12.55	13.37	14.23	14.64	14.98	15.76	.....	17.73	18.56
30	11.93		11.89	12.55	13.41	14.26	14.65	14.99	15.80	.....	.....	18.58
31	11.71		11.89		13.44		14.64	15.01		16.78		18.60

St-5. Canton Water Department. In northeast well field, 1 mile north of Canton. Records available: 1941-49. Measurement discontinued.

Lowest daily water level, from recorder graph									
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36.59	36.65	34.33	35.34	35.35	34.54	33.97	32.97	35.92
2	36.18	36.25	34.12	35.36	34.74	34.56	33.93	33.12	36.20
3	36.75	.....	34.17	34.56	34.64	34.57	33.77	33.13	36.29
4	37.10	36.79	34.48	35.03	34.32	34.57	33.82	33.14	36.67
5	37.42	36.83	34.92	35.27	34.20	34.54	33.86	33.17	36.60
6	37.58	36.65	35.11	35.38	34.65	34.52	33.88	33.17	37.01
7	37.63	36.45	34.77	34.97	35.08	34.53	33.89	33.09	36.77
8	36.65	36.69	34.28	34.61	35.14	34.45	33.87	33.04	34.75
9	36.46	36.84	34.60	34.85	34.92	34.37	33.82	33.51	34.51
10	36.95	36.96	35.01	35.15	35.00	34.41	33.85	33.82	36.01
11	37.35	37.01	35.25	34.87	35.05	34.40	33.64	33.47	36.55
12	37.58	36.35	35.26	34.34	35.35	34.28	33.68	33.42	37.00
13	37.50	36.50	34.85	34.09	35.94	34.21	33.72	33.76	37.47
14	36.88	36.72	35.20	33.93	35.70	34.17	33.77	33.86	37.68
15	36.69	36.73	35.38	33.78	35.63	34.20	33.82	33.66	37.99
16	36.68	36.10	34.95	34.35	35.60	34.22	33.64	34.14	39.11
17	37.20	35.77	34.54	34.72	35.51	34.25	33.48	34.35	39.18
18	37.44	35.40	34.62	34.24	35.78	34.05	33.18	33.97	37.71
19	36.87	35.82	34.95	34.87	35.94	34.10	33.33	33.77	38.15
20	36.57	35.86	34.97	35.12	36.10	34.12	33.45	33.70	38.14
21	36.30	35.20	34.27	35.33	36.12	34.14	33.32	33.66	37.97
22	35.81	34.75	33.97	35.37	35.74	34.17	33.35	33.61	38.30
23	36.22	34.70	34.04	35.26	35.85	34.07	33.42	35.57	38.51
24	36.81	34.54	33.92	35.39	35.35	34.12	33.40	35.99	38.82
25	36.87	34.97	33.77	34.67	35.27	34.15	33.15	36.29	38.86
26	36.13	35.35	33.66	34.57	35.02	34.15	33.19	36.60	38.70
27	35.92	35.41	34.20	34.74	34.85	33.97	33.21	36.88	.....
28	36.54	34.58	34.67	35.15	34.85	34.04	33.27	36.79	.....
29	36.95		34.95	35.39	34.84	33.90	33.27	36.30	.....
30	37.01		35.00	35.56	34.80	33.95	33.25	36.39	.....
31	36.59		35.09		34.63		32.97	36.43	

St-5A. City of Canton. Drilled unused well 1300 ft. east of Harrisburg Rd., and 1060 feet south of 30th St. Records available: 1949.

Lowest daily water level, from recorder graph

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	37.40	36.65	38.73	42.48	43.35	44.14
2	.....	37.35	37.08	38.99	42.66	43.44	44.64
3	.....	37.22	37.17	39.09	42.40	43.45	45.86
4	.....	37.26	37.17	39.51	42.67	42.95	44.68
5	.....	37.28	37.22	41.20	42.70	43.35	44.62
6	.....	37.31	37.22	39.85	42.82	42.80	44.96
7	.....	37.31	37.04	39.60	42.85	43.17	44.98
8	.....	37.29	36.80	38.17	42.95	43.32	44.98
9	.....	37.24	36.88	37.96	43.06	42.80	45.22
10	.....	37.27	37.25	38.90	42.90	43.45	45.30
11	.....	37.05	36.87	39.36	43.22	43.56	44.63
12	.....	37.24	36.92	39.80	43.15	43.52	45.10
13	.....	37.30	37.17	40.29	42.32	43.00	45.34
14	.....	37.47	37.29	40.49	42.15	43.67	45.18
15	.....	37.61	37.08	40.79	42.02	43.97	44.48
16	.....	37.15	37.56	40.92	42.63	43.70	44.08
17	37.68	36.76	37.76	40.98	42.58	43.77	43.82
18	37.48	37.47	37.41	40.52	42.55	44.14	.....
19	37.54	37.82	37.21	40.96	42.90	44.20	42.12
20	37.57	38.10	37.15	40.96	42.98	43.30	42.25
21	37.58	37.67	37.10	40.78	42.80	43.95	42.12
22	37.60	37.75	37.05	42.14	43.20	44.32	42.15
23	37.51	37.88	38.34	41.32	43.15	44.43	42.06
24	37.55	37.84	38.73	41.65	42.45	44.34	41.92
25	37.58	37.30	39.04	41.68	43.18	43.22	41.80
26	37.58	36.59	39.34	41.51	43.18	44.32	41.95
27	37.42	36.60	39.63	41.88	43.15	44.37	41.97
28	37.48	36.65	39.50	41.98	43.47	44.15	41.96
29	37.33	36.65	38.98	42.23	43.52	44.47	41.98
30	37.37	36.63	39.22	42.43	43.14	44.57	41.98
31		36.38	39.25		43.25		.....

St-6. Canton Water Department. Ninth St. well field. Records available: 1944-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.08	14.19	12.87	11.73	10.91	9.96	10.73	10.74	10.90	9.24	8.62	7.73
2	16.02	14.19	13.87	11.72	10.85	9.94	10.77	10.82	10.93	9.22	8.60	7.73
3	15.99	14.18	12.83	11.71	10.86	9.94	10.79	.....	10.77	9.17	8.58	7.73
4	15.95	14.10	12.82	11.70	10.86	9.93	10.81	.....	10.54	9.12	8.58	7.73
5	15.93	14.04	12.76	11.70	10.85	9.82	10.80	.....	10.38	9.08	8.59	7.70
6	15.79	14.02	12.70	11.64	10.83	9.70	10.80	.....	10.26	9.06	8.60	7.69
7	15.68	13.93	12.70	11.61	10.79	9.72	10.78	.....	10.20	9.02	8.57	7.64
8	15.65	13.92	12.69	11.58	10.77	9.77	10.78	8.61	10.10	9.03	8.55	7.62
9	15.62	13.84	12.63	11.58	10.74	9.78	10.79	9.49	10.02	9.02	8.54	7.63
10	15.58	13.82	12.58	11.59	10.71	9.77	10.76	10.01	9.98	8.97	8.54	7.63
11	15.54	13.79	12.53	11.53	10.72	9.74	10.41	10.34	9.94	8.93	8.51	7.61
12	15.48	13.79	12.51	11.51	10.71	9.70	10.41	10.51	9.88	8.92	8.50	7.52
13	15.40	13.71	12.48	11.45	10.69	9.67	10.48	10.62	9.81	8.94	8.47	7.52
14	15.34	13.66	12.46	11.39	10.67	9.65	10.53	10.70	9.74	8.94	8.35	7.58
15	15.31	13.59	12.43	11.37	10.64	9.64	10.58	10.74	9.72	8.90	8.28	7.63
16	15.26	13.46	12.42	11.37	10.56	9.64	10.39	10.80	9.67	8.88	8.28	7.68
17	15.20	13.39	12.38	11.37	10.46	9.93	10.43	10.83	9.64	8.85	8.28	7.73
18	15.18	13.30	12.35	11.32	10.44	10.06	10.49	10.84	9.60	8.83	8.28	7.77
19	15.09	13.36	12.35	11.33	10.42	10.05	10.55	10.88	9.48	8.82	8.28	7.81
20	15.10	13.31	12.35	11.33	10.39	9.91	10.62	10.91	9.48	8.80	8.25	7.84
21	15.08	13.30	12.31	11.31	10.31	10.09	10.65	10.94	9.48	8.79	8.23	7.87
22	14.99	13.27	12.26	11.27	10.24	10.24	10.67	10.85	9.45	8.75	8.21	7.90
23	14.97	13.16	12.15	11.22	10.17	10.35	10.72	10.96	9.40	8.74	8.15	7.93
24	14.89	13.08	12.11	11.15	10.16	10.44	10.77	10.98	9.39	8.74	8.04	7.97
25	14.82	13.01	12.06	11.15	10.08	10.48	10.79	11.00	9.39	8.74	7.92	8.00
26	14.77	13.00	12.02	11.11	10.05	10.53	10.82	11.02	9.37	8.72	7.89	8.02
27	14.67	12.98	11.96	11.06	10.05	10.51	10.85	11.03	9.33	8.74	7.81	8.04
28	14.49	12.87	11.92	11.02	10.05	10.57	10.88	11.03	9.27	8.73	7.83	8.07
29	14.25		11.93	11.01	10.05	10.65	10.90	10.79	9.21	8.69	7.79	8.10
30	14.28		11.91	10.96	10.04	10.71	10.91	10.80	9.23	8.66	7.76	8.14
31	14.25		11.86		10.00		10.79	10.84		8.62		8.17

St-7. Canton Water Department. In Grovemiller well field. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	79.07	Apr. 4	75.77	July 4	72.70	Oct. 10	71.47
10	78.02	11	75.37	11	71.65	17	71.46
17	78.52	18	75.07	18	72.50	24	71.51
24	78.45	25	74.84	25	72.35	31	71.31
31	77.88	May 2	74.63	Aug. 1	72.20	Nov. 7	71.30
Feb. 7	78.05	9	74.10	8	72.06	14	72.28
14	77.68	16	73.60	16	71.80	21	71.37
21	77.53	24	73.55	22	71.73	28	71.20
28	77.47	30	73.70	29	71.80	Dec. 5	71.15
Mar. 7	77.00	June 6	72.26	Sept. 5	71.70	12	71.15
14	76.55	13	73.23	12	71.75	19	71.18
21	76.15	20	73.02	Oct. 3	71.55	26	71.12
28	76.10	27	72.62				

St-8. Canton Water Department. Grovemiller well field. Records available: 1944-49.

Jan. 3	77.40	Apr. 4	74.50	July 4	71.54	Oct. 10	70.32
10	77.65	11	74.28	11	70.55	17	70.28
17	77.40	18	73.80	18	71.25	24	70.18
24	77.32	25	73.60	25	71.15	31	70.10
31	77.00	May 2	73.28	Aug. 1	70.99	Nov. 7	70.12
Feb. 7	76.70	9	73.10	8	70.90	14	70.02
14	76.50	16	72.93	16	70.77	21	70.22
21	76.31	24	72.95	22	70.73	28	70.00
28	76.38	30	72.50	29	70.55	Dec. 5	70.05
Mar. 7	75.71	June 6	73.00	Sept. 5	70.58	12	78.97
14	75.40	13	72.04	12	70.50	19	69.90
21	75.10	20	71.88	Oct. 3	70.42	26	69.78
28	74.75	27	71.70				

St-9. Canton Water Department. In Grovemiller well field. Records available: 1944-49.

Jan. 3	91.65	Apr. 4	89.24	July 4	83.46	Oct. 10	84.73
10	92.40	11	88.78	11	84.70	17	84.85
17	91.85	18	88.48	18	85.82	24	84.89
24	91.77	25	88.44	25	85.62	31	84.62
31	91.28	May 2	88.05	Aug. 1	85.57	Nov. 7	84.62
Feb. 7	91.44	9	87.70	8	85.37	14	84.58
14	91.10	16	87.56	16	85.37	21	84.45
21	91.00	24	87.52	22	85.30	28	84.49
28	90.97	30	87.12	29	85.12	Dec. 5	84.49
Mar. 7	90.57	June 6	86.75	Sept. 5	85.06	12	84.45
14	89.99	13	86.62	12	85.13	19	84.47
21	89.52	20	86.41	Oct. 3	84.77	26	84.20
28	89.60	27	83.60				

St-10. Canton Water Department. In Sippo well field. 5 miles west of Canton. Records available: 1944-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.09	0.84	0.49	0.68	0.71	1.12	1.46	1.41	1.76	2.05	2.38	2.55
2	2.12	.82	.49	.69	.70	1.14	1.46	1.43	1.77	2.05	2.38	2.57
3	2.14	.80	.54	.72	.74	1.15	1.47	1.45	1.77	2.06	2.39	2.57
4	2.15	.79	.52	.72	.75	1.16	1.51	1.48	1.77	2.06	2.40	2.55
5	2.11	.80	.49	.70	.76	1.17	1.52	1.49	1.77	2.07	2.42	2.56
6	1.98	.80	.59	.68	.76	1.18	1.51	1.51	1.70	2.07	2.42	2.56
7	1.90	.84	.62	.68	.79	1.22	1.48	1.52	1.80	2.09	2.41	2.58
8	1.88	.88	.59	.69	.79	1.24	1.51	1.52	1.80	2.10	2.42	2.59
9	1.86	.88	.59	.72	.86	1.26	1.52	1.53	1.82	2.10	2.42	2.59
10	1.86	.92	.60	.74	.90	1.26	1.48	1.55	1.82	2.10	2.42	2.58
11	1.84	.95	.60	.73	.91	1.27	1.43	1.56	1.83	2.09	2.43	2.57
12	1.81	.94	.65	.72	.92	1.27	1.42	1.55	1.85	2.12	2.44	2.57
13	1.80	.96	.66	.72	....	1.29	1.45	1.55	1.85	2.13	2.42	2.59
14	1.84	.97	.63	.74	....	1.30	1.46	1.57	1.87	2.14	2.43	2.58
15	1.83	.91	.66	.74	....	1.32	1.47	1.61	1.87	2.16	2.44	2.59

St-10 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	1.82	0.85	0.66	0.78	0.97	1.32	1.33	1.61	1.88	2.18	2.44	2.59
17	1.85	.80	.68	.78	.99	1.34	1.30	1.61	1.90	2.21	2.45	2.59
18	1.85	.76	.81	.80	.99	1.36	1.32	1.62	1.90	2.22	2.46	2.59
19	1.86	.73	.76	.82	.98	1.37	1.34	1.64	1.91	2.23	2.46	2.57
20	1.86	.78	.77	.82	.99	1.38	1.36	1.66	1.93	2.24	2.47	2.56
21	1.79	.79	.78	.81	.99	1.38	1.36	1.67	1.93	2.24	2.50	2.54
22	1.79	.73	.72	.78	1.01	1.40	1.27	1.69	1.93	2.27	2.50	2.55
23	1.78	.64	.72	.76	1.01	1.41	1.28	1.69	1.96	2.28	2.48	2.40
24	1.72	.57	.69	.79	1.02	1.42	1.28	1.70	1.97	2.32	2.48	2.41
25	1.70	.54	.66	.80	1.03	1.42	1.29	1.71	1.98	2.32	2.50	2.41
26	1.64	.50	.36	.74	1.03	1.44	1.31	1.70	1.98	2.34	2.51	2.58
27	1.54	.46	.65	.72	1.05	1.42	1.34	1.70	1.98	2.34	2.51	2.60
28	1.32	.46	.70	.73	1.06	1.43	1.36	1.70	1.98	2.34	2.51	2.61
29	1.13		.71	.70	1.08	1.44	1.36	1.72	2.01	2.35	2.52	2.63
30	1.01		.68	.69	1.10	1.44	1.38	1.73	2.03	2.34	2.54	2.63
31	.88		.66		1.11		1.40	1.72		2.38		2.62

St-11. Canton Water Department. 3 miles northeast of Canton, in northeast well field. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.96	26.61	25.72	23.52	23.79	30.82	.....	29.80	29.45	.....	30.45	32.03
2	29.00	24.35	25.94	23.30	26.62	.....	.....	.....	32.26	.....	30.43	31.93
3	26.39	24.02	26.36	23.22	27.38	.....	.....	.....	32.80	.....	33.50	.....
4	26.23	.....	24.07	23.21	28.00	.....	.....	.....	30.15	.....	31.10	.....
5	26.15	.....	23.62	23.20	28.46	30.75	.....	.....	29.91	31.95	31.07	.....
6	25.85	.....	23.40	23.17	28.88	.....	.....	.....	33.01	.....	31.00	.....
7	27.10	.....	25.65	25.84	29.01	.....	.....	29.92	33.92	.....	31.07	32.07
8	28.25	.....	26.28	26.21	26.20	.....	.....	29.70	34.60	.....	31.12	32.10
9	28.42	23.10	24.07	23.83	28.57	.....	.....	.....	35.08	.....	34.12	32.10
10	26.50	23.00	23.66	23.58	29.04	.....	30.31	.....	35.20	.....	31.52	32.12
11	28.85	25.42	23.49	25.85	26.50	.....	29.71	.....	31.80	33.97	31.40	32.13
12	25.30	23.60	23.24	26.56	28.70	.....	28.82	.....	31.38	34.70	31.41	32.13
13	27.38	23.27	23.14	26.70	28.52	.....	.....	30.67	31.19	35.08	31.42	32.13
14	28.61	23.17	23.10	27.32	29.03	.....	.....	30.35	31.04	35.63	31.43	32.12
15	29.10	25.10	23.02	27.54	26.44	.....	.....	30.18	30.90	32.70	31.42	32.12
16	26.85	25.24	25.70	24.98	28.60	.....	28.44	30.04	30.81	32.34	31.50	32.14
17	26.35	23.33	26.25	24.58	29.32	.....	28.07	29.92	30.75	32.18	31.52	32.17
18	26.18	25.90	24.00	24.36	29.32	.....	27.90	29.81	30.69	32.10	31.53	32.20
19	28.40	24.00	23.65	24.24	29.47	.....	.....	32.52	33.48	31.04	31.56	32.50
20	29.16	23.21	23.54	24.12	27.15	.....	.....	30.22	34.40	31.04	31.60	32.20
21	29.75	25.54	26.17	24.04	26.64	.....	29.70	29.91	31.46	31.00	31.63	32.18
22	29.98	26.17	26.72	23.97	26.43	.....	.....	29.78	32.13	31.00	31.63	.....
23	27.40	25.77	26.49	23.92	28.93	.....	29.90	29.74	32.90	30.98	31.63	.....
24	26.88	26.05	26.85	23.80	29.20	.....	29.41	29.70	30.63	30.98	31.67	.....
25	27.35	23.86	26.79	26.22	29.40	.....	.....	29.65	30.45	30.98	31.72	.....
26	28.62	23.12	27.03	26.90	29.77	.....	.....	29.62	30.34	30.65	31.72	.....
27	28.62	22.62	24.50	24.62	29.77	30.70	.....	29.60	33.15	30.62	31.76	.....
28	25.60	24.90	24.10	24.14	30.03	.....	.....	29.56	30.62	30.59	31.78	.....
29	24.66		23.90	23.92	27.28	.....	.....	29.52	30.30	30.53	31.80	.....
30	24.02		23.74	23.84	26.91	.....	.....	29.51	30.20	30.52	34.72	.....
31	25.95		23.64		29.87	.....	30.80	29.49		30.48		.....

St-13. Canton Water Department. 3 miles northwest of Canton. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	3.10	3.13	3.12	3.53	4.84	....	5.20	6.13	6.54	7.34
2	....	3.73	3.22	3.16	3.19	3.56	4.85	....	5.24	6.15	6.55	7.36
3	....	3.73	3.22	3.17	3.12	3.59	....	....	5.28	6.16	6.57	7.36
4	4.46	3.70	3.10	3.18	3.18	3.64	....	....	5.33	6.15	6.61	7.43
5	4.34	3.69	3.14	3.17	3.21	....	....	....	....	6.11	6.64	7.46

St-13 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	4.21	3.69	3.17	3.15	3.25	....	4.96	....	....	6.11	6.68	7.48
7	....	3.62	3.16	3.06	3.27	....	....	....	5.36	6.10	6.72	7.49
8	....	3.61	3.17	3.11	3.31	3.78	....	....	5.38	6.07	6.73	7.53
9	....	3.59	3.17	3.13	3.31	3.81	....	....	5.47	6.07	6.76	7.55
10	....	3.53	....	3.15	3.35	3.84	....	....	5.55	6.07	6.78	7.58
11	....	3.53	....	3.15	3.41	3.87	....	....	5.60	6.01	6.80	7.60
12	4.21	3.53	....	3.15	3.41	....	....	....	5.64	5.99	6.81	7.60
13	4.22	3.53	....	3.15	3.43	....	5.02	....	5.66	6.09	6.82	7.59
14	4.32	3.48	....	3.18	3.44	....	....	....	5.68	6.16	6.82	7.62
15	....	3.31	....	3.23	3.44	4.07	....	....	5.72	6.19	6.85	....
16	....	3.20	....	3.25	3.41	4.14	....	....	5.75	6.22	6.87	....
17	....	3.22	....	3.28	3.45	4.23	....	....	5.78	6.24	6.91	....
18	....	3.25	....	3.27	3.45	4.29	....	....	5.79	6.24	6.93	....
19	4.08	3.25	....	3.25	3.47	....	....	....	5.81	6.26	6.97	....
20	4.09	3.25	....	3.26	3.44	....	4.92	....	5.85	6.28	7.00	....
21	3.85	3.24	....	3.27	3.44	....	4.92	....	5.90	6.29	7.04	....
22	3.60	3.24	....	3.26	3.44	4.47	4.87	....	5.92	6.29	7.07	....
23	3.62	3.00	3.09	3.15	3.32	4.53	4.87	....	5.95	6.33	7.11	....
24	3.61	3.06	3.16	3.12	3.36	4.59	4.88	5.31	5.99	6.35	7.14	....
25	3.63	3.06	3.23	3.14	3.42	....	....	5.29	6.04	6.37	7.17	....
26	3.63	3.06	3.26	3.16	3.46	....	....	5.29	6.06	6.41	7.19	....
27	....	3.06	3.26	3.14	3.49	....	....	5.29	6.07	6.44	7.22	....
28	....	3.06	3.23	3.10	3.54	....	....	5.26	6.07	6.47	7.26	....
29	....	....	3.23	3.12	3.56	4.81	....	5.25	6.09	6.49	7.27	....
30	....	....	3.26	3.12	3.56	4.83	....	....	6.12	6.52	7.31	....
31	....	....	3.24	....	3.56	....	....	....	....	6.52	....	....

St-21. Canton Water Department. 3 miles northwest of Canton. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	19.70	18.97	19.05	19.22	22.93	25.72	24.96	24.35	25.21	25.50	26.70
2	....	19.65	19.15	18.89	19.55	23.47	25.95	24.60	24.57	25.00	25.47	26.72
3	....	19.48	19.15	18.80	20.18	23.92	25.86	24.87	24.93	24.95	25.68	26.72
4	....	19.26	19.47	18.74	20.72	24.29	25.53	24.85	24.93	24.92	25.74	26.72
5	21.32	19.18	19.15	18.69	21.14	24.31	25.80	24.82	24.80	24.94	25.76	26.74
6	21.05	19.09	18.95	18.62	21.54	24.10	26.17	25.00	25.08	24.93	25.70	26.76
7	20.80	18.99	19.01	18.96	21.70	24.44	26.17	24.92	25.70	24.88	25.77	26.77
8	21.15	18.91	19.45	19.31	21.52	24.68	25.77	24.72	26.15	24.86	25.82	26.79
9	21.36	18.82	19.42	19.25	21.34	24.66	25.67	24.90	26.56	24.83	26.07	26.81
10	21.17	18.71	19.17	19.07	21.70	24.95	25.45	25.48	26.75	24.80	26.14	26.82
11	21.07	18.81	18.98	19.13	21.66	25.28	24.77	25.54	26.70	25.04	26.15	26.84
12	20.92	18.82	18.78	19.58	21.50	25.35	24.09	25.70	26.37	25.58	26.15	26.85
13	20.70	18.73	18.68	19.72	21.51	25.55	24.22	25.54	26.13	25.80	26.17	26.84
14	21.40	18.64	18.61	20.27	21.73	25.77	24.27	25.31	25.94	26.24	26.17	26.82
15	21.89	18.50	18.55	20.53	21.63	25.99	24.60	25.13	25.79	26.25	26.18	26.80
16	21.88	18.48	18.90	20.40	21.46	26.22	24.57	25.00	25.68	26.15	26.18	26.82
17	21.62	18.66	19.35	20.10	21.93	26.54	24.34	24.88	25.61	26.02	26.20	26.85
18	21.45	19.17	19.32	19.89	22.01	26.46	24.18	24.79	25.54	25.93	26.23	26.87
19	21.37	19.17	19.14	19.75	22.03	25.93	24.20	24.94	25.62	25.85	26.25	26.88
20	21.70	18.86	19.02	19.73	22.02	26.06	24.58	24.95	26.13	25.82	26.27	26.87
21	22.47	18.92	19.33	19.52	21.73	26.35	24.57	24.85	26.15	25.80	26.30	26.87
22	22.72	19.35	19.77	19.43	21.53	26.52	24.54	24.76	25.97	25.77	26.32	....
23	22.60	19.34	19.70	19.34	21.55	26.42	24.54	24.67	25.77	25.77	26.34	....
24	22.25	19.34	19.95	19.23	21.76	26.57	24.39	24.63	25.68	25.76	26.36	....
25	21.76	19.22	20.02	19.40	22.02	26.69	24.32	24.59	25.56	25.76	26.30	....
26	21.58	18.78	20.20	19.91	22.39	26.54	24.80	24.55	25.45	25.74	26.42	....
27	21.58	18.52	20.03	19.90	22.40	26.06	24.83	24.52	25.52	25.69	26.44	....
28	21.02	18.51	19.72	19.59	22.66	25.62	25.33	24.48	25.53	25.63	26.47	....
29	19.90	....	19.50	19.42	22.57	25.93	25.78	24.45	25.37	25.59	26.49	....
30	19.69	....	19.33	19.29	22.27	25.93	25.95	24.41	25.27	25.55	26.63	....
31	19.22	....	19.21	....	22.33	....	25.72	24.38	....	25.52	....	....

St-22. Canton Water Department. 3 miles northwest of Canton. 40 feet west of Baltimore & Ohio Railroad. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.98	23.97	25.31	27.32	27.11	26.96	27.70	27.94	28.58
2	24.48	23.73	23.95	24.01	25.44	27.35	27.07	26.96	27.69	27.96	28.61
3	24.15	23.83	23.90	24.15	25.58	27.35	27.06	27.04	27.67	27.97	28.64
4	23.83	23.86	24.25	25.72	27.34	.....	27.05	27.66	27.99	28.67
5	25.55	.....	23.78	23.83	24.37	25.77	27.37	27.03	27.06	27.63	28.01	28.70
6	23.76	23.78	24.49	25.82	27.51	27.06	27.08	27.63	28.03	28.73
7	23.86	23.79	24.57	25.92	27.51	27.06	27.22	27.62	28.05	28.83
8	23.86	24.58	26.02	27.49	27.04	27.31	27.61	28.07	28.85
9	24.26	23.85	23.86	24.64	26.08	27.49	27.05	27.41	27.59	28.09	28.88
10	24.18	23.84	23.85	24.72	26.17	27.46	27.15	27.53	27.57	28.14	28.91
11	24.17	23.82	23.84	24.74	26.27	27.32	27.18	27.58	27.56	28.17	28.93
12	24.14	23.78	23.92	24.77	26.36	27.18	27.24	27.60	27.61	28.20	28.96
13	24.09	23.74	23.98	24.80	.....	27.10	27.24	27.62	27.67	28.22	28.97
14	24.08	24.72	24.10	24.87	.....	27.01	27.24	27.63	27.75	28.25	28.98
15	23.70	24.18	24.87	.....	27.02	27.24	27.63	27.79	28.27	29.00
16	23.75	24.20	24.88	.....	27.01	27.22	27.63	27.81	28.27	29.01
17	23.89	23.85	24.20	24.94	26.94	26.97	27.20	27.63	27.84	28.20	29.03
18	23.96	23.86	24.20	25.00	26.99	26.92	27.16	27.63	27.85	28.32	29.05
19	23.95	23.87	24.19	25.02	27.00	26.89	27.15	27.63	27.88	28.35	29.07
20	23.87	23.87	24.18	25.02	27.06	26.99	27.15	27.68	27.89	28.36	29.08
21	23.88	23.93	24.15	25.00	27.12	26.99	27.15	27.71	27.90	28.39	29.10
22	23.95	24.00	24.12	24.98	27.22	26.94	27.15	27.73	27.91	28.41	.....
23	23.93	24.03	24.08	24.95	27.25	26.93	27.14	27.73	27.92	28.45	.....
24	23.91	24.10	24.03	25.00	27.33	26.92	27.13	27.73	27.93	28.48	.....
25	23.87	24.14	24.04	25.03	27.42	26.88	27.13	27.73	27.93	28.50	.....
26	25.64	23.81	24.18	24.14	25.10	27.42	26.93	27.13	27.73	27.93	28.53	.....
27	25.64	23.73	24.18	24.13	25.13	27.41	26.93	27.10	27.73	27.93	28.56	.....
28	25.51	23.69	24.15	24.11	25.20	27.47	27.00	27.09	27.74	27.93	28.58	.....
29	25.30	.....	24.14	24.06	25.22	27.49	27.10	27.07	27.72	27.93	28.60	.....
30	24.09	24.00	25.22	27.32	27.16	27.04	27.70	27.94	28.60	.....
31	24.03	.....	25.22	.....	27.16	27.01	.....	27.94	.....	.....

St-23. Canton Water Department. 3 miles northwest of Canton. Records available: 1947-49.

Lowest daily water level, from recorder graph											
Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1	7.48	.....	6.69	6.81	6.78	17	7.42	6.78	6.82	6.90	.....
2	7.51	6.75	6.66	6.82	6.81	18	7.45	6.78	6.84	6.91	.....
3	7.53	6.74	6.66	6.82	6.85	19	7.40	6.78	6.88	6.91	.....
4	7.57	6.75	6.66	6.83	6.84	20	7.39	6.79	6.87	6.91	.....
5	7.47	6.78	6.68	6.85	.....	21	7.38	6.83	6.91	6.82	.....
6	7.37	6.80	6.73	6.84	.....	22	7.40	6.79	6.88	6.82	.....
7	7.30	6.83	6.72	6.82	.....	23	7.40	6.81	6.84	6.82	.....
8	7.29	6.87	6.72	6.82	.....	24	7.36	6.81	6.81	6.80	.....
9	7.28	6.90	6.76	6.84	.....	25	7.30	6.66	6.79	6.80	.....
10	7.29	6.86	6.76	6.87	.....	26	7.25	6.67	6.80	6.78	.....
11	7.28	6.91	6.76	6.85	.....	27	7.14	6.62	6.78	6.86	.....
12	7.32	6.90	6.77	6.88	.....	28	7.00	6.62	6.84	6.81	.....
13	7.31	6.91	6.77	6.85	.....	29	6.83	.....	6.81	6.79	.....
14	7.33	6.92	6.80	6.86	.....	30	6.76	.....	6.83	6.79	.....
15	7.42	6.88	6.83	6.88	.....	31	.....	.....	6.81	.....	.....
16	7.40	6.82	6.82	6.91	.....					

Summit County

Su-1. Village of Hudson. In Hudson. Records available: 1946-49.

Lowest daily water level, from recorder graph										
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Oct.	Nov.	Dec.
1	21.32	20.60	20.01	17.80	22.94	22.87	22.95	.....	21.55	21.38
2	21.37	20.57	20.01	17.83	22.70	22.98	22.82	.....	21.35	21.80
3	21.63	20.45	20.02	17.83	23.04	23.04	22.85	.....	21.21	21.49
4	21.48	20.42	19.87	17.80	23.02	23.06	22.90	.....	21.52	21.38
5	21.30	20.43	19.82	17.87	23.07	23.08	23.49	21.74	21.50	21.31

Su-1 --Continued.

Lowest daily water level, from recorder graph										
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Oct.	Nov.	Dec.
6	21.23	20.42	19.93	17.86	23.09	23.02	23.62	21.66	21.40	21.22
7	21.23	20.57	19.97	17.82	23.22	23.23	23.26	21.73	21.31	21.30
8	21.28	20.39	19.88	17.92	23.24	23.19	23.15	21.96	21.18	21.45
9	21.22	20.54	19.84	18.04	22.90	23.02	23.45	21.71	21.29	21.46
10	21.68	20.37	19.73	18.03	23.15	23.33	23.05	21.68	21.28	21.11
11	21.00	20.48	19.75	17.80	23.10	23.40	22.78	21.63	21.34	21.28
12	20.90	20.42	19.80	17.90	23.10	23.46	22.68	21.70	21.31	21.36
13	20.86	20.39	19.82	17.81	23.11	23.68	22.86	21.70	21.27	21.40
14	20.96	20.27	19.72	22.85	23.07	23.45	22.60	21.66	21.27	21.35
15	20.86	20.25	19.81	17.92	23.18	23.30	22.83	21.66	21.21	21.31
16	20.87	20.18	19.72	18.00	22.85	23.20	22.56	21.58	22.30	21.30
17	20.88	20.32	19.67	23.18	23.48	23.07	22.53	21.60	21.71	21.25
18	20.59	20.25	19.77	22.85	23.37	22.93	22.55	21.54	21.72	21.15
19	20.87	20.82	19.84	23.30	23.22	23.10	22.58	21.50	21.37	21.10
20	20.85	20.55	19.70	23.28	23.17	22.98	22.77	21.52	21.53	20.97
21	20.86	20.42	19.80	23.11	23.06	22.98	22.72	21.53	.....	20.92
22	20.90	20.27	19.29	23.03	22.72	22.90	22.55	21.78	21.50	20.96
23	21.10	20.22	19.62	23.00	22.60	22.93	22.53	21.52	21.44	21.21
24	21.20	20.10	20.03	23.12	23.00	23.22	.....	21.60	21.15	21.31
25	20.77	20.19	19.56	23.03	22.98	23.32	.....	21.53	21.04	21.18
26	20.59	20.10	17.46	23.03	22.95	22.89	.....	21.60	21.22	20.60
27	20.42	19.88	13.90	23.22	22.92	22.94	.....	21.58	20.92	20.43
28	20.41	19.97	17.40	23.44	22.86	22.90	.....	21.66	21.10	20.73
29	20.63		17.87	23.10	22.93	23.07	.....	21.60	21.25	20.74
30	20.60		17.60	23.24	22.60	23.09	.....	21.53	21.29	20.70
31	20.52		17.40		22.92		.....	21.60		20.70

Su-2. Firestone Tire & Rubber Co. In Akron. Records available: 1947-49. Measurement discontinued.

Lowest daily water level, from recorder graph						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	.....	10.00	35.40	44.92	45.62
2	.....	.....	.....	35.80	42.15	45.90
3	.....	12.60	10.12	12.90	43.67	46.65
4	.....	12.74	10.11	36.70	43.52	46.35
5	.....	12.80	10.00	38.68	45.13	31.95
6	21.70	12.80	10.12	38.67	45.60	45.45
7	21.15	12.85	10.22	38.53	46.70	46.55
8	20.50	12.91	10.12	38.40	27.70	46.55
9	20.00	12.90	10.10	39.33	43.65	46.20
10	19.70	13.00	10.25	19.10	44.58	46.45
11	19.50	13.12	10.25	38.75	45.20	39.95
12	19.15	13.00	10.15	39.65	45.60	34.90
13	19.00	11.85	10.15	40.25	44.38	46.80
14	18.90	11.80	10.10	40.60	45.90	46.90
15	18.90	11.90	10.13	41.10	41.40	46.40
16	18.74	11.80	10.15	27.75	45.40	46.80
17	18.74	11.00	10.25	44.60	45.91	46.10
18	.....	10.85	10.30	.....	46.22	41.20
19	.....	10.72	10.35	.....	46.25	37.70
20	18.20	9.40	10.35	.....	46.15	47.50
21	18.00	10.15	10.30	44.90	46.15	46.70
22	17.85	10.35	10.25	45.40	33.70	46.82
23	17.78	10.40	.....	45.70	45.60	47.35
24	17.50	10.15	9.70	32.70	45.92	47.30
25	17.30	10.05	9.52	45.05	45.92	47.20
26	16.55	10.05	9.50	45.90	46.05	38.70
27	15.90	9.90	9.32	46.02	46.10	46.92
28	14.82	9.95	9.35	45.50	46.00	47.90
29	13.85		9.30	46.30	.....	47.20
30	13.20		28.50	46.90	29.45	46.70
31	.....		33.95		44.60	

Su-3. Goodyear Rubber Co. In Akron. Records available: 1944-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	30.45	25.92	22.34	19.67	.....	38.26	49.67	54.74	54.64	55.47	50.45
2	.....	30.30	25.84	22.27	19.53	.....	38.92	50.00	54.76	54.75	55.47	49.87
3	.....	30.13	25.72	22.17	19.48	24.81	39.19	50.31	54.80	54.85	55.47	49.25
4	.....	29.87	25.60	22.07	19.44	25.38	39.19	50.65	54.84	54.95	55.48	48.68
5	.....	29.67	25.35	21.98	19.39	25.47	39.06	51.02	54.84	55.02	55.47	48.17
6	.....	29.50	25.20	21.80	19.44	25.40	39.45	51.30	54.84	55.08	55.47	47.61
7	35.87	29.27	25.17	21.72	19.50	25.94	39.97	51.58	54.77	55.13	55.47	47.06
8	35.75	29.17	25.07	21.63	19.47	26.55	40.65	51.72	54.71	55.17	55.46	46.56
9	35.47	28.97	24.93	21.63	19.31	27.10	41.20	51.78	54.75	55.21	55.45	46.07
10	35.25	28.86	24.78	21.58	19.37	27.66	41.40	51.90	54.80	55.23	55.44	45.28
11	35.02	28.68	24.63	21.52	19.52	28.22	41.58	52.07	54.85	55.27	55.52	44.88
12	34.74	28.55	24.50	21.52	20.00	28.32	41.99	52.18	54.85	55.30	55.52	44.48
13	34.45	28.38	24.39	21.52	20.70	28.43	42.45	52.35	54.85	55.31	55.52	44.07
14	34.18	28.24	24.30	21.12	21.30	28.93	42.95	52.55	54.88	55.32	55.52	43.67
15	33.95	28.04	24.17	21.03	21.35	29.50	43.60	52.74	54.92	55.32	55.50	43.26
16	33.68	27.95	24.07	20.95	21.27	30.12	44.12	52.94	54.93	55.33	55.48	42.85
17	33.50	27.77	23.95	20.92	21.78	30.89	44.60	53.10	54.93	55.35	55.45	42.30
18	33.32	27.70	23.80	20.82	22.34	31.55	45.05	53.27	54.93	55.37	55.45	41.92
19	33.04	27.43	23.78	20.77	22.92	31.70	45.50	53.69	54.92	55.40	55.45	41.48
20	32.95	27.25	23.73	20.72	23.57	31.87	45.92	53.87	54.87	55.41	55.39	41.16
21	32.77	27.18	23.60	20.14	24.04	32.38	46.34	54.00	54.90	55.45	55.31	40.81
22	32.45	27.00	23.45	20.53	24.12	32.87	46.77	54.06	54.90	55.45	55.17	40.52
23	32.27	26.86	23.30	20.32	24.08	33.47	47.20	54.15	54.90	55.46	54.95	40.24
24	32.04	26.68	23.27	20.21	24.12	34.34	47.57	54.37	54.88	55.46	54.58	39.98
25	31.88	26.50	23.14	20.20	24.22	35.02	47.87	54.45	54.87	55.47	54.13	39.72
26	31.70	26.40	23.05	20.10	24.07	35.30	48.20	54.58	54.82	55.48	53.30	39.42
27	31.47	26.25	22.91	20.00	24.03	35.52	48.56	54.62	54.77	55.48	52.75	38.64
28	31.20	26.05	22.76	19.91	24.05	36.06	48.92	54.63	54.71	55.47	52.18	38.40
29	31.00		22.75	19.86	23.75	36.68	49.27	54.70	54.65	55.48	51.61	.....
30	30.86		22.64	19.77	23.38	37.35	49.55	54.70	54.60	55.48	51.03	38.20
31	30.67		22.50		23.02		49.41	.....		55.47		38.00

Su-4. Firestone Tire & Rubber Co. In Akron. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.20	15.76	11.12	11.77	16.00	20.12	24.38	25.43	26.84	27.85	26.72	23.35
2	21.06	15.58	11.04	12.24	17.00	20.73	23.20	26.03	26.88	27.80	27.18	23.12
3	20.90	15.13	10.82	9.83	17.60	21.30	22.35	26.40	26.54	27.47	27.97	22.88
4	20.74	15.05	10.76	11.71	17.81	21.28	20.58	26.70	25.90	28.00	28.22	22.81
5	.....	14.94	10.57	11.41	18.11	19.41	22.56	26.60	23.59	28.28	28.22	22.42
6	20.20	14.80	10.43	13.01	18.55	19.57	23.71	26.35	25.07	28.60	25.63	22.20
7	20.06	14.60	10.43	13.50	18.52	20.00	24.18	24.28	25.64	28.95	26.80	21.96
8	20.01	14.50	10.30	13.78	16.93	20.45	24.42	24.71	25.86	28.95	27.50	21.80
9	19.75	14.29	10.16	13.75	17.95	19.79	24.51	25.63	26.14	28.00	27.85	21.53
10	19.61	14.16	9.98	11.93	17.50	19.62	22.51	25.67	26.22	27.86	28.08	21.31
11	19.45	14.10	9.97	13.55	18.62	19.04	23.60	25.92	26.10	28.48	28.26	21.10
12	19.25	13.91	9.87	14.32	18.89	18.84	24.23	25.69	25.23	28.63	28.21	20.88
13	19.08	13.72	9.80	14.62	18.94	20.77	24.71	25.70	25.75	28.63	26.16	20.69
14	18.86	13.55	9.72	13.77	18.90	21.14	25.09	25.19	26.08	.....	27.20	20.50
15	18.77	13.32	10.62	15.10	17.25	21.53	25.31	23.84	26.12	.....	27.98	20.30
16	18.60	13.24	10.58	15.80	18.50	21.82	25.31	23.33	26.38	.....	28.00	20.00
17	18.48	13.16	9.52	13.40	19.45	20.82	23.21	22.60	26.41	.....	28.70	19.93
18	18.37	12.98	9.43	15.11	19.66	20.46	24.20	22.26	26.48	.....	28.75	19.74
19	18.12	12.80	9.47	15.41	19.92	20.31	25.30	22.03	26.12	.....	28.72	19.60
20	18.10	12.53	9.40	15.80	20.13	21.57	.....	22.06	26.43	29.41	26.75	19.43
21	17.83	12.42	9.25	16.10	20.05	21.60	25.71	22.42	26.71	29.32	27.44	19.22
22	17.69	12.22	9.13	16.27	19.73	21.10	25.90	23.81	26.93	26.88	27.80	19.05
23	17.58	12.02	9.07	16.21	19.82	22.17	25.89	24.20	27.30	25.80	27.82	18.93
24	17.36	11.87	8.90	15.22	20.35	22.18	25.41	24.50	27.29	27.51	26.13	18.80
25	17.25	11.62	8.82	15.90	20.69	20.29	24.89	24.83	26.25	28.12	24.90	18.62
26	17.10	11.60	8.79	16.54	20.82	20.07	25.67	25.31	26.93	28.30	24.68	18.40
27	16.90	11.41	8.60	16.92	21.04	22.16	26.20	25.41	27.11	28.33	24.32	18.19
28	16.57	11.20	8.60	16.93	21.00	23.04	26.49	25.29	27.22	27.20	24.08	18.00
29	16.45		8.52	16.84	19.22	23.76	26.81	25.15	27.38	25.18	23.78	17.79
30	16.28		10.96	16.95	18.56	24.30	26.66	25.72	27.85	24.78	23.54	17.59
31	16.01		11.02		19.73		26.33	26.34		24.39		17.25

Su-6. Goodyear Rubber Co. In Akron. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	44.86	Mar. 25	36.04	June 3	52.60	Oct. 28	58.25
14	44.34	Apr. 1	36.28	10	53.25	Nov. 4	57.68
21	43.90	8	25.70	Sept. 2	56.70	11	59.30
28	42.60	15	45.08	9	53.65	18	55.47
Feb. 4	41.54	22	36.22	16	54.98	25	51.30
11	41.98	29	37.22	23	55.70	Dec. 2	50.80
18	40.30	May 6	48.00	30	56.35	9	47.85
25	38.95	13	47.00	Oct. 7	56.50	16	47.02
Mar. 4	38.53	20	48.38	14	57.00	23	46.27
11	38.19	27	51.75	21	58.10	30	45.08
18	37.78						

Trumbull County

T-2. Copperweld Steel Co. About 3 miles northwest of Warren. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.93	39.00	33.58	33.27	31.55	34.57	25.87	36.88	35.42	37.12	.....	39.86
2	38.54	39.30	33.66	32.96	31.20	34.70	26.72	37.08	35.43	35.85	.....	39.62
3	38.72	39.34	33.72	31.82	31.84	34.94	26.60	36.77	35.43	34.02	.....	39.26
4	38.74	38.49	33.75	31.56	32.12	34.94	26.60	36.50	35.37	33.04	.....	38.71
5	38.84	39.16	33.82	31.56	32.65	34.47	28.27	35.87	35.25	37.35	.....	38.52
6	38.84	39.11	33.85	31.76	34.12	34.50	28.87	35.52	35.51	.....	.....	38.57
7	39.16	39.09	34.05	31.88	34.12	34.88	29.95	35.00	35.45	.....	.....	38.47
8	39.27	38.98	37.12	31.13	33.92	34.97	31.43	35.30	35.57	.....	.....	38.49
9	39.46	38.72	34.25	31.12	33.78	34.87	31.55	36.05	35.87	.....	.....	38.60
10	39.44	37.85	34.22	31.37	33.84	34.68	31.00	36.42	35.90	.....	.....	38.46
11	39.12	37.14	34.40	31.65	34.47	33.30	31.18	36.52	35.82	.....	.....	38.77
12	39.14	36.61	34.50	31.94	34.59	30.46	31.92	36.35	35.78	.....	.....	39.97
13	39.17	35.95	34.42	34.35	34.77	28.86	33.00	36.03	35.86	.....	.....	40.92
14	39.28	35.34	34.60	32.76	34.82	28.33	33.75	35.77	36.50	.....	.....	40.78
15	39.30	35.23	34.60	33.25	34.54	28.02	34.29	35.85	36.67	.....	.....	40.15
16	39.16	35.20	34.64	32.94	34.72	27.94	34.46	36.06	36.76	.....	37.48	40.01
17	39.40	34.54	34.80	31.79	35.13	27.63	34.49	36.03	36.76	.....	37.71	39.97
18	39.26	34.30	34.74	31.72	35.44	27.45	34.49	35.93	36.68	.....	38.48	39.54
19	39.20	34.30	34.65	32.30	35.67	26.70	34.66	36.00	36.37	.....	38.87	39.28
20	39.16	34.24	34.25	32.81	35.57	26.38	34.87	36.00	36.52	.....	39.20	39.29
21	38.99	34.00	33.80	32.98	35.52	26.57	36.33	35.62	36.52	.....	39.92	39.22
22	39.23	34.03	34.30	32.87	34.92	26.58	37.27	35.55	36.57	.....	40.32	39.16
23	39.09	34.02	34.67	32.87	34.60	26.69	36.77	35.72	36.74	.....	40.65	39.07
24	39.11	34.10	34.67	31.97	34.87	26.85	36.00	35.87	36.72	.....	40.71	38.42
25	39.44	33.68	34.55	31.56	34.95	26.86	36.10	36.13	36.70	.....	41.07	38.55
26	39.27	33.60	34.50	32.17	34.95	26.72	36.40	36.17	36.88	.....	41.06	36.95
27	39.15	33.00	33.80	32.54	34.87	26.68	36.66	36.00	37.17	.....	40.67	36.82
28	38.93	33.12	33.32	32.40	34.88	26.92	37.03	35.80	37.18	.....	40.86	37.37
29	39.08		33.68	32.56	34.65	27.08	36.97	35.56	37.38	.....	40.67	37.97
30	39.08		33.58	32.57	34.40	27.06	36.91	35.56	37.35	.....	40.18	38.20
31	38.96		.....		34.31		36.87	35.50		.....		38.32

Tuscarawas County

Tu-1. Everett Waltz. About 3 miles north of Strasburg. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.06	10.00	9.75	10.22	10.57	11.60	12.26	12.46	12.91	13.23	13.42	13.52
2	12.09	9.97	9.79	10.10	10.62	11.64	12.23	12.47	12.91	13.24	13.45	13.52
3	12.13	9.94	9.86	10.02	10.66	11.66	12.24	12.50	12.92	13.25	13.45	13.52
4	12.15	10.01	9.89	10.14	10.67	11.69	12.27	12.51	12.93	13.25	13.45	13.52
5	12.03	10.05	9.94	10.01	10.70	11.72	12.29	12.52	12.94	13.25	13.45	13.52

Tu-1 --Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	11.86	10.07	10.02	10.02	10.72	11.74	12.31	12.54	12.96	13.26	13.46	13.53
7	11.60	10.15	10.08	10.02	10.77	11.77	12.30	12.56	12.97	13.27	13.46	13.53
8	11.50	10.19	10.12	10.05	10.79	11.83	12.21	12.58	12.98	13.27	13.57	13.54
9	11.46	10.26	10.17	10.11	10.84	11.86	12.18	12.59	.....	13.28	13.47	13.54
10	11.42	10.32	10.20	10.17	10.89	11.89	12.16	12.62	13.02	13.29	13.48	13.54
11	11.43	10.39	.....	10.19	10.94	11.92	12.01	12.65	13.03	13.29	13.49	13.54
12	11.43	10.44	.....	10.24	10.97	11.94	11.97	12.65	13.04	13.30	13.49	13.54
13	11.45	10.51	10.25	10.30	11.02	11.97	11.99	12.65	13.05	13.30	13.49	13.53
14	11.46	10.52	10.29	10.36	11.07	11.99	12.04	12.66	13.07	13.30	13.49	13.49
15	11.51	10.51	10.33	10.40	11.12	12.02	12.10	12.70	13.07	13.30	13.49	13.48
16	11.53	10.40	10.35	10.43	11.15	12.07	12.13	12.72	13.08	13.32	13.48	13.49
17	11.56	10.20	10.39	10.45	11.19	12.07	12.15	12.72	13.11	13.33	.....	13.49
18	11.56	10.09	10.44	10.47	11.23	12.10	12.17	12.73	.....	13.34	.....	13.50
19	11.56	10.04	10.49	10.51	11.27	12.12	12.20	12.75	13.15	13.34	.....	13.50
20	11.55	10.04	10.50	10.54	11.27	12.14	12.22	12.77	13.15	13.34	.....	13.46
21	11.49	10.03	10.80	10.56	11.33	12.17	12.26	12.78	13.16	13.35	.....	13.43
22	11.47	10.01	10.57	10.58	11.34	12.20	12.27	12.90	13.16	13.35	.....	13.43
23	11.47	9.98	10.52	10.58	11.34	12.22	12.29	12.81	13.17	13.36	13.51	13.43
24	11.42	9.85	10.47	10.55	11.34	12.24	12.31	12.84	13.18	13.36	13.31	13.43
25	11.30	9.76	10.37	10.57	11.38	12.27	12.33	12.85	13.18	13.37	13.52	13.53
26	.....	9.68	10.35	10.57	11.41	12.27	12.35	12.85	13.20	13.40	13.52	13.54
27	10.81	9.65	10.33	.....	11.44	12.28	12.38	12.88	13.21	13.40	13.52	13.54
28	10.64	9.69	10.28	.....	11.48	12.25	12.40	12.88	13.21	13.42	13.52	13.53
29	10.32	.....	10.29	10.52	11.50	12.25	12.41	12.89	13.22	13.42	13.52	13.53
30	10.16	.....	10.30	10.54	11.53	12.27	12.42	12.90	13.22	13.42	13.53	13.42
31	10.05	.....	10.29	.....	11.57	.....	12.44	12.91	.....	13.42	.....	13.43

Union County

U-1. S. F. McIntyre. In Irwin. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	8.35	8.61	....	9.35	8.34	9.69	9.37	9.42	9.61	9.82
2	....	8.12	8.44	8.33	....	9.38	8.55	9.74	9.40	9.44	9.63	9.84
3	....	8.18	8.54	8.41	....	....	8.69	9.75	9.44	9.45	9.65	9.84
4	....	8.28	8.56	8.45	....	....	8.81	....	9.44	9.45	9.66	9.82
5	....	8.38	8.61	8.45	....	....	8.90	....	9.26	9.46	9.69	9.83
6	....	8.42	....	8.47	9.11	....	8.96	....	8.87	9.46	9.68	9.83
7	....	8.47	....	8.50	9.14	9.54	8.96	....	8.98	9.48	9.68	....
8	....	8.50	....	8.55	9.15	9.56	9.02	....	9.09	9.49	9.70	....
9	7.73	8.55	....	8.58	9.16	9.58	9.04	....	9.18	9.49	9.71	....
10	7.81	....	....	....	9.19	9.58	9.10	....	9.24	9.49	9.70	....
11	7.64	....	....	....	9.21	9.55	9.13	....	9.29	9.49	9.72	....
12	7.72	8.76	....	8.94	9.23	9.21	9.16	....	9.33	9.49	9.72	....
13	7.83	8.78	....	8.95	9.26	....	9.20	....	9.36	....	9.72	....
14	7.92	8.78	....	8.95	....	....	9.23	....	....	9.50	9.72	....
15	7.92	8.64	....	8.96	....	6.13	....	....	....	9.50	9.73	....
16	7.92	....	8.26	8.95	9.30	6.40	....	....	....	9.50	9.74	....
17	7.88	....	8.33	8.97	9.32	6.08	....	....	....	9.52	....	....
18	7.70	7.80	8.41	8.95	9.33	....	....	....	....	9.52	....	....
19	7.56	7.95	8.50	8.74	9.34	....	....	....	9.41	9.53	....	....
20	6.77	8.12	8.54	....	9.29	....	....	....	9.44	9.53	9.74	....
21	7.42	8.23	8.57	....	9.29	....	9.36	....	9.45	9.54	9.77	....
22	7.65	8.25	8.57	8.48	9.29	....	9.39	9.73	9.45	9.50	9.77	....
23	....	....	8.40	8.52	9.00	....	9.43	9.76	9.34	9.51	9.76	....
24	....	....	....	8.70	....	8.79	9.45	9.79	9.28	9.52	9.76	....
25	....	....	8.57	8.73	....	8.84	9.47	9.81	9.30	9.52	9.77	....
26	....	7.94	8.58	8.78	9.16	8.92	9.50	9.84	9.33	9.53	9.78	....
27	....	8.05	8.28	8.82	9.19	8.94	9.57	9.87	....	9.53	9.79	....
28	....	8.21	8.22	8.87	9.23	8.97	9.60	9.84	....	9.53	....	....
29	....	....	8.33	8.89	9.26	9.01	9.61	9.71	9.38	....	9.79	....
30	....	....	8.42	....	9.29	9.06	9.62	....	9.40	....	9.82	....
31	....	....	8.50	....	9.32	....	9.66	9.56	....	....	....	....

Warren County

W-1. WLW Farm. 1 mile southwest of Mason. Records available: 1946-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	1.96	2.07	1.97	3.25	4.45	3.80	4.90	4.20	4.50	4.31	4.88
2	....	2.05	2.14	1.94	3.35	4.52	3.93	4.95	4.27	4.52	4.32	4.91
3	....	2.17	1.92	2.18	3.47	4.58	4.05	5.00	4.42	4.53	4.35	5.10
4	....	2.39	1.97	2.35	3.57	4.64	4.17	5.00	4.42	4.52	4.37	5.11
5	....	1.05	2.06	2.37	3.64	4.72	4.26	4.96	4.35	4.48	4.41	5.13
6	....	1.14	1.75	2.03	3.70	4.77	4.33	4.96	4.22	4.38	4.42	5.13
7	....	1.07	1.68	2.14	3.82	4.82	4.42	4.98	3.81	4.31	4.43	5.15
8	....	1.29	1.76	2.32	3.87	4.87	4.50	5.03	3.78	4.26	4.45	5.17
9	....	1.40	1.77	2.55	3.92	4.92	4.55	5.07	3.89	4.10	4.47	5.19
10	....	1.65	.67	2.67	3.97	4.97	4.61	5.03	3.98	4.11	4.48	5.20
11	....	1.85	1.00	2.74	4.02	5.00	4.66	5.00	4.07	4.12	4.50	5.03
12	....	1.87	1.32	2.83	4.07	4.97	4.70	4.97	4.13	4.14	4.55	4.83
13	....	1.95	1.62	2.87	4.11	4.91	4.77	4.86	4.18	4.10	4.55	4.28
14	....	1.78	1.69	1.25	4.15	4.86	4.82	4.77	4.24	4.04	4.56	3.55
15	....	.58	1.72	1.22	4.11	4.79	4.85	4.72	4.25	4.00	4.57	3.33
16	....	.86	1.86	1.40	4.12	4.74	4.91	4.31	4.27	4.06	4.58	3.42
17	....	1.18	1.60	1.47	4.15	4.42	4.92	3.92	4.47	4.08	4.60	3.48
18	....	1.45	1.40	1.06	4.20	3.74	4.95	3.77	4.47	4.10	4.62	3.48
19	....	1.20	1.40	1.45	4.24	3.65	5.01	3.60	4.13	4.11	4.62	2.80
20	....	.86	1.25	1.70	4.22	3.81	5.04	3.78	4.12	4.12	4.63	2.61
21	....	1.02	1.63	1.97	4.20	3.96	4.93	3.94	4.16	4.14	4.66	2.57
22	....	1.06	1.67	2.05	4.15	4.09	4.89	4.03	4.16	4.12	4.67	2.67
23	....	.93	1.02	2.13	4.13	4.18	4.75	4.12	4.08	4.08	4.68	2.85
24	....	1.02	1.35	2.45	4.11	4.07	4.69	4.20	4.20	4.07	4.68	3.02
25	0.66	1.23	1.65	2.65	4.12	3.80	4.72	4.29	4.24	4.08	4.72	3.06
26	.65	1.43	1.67	2.86	4.16	3.74	4.77	4.36	4.28	4.14	4.80	3.06
27	.63	1.59	.77	2.87	4.19	3.27	4.84	4.40	4.32	4.17	4.83	2.50
28	.76	1.77	1.27	3.00	4.22	3.12	4.90	4.15	4.34	4.20	4.83	2.24
29	1.40		1.68	3.17	4.27	3.35	4.95	4.12	4.36	4.25	4.84	2.35
30	1.82		1.80	3.26	4.33	3.60	4.95	4.09	4.36	4.27	4.87	2.46
31	1.88		1.95		4.38		4.89	4.12		4.30		2.57

W-2. Lebanon Water Department. In Lebanon. Records available: 1947-49.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.21	17.16	18.12	16.48	16.92	16.46	.....	17.93	18.47	17.67	17.84	19.52
2	18.19	17.17	16.43	16.33	16.34	17.24	.....	18.01	18.47	17.50	18.15	18.84
3	18.22	18.88	17.28	16.27	16.36	16.46	.....	17.98	18.36	18.38	17.98	18.64
4	.....	17.52	16.38	16.36	16.45	17.23	.....	18.81	18.39	17.57	18.05	18.72
5	17.92	18.16	16.36	16.99	16.38	16.56	17.44	18.01	18.30	17.91	18.27	18.80
6	18.92	16.96	17.16	16.44	16.38	16.34	17.63	18.08	17.34	17.65	18.17	19.36
7	19.34	17.34	16.52	16.94	16.63	16.56	17.78	18.04	17.41	17.62	17.96	19.54
8	18.37	17.18	17.24	16.78	16.53	16.86	17.85	17.90	17.75	17.72	18.03	19.64
9	18.35	17.80	16.38	16.46	16.37	16.50	17.85	17.94	17.64	18.65	17.98	19.56
10	18.31	17.34	16.49	17.28	16.44	17.41	17.66	17.09	17.53	17.56	18.08	19.49
11	.....	18.07	16.29	16.65	16.55	16.55	17.60	18.18	17.72	17.72	11.06	18.72
12	.....	17.08	16.29	16.48	17.35	17.15	17.73	18.34	17.54	17.76	18.85	19.25
13	.....	17.98	16.16	16.31	16.76	16.86	17.76	18.41	18.41	17.80	18.20	19.54
14	.....	17.79	16.29	16.37	17.22	17.59	17.72	18.28	18.52	17.77	18.23	18.66
15	.....	16.48	16.52	16.41	17.54	16.86	17.77	18.44	18.40	18.68	18.94	19.49
16	.....	16.69	16.48	16.41	16.36	16.73	17.76	18.45	17.56	18.66	18.06	18.52
17	17.64	17.52	17.24	17.01	17.25	17.47	17.72	18.40	17.54	18.12	18.41	18.76
18	17.29	16.62	16.65	16.47	17.24	16.54	17.73	18.51	17.50	18.16	18.77	18.73
19	19.45	16.56	16.56	17.25	16.54	16.54	16.73	18.46	17.48	16.33	18.58	18.74
20	19.22	16.63	16.32	17.14	16.57	16.48	17.87	18.40	18.37	18.05	18.66	18.54
21	17.46	16.78	16.30	17.32	16.28	15.66	17.94	18.24	18.53	17.87	19.29	18.50
22	17.52	16.55	16.30	17.24	16.16	15.54	17.77	18.33	17.54	18.18	19.47	18.71
23	17.54	16.64	16.44	16.32	16.14	17.14	16.74	18.37	17.55	17.73	18.91	18.96
24	18.36	16.33	16.26	16.34	16.26	15.68	17.85	18.24	17.75	17.74	19.24	18.60
25	17.49	16.62	16.26	16.34	16.17	17.63	17.77	18.19	17.74	17.80	18.79	18.47
26	17.07	16.43	16.15	17.34	16.56	16.59	17.84	18.23	17.54	18.11	18.67	18.71
27	16.86	16.36	15.64	.....	16.21	17.36	17.76	17.52	18.40	17.92	18.46	18.75
28	17.02	16.34	16.74	.....	16.26	.....	17.94	17.69	17.64	18.12	18.64	18.91
29	17.28		16.22	16.41	17.57	.....	18.09	17.44	17.73	18.14	19.54	18.64
30	16.98		16.24	17.09	17.14	.....	17.07	17.56	17.65	18.05	19.58	18.64
31	17.02		17.08		16.36		18.05	17.36		18.74		18.57

Washington County

Wa-1. Marietta Osteopathic Clinic. In Marietta. 4th and Putnam
Sts. Records available: 1942-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.12	.....	23.97	25.17	25.87	26.95	28.47	28.80	28.95	28.84	29.04	29.07
2	28.04	.....	24.03	25.13	25.95	27.02	28.49	28.80	28.85	28.84	29.03	29.07
3	28.00	.....	.....	.....	25.99	27.06	28.54	28.80	28.90	28.84	29.04	29.05
4	28.12	.....	.....	25.12	26.03	27.36	28.57	28.82	28.79	28.84	29.04	29.03
5	28.06	23.80	24.57	25.12	26.08	27.42	28.60	28.84	28.80	28.85	29.07	29.04
6	28.20	23.97	24.69	25.29	26.29	27.48	28.65	28.90	28.63	28.87	29.07	29.03
7	27.70	24.02	24.73	25.28	26.21	27.46	28.65	28.90	28.59	28.89	29.07	29.03
8	27.41	24.23	24.72	25.32	26.61	27.26	28.65	28.92	28.58	28.93	29.08	.....
9	27.16	24.32	24.76	25.32	26.47	27.31	28.70	28.94	28.55	28.95	29.08	.....
10	27.10	24.62	24.80	25.32	26.40	27.52	28.70	28.97	28.55	28.95	29.08	29.02
11	27.10	24.65	24.87	25.34	26.41	27.64	28.66	28.97	28.55	28.95	29.14	29.04
12	27.16	24.80	24.87	25.38	26.47	27.75	28.63	29.00	28.54	28.95	29.10	29.08
13	27.22	24.92	24.89	25.81	26.52	27.77	28.65	29.05	28.73	28.93	29.13	29.05
14	27.34	25.02	25.33	25.58	26.61	27.80	28.67	29.07	28.55	28.90	29.12	28.95
15	27.40	24.99	25.15	25.52	27.00	27.82	28.70	29.06	28.54	28.91	29.11	28.85
16	27.48	24.52	25.20	25.55	26.94	27.87	28.77	29.04	28.53	28.92	29.11	28.73
17	27.63	24.28	25.24	25.54	26.80	27.92	28.80	29.01	28.65	28.93	29.10	28.63
18	27.55	23.95	25.36	25.60	26.82	28.01	28.80	29.05	28.63	28.92	29.09	28.68
19	27.64	23.87	25.42	25.65	26.85	28.10	28.80	29.05	28.53	28.91	29.09	28.69
20	27.64	24.02	25.45	25.70	26.85	28.08	28.83	28.83	28.53	28.91	29.08	28.63
21	27.55	24.00	25.50	25.65	26.97	28.10	28.82	28.98	28.52	28.90	29.08	28.60
22	27.58	24.04	25.55	25.71	26.90	28.11	28.80	29.00	28.53	28.98	29.08	28.61
23	27.49	24.07	25.62	25.71	26.86	28.12	28.72	29.03	28.53	28.96	29.09	28.61
24	27.40	23.90	25.93	25.76	26.80	28.22	28.71	29.03	28.52	28.98	29.09	28.61
25	27.15	23.74	25.52	25.75	26.74	28.30	28.72	29.10	28.51	28.98	29.09	28.57
26	26.71	23.67	25.43	25.71	26.65	28.39	28.72	29.12	28.50	28.99	29.09	28.58
27	26.18	23.62	25.30	25.75	26.65	28.37	28.74	29.21	28.49	28.99	29.08	28.60
28	.....	23.83	25.17	26.21	26.71	28.41	28.75	29.20	.....	29.00	29.07	28.56
29	.....	.....	25.07	25.80	26.80	28.42	28.76	29.18	.....	29.01	29.09	28.51
30	.....	.....	25.02	25.76	26.83	28.45	28.82	29.17	.....	29.02	29.08	28.47
31	.....	.....	25.07	.....	26.90	.....	28.81	29.17	.....	29.05	.....	28.42

Wayne County

Wn-1. Ohio Boxboard Co. In Rittman. Oct. 5, 99.68. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	July	Nov.
1	96.47	95.58	94.67	95.21	89.82	.....	.....
2	95.18	96.12	95.78	94.63	91.16	.....	.....
3	96.46	97.66	95.43	94.44	92.67	.....	.....
4	95.92	95.79	95.36	93.30	91.76	.....	100.10
5	95.62	95.95	95.11	93.45	92.13	.....	100.48
6	96.50	95.83	96.75	94.13	93.67	.....	99.76
7	.....	95.28	96.30	93.37	93.42	.....	100.14
8	.....	95.42	95.44	93.40	91.51	.....	100.30
9	.....	95.84	95.47	93.73	92.50	.....	99.61
10	97.53	95.64	95.89	93.36	90.43	.....	.....
11	97.48	96.72	.....	.....	89.31	.....	.....
12	96.82	95.90	.....	.....	89.17	93.72	.....
13	96.00	95.95	.....	.....	89.98	94.62	.....
14	96.16	96.06	95.94	.....	91.12	95.54	.....
15	96.98	95.60	95.00	.....	88.17	95.85	.....
16	.....	95.87	96.57	.....	88.37	94.45	93.35
17	94.36	96.30	94.94	.....	90.38	94.40	93.56
18	94.54	96.19	95.06	.....	91.37	96.17	93.31
19	95.85	96.23	94.70	.....	91.65	95.67	94.58
20	96.76	96.29	95.10	.....	91.85	95.60	94.30
21	95.97	96.33	94.24	.....	92.17	95.48	94.36
22	96.63	96.08	93.62	.....	88.76	95.72	96.00
23	96.13	97.02	94.25	.....	88.25	96.47	.....
24	95.76	96.07	96.07	.....	90.66	97.12	.....
25	96.47	96.30	95.37	93.32	91.22	97.58	.....

Wn-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	July	Nov.
26	96.58	96.67	94.18	92.97	91.83	97.70	.....
27	96.32	94.65	93.49	91.63	91.55	.....	.....
28	95.62	93.65	93.63	92.08	92.07	.....	.....
29	96.15		93.70	93.48	92.27	.....	.....
30	95.77		93.80	92.17	92.36	.....	.....
31	95.38		93.70		94.86	.....	.....

Wn-2. City of Wooster. At city waterworks, 300 feet from Killbuck Creek. Records available: 1949.

Lowest daily water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	14.90	16.18	18.65	19.30	19.99	21.56	21.65	22.32	21.90
2	14.80	14.45	16.64	18.75	19.40	20.22	21.50	21.61	22.16	22.02
3	15.01	14.46	16.90	19.10	18.70	20.13	21.61	21.76	22.08	22.01
4	15.41	14.60	17.00	19.28	18.60	20.35	21.46	21.80	22.10	22.01
5	15.50	14.70	17.30	19.22	19.16	20.45	21.22	21.70	22.11	21.93
6	.....	15.40	17.65	19.18	19.32	20.50	21.46	21.50	21.20	22.16
7	.....	15.40	17.73	19.40	19.18	20.50	21.50	21.50	21.95	22.00
8	.....	15.90	16.70	19.59	18.70	20.56	21.55	21.60	22.10	22.10
9	.....	16.00	17.20	19.68	.....	20.75	21.59	21.51	22.12	22.08
10	.....	8.50	17.44	19.90	.....	20.82	21.20	21.64	22.07	22.00
11	.....	15.45	17.57	19.91	17.66	20.92	21.05	21.72	22.20	.....
12	.....	16.15	17.70	19.76	17.80	21.00	21.33	21.80	22.24	.....
13	.....	16.27	18.02	19.82	18.09	21.09	21.41	23.00	21.95	22.84
14	.....	16.12	18.10	19.88	18.20	21.12	21.55	22.42	22.05	22.83
15	.....	16.00	17.91	19.86	18.65	21.00	21.57	22.00	22.10	22.71
16	.....	16.00	17.90	19.85	18.54	21.10	21.61	21.75	22.00	22.40
17	.....	15.60	18.01	20.23	18.51	21.19	21.50	21.90	22.10	22.15
18	15.68	15.77	18.40	19.25	18.61	21.30	21.53	21.92	21.90	20.20
19	15.73	15.96	18.63	19.21	19.19	21.36	21.30	22.10	22.00	20.22
20	15.50	16.02	18.58	19.40	19.20	21.48	21.40	22.00	13.20	20.10
21	15.95	16.15	18.58	19.80	19.15	21.25	21.40	22.20	21.87	20.00
22	15.82	16.24	17.92	20.03	19.12	21.22	21.48	22.20	21.92	19.86
23	15.07	15.63	17.82	20.10	19.10	21.30	21.60	21.00	21.91	19.88
24	14.72	16.77	18.20	20.26	18.87	21.50	21.40	21.89	21.91	19.90
25	14.55	15.41	18.83	20.35	18.59	.....	21.08	21.93	21.00	19.30
26	14.21	15.69	18.67	20.16	19.39	.....	21.72	22.00	21.58	19.20
27	13.70	15.72	18.65	19.91	19.55	21.81	21.80	22.05	21.85	19.03
28	14.40	16.00	17.92	20.00	19.79	21.91	21.74	22.08	21.80	19.66
29	14.48	15.82	17.50	20.30	19.82	21.80	21.78	22.12	21.76	21.46
30	14.44	16.15	9.06	20.27	20.05	21.90	21.81	22.10	21.90	21.50
31	14.99		18.05		20.02	21.53		22.30		21.48

Wood County

Wo-1. Paul W. Kale. 1 mile west of Wingston, at Liberty schoolhouse. Records available: 1946-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.91	3.57	3.51	3.75	3.69	3.16	3.09	3.26	3.75	....	4.57	5.00
2	3.92	3.59	3.52	3.75	3.60	3.17	3.10	3.29	3.79	....	4.56	5.11
3	3.92	3.59	3.53	3.75	3.63	3.19	3.11	3.30	3.81	....	4.57	5.14
4	3.91	3.56	3.53	3.79	3.59	3.22	3.12	3.33	....	....	4.60	5.18
5	3.84	3.59	3.50	3.79	3.58	3.21	3.12	3.33	3.83	....	4.62	5.24
6	....	3.59	3.52	3.74	3.56	3.18	....	3.34	3.84	....	4.62	5.24
7	....	3.61	3.56	....	3.55	3.20	....	3.38	3.88	....	4.64	5.28
8	....	3.63	3.57	....	3.53	3.22	3.10	3.38	3.90	4.29	4.67	5.33
9	3.90	3.66	3.57	3.74	3.50	3.23	3.13	3.28	3.93	4.32	4.67	5.36
10	3.92	3.70	....	3.78	3.55	3.25	3.11	3.30	3.93	4.34	4.68	5.37
11	3.92	3.71	3.55	3.77	3.54	3.25	3.12	3.31	3.93	4.38	4.71	5.39
12	3.92	3.72	3.59	3.79	3.55	3.25	3.13	3.34	3.97	4.40	4.72	5.44
13	3.91	3.73	3.61	3.76	3.54	3.23	3.14	3.38	....	4.39	4.72	5.49
14	3.91	3.72	3.64	3.76	3.55	3.27	3.15	3.41	....	4.41	4.77	5.53
15	3.91	3.63	3.68	3.78	3.57	3.25	3.15	3.41	3.97	4.43	4.79	....

Wo-1 --Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	3.88	3.63	3.68	3.71	3.57	3.18	....	3.39	3.98	....	4.82	....
17	3.87	3.64	3.68	....	3.60	3.11	....	....	3.97	4.52	....	....
18	3.87	3.61	3.69	3.72	3.60	3.11	....	....	3.98	4.53	....	....
19	3.81	3.60	3.76	3.75	3.68	3.12	3.15	....	4.01	4.54	....	....
20	3.84	3.63	3.75	3.75	3.61	3.13	3.15	3.41	4.02	4.55	....	....
21	3.82	3.63	3.75	3.75	3.50	3.12	3.17	3.45	4.03	4.51	4.86	....
22	3.83	3.58	3.74	3.72	3.32	3.04	3.18	3.51	4.15	4.52	4.86	5.56
23	3.83	3.59	3.76	3.73	3.29	3.04	3.20	3.58	4.14	4.53	4.88	5.56
24	....	3.58	3.75	3.73	3.25	....	3.20	3.65	4.15	4.56	4.88	5.53
25	3.80	3.56	3.77	3.72	3.18	....	3.22	3.69	4.11	....	4.89	5.47
26	3.80	3.56	3.77	3.70	3.17	....	3.23	3.77	4.14	4.56	4.91	5.47
27	3.74	3.53	3.71	3.71	3.14	....	....	3.80	4.20	4.57	4.94	5.47
28	3.61	3.50	3.74	3.73	3.12	3.05	....	3.81	4.23	4.58	4.94	5.55
29	3.62	....	3.76	3.72	3.14	3.07	....	3.67	4.27	4.58	4.94	5.47
30	3.62	....	3.79	3.72	3.13	3.08	....	3.68	4.31	4.57	4.98	....
31	3.58	....	3.77	....	....	....	....	3.70	....	4.59	....	....

Wo-2. Village of North Baltimore. In North Baltimore. Records available: 1948-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	31.40	27.15	27.68	28.40	28.75	27.00	32.10	35.40
2	30.90	26.80	27.34	28.70	28.24	27.00	32.80	36.00
3	31.30	27.84	27.16	27.32	27.60	27.45	33.15	36.00
4	31.23	27.06	26.36	29.04	28.40	28.84	32.60	36.10
5	31.52	27.80	26.40	27.54	27.63	27.70	33.41	36.20
6	31.22	26.44	25.18	28.42	28.20	28.85	33.75	36.90
7	29.86	27.55	27.36	28.55	28.10	29.04	33.05	37.47
8	31.08	....	26.22	28.28	28.10	29.23	33.88	37.57
9	30.85	....	26.20	29.12	28.13	29.20	33.00	38.98
10	29.90	28.07	27.12	27.00	....	29.82	32.92	39.62
11	31.20	26.80	26.90	28.12	....	30.62	34.40	40.00
12	30.30	27.48	27.40	27.90	....	30.34	34.70	40.20
13	30.20	27.10	27.45	27.93	....	30.20	33.78	40.38
14	30.32	....	27.62	28.68	29.00	30.25	33.78	40.20
15	30.40	....	27.74	28.80	28.82	30.35	33.70	38.59
16	30.90	25.80	27.55	28.05	29.50	....	34.25	38.60
17	29.30	25.10	27.60	27.08	29.40	....	34.50	....
18	30.46	25.70	27.99	26.60	29.65	29.85	33.25	39.76
19	29.36	25.70	28.09	....	29.79	29.53	34.10	39.80
20	30.10	25.70	26.41	32.25	29.98	30.37	34.67	39.90
21	27.70	....	27.80	31.21	28.60	30.62	34.21	39.41
22	....	26.00	27.80	30.64	28.38	30.65	34.18	38.21
23	27.82	26.90	28.23	30.20	27.05	30.10	34.50	37.87
24	28.45	26.66	28.60	30.12	26.78	30.80	34.90	36.59
25	29.20	27.20	28.58	29.14	26.85	31.18	35.10	....
26	28.46	27.12	28.20	28.06	26.95	30.98	35.30	....
27	28.60	24.74	27.60	28.90	26.50	30.90	35.18	....
28	27.30	27.25	28.42	29.18	26.58	31.25	36.78	....
29	27.60	....	28.12	29.72	27.10	31.25	37.15	....
30	27.08	....	28.43	30.00	26.30	31.85	37.21	....
31	26.48	....	27.24	....	26.70	....	35.22	....

PENNSYLVANIA

By J. B. Graham

PROGRAM OF WORK

In 1949, as in previous years, the program of water-level measurements in observation wells in Pennsylvania was carried on in cooperation with the Topographic and Geologic Survey of the Pennsylvania Department of Internal Affairs. The State-wide network of wells, begun in 1931, was enlarged during 1949 by the addition of seven wells. Approximately 2,800 measurements of water level were recorded for 1949. Of the 91 wells in Pennsylvania used for observation of ground-water fluctuation, 23 are equipped with automatic water-stage recorders. Nine were measured at irregular intervals and the remainder were measured weekly.

Measurements of 25 observation wells in the Susquehanna River basin in Pennsylvania were made available each week to the Pennsylvania Water and Power Company, at Baltimore, Maryland. These weekly measurements, together with similar records obtained from those portions of the basin lying in New York and Maryland, are weighted and averaged by company engineers. The resulting value, the "Susquehanna ground-water index" is then used in forecasting the minimum fair-weather flow of the Susquehanna at the company's hydroelectric plant, thereby making possible a more economical operation of power-plant facilities during periods of low flow in the river.

PRECIPITATION

Although precipitation in Pennsylvania during 1949 totaled about 4 inches less than the 62-year average, the year was not notable as a drought year. It was a bumper year for crops and farm products. The winter season of early 1949 was warm and wet. The summer season was the second warmest of record since 1888 but was not so dry as the summer of 1944. The remainder of the year was generally warm and dry with very little snowfall reported at the year's end.

FLUCTUATIONS OF WATER LEVELS

There was considerable anxiety expressed throughout the State concerning the dependability of both surface and underground water resources of Pennsylvania. Water levels in municipal and industrial well fields did not decrease more than should be expected during a moderately dry year. Rural ground-water levels remained average or above-average throughout most of the first 9 months and the low levels reached during November and early December had largely recovered by the year's end.

The weekly average water level for Pennsylvania is shown in figure 7. Measurements obtained weekly in 29 observation wells distributed over the State have been converted to feet above assumed datum planes and arithmetically averaged. This average is shown with the 17-year average for the 1932-49 period, and the highest and lowest weekly averages occurring during this period. Figure 7 also shows the monthly mean precipitation in Pennsylvania in 1949, and the average monthly precipitation for the past 62 years.

In the following table the 17-year average of water levels in observation wells in Pennsylvania is shown with the average of the water levels in observation wells for each week in 1949. The number of wells reported each week is also tabulated.

Average of water levels in observation wells in Pennsylvania,
by weeks, in feet above assumed datum planes

Date	No. of wells	1949 average	17-year average	Date	No. of wells	1949 average	17-year average
Jan. 4	25	17.19	13.83	July 5	22	12.71	13.18
11	26	17.53	13.87	12	21	12.70	12.98
18	27	16.30	13.73	19	24	13.04	12.77
25	25	16.76	13.73	26	21	12.94	12.72
Feb. 1	28	17.01	13.70	Aug. 2	21	12.66	12.53
8	24	16.50	13.60	9	22	12.00	12.37
15	29	16.40	13.80	16	21	11.92	12.31
22	24	17.42	14.01	23	21	12.32	12.21
Mar. 1	28	16.98	14.35	30	24	12.14	12.07
8	27	16.89	14.59	Sept. 6	22	12.21	11.93
15	25	16.75	15.08	13	23	12.17	11.74
22	29	15.73	15.61	20	23	11.61	11.77
29	26	15.74	15.66	27	22	11.73	11.65
Apr. 5	26	15.76	15.72	Oct. 4	24	11.87	11.52
12	27	16.47	15.64	11	24	11.60	11.51
19	27	16.96	15.50	18	23	11.52	11.49
26	28	16.74	15.26	25	23	11.03	11.73
May 3	28	15.81	14.98	Nov. 1	24	10.99	12.04
10	27	15.45	14.73	8	23	11.22	12.28
17	26	15.12	14.64	15	23	10.69	12.60
24	23	14.49	14.67	22	21	11.21	12.78
31	26	14.89	14.54	29	23	11.28	12.93
June 7	25	13.72	14.25	Dec. 6	23	11.19	12.98
14	26	13.42	13.83	13	23	11.63	13.11
21	24	12.83	13.76	20	22	12.58	13.24
28	25	12.42	13.34	27	24	13.28	13.50

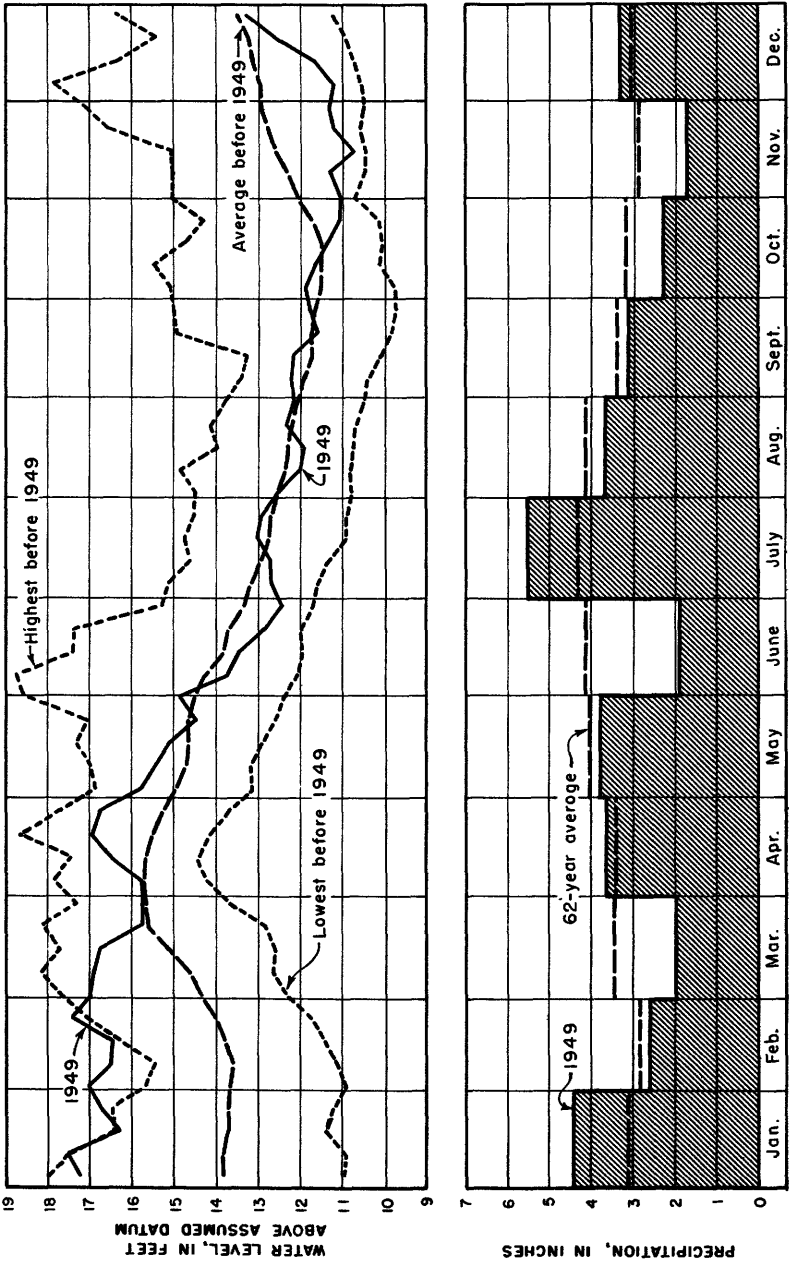


Figure 7.--Graphs showing average ground-water levels and precipitation in Pennsylvania in 1949 in comparison with previous years of record.

Ground-water levels in Pennsylvania were approaching the highest of record as the year began. The sixth wettest and warmest January recorded for the State sent the already high ground-water levels to new record highs. Averages for the first 2 weeks of February were more than a foot higher than the highest previous averages.

Precipitation fell below normal during February, March, and May. June was the driest of record, and water levels which had declined from the record highs of winter to about average by the end of May, fell below average during all of June. Excessive rainfall in July restored water levels to the average for the month. The 1949 average followed closely the 17-year average until mid-October, when deficient precipitation during the autumn months began to be reflected in the water levels. During November and early December 1949 levels fell well below the average. At the year's end, water levels had risen almost to average values, as above-normal precipitation and mild weather in late December made infiltration favorable.

A comparison of the 1949 ground-water hydrograph to the average prior to 1949, and to the highest and lowest average of record, indicates that the widespread belief in failing ground-water supplies in Pennsylvania was unwarranted. At no time during the year were new low averages for water levels attained. To the contrary, during much of January and February, water levels averaged higher than ever before since measurement began. Water levels declined well below average during all of November and early in December, but recovered satisfactorily by the end of December.

Twenty-three wells in South Philadelphia were measured during 1949. Of these, 18 were equipped with automatic water-stage recorders, and weekly tape measurements were obtained from the remaining five wells. The majority of observation wells are in or adjacent to the Philadelphia Naval Base. Most of the changes observed in water levels in South Philadelphia are related to the quantity and schedule of ground-water withdrawal in the Naval Base, and by large industries to the northeast along the Delaware River. Averaged ground-water levels in South Philadelphia showed a distinct rise during the summer months but returned to early 1949 levels during the later months. December levels appeared to be trending somewhat below previous December levels.

The variation in levels noted above is believed to have been caused by the summer shut-down of a large distillery, the return to large ground-water consumption by the distillery in the fall, and by new withdrawals at an oil refinery in adjacent New Jersey, late in the year. No close relationship of water levels in South Philadelphia to local precipitation is apparent. Recharge to the basal sand and gravel aquifer overlying mica-schist bedrock is believed to be related chiefly to the Schuylkill and Delaware Rivers. Recharge from these sources remains fairly constant throughout the year except for the minor effect of changes in water temperature and silt conditions in the river beds. All major fluctuations in water levels in the area are believed to be caused by pumping.

Fifteen observation wells were measured weekly in the "Triangle" area of Pittsburgh during 1949. The increased use of ground water for airconditioning caused water levels to drop to record low levels in nine wells between July 14 and August 18. At least three new wells were put into operation this year for airconditioning purposes in the heavily pumped "Triangle". The water levels in the sand and gravel aquifer averaged 0.5 foot lower at the end of 1949 than at the end of 1948. This average net decline was not due entirely to increased pumping, however, since a river stage about 6.5 feet above normal pool on December 17, 1948, caused water levels to be higher than normal at the beginning of 1949. Nevertheless, the trend of ground-water levels appears to be downward in this area, as shown by comparison to the lowest water levels reached each summer. In six observation wells in the center of the heaviest pumping, the net decline has averaged 0.84 foot a year since 1945. This indicates an increase in the regional summer rate of pumping during the period but not necessarily a permanent decline of water levels or loss of storage in the aquifer. A similar comparison of the water levels at the end of each year of record shows that the aquifer is refilled practically to the same level each winter. The yield of wells is limited therefore by the ability of the sands and gravels to transmit the recharge from adjacent rivers rather than to the storage capacity of the sediments in the area.

The abandonment of pumping at a cold storage plant in November caused water levels to rise an average of 1.5 feet in three observation wells near the point of the "Triangle". The water level in two wells drilled into rock

underlying the "Triangle" rose an average of about 9.5 feet in 1949, continuing a rising trend which has averaged about 2.6 feet a year since 1945.

Automatic water-stage recorders were installed on two observation wells during the year--well A-10 on February 22, and well A-13 on December 23. The water level in well A-5 was recorded from November 28 to December 22, and the effect of nearby pumping from the rock strata was apparent in the record. The behavior of the water level in the rock wells is quite different from that in the gravel wells in the same area.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

The water-level measurements given in the following tables are in feet below land-surface datum unless otherwise indicated.

Allegheny County

A1. City of Pittsburgh. At Liberty Avenue and Short Street. Extremes of observed water level: Highest, Apr. 15, 1948, 17.68; lowest, Aug. 18, 1949, 30.04. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	26.48	Mar. 31	28.12	July 11	29.56	Oct. 6	28.44
13	26.65	Apr. 7	28.06	14	29.80	13	28.75
20	26.84	14	28.17	21	29.85	20	28.17
27	25.60	21	28.08	28	29.80	27	27.96
28	25.04	28	28.58	Aug. 4	29.82	Nov. 3	27.67
Feb. 3	26.40	May 5	29.22	11	30.02	9	26.20
10	26.72	12	29.24	18	30.04	17	25.80
17	26.72	19	29.64	25	29.76	23	25.62
24	27.06	26	29.40	Sept. 1	29.70	Dec. 1	25.53
Mar. 3	27.22	June 2	28.84	8	29.08	8	25.62
10	27.30	9	29.30	15	28.92	15	25.45
17	27.42	16	29.66	22	28.60	22	25.60
24	27.50	23	30.00	29	28.25	29	25.64
29	27.90	30	29.98				

A2. City of Pittsburgh. At First Avenue and Short Street. Extremes of observed water level: Highest, Apr. 15, 1948, 18.10; lowest, June 30, 1949, 30.52. Records available: 1945-49.

Jan. 6	27.48	Mar. 31	28.95	July 11	30.30	Oct. 6	29.02
13	27.60	Apr. 7	28.90	14	30.36	13	29.35
20	27.82	14	29.00	21	30.40	20	29.13
27	27.25	21	29.12	28	30.38	27	28.93
28	25.70	28	29.42	Aug. 4	30.35	Nov. 3	28.65
Feb. 3	27.00	May 5	29.76	11	30.33	9	27.28
10	27.66	12	30.14	18	30.48	17	26.40
17	27.92	19	30.25	25	30.32	23	26.12
24	28.12	26	30.26	Sept. 1	30.24	Dec. 1	26.07
Mar. 3	28.26	June 2	29.68	8	29.90	8	26.15
10	28.38	9	29.98	15	29.64	15	25.98
17	28.48	16	30.22	22	29.46	22	26.14
24	28.55	23	30.46	29	29.10	29	26.20
29	28.82	30	30.52				

A3. City of Pittsburgh. At Water and Short Streets. Extremes of observed water level: Highest, Apr. 15, 1948, 15.60; lowest, Mar. 16, 1946, 28.39. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	25.64	Mar. 31	27.20	June 30	28.30	Sept. 29	27.15
13	25.83	Apr. 7	27.16	July 11	28.10	Oct. 6	27.26
20	26.02	14	26.97	14	28.12	13	27.50
27	24.45	21	27.27	21	28.15	20	27.22
28	23.78	28	27.55	28	28.12	27	27.06
Feb. 3	25.54	May 5	27.88	Aug. 4	28.08	Nov. 3	26.84
10	25.90	12	28.14	11	28.16	9	25.00
17	25.86	19	28.20	18	28.30	17	24.62
24	26.27	26	28.16	25	28.17	23	24.50
Mar. 3	26.54	June 2	27.63	Sept. 1	28.09	Dec. 1	24.44
10	26.66	9	27.92	8	27.78	8	24.48
17	26.74	16	28.10	15	27.64	22	24.48
24	26.78	23	28.30	22	27.44	29	24.52
29	27.07						

A4. Commonwealth Building. 316 Fourth Avenue, Pittsburgh. Extremes of observed water level: Highest, Jan. 22, 1948, 35.90; lowest, Apr. 3, 1946, 58.91. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	45.62	Apr. 7	46.35	July 11	43.16	Oct. 6	45.70
13	47.00	14	46.53	14	44.10	13	45.90
20	45.45	21	48.30	21	43.16	20	46.50
27	45.60	28	47.94	28	42.70	27	43.42
28	49.08	May 5	47.20	Aug. 4	46.70	Nov. 3	43.40
Feb. 3	44.00	12	45.36	11	46.53	9	43.54
10	46.30	19	46.84	18	48.26	17	44.86
17	48.87	26	45.00	25	49.20	23	40.85
24	46.64	June 2	46.30	Sept. 1	45.70	Dec. 1	41.78
Mar. 3	46.20	9	46.75	8	44.25	8	40.96
10	45.70	16	41.48	15	46.45	15	40.95
17	47.12	23	49.56	22	42.95	22	40.82
24	47.68	30	45.22	29	44.90	29	45.85

A5. Keystone Building. 324 Fourth Avenue, Pittsburgh. Extremes of observed water level: Highest, Jan. 22, 1948, 34.40; lowest, Apr. 3, 1946, 53.93. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	41.84	May 12	42.72	Sept. 22	40.82	Dec. 6	38.05
13	44.10	19	44.50	29	42.25	7	38.40
20	42.85	26	42.20	Oct. 6	42.58	8	38.45
27	43.08	June 2	43.55	13	42.76	9	39.55
28	45.68	9	43.75	20	43.65	10	37.50
Feb. 3	41.90	16	40.23	27	41.14	11	36.30
10	43.72	23	46.32	Nov. 3	40.30	12	37.70
17	46.22	30	42.82	9	40.30	13	38.33
24	44.13	July 11	41.16	17	41.55	14	38.75
Mar. 3	43.52	14	42.38	23	38.98	15	38.37
10	43.08	21	41.86	28	38.00	16	39.20
17	44.62	28	41.35	29	37.95	17	37.62
24	44.62	Aug. 4	43.56	30	38.90	18	36.25
31	43.29	11	44.10	Dec. 1	39.80	19	37.35
Apr. 7	43.60	18	45.20	2	39.70	20	40.20
14	43.93	25	43.57	3	37.37	21	38.40
21	45.40	Sept. 1	42.26	4	36.34	22	39.12
28	44.08	8	42.10	5	37.83	29	39.80
May 5	43.70	15	43.98				

a Daily noon water level, from recorder charts, Nov. 28 to Dec. 22.

A6. Fulton Building. Sixth Street and Duquesne Way, Pittsburgh. Extremes of observed water level: Highest, Dec, 28, 1945, 30.86; lowest, July 28, 1949, 40.65. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	31.69	Apr. 7	33.62	July 11	38.99	Oct. 6	36.30
13	32.05	14	34.90	14	39.55	13	35.95
20	32.27	21	35.11	21	40.25	20	34.05
27	31.25	28	34.91	28	40.65	27	33.71
Feb. 3	31.75	May 5	37.55	Aug. 4	39.95	Nov. 3	33.55
10	31.87	12	35.90	11	40.01	9	32.75
17	32.39	19	38.65	18	40.05	17	32.27
24	32.65	26	36.29	25	39.45	23	31.95
Mar. 3	33.00	June 2	37.00	Sept. 1	37.75	Dec. 1	31.91
10	32.99	9	37.35	8	37.01	8	32.85
17	33.03	16	39.37	15	36.55	15	31.73
24	33.69	23	39.48	22	36.15	22	31.91
31	34.89	30	39.63	29	34.45	29	31.91

A7. Stanley Theater. Penn Avenue and Seventh Street, Pittsburgh. Extremes of observed water level: Highest, Apr. 16, 1948, 29.60; lowest, Aug. 18, 1949, 42.75. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	31.75	Apr. 7	34.20	July 11	40.48	Oct. 6	36.33
13	31.90	14	34.73	14	42.60	13	37.02
20	32.20	21	34.74	21	41.70	20	35.62
27	32.07	28	35.64	28	41.87	27	35.06
28	31.90	May 5	37.02	Aug. 4	41.48	Nov. 3	34.44
Feb. 3	31.52	12	37.42	11	42.66	9	33.88
10	31.76	19	38.45	18	42.75	17	33.34
17	32.30	26	37.72	25	40.72	23	32.70
24	32.48	June 2	37.08	Sept. 1	40.50	Dec. 1	32.40
Mar. 3	32.76	9	37.84	8	38.76	8	32.24
10	32.90	16	39.82	15	38.15	15	32.28
17	33.10	23	40.12	22	37.50	22	32.33
24	33.36	30	41.12	29	36.20	29	32.26
31	34.28						

A8. Pittsburgh Plate Glass Co. 632 Duquesne Way, Pittsburgh. Extremes of observed water level: Highest, Apr. 16, 1948, 25.77; lowest, July 14, 21, 1949, 37.80. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	30.96	Apr. 7	33.14	July 11	37.30	Oct. 6	33.50
13	31.11	14	33.04	14	37.80	13	33.90
20	31.40	21	33.34	21	37.80	20	33.48
27	30.68	28	34.38	28	37.50	27	33.13
28	30.35	May 5	34.80	Aug. 4	37.52	Nov. 3	32.60
Feb. 3	30.54	12	35.04	11	37.23	9	32.10
10	31.10	19	36.44	18	36.68	17	31.60
17	31.43	26	35.84	25	36.58	23	31.30
24	31.71	June 2	34.73	Sept. 1	36.70	Dec. 1	31.04
Mar. 3	31.88	9	36.00	8	35.44	8	31.08
10	32.05	16	36.76	15	35.12	15	31.07
17	32.22	23	37.22	22	34.55	22	31.15
24	32.46	30	37.92	29	33.90	29	31.06
31	33.12						

A9. Century Building. 130 Seventh Street, Pittsburgh. Extremes of observed water level: Highest, Apr. 15, 1948, 24.76; lowest, July 22, 1948, 35.48. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	28.48	Feb. 17	29.08	Mar. 31	31.27	May 5	34.00
13	28.64	24	29.24	Apr. 7	31.25	12	33.17
20	28.88	Mar. 3	29.47	14	31.94	19	34.97
27	28.82	10	29.72	21	31.60	26	33.53
Feb. 3	28.36	17	29.84	28	32.00	June 2	33.41
10	28.62	24	30.12				

A10. Atlas Paste Co. Garrison Place and Duquesne Way, Pittsburgh.
 Extremes of observed water level: Highest, Apr. 22, 1948, 28.90; lowest,
 Aug. 1, 1946, 41.88. Records available: 1946-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.06	33.70	34.99	36.17	38.74	38.90	38.24	34.84	34.01	32.21
2	32.10	33.72	35.36	36.28	38.54	39.14	37.99	34.56	33.96	32.29
3	30.98	32.21	33.64	35.70	36.51	38.43	39.18	37.75	34.42	33.94	32.09
4	32.25	33.64	35.85	36.63	38.16	39.22	37.60	34.69	33.86	31.95
5	32.28	33.66	36.20	36.38	38.32	39.26	37.36	34.90	33.80	31.89
6	31.18	.....	32.30	33.70	36.50	36.72	38.47	39.26	37.59	34.94	33.40	32.08
7	32.38	33.62	36.58	36.80	38.66	38.96	37.16	35.08	33.43	32.18
8	32.39	33.68	36.46	36.85	38.75	38.91	37.08	35.15	33.47	32.01
9	32.42	33.72	36.54	37.00	38.85	39.10	36.88	34.68	33.47	32.06
10	31.24	32.45	33.69	36.68	37.12	38.47	39.16	36.78	35.11	33.47	31.99
11	32.54	33.66	36.60	37.08	38.62	39.28	36.46	35.45	33.46	31.88
12	32.57	33.75	36.50	37.01	38.87	39.28	36.40	35.48	33.47	32.10
13	31.30	.....	32.52	33.90	36.48	37.30	38.94	39.38	36.42	35.38	33.16	32.19
14	32.50	34.04	36.57	37.60	39.00	38.94	36.47	35.32	33.27	32.14
15	32.62	34.20	36.64	37.75	39.06	38.94	36.40	35.28	33.23	31.97
16	32.65	34.22	36.60	37.91	39.12	39.06	36.30	34.88	33.20	32.00
17	31.66	32.69	34.11	36.92	38.06	38.75	39.11	36.24	34.90	32.80	31.96
18	32.74	34.10	36.82	38.19	38.74	39.04	36.04	34.88	33.00	31.80
19	32.78	34.17	36.95	37.89	38.94	39.10	36.18	34.80	32.61	31.99
20	31.63	.....	32.74	34.32	36.92	38.12	39.08	38.91	36.22	34.82	32.74	32.07
21	32.72	34.34	36.74	38.30	39.21	38.60	36.07	34.81	32.72	32.16
22	31.79	32.85	34.40	36.73	38.42	39.26	38.40	35.94	34.92	32.38	32.21
23	31.88	32.94	34.40	36.69	38.50	39.35	38.51	35.78	34.50	32.42	32.42
24	31.88	32.97	34.42	36.90	38.57	38.90	38.50	35.65	34.56	32.16	32.36
25	31.98	33.08	34.50	36.95	38.64	38.99	38.56	35.34	34.60	32.35	32.08
26	32.02	33.19	34.98	36.77	38.30	39.14	38.52	35.12	34.55	32.08	31.91
27	31.25	31.90	33.18	35.02	36.60	38.44	39.25	38.50	35.18	34.44	31.96	32.08
28	31.10	31.91	33.26	35.12	36.53	38.66	39.25	38.22	35.16	34.42	32.15	.....
29	33.42	35.09	36.13	38.74	39.32	38.23	35.06	34.34	32.30	32.26
30	33.54	35.30	35.92	38.71	39.34	38.32	34.85	33.88	.....	32.28
31	33.62	.....	35.90	.....	38.92	38.34	.....	34.08	.....	32.02

a Automatic water-stage recorder installed; daily noon water levels,
 from recorder charts, Feb. 22 to Dec. 31.

A11. Victory Building. Liberty Avenue and Ninth Street, Pittsburgh.
 Extremes of observed water level: Highest, Apr. 22, 1948, 34.30; lowest,
 Aug. 11, 1949, 46.14. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	36.60	Apr. 7	39.05	July 11	45.24	Oct. 6	40.74
13	36.73	14	39.38	14	45.75	13	41.66
20	36.92	21	39.63	21	45.98	20	40.76
27	37.02	28	40.34	28	46.12	27	40.22
28	36.96	May 5	41.55	Aug. 4	46.12	Nov. 3	39.54
Feb. 3	36.35	12	42.55	11	46.14	9	39.04
10	36.52	19	43.00	18	46.10	17	38.60
17	36.96	26	42.84	25	45.34	23	37.96
24	37.20	June 2	41.80	Sept. 1	45.17	Dec. 1	37.24
Mar. 3	37.46	9	42.84	8	43.76	8	37.38
10	37.72	16	43.90	15	42.90	15	37.32
17	37.90	23	44.74	22	42.37	22	37.24
24	38.22	30	45.16	29	41.24	29	37.26
31	38.98						

A13. Columbia Building. Fourth Avenue and Wood Street, Pittsburgh.
 Extremes of observed water level: Highest, Apr. 16, 1948, 30.94; lowest,
 Aug. 11, 1949, 42.44. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	35.40	Feb. 17	35.86	Apr. 7	37.46	May 26	39.88
13	35.50	24	35.98	14	37.66	June 2	38.96
20	35.74	Mar. 3	36.22	21	37.68	9	39.80
27	35.40	10	36.38	28	38.40	16	40.80
28	35.04	17	36.47	May 5	39.30	23	41.50
Feb. 3	35.05	24	36.72	12	39.92	30	41.85
10	35.48	31	37.52	19	40.42	July 11	41.35

A13--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 14	41.52	Sept. 15	40.54	Nov. 9	36.95	Dec. 24	35.80
21	42.15	22	40.00	17	36.30	25	35.57
28	42.34	29	39.08	23	35.76	26	35.36
Aug. 4	42.34	Oct. 6	38.80	Dec. 1	35.50	27	35.34
11	42.44	13	39.86	8	35.45	28	35.41
18	42.40	20	38.74	15	35.38	29	35.44
25	41.97	27	38.15	22	35.60	30	35.46
Sept. 1	41.83	Nov. 3	37.58	23	35.80	31	35.47
8	40.66						

A14. City of Pittsburgh. At Barbeau Street and Duquesne Way.
Extremes of observed water level: Highest, Apr. 15, 1948, 0.33; lowest, July 14, 1949, 18.63. Records available: 1948-49.

Jan. 6	13.70	Apr. 7	15.37	July 11	18.58	Oct. 6	17.80
13	14.26	14	15.46	14	18.63	13	17.92
20	14.97	21	15.88	21	15.84	20	17.92
27	13.50	29	16.28	28	17.16	27	17.88
28	11.14	May 5	16.72	Aug. 4	16.96	Nov. 3	17.74
Feb. 3	12.20	12	17.36	11	17.75	9	17.55
10	13.14	19	17.74	18	17.85	17	17.02
17	13.58	26	17.93	25	18.10	23	16.78
24	12.60	June 2	17.92	Sept. 1	18.24	Dec. 1	16.55
Mar. 3	13.32	9	18.08	8	18.10	8	16.52
10	14.12	16	18.00	15	18.06	15	15.76
17	14.66	23	17.86	22	17.90	22	15.65
24	15.19	30	18.36	29	17.77	29	15.80
31	15.35						

A15. Hardie Bros. Co. Fourteenth and Smallman Streets, Pittsburgh.
Extremes of observed water level: Highest, Apr. 23, 1948, 35.72; lowest, July 28, 1949, 43.58. Records available: 1948-49.

Jan. 13	39.08	May 26	42.98	Aug. 11	43.39	Oct. 20	41.26
27	38.54	June 2	42.86	18	43.46	28	41.10
Feb. 10	38.56	9	43.26	25	43.14	Nov. 3	40.90
24	39.20	16	43.15	Sept. 1	42.96	17	40.68
Mar. 10	39.97	23	43.30	8	42.54	23	40.54
24	40.70	30	43.48	15	42.20	Dec. 1	40.44
Apr. 14	41.38	July 14	43.54	22	41.95	8	40.32
21	41.54	21	43.56	29	41.55	15	40.26
May 5	42.17	28	43.58	Oct. 7	41.35	22	40.22
13	42.60	Aug. 4	43.56	13	41.44	29	40.16
19	42.84						

A16. Otto Milk Co. Twenty-fourth and Smallman Streets, Pittsburgh.
Extremes of observed water level: Highest, Apr. 23, 1948, 32.02; lowest, Aug. 4, 1949, 37.10. Records available: 1948-49.

Jan. 13	33.35	May 26	36.74	Aug. 11	36.86	Oct. 20	35.46
27	32.87	June 2	36.32	18	36.98	28	35.50
Feb. 10	33.84	9	36.52	25	36.76	Nov. 3	35.48
24	33.84	16	36.52	Sept. 1	36.56	17	35.49
Mar. 10	34.58	23	36.80	8	36.56	23	35.44
24	35.37	30	36.88	15	36.20	Dec. 1	35.40
Apr. 21	35.96	July 14	36.84	22	36.05	8	35.50
May 5	36.20	21	36.88	29	35.96	15	35.42
13	36.46	28	36.86	Oct. 6	35.98	22	35.50
19	36.26	Aug. 4	37.10	13	35.68	29	35.68

A17. Liquid Carbonic Corporation. 3101 Preble Avenue, Pittsburgh. Altitude 725 feet above mean sea level. Unused drilled well, diameter 10 inches, depth 49.5 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	29.05	Apr. 21	23.40	July 14	26.46	Oct. 13	22.90
27	28.97	5	25.76	28	29.58	3	24.70
Feb. 10	28.16	12	27.73	Aug. 11	27.04	17	23.28
24	29.43	26	28.58	25	27.80	Dec. 1	23.22
Mar. 10	23.10	June 9	26.38	Sept. 8	27.70	15	27.50
24	27.50	23	29.43	22	25.25	29	27.20
Apr. 7	25.65						

A18. Federal Drug Co. 947 Penn Avenue, Pittsburgh. Unused drilled well, diameter 8 inches, depth 62 feet. Records available: 1949.

Mar. 28	37.88	June 9	41.65	Aug. 18	44.12	Oct. 27	39.22
31	38.14	16	42.52	25	43.58	Nov. 3	38.65
Apr. 7	38.35	23	43.10	Sept. 1	43.28	9	38.17
14	38.62	30	43.50	8	42.16	17	37.66
21	39.06	July 11	43.50	15	41.42	23	37.10
28	39.70	14	43.90	22	40.93	Dec. 1	36.85
May 5	40.70	21	44.12	29	40.06	8	36.72
12	41.28	28	44.22	Oct. 6	39.72	15	36.70
19	41.44	Aug. 4	44.24	13	40.26	22	36.73
26	41.52	11	44.28	20	39.64	29	36.78
June 2	40.98						

A19. West View Municipal Water Authority. Upstream end of Neville Island, Neville Township. Altitude 725.51 feet above mean sea level. Drilled test well, diameter 6 inches, depth 60 feet. Automatic water-stage recorder installed May 23, 1946. Extremes of observed water level: Highest, Sept. 26, 1949, 27.70; lowest, Feb. 24, 1948, 44.40. Records available: 1946-49.

Daily water level, from recorder charts, 1946

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	36.98	36.45	34.38	.....	33.04	35.30	37.60
2	.....	38.28	36.68	32.70	.....	32.70	35.63	37.80
3	.....	38.02	36.40	33.30	.....	33.17	.....	38.02
4	.....	37.50	35.90	32.80	36.60	32.98	35.60	37.20
5	.....	34.05	35.65	32.68	36.78	33.05	35.60	36.92
6	.....	37.10	35.45	33.40	36.92	33.17	35.75	36.86
7	.....	37.00	35.20	33.70	36.95	33.08	35.80	36.84
8	.....	36.30	35.12	33.00	36.72	32.78	35.05	36.73
9	.....	36.07	37.02	34.08	36.82	33.28	.....	36.54
10	.....	35.33	37.92	33.35	36.46	33.50	.....	36.30
11	.....	36.52	.....	33.70	36.53	.....	.....	.....
12	.....	35.92	37.92	34.42	36.30	32.82	32.28	.....
13	.....	36.00	36.68	34.70	36.06	32.60	31.83	.....
14	.....	35.80	36.42	34.80	35.88	32.50	31.48	36.55
15	.....	35.80	36.65	35.60	35.80	33.10	31.55	36.68
16	.....	35.63	36.00	36.50	35.77	32.98	31.80	36.83
17	.....	35.65	30.00	34.68	36.20	32.64	35.00	36.98
18	.....	35.58	36.50	34.32	.....	32.35	35.80	36.73
19	.....	35.82	35.75	34.28	36.40	32.72	36.12	36.25
20	.....	35.90	35.20	34.28	36.20	32.82	35.90	36.10
21	.....	34.60	34.55	35.75	35.84	33.00	.....	36.65
22	.....	36.30	34.68	40.30	36.20	33.16	36.74	36.97
23	34.80	35.90	34.80	36.58	36.37	33.18	36.93	37.14
24	35.67	36.00	34.20	35.55	36.05	33.34	37.10	37.33
25	35.65	37.35	36.70	34.82	35.05	33.25	37.15	37.48
26	35.13	37.30	39.58	35.50	34.35	33.22	37.15	.....
27	34.94	37.62	34.80	34.10	33.18	33.35	.....	37.60
28	35.13	37.58	32.00	34.00	33.80	33.78	37.40	37.40
29	34.50	36.80	35.90	.....	33.40	34.30	37.48	37.05
30	.....	36.22	35.90	33.18	33.65	35.00	37.53	37.55
31	35.70	.....	34.43	33.18	.....	35.70	.....	38.05

A19--Continued.

Daily water level, from recorder charts, 1947

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.43	39.08	38.23	38.66	37.60	40.15	37.23	36.60	37.23	.....	35.28	37.00
2	.....	39.22	38.44	38.60	36.60	39.60	37.88	37.82	35.70	.....	34.85	36.36
3	.....	39.25	38.62	38.60	36.15	38.20	37.53	38.08	34.98	34.48	34.96	36.81
4	39.08	39.25	38.53	38.75	37.05	37.82	37.10	38.47	35.90	34.68	35.42	37.11
5	39.40	.....	38.38	38.72	38.00	37.68	36.53	38.50	36.00	34.72	35.25	37.18
6	39.43	39.05	38.38	38.80	38.12	37.68	37.60	38.50	36.49	34.70	35.40	37.20
7	38.48	37.15	38.35	38.70	38.00	37.73	37.90	38.67	36.86	36.08	35.45	37.33
8	38.38	37.94	38.40	38.65	38.03	38.00	37.32	38.95	36.53	36.44	35.35	37.53
9	38.57	37.98	38.45	38.62	37.88	37.88	37.88	39.06	37.28	35.95	35.31	.....
10	38.75	37.95	38.52	38.72	37.90	38.10	38.26	39.02	37.10	35.15	35.22	.....
11	39.07	37.82	38.42	38.80	38.10	38.17	38.42	39.00	37.08	34.76	35.30	.....
12	39.17	37.78	38.50	38.72	38.26	38.10	38.37	38.90	37.60	35.90	35.70	.....
13	39.10	38.15	38.59	38.65	38.20	37.90	38.14	38.83	37.60	36.45	35.52	.....
14	35.85	38.52	38.52	38.53	38.30	37.74	38.02	37.15	37.60	36.62	35.72	.....
15	38.30	38.70	38.68	38.60	38.20	37.62	37.80	37.30	37.15	36.01	35.84	37.35
16	37.50	38.88	38.40	38.55	38.23	37.60	37.50	37.70	36.05	35.47	35.98	37.85
17	38.10	38.50	38.38	38.45	38.16	37.55	35.55	38.20	36.45	36.25	36.00	38.08
18	.....	38.45	38.50	38.40	38.18	37.40	37.60	37.88	36.00	36.40	36.10	38.24
19	.....	38.42	38.62	38.33	38.08	37.30	38.11	37.90	36.60	35.80	36.22	38.34
20	.....	38.35	38.70	38.30	38.18	37.22	38.00	37.85	.....	35.70	36.52	38.40
21	38.94	38.28	38.66	38.37	38.20	36.92	37.20	37.75	.....	36.08	36.70	.....
22	39.08	38.40	38.63	38.40	38.26	36.68	36.62	37.49	37.40	36.50	36.85	38.99
23	39.20	38.37	38.61	38.40	38.23	36.42	37.77	37.19	.....	36.75	36.65	39.23
24	39.15	38.35	38.52	38.40	38.27	36.28	38.23	37.50	.....	35.62	36.45	39.64
25	39.13	38.35	38.52	38.40	38.32	36.05	38.30	37.90	.....	35.37	36.37	39.70
26	39.13	38.35	38.60	38.48	38.33	35.80	38.29	37.90	.....	35.29	36.60	39.70
27	39.13	38.40	38.70	38.52	38.32	35.68	38.30	37.55	36.78	36.00	36.60	40.00
28	39.18	38.48	38.80	38.38	38.27	35.57	37.92	37.45	36.43	36.41	36.70	40.17
29	39.06	.....	38.86	38.42	38.27	35.36	38.72	37.62	37.28	36.68	36.92	40.19
30	39.00	.....	38.80	38.35	38.10	35.20	38.60	37.84	.....	36.06	37.03	40.30
31	38.97	.....	38.75	.....	39.70	.....	37.40	37.82	.....	35.58	.....	40.40

Daily noon water level, from recorder charts, 1948

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.45	43.48	44.00	43.32	42.20	.....	41.66	40.62	41.15	38.00	32.66	.....
2	40.48	43.60	43.82	43.32	42.90	42.08	41.78	40.36	41.00	39.18	32.98	.....
3	40.72	43.60	43.75	43.38	42.90	41.95	40.30	40.38	39.98	39.70	32.98	.....
4	40.82	43.60	43.70	43.42	41.75	41.78	38.75	40.60	39.28	39.28	32.90	.....
5	40.80	44.08	43.68	43.32	41.05	42.46	38.62	40.70	39.34	39.26	32.80	.....
6	40.67	44.10	43.62	43.25	39.70	42.70	39.90	40.10	39.50	35.82	32.72	.....
7	40.62	44.05	43.55	43.16	40.65	42.70	37.86	39.46	39.50	34.80	33.20	36.37
8	40.50	44.03	43.50	41.10	41.30	42.66	40.40	39.14	39.43	33.62	32.82	.....
9	40.48	43.90	43.38	39.50	41.35	42.22	40.62	38.41	39.36	32.06	32.72	.....
10	40.78	43.60	43.48	42.35	41.30	42.02	40.94	39.22	39.36	32.62	32.70	.....
11	41.00	43.50	43.55	42.85	41.00	42.00	41.38	37.90	39.30	32.96	34.15	.....
12	40.04	43.40	43.70	42.94	40.88	41.96	41.90	37.20	39.28	32.50	34.38	.....
13	39.88	43.90	43.55	42.67	41.15	41.30	41.62	37.90	39.20	.....	33.68	.....
14	41.00	44.00	43.35	39.72	41.50	40.72	41.60	37.50	39.65	.....	34.00	36.82
15	42.10	43.00	43.10	35.10	41.60	40.90	41.74	39.12	36.90	.....	34.16	36.90
16	42.50	42.30	43.08	35.25	41.58	41.76	41.70	39.00	39.52	.....	34.06	37.30
17	42.72	43.25	43.05	37.15	41.42	41.58	.....	37.30	40.03	.....	34.50	36.30
18	42.80	44.00	43.10	38.20	41.00	41.22	.....	39.30	40.85	.....	34.68	37.30
19	42.90	43.40	43.30	38.50	40.70	40.90	.....	39.34	41.25	.....	34.32	.....
20	42.85	43.72	43.50	39.38	40.95	40.50	40.18	39.54	41.35	35.80	34.40	.....
21	42.86	44.07	43.72	39.82	40.90	39.40	39.46	38.80	41.00	34.00	33.54	38.16
22	43.10	44.25	43.91	39.72	40.52	39.65	40.25	38.02	40.68	35.12	35.22	.....
23	43.46	44.38	43.90	39.42	40.30	40.88	38.50	38.10	40.02	35.56	35.60	.....
24	43.60	44.40	43.72	39.58	39.88	41.75	.....	39.58	39.40	35.62	.....	.....
25	43.90	44.35	43.42	39.70	39.55	41.90	.....	40.00	39.70	35.60	.....	.....
26	43.35	44.22	42.85	39.60	39.95	41.52	.....	40.15	37.62	35.70	.....	.....
27	43.30	44.22	42.80	39.52	37.65	41.87	39.60	40.15	38.06	34.30	.....	.....
28	43.32	44.34	42.92	39.72	36.40	41.42	40.08	40.58	38.00	33.65	.....	37.52
29	43.40	44.20	43.25	36.00	40.55	41.70	40.54	41.06	38.00	33.14	.....	37.65
30	43.45	.....	43.40	40.90	41.86	41.50	39.60	41.35	38.08	32.70	35.67	38.00
31	43.45	.....	43.37	.....	42.10	.....	40.26	41.35	.....	32.66	.....	38.40

A19--Continued.

Daily noon water level, from recorder charts, 1949

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.68	39.16	38.35	40.72	38.65	37.28	39.08	38.04	39.60	39.04	37.72	40.08
2	38.78	39.13	38.92	40.58	38.81	37.64	39.28	37.56	39.85	38.65	37.78	39.80
3	38.00	39.03	38.85	40.10	38.95	37.90	39.40	37.66	40.00	38.18	37.73	40.12
4	38.50	39.00	39.10	39.95	38.96	38.63	39.30	38.60	40.15	36.60	37.75	40.13
5	38.57	38.84	39.10	39.83	38.95	38.83	39.23	39.00	40.13	37.46	37.63	40.18
6	38.92	38.84	39.12	39.88	38.70	38.88	39.58	39.00	40.08	37.66	37.65	40.22
7	39.02	38.84	39.35	39.55	38.52	38.78	39.62	39.26	39.38	37.50	37.76	40.30
8	39.28	38.77	39.75	40.90	38.19	39.04	39.58	39.20	39.10	37.55	37.74	40.35
9	39.30	39.30	39.35	41.13	38.11	39.17	39.44	39.10	39.05	37.71	37.82	40.42
10	39.18	38.70	39.78	40.85	38.19	39.05	38.68	38.80	39.33	37.80	37.90	40.53
11	38.10	38.67	40.05	40.63	38.22	39.26	39.48	38.82	38.90	37.58	37.95	40.62
12	38.50	38.67	40.13	41.14	38.12	39.59	39.49	39.28	38.85	37.72	38.14	40.67
13	38.80	38.68	40.10	41.22	38.04	39.70	38.76	39.44	39.42	37.82	38.18	40.75
14	38.93	38.68	40.10	41.22	38.25	39.74	38.75	39.46	39.20	37.80	38.18	41.03
15	39.00	38.66	38.30	40.60	37.85	39.80	38.96	39.22	39.00	37.74	38.18	41.20
16	39.00	38.58	38.63	40.33	37.15	39.92	39.15	39.28	38.98	37.64	38.18	40.08
17	38.94	39.12	39.25	40.50	36.45	39.98	39.50	....	38.96	37.65	38.18	40.08
18	38.80	39.23	39.66	40.40	36.72	34.00	39.04	39.25	39.15	37.50	38.18	40.38
19	38.80	39.20	39.72	39.90	37.58	35.92	39.16	....	39.52	35.15	38.18	40.72
20	38.78	39.15	39.75	40.10	37.87	37.17	39.45	....	39.74	35.70	38.19	40.86
21	38.78	39.12	39.70	40.05	38.08	38.30	39.20	....	39.52	36.88	38.20	41.05
22	38.80	38.98	39.68	39.97	38.47	39.22	39.37	....	39.50	37.50	38.21	41.18
23	38.85	38.92	39.58	39.78	38.85	39.30	39.12	....	39.24	37.73	39.30	41.22
24	38.94	38.75	39.53	39.53	39.44	39.00	38.75	....	39.23	37.80	39.75	41.30
25	39.15	38.72	39.60	40.00	39.18	39.08	36.80	....	39.30	37.80	39.27	41.35
26	38.90	37.30	40.00	40.30	38.53	39.47	37.90	37.63	27.70	37.80	39.90	41.42
27	38.00	37.18	40.42	40.60	38.46	39.58	38.16	37.90	37.75	37.80	39.93	41.47
28	37.98	38.30	40.66	37.90	38.46	39.58	38.50	38.78	38.52	37.96	39.93	41.52
29	38.10		40.75	35.90	38.46	39.31	38.70	38.28	38.74	37.96	39.93	41.32
30	38.62		40.75	37.90	38.25	39.12	38.47	37.20	38.90	37.75	39.93	41.20
31	39.05		40.75		36.30		38.48	38.56		37.72		41.10

A20. West View Municipal Authority. In old Ross Township well field, on left bank of Ohio River, in Stowe Township. Drilled well, diameter 12 inches, depth 58 feet. Extremes of observed water level: Highest, Dec. 17, 1948, 14.55; lowest, July 6, 1949, 18.92. Records available: 1948-49.

Daily noon water level, from recorder charts, 1948

Date	Water level	Date	Water level	Date	Water level
Nov. 17, 1948	16.42	Dec. 2, 1948	16.75	Dec. 17, 1948	14.55
18	16.38	3	16.78	18	16.83
19	16.37	4	16.65	19	17.62
20	16.43	5	16.64	20	17.31
21	16.39	6	16.72	21	17.21
22	16.40	7	16.62	22	17.23
23	16.48	8	16.71	23	16.96
24	16.58	9	16.75	24	16.89
25	16.61	10	16.76	25	16.87
26	16.58	11	16.59	26	16.78
27	16.59	12	16.60	27	16.68
28	16.50	13	16.60	28	16.64
29	16.53	14	16.67	29	16.49
30	16.70	15	16.68	30	16.61
Dec. 1	16.71	16	16.75	31	17.28

Daily noon water level, from recorder charts, 1949

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.43	17.92	17.05	17.02	17.04	16.80	16.58	16.28	16.32	16.25	16.07	16.53
2	17.20	17.92	16.92	17.33	16.93	16.75	16.62	16.44	16.40	16.22	16.12	16.60
3	17.06	17.57	16.95	17.29	16.90	16.78	16.64	16.38	16.35	16.27	16.20	16.63
4	16.87	17.21	16.92	17.16	16.82	16.80	16.56	16.45	16.40	16.32	16.20	16.59
5	16.72	17.04	16.82	17.07	16.84	16.73	16.58	16.36	16.32	16.79	16.18	16.55
6	17.47	17.06	16.82	17.05	16.72	16.76	18.92	16.36	16.40	16.54	16.22	16.46

A20--Continued.

Daily noon water level, from recorder charts, 1949

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	17.48	17.05	17.02	17.32	16.72	16.72	16.54	16.33	16.25	16.28	16.25	16.53
8	17.87	16.80	17.17	17.41	16.72	16.70	16.54	16.35	16.27	16.23	16.22	16.45
9	17.88	16.86	17.22	17.37	16.72	16.74	16.49	16.22	16.30	16.23	16.17	16.55
10	17.62	16.78	17.04	17.37	16.76	16.61	16.50	16.24	16.34	16.20	16.20	16.49
11	17.38	16.77	17.25	17.18	16.76	16.69	16.54	16.28	16.34	16.20	16.20	16.52
12	17.16	16.74	17.25	17.15	16.81	16.70	16.50	16.25	16.32	16.24	16.11	16.49
13	16.98	16.79	17.20	17.06	16.80	16.68	16.40	16.20	16.36	16.21	16.20	16.45
14	16.90	16.71	17.08	17.10	16.80	16.62	16.58	16.19	16.38	16.20	16.24	17.31
15	16.88	16.72	16.94	17.19	16.78	16.63	16.60	16.17	16.34	16.14	16.16	17.60
16	16.80	17.50	17.03	17.10	16.66	16.70	16.50	16.25	16.36	16.10	16.15	17.23
17	16.81	17.80	16.94	17.00	16.62	16.63	16.40	.....	16.38	16.10	16.18	16.80
18	16.70	17.99	16.96	17.02	16.72	.....	16.54	.....	16.22	16.11	16.21	16.72
19	16.67	17.80	16.96	16.89	16.72	.....	16.37	16.38	16.28	16.16	16.23	16.75
20	16.75	17.58	16.94	17.00	16.70	.....	16.42	16.40	16.26	16.17	16.30	16.65
21	16.74	17.50	16.90	16.88	16.72	.....	16.38	16.42	16.17	16.20	16.32	16.81
22	16.76	17.28	16.82	16.96	16.75	16.60	16.43	16.38	16.16	16.28	16.28	16.76
23	17.04	17.49	16.81	16.91	16.76	16.61	16.41	16.34	16.30	16.20	16.25	16.66
24	17.17	17.87	17.27	16.93	17.18	16.62	16.79	.....	16.28	16.22	16.26	16.58
25	17.48	17.70	17.44	16.82	17.25	16.55	16.94	.....	16.30	16.21	16.40	16.63
26	16.78	17.56	17.41	16.99	17.19	16.60	16.37	16.33	16.22	16.19	16.34	16.58
27	15.68	17.38	17.31	17.04	17.22	16.53	16.46	16.28	16.19	16.46	16.29	16.52
28	15.75	17.23	17.20	16.98	17.07	16.44	16.31	16.29	16.20	16.56	16.22	16.90
29	16.02		17.17	17.16	17.02	16.50	16.52	16.28	16.26	16.17	16.34	17.10
30	17.15		17.17	17.10	16.88	16.48	16.38	16.32	16.34	16.11	16.30	16.98
31	17.75		17.08		16.77		16.41	16.25		16.13		16.93

Armstrong County

134. At Schenley, on property of Martin J. Cordera. Altitude about 780 feet above mean sea level. Unused drilled well, 6-inch casing depth 81.6 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 6	39.10	Aug. 31	39.50	Oct. 12	39.80	Nov. 23	39.27
20	38.30	Sept. 7	39.47	19	40.20	30	38.89
27	37.90	14	39.51	26	40.13	7	38.47
Aug. 3	38.40	21	39.43	Nov. 2	39.87	14	37.89
10	39.20	28	39.47	9	39.82	21	36.80
17	39.60	Oct. 5	39.38	16	39.54	28	35.50
24	39.60						

Bedford County

116. At West Saxton. Extremes of observed water level: Highest, Apr. 16, 1948, 44.38; lowest, Feb. 13, 1948, 53.99. Records available: 1941-49.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	49.67		8	50.57		8	52.72		7	52.86	
14	50.38		15	50.90		15	52.14		14	52.93	
22	50.99		22	51.09		22	50.75		21	53.03	
29	47.60		29	51.18		29	51.24		28	53.17	
Feb. 5	49.71		6	51.28		5	51.52		4	53.09	
12	50.24		13	51.39		12	51.74		11	53.17	
19	50.79		20	51.51		19	51.91		18	53.20	
25	49.16		27	51.74		26	52.08		25	53.26	
Mar. 4	50.89		3	51.89		2	52.16		2	53.28	
11	50.66		10	52.10		9	52.28		9	53.39	
18	50.93		17	52.29		16	52.48		16	53.21	
25	51.14		24	51.41		23	52.60		23	53.19	
Apr. 1	50.18		July 1	52.65		30	52.71		30	52.65	

Berks County

114. At Bally.. Extremes of observed water level: Highest, Aug. 14, 1942, 4.37; lowest, Feb. 9, 1940, 19.92. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	6.57	Feb. 19	15.13	Apr. 9	15.38	May 21	16.28
8	6.56	26	14.29	16	15.52	28	16.15
15	13.56	Mar. 5	14.92	23	14.98	June 4	16.50
22	15.56	12	15.35	30	15.01	11	16.86
29	14.66	19	15.83	May 7	15.50	18	17.20
Feb. 5	15.16	26	15.74	14	15.92	25	17.38
12	15.07	Apr. 2	15.64				

128. Howard Dubois. Near Berne. Extremes of observed water level: Highest, Apr. 19, 1949, 7.52; lowest, Aug. 25, 1949, 9.41. Records available: 1948-49.

Jan. 17	8.01	May 10	8.54	July 8	9.20	Sept. 1	9.07
Feb. 15	8.52	19	8.62	13	9.00	6	9.18
Mar. 15	8.46	24	7.94	20	8.40	19	9.01
21	8.48	June 1	8.57	26	8.45	26	9.07
Apr. 12	8.42	6	8.67	Aug. 2	8.50	Oct. 10	8.87
19	7.52	15	8.74	15	8.88	Nov. 7	8.71
May 3	8.50	21	8.75	25	9.41		

F4a. Lacey School. At French Creek State Park. Extremes of observed water level: Highest, June 22, 1948, 22.43; lowest, Dec. 30, 1949, 38.88. Records available: 1948-49.

Jan. 7	33.50	Apr. 1	24.90	July 1	30.15	Sept. 16	34.56
14	32.10	8	26.00	8	30.85	23	35.89
21	31.80	18	26.30	15	31.38	Oct. 27	37.19
28	29.50	22	25.90	22	31.85	28	37.32
Feb. 4	29.10	29	26.00	29	32.41	Nov. 4	37.51
11	29.30	May 6	26.00	Aug. 5	32.97	11	37.75
18	29.10	13	25.45	12	33.42	18	37.88
25	25.80	27	26.45	19	33.87	Dec. 2	38.32
Mar. 4	25.10	June 3	27.25	26	34.35	16	38.79
11	24.70	17	28.95	Sept. 2	34.87	23	38.85
18	24.50	24	29.35	9	35.18	30	38.88
25	25.90						

F4b. French Creek State Park. Extremes of observed water level: Highest, Jan. 28, 1949, 5.40; lowest, Aug. 12, 1949, when well was reported dry. Records available: 1948-49.

Jan. 7	6.00	Mar. 25	8.20	June 24	13.89	Sept. 16	15.90
14	8.90	Apr. 1	9.80	July 1	14.34	Oct. 27	16.80
21	11.50	8	9.00	8	14.68	28	16.85
28	5.40	18	9.10	15	14.24	Nov. 4	16.95
Feb. 4	8.20	22	8.80	22	14.15	11	16.93
11	9.00	29	9.00	29	14.45	18	16.95
18	8.60	May 6	9.00	Aug. 5	14.78	Dec. 2	17.33
25	6.30	13	11.30	12	(a)	16	16.97
Mar. 4	8.90	27	12.19	19	15.29	23	16.89
11	9.50	June 3	12.65	Sept. 2	15.77	30	16.40
18	10.30	17	13.66	9	15.79		

a Dry on Aug. 12, 1949.

133. At Bally, in basement of grocery store, on Main Street. Altitude about 470 feet above mean sea level. Dug well, diameter 3 feet, depth 17.6 feet, rock lined. Records available: 1949.

Aug. 20	11.40	Sept. 24	12.65	Oct. 29	13.30	Dec. 3	13.37
27	12.29	Oct. 1	12.75	Nov. 4	13.20	10	13.40
Sept. 3	12.50	8	12.88	12	13.34	17	12.65
10	12.26	15	13.00	19	12.90	31	11.69
17	12.34	22	13.18	26	13.20		

Bradford County

81. At Monroeton. Extremes of observed water level: Highest, Apr. 6, 1941, 1.45; lowest, Sept. 24-Oct. 8, 1932, Oct. 3-17, 1936, Aug. 20-Oct. 29, 1939, Oct. 5-19 and Oct. 26-Nov. 29, 1941, Sept. 21, 1942, Sept. 6-Oct. 24, 1943, when well was dry. Records available: 1931-44, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.78	Apr. 4	3.20	July 6	4.95	Oct. 3	3.02
10	2.87	11	3.06	14	5.00	11	3.31
17	3.16	18	2.98	18	5.80	17	3.04
24	3.17	25	3.06	26	5.70	24	3.21
31	3.01	May 2	3.24	Aug. 1	4.67	31	2.81
Feb. 7	3.17	9	3.35	8	4.81	Nov. 7	2.95
14	3.26	16	3.75	15	3.39	16	2.68
21	3.04	23	3.05	22	3.57	23	2.84
28	3.03	31	3.26	30	2.44	30	2.85
Mar. 7	2.89	June 6	3.58	Sept. 6	3.00	Dec. 7	2.81
14	3.20	13	4.05	12	3.16	14	2.55
21	3.46	20	4.62	20	3.22	20	2.71
28	3.24	27	4.70	26	3.06	28	2.16

82. At East Towanda. Extremes of observed water level: Highest, May 25, 1947, 17.00; lowest, Feb. 15, 1942, 61.70. Records available: 1931-49.

Jan. 2	40.95	Apr. 3	37.17	July 3	44.84	Oct. 2	52.94
8	32.58	10	31.51	10	46.68	9	53.47
15	33.13	17	27.74	18	46.54	16	54.02
22	33.48	24	27.50	24	47.20	24	54.54
29	29.89	May 1	31.48	31	47.88	30	54.95
Feb. 5	33.29	8	35.45	Aug. 7	48.51	Nov. 6	55.47
13	35.04	15	38.13	14	49.08	13	55.88
19	32.32	22	39.73	21	49.60	20	56.22
27	29.92	29	37.88	28	50.08	27	56.79
Mar. 5	32.01	June 5	39.52	Sept. 3	50.55	Dec. 4	57.13
13	30.96	12	41.30	11	51.22	10	57.38
20	34.73	19	42.68	17	51.71	18	57.65
27	37.29	26	43.75	25	52.39	25	57.88

Bucks County

F3. Stover Mansion, at Ralph Stover State Park. Extremes of observed water level: Highest, Nov. 27, 1948, 6.10; lowest, Oct. 27, 1949, 11.18. Records available: 1948-49.

Jan. 1	8.90	Mar. 7	9.00	Apr. 23	9.20	June 26	9.25
10	9.00	15	9.24	May 1	9.20	July 2	9.25
16	9.00	21	9.10	9	9.20	16	9.50
22	9.00	28	9.20	16	9.20	Aug. 12	9.50
31	9.00	Apr. 3	9.20	23	9.20	31	10.30
Feb. 14	9.00	11	9.20	30	9.20	Sept. 10	10.30
20	9.00	16	9.20	June 18	9.50	Oct. 27	11.18
27	9.00						

Butler County

120. At West Sunbury. Extremes of observed water level: Highest, Mar. 14, 1942, 6.84; lowest, Oct. 5, 1946, 11.22. Records available: 1941-49.

Jan. 1	8.36	Mar. 5	8.50	May 7	8.89	July 9	10.19
8	7.88	12	8.59	14	9.19	16	10.05
15	8.61	19	8.59	21	9.30	23	9.74
22	8.47	26	8.06	28	9.14	30	9.70
29	7.61	Apr. 2	8.05	June 4	9.39	Aug. 6	9.89
Feb. 5	8.48	9	8.53	11	9.69	13	9.91
12	8.57	16	8.80	18	9.90	20	10.10
19	8.09	23	8.04	25	10.00	27	10.20
26	8.11	30	8.29	July 2	10.16	Sept. 4	10.35

120--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 10	10.50	Oct. 15	10.83	Nov. 12	11.00	Dec. 10	11.02
17	10.55	22	10.88	19	11.05	17	10.75
24	10.62	29	10.93	26	11.06	24	10.42
Oct. 1	11.17	Nov. 5	10.96	Dec. 3	11.04	31	9.86
8	10.83						

Centre County

124. At Milesburg. Extremes of observed water level: Highest, Apr. 17, 1948, 1.98; lowest, Oct. 25, 1947, 18.10. Records available: 1946-49.

Jan. 1	3.66	Mar. 26	7.98	July 2	15.80	Oct. 8	16.95
8	3.42	Apr. 9	7.80	9	15.25	15	15.98
15	4.06	16	5.14	16	14.13	22	17.68
22	4.21	23	5.80	23	16.56	29	17.84
29	3.50	30	8.44	Aug. 6	17.50	Nov. 5	17.25
Feb. 5	4.00	May 7	11.26	13	17.60	12	17.08
12	4.47	14	13.50	20	15.95	19	17.95
19	4.63	21	11.14	27	16.08	26	18.08
26	4.98	28	11.24	Sept. 3	16.44	Dec. 3	17.92
Mar. 5	4.44	June 4	13.95	10	16.04	10	17.95
12	5.44	11	14.70	24	17.10	17	14.93
19	8.54	25	15.46	Oct. 1	16.60	31	11.15

Clarion County

103. At Clarion. Extremes of observed water level: Highest, Apr. 9, 1938, 11.36; lowest, Sept. 23, 1944, 20.76. Records available: 1932-49.

Jan. 1	15.16	Apr. 9	12.82	July 2	19.07	Oct. 15	20.14
8	12.48	16	14.28	30	18.42	22	20.33
15	14.53	23	13.84	Aug. 6	19.03	29	20.51
29	11.88	30	14.87	13	19.42	Nov. 5	20.62
Feb. 1	12.64	May 7	16.18	20	14.55	12	20.75
5	13.77	14	17.59	27	19.30	19	19.54
12	15.15	21	15.97	29	19.09	26	19.63
19	12.57	28	13.01	Sept. 3	18.56	29	19.46
26	12.60	June 4	16.16	10	18.90	Dec. 3	18.68
Mar. 5	14.63	6	17.02	17	19.74	10	18.15
19	14.84	11	17.87	24	19.18	24	15.56
26	14.83	18	18.54	Oct. 1	19.63	31	15.22
Apr. 2	14.56	25	18.62	8	19.95		

Clearfield County

123. At Curwensville. Extremes of observed water level: Highest, May 1, 1948, 18.26; lowest, Aug. 31, 1946, 21.40. Records available: 1946-49.

Jan. 3	20.43	Apr. 4	19.52	July 5	20.51	Oct. 3	20.81
10	20.42	11	19.51	11	20.47	10	20.83
17	20.77	18	19.65	18	20.50	17	20.80
23	20.86	25	19.66	25	20.58	24	21.02
31	20.77	May 2	19.71	Aug. 1	20.61	31	21.01
Feb. 7	20.85	9	19.01	8	20.66	Nov. 7	20.89
14	20.88	16	20.18	15	20.72	14	20.84
21	20.82	23	20.99	22	20.70	21	20.87
28	20.80	30	20.13	29	20.72	28	20.91
Mar. 7	20.86	June 6	20.28	Sept. 5	20.54	Dec. 5	20.89
14	19.81	13	20.32	12	20.64	12	20.87
21	19.98	20	20.48	19	20.91	19	20.21
28	19.93	27	20.52	26	20.27	26	20.39

Columbia County

75. At Fernville. Extremes of observed water level: Highest, Sept. 2, 1933, 7.28; lowest, Dec. 15, 1931, 16.91. Records available: 1931-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	11.93	Apr. 2	13.15	July 2	14.75	Sept. 24	15.84
8	12.20	9	12.97	9	14.97	Oct. 3	15.35
15	12.09	16	13.14	16	15.17	8	15.45
26	11.87	23	12.77	23	15.14	15	16.81
29	12.23	30	13.09	30	15.37	22	16.76
Feb. 5	11.63	May 7	13.13	Aug. 6	15.65	29	16.43
12	12.37	14	13.29	13	15.62	Nov. 26	14.89
19	12.47	21	13.44	20	15.37	Dec. 3	16.17
26	12.37	28	13.55	27	15.29	10	15.65
Mar. 5	12.52	June 4	13.70	Sept. 3	15.17	17	14.11
12	12.64	10	14.15	10	15.60	24	12.45
19	13.03	18	14.47	17	15.67	31	12.93
26	13.19	25	14.56				

Cumberland County

125. Near Mt. Holly Springs. Extremes of observed water level: Highest, May 10, 1948, 18.45; lowest, Oct. 11, 1948, 28.63. Records available: 1947-49.

Jan. 8	19.46	Feb. 28	19.81	Apr. 19	19.82	May 31	22.31
17	19.96	Mar. 7	19.93	26	19.85	June 7	22.83
22	19.83	14	19.95	3	19.81	14	23.45
Feb. 2	19.86	22	19.92	11	20.11	29	24.32
14	19.84	29	19.94	18	20.61	July 20	25.18
21	19.85	Apr. 5	19.96				

Elk County

118. At Kersey. Extremes of observed water level: Highest, June 11, 1943, 8.12; lowest, Nov. 11, 1949, 12.55. Records available: 1941-49.

Jan. 7	10.10	Apr. 8	9.60	July 8	10.85	Oct. 7	11.90
14	10.05	15	9.35	15	10.88	14	11.98
21	10.10	22	9.52	22	10.98	21	12.16
28	9.60	29	8.48	29	11.02	28	12.30
Feb. 4	9.70	May 6	9.65	Aug. 5	11.20	Nov. 4	12.31
11	10.10	13	9.85	12	11.32	11	12.55
18	9.90	20	9.90	19	11.35	18	12.54
25	9.70	27	9.70	26	11.30	25	12.30
Mar. 4	9.78	June 3	9.93	Sept. 2	11.50	Dec. 2	12.35
11	9.76	10	10.05	9	11.45	9	12.40
18	9.74	17	10.25	16	11.55	16	12.10
25	9.75	24	10.35	23	11.55	23	11.88
Apr. 1	9.66	July 1	10.62	30	11.78	30	11.78

Erie County

1. Near Carters Corner. Extremes of observed water level: Highest, June 8, 1947, 8.63; lowest, Sept. 8-Dec. 1, 1934, when well was dry. Records available: 1931-49.

Jan. 16	12.60	Apr. 10	12.14	July 10	18.12	Sept. 18	16.81
Feb. 3	11.77	24	13.36	17	17.98	Oct. 16	16.46
13	13.96	May 5	12.94	24	16.97	Nov. 6	17.32
27	12.61	8	15.21	Aug. 7	17.14	Dec. 1	15.09
Mar. 18	15.62	29	17.48	Sept. 1	15.81	4	14.92
20	14.34	June 9	17.85	4	16.22	18	13.07
Apr. 3	11.57	12	18.07				

Huntingdon County

47. Near Trexler Bridge. Extremes of observed water level: Highest, Mar. 15, 1941, when well was full; lowest, Oct. 1, 1932, 26.25. Records available: 1931-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	17.23	Apr. 9	19.88	July 9	22.00	Oct. 8	22.22
8	16.65	16	20.15	16	17.46	15	22.55
15	18.32	23	20.80	23	17.41	22	22.60
22	19.96	30	21.13	30	19.52	29	22.85
29	16.58	May 7	21.29	Aug. 6	20.35	Nov. 5	23.00
Feb. 5	17.23	14	21.42	13	21.05	12	23.04
12	18.83	21	21.50	20	21.34	19	23.27
19	19.77	28	21.48	27	21.54	26	23.50
26	17.19	June 4	21.91	Sept. 3	21.35	Dec. 3	23.48
Mar. 5	18.54	11	23.05	11	21.55	10	23.46
12	19.80	18	22.25	17	21.70	17	21.33
20	20.81	25	22.12	24	21.83	24	20.69
26	21.27	July 1	22.24	Oct. 1	21.96	31	19.77
Apr. 2	21.08						

Indiana County

200. At Indiana. Extremes of observed water level: Highest, Mar. 21, 1945, 77.70; lowest, Oct. 19, 1946, 87.03. Records available: 1944-47, 1949.

Daily noon water level, from recorder charts

Sept. 10	79.90	Oct. 1	80.24	Oct. 22	82.47	Nov. 12	84.56
11	79.96	2	80.37	23	82.70	13	84.58
12	80.00	3	80.64	24	82.87	14	84.67
13	80.03	4	80.74	25	82.94	15	84.75
14	80.15	5	80.79	26	83.07	16	84.89
15	79.95	6	80.78	27	83.27	17	84.40
16	79.90	7	80.75	28	83.28	18	85.01
17	79.93	8	80.65	29	83.40	19	85.02
18	80.13	9	80.68	30	83.42	20	85.05
19	80.08	10	80.76	31	83.50	21	85.20
20	79.98	11	81.14	Nov. 1	83.65	22	85.33
21	79.98	12	81.19	2	83.66	23	85.20
22	80.14	13	81.32	3	83.77	24	85.40
23	80.14	14	81.40	4	83.86	25	85.30
24	80.03	15	81.55	5	84.03	26	85.55
25	80.21	16	81.72	6	84.02	27	85.49
26	80.45	17	81.90	7	84.10	28	85.56
27	80.52	18	82.00	8	84.17	29	85.59
28	80.34	19	82.12	9	84.34	30	85.59
29	80.20	20	82.28	10	84.34	Dec. 1	85.72
30	80.18	21	82.43	11	84.44	2	85.70

Lackawanna County

102. Near Carbondale. Extremes of observed water level: Highest, Mar. 21, 1936, 1.17; lowest, Oct. 15, 1943, 13.10. Records available: 1931-49.

Jan. 7	1.87	Apr. 8	4.51	July 8	8.30	Oct. 14	5.98
14	4.35	15	3.05	15	8.27	21	6.50
21	5.65	22	3.57	22	7.50	29	6.99
28	5.20	29	3.80	Aug. 5	5.46	Nov. 4	5.72
Feb. 4	5.60	May 6	3.94	12	6.71	11	4.98
11	5.81	13	4.51	19	7.70	18	4.78
18	3.89	20	5.99	26	8.78	26	5.45
25	3.39	28	4.28	Sept. 2	7.82	Dec. 2	5.95
Mar. 4	4.83	June 3	5.51	10	7.87	9	6.20
10	4.20	9	8.18	17	8.63	16	3.70
19	5.25	17	8.00	23	8.21	24	2.92
25	5.65	24	9.03	Oct. 1	5.62	30	3.65
Apr. 1	5.62	July 1	8.37	7	5.33		

F8. Commonwealth of Pennsylvania. Near Bear Lake. Highest water level, June 18, 1948, 3.64; lowest, Nov. 24, 1948, 5.19. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	4.05	Jan. 28	4.04	Feb. 18	4.05	Mar. 4	4.00
14	4.04	Feb. 4	4.04	27	4.03	12	4.02
21	4.02	11	4.04				

Lancaster County

119. Owner unknown. At West Quarryville. Highest water level, June 2, 1946, 0.99; lowest, Jan. 31, 1942, 25.10. Records available: 1941-49. Feb. 18, 11.18; Feb. 27, 10.77; Mar. 6, 11.48; Mar. 12, 12.38; Mar. 19, 12.25; Mar. 25, 12.25.

Luzerne County

76. Owner unknown. Near Wapwallopen. Highest water level, Aug. 5, 1933, 18.17; lowest, Sept. 3, 1941, 29.89. Records available: 1931-49.

Jan. 6	20.10	Feb. 4	23.60	Mar. 3	23.60	Apr. 11	23.30
13	23.70	10	24.00	9	23.10	18	23.30
21	24.40	17	22.60	25	24.80	25	23.50
27	24.30	24	22.60	Apr. 1	24.80	May 2	28.10

F9a. Commonwealth of Pennsylvania. Highest water level, Dec. 31, 1949, 9.29; lowest, dry Oct. 14 - Dec. 9, 1949. Records available: 1948-49.

Jan. 7	9.40	Apr. 8	13.21	July 8	18.80	Oct. 7	23.40
14	10.50	15	10.23	15	18.69	14	(a)
21	10.40	20	10.10	22	19.46	21	(a)
28	12.36	29	10.10	29	20.12	28	(a)
Feb. 4	12.09	May 6	10.78	Aug. 5	20.72	Nov. 4	(a)
11	12.90	13	11.30	12	21.30	12	(a)
18	11.10	20	12.51	19	21.78	18	(a)
25	11.10	27	12.19	26	22.08	26	(a)
Mar. 4	12.04	June 3	10.90	Sept. 2	22.50	Dec. 9	(a)
11	11.80	10	14.18	9	22.98	16	18.07
18	12.55	17	15.20	23	22.88	23	19.84
25	13.42	24	15.65	30	23.40	30	18.08
Apr. 1	13.70	July 1	17.58				

a Dry.

F9b. Commonwealth of Pennsylvania. Highest water level, Apr. 15, 1949, 38.49; lowest, Oct. 28, 1949, 45.77. Records available: 1948-49.

Jan. 7	38.86	Apr. 8	41.79	July 8	43.90	Oct. 7	45.47
14	39.86	15	38.49	15	44.12	14	45.60
21	41.47	20	38.74	22	44.33	21	45.64
28	41.40	29	38.70	29	44.46	28	45.77
Feb. 4	40.63	May 6	39.05	Aug. 5	44.66	Nov. 4	45.63
11	41.90	13	39.59	12	44.86	12	45.75
18	40.70	20	41.19	19	44.94	18	45.64
25	40.26	27	41.10	26	45.06	26	45.75
Mar. 4	40.50	June 3	41.55	Sept. 2	45.13	Dec. 9	45.70
11	40.59	10	42.35	9	45.22	16	43.75
18	41.34	17	42.85	23	45.36	23	43.08
25	42.10	24	43.32	30	45.55	30	40.47
Apr. 1	42.30	July 1	43.55				

Lycoming County

F10. Commonwealth of Pennsylvania. At pump station on State Highway 44, in basement of log house, adjacent to Ranger Station. Altitude 2,070 feet above mean sea level. Unused drilled well, 4.5 inch casing, depth, 74.25 feet. Records available: 1949.

Mar. 25	16.46	Apr. 15	14.92	May 6	14.77	May 27	16.93
Apr. 1	15.65	22	14.24	13	16.07	June 3	16.66
9	14.93	29	14.35	20	16.53	10	17.73

F10 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 17	17.24	Aug. 5	19.94	Sept. 24	19.00	Nov. 13	21.04
26	18.61	8	21.77	Oct. 2	18.80	20	20.60
July 2	18.93	21	21.46	9	19.71	27	20.68
9	19.20	27	19.70	16	20.27	Dec. 4	21.67
15	19.25	Sept. 3	20.00	23	21.37	13	21.16
22	19.70	10	20.36	30	20.99	19	19.57
29	20.51	16	19.10	Nov. 6	20.20	26	18.73

Mifflin County

117. Charles C. Naginey. At Naginey. Highest water level, May 23, 1942, 8.38; lowest, Sept. 25, 1948, 23.66. Records available: 1941-42, 1946-49.

Jan. 1	13.38	Apr. 9	17.50	July 9	22.54	Oct. 8	22.97
8	14.96	16	14.50	16	22.42	15	23.15
15	16.71	23	16.49	23	22.79	22	23.50
22	18.65	30	17.53	30	23.18	29	23.43
29	14.54	May 7	17.16	Aug. 6	22.84	Nov. 5	23.15
Feb. 5	17.12	14	18.08	13	23.13	12	23.17
12	18.67	21	18.12	20	23.22	19	23.12
19	17.05	28	18.38	27	23.30	26	23.14
26	16.22	June 4	19.16	Sept. 3	22.30	Dec. 3	23.13
Mar. 5	17.50	11	21.75	10	23.15	10	23.12
12	17.88	18	21.79	17	22.44	17	19.34
19	19.08	25	22.46	24	22.73	24	17.74
26	19.24	July 2	23.02	Oct. 1	22.22	31	17.05
Apr. 2	18.30						

Montgomery County

126. Commonwealth of Pennsylvania. Pottstown. Highest water level, May 14, 1948, 21.04; lowest, Sept. 22, 1949, 27.15. Records available: 1948-49.

Jan. 7	22.06	Apr. 1	25.03	July 1	26.15	Sept. 30	25.94
12	24.93	8	24.36	8	25.21	Oct. 6	26.79
14	24.92	15	24.02	15	24.16	7	26.25
21	25.51	22	24.27	22	24.86	14	26.45
27	24.73	29	25.15	29	25.62	20	26.96
28	21.67	May 5	25.70	Aug. 5	26.05	21	26.74
Feb. 4	24.57	6	25.34	10	26.61	28	26.01
11	24.81	12	25.92	12	26.05	Nov. 4	26.07
17	24.89	13	25.44	19	26.33	11	26.44
18	24.23	20	25.41	24	26.78	16	26.46
25	23.30	27	25.22	26	25.96	18	26.04
Mar. 3	25.26	June 3	25.74	Sept. 2	25.96	25	26.15
4	24.83	9	26.55	8	26.62	Dec. 2	25.93
11	25.03	10	26.21	9	26.25	6	26.86
17	26.14	17	26.31	16	26.02	9	26.67
18	25.20	22	26.72	22	27.15	16	25.30
25	24.71	24	26.25	23	26.13	23	25.71
29	25.65						

131. Gottfried Ott. Near Schwenksville. Highest water level, Dec. 22, 1949, 6.65; lowest, Oct. 21, 1949, 13.80. Records available: 1948-49.

Mar. 28	9.03	June 22	13.47	Sept. 8	12.79	Nov. 3	10.80
May 5	8.30	July 15	8.51	22	12.79	16	12.34
12	10.00	29	9.28	Oct. 6	12.87	Dec. 6	13.62
27	9.67	Aug. 11	11.63	21	13.80	22	6.65
June 9	12.00						

Perry County

61. Miss Bertha Demaree. At Newport. Highest water level, Apr. 27, 1940, 7.58; lowest, May 28, 1943, 18.59. Records available: 1931-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	12.56	Apr. 2	13.49	July 1	11.65	Oct. 1	10.84
9	12.77	9	13.18	17	12.08	14	10.55
15	12.82	17	13.83	24	12.10	22	10.40
23	12.92	24	13.87	31	12.25	29	10.35
29	13.89	30	13.64	Aug. 6	12.10	Nov. 5	10.27
Feb. 6	13.90	May 8	13.41	14	11.88	12	10.20
12	13.94	15	13.07	20	11.95	19	10.10
19	14.05	23	13.01	27	11.92	Dec. 4	9.96
27	14.82	28	12.62	Sept. 10	11.40	11	9.85
Mar. 5	14.71	June 3	12.39	17	11.11	24	10.20
12	14.39	20	12.31	24	10.95	31	10.11
19	13.83	26	11.79				

Philadelphia County

P3. City of Philadelphia. In south Philadelphia, in League Island Park. Highest water level, May 12, 1946, 24.38; lowest, June 13, 1946, 36.58. Records available: 1943-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.90	32.20	32.20	28.74	27.49	30.13	31.33	32.10	32.76	.....	.....	.....
2	28.91	31.78	32.58	29.04	28.23	30.32	30.47	31.70	35.12	.....	.....	.....
3	30.47	31.61	32.57	28.80	29.68	30.12	29.50	32.00	.....	.....	.....	.....
4	32.15	31.40	32.58	29.80	29.92	29.36	29.11	34.08	.....	.....	30.95	.....
5	32.21	31.92	32.00	30.18	30.00	29.08	29.27	31.90	.....	.....	.....	.....
6	32.08	30.60	29.41	30.32	29.92	29.01	29.60	32.19	.....	31.18	30.59	.....
7	32.13	31.60	31.20	31.42	29.61	29.11	34.72	30.66	.....	31.32	30.92	.....
8	.....	32.38	31.90	31.12	26.80	30.11	34.63	30.20	32.38	30.59	30.14	.....
9	.....	32.50	32.00	30.74	29.22	30.50	34.62	32.20	.....	28.73	29.31	.....
10	.....	32.48	31.90	28.00	30.38	30.48	34.18	31.35	.....	28.58	.....	.....
11	.....	31.99	32.00	30.70	30.41	30.11	34.41	33.47	.....	31.49	29.00	.....
12	.....	30.93	31.56	31.57	30.17	28.47	35.71	31.78	.....	31.62	29.02	.....
13	32.40	29.72	29.17	31.50	30.21	29.58	34.26	30.64	.....	.....	31.62	32.49
14	32.59	31.51	31.10	31.13	29.60	30.10	35.92	30.50	.....	31.83	.....	32.82
15	30.80	32.19	31.92	30.59	29.72	30.19	35.74	30.70	.....	29.99	.....	32.80
16	29.50	32.60	32.39	29.92	29.50	30.21	35.43	31.12	.....	28.91	.....	32.65
17	31.02	32.87	32.54	28.26	30.21	30.27	34.00	31.32	.....	29.42	35.00	32.63
18	31.85	32.96	32.14	28.75	30.27	29.96	33.83	31.66	.....	31.05	35.10	30.62
19	32.13	31.56	32.00	30.03	30.19	28.32	34.09	31.56	.....	30.60	34.17	31.78
20	33.23	31.02	29.89	30.48	29.61	29.46	34.12	31.33	.....	.....	31.50	32.64
21	32.68	31.50	30.56	31.30	29.42	30.44	34.25	30.88	.....	.....	33.75	.....
22	32.00	31.68	31.88	31.30	29.98	30.57	34.31	29.85	32.54	.....	.....	.....
23	30.50	31.75	31.92	30.47	29.06	30.78	33.06	31.56	31.94	.....	.....	31.77
24	30.79	32.65	32.18	26.70	27.72	30.91	31.10	31.54	31.47	.....	.....	32.23
25	32.07	32.50	29.21	29.20	29.68	30.80	32.85	31.84	28.79	.....	.....	.....
26	31.72	32.15	28.66	30.13	30.03	28.88	31.61	32.51	29.56	.....	.....	.....
27	31.59	29.58	28.00	31.22	30.13	29.70	31.70	32.86	31.71	.....	.....	.....
28	31.14	31.19	28.62	30.82	30.13	30.90	33.00	30.46	32.29	32.03	.....	.....
29	31.33	.....	28.84	30.52	28.90	31.25	33.85	31.97	32.43	31.68	.....	.....
30	30.63	.....	28.82	30.07	27.20	31.44	33.54	.....	32.67	28.92	.....	.....
31	30.78	.....	28.77	.....	29.61	.....	30.80	.....	.....	30.31	.....	.....

P4. City of Philadelphia. In south Philadelphia, at Southwest Airport. Highest water level, Dec. 21, 1945, 7.34; lowest, Jan. 20, 1949, 14.22. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	12.59	Feb. 17	13.75	Mar. 31	13.80	May 12	13.34
13	13.32	24	13.12	Apr. 7	13.61	19	13.60
20	14.22	Mar. 3	13.30	14	13.98	26	12.53
27	13.02	10	13.42	21	13.98	June 2	13.15
Feb. 3	13.54	17	13.92	28	13.90	9	13.47
10	13.36	24	13.32	May 5	13.68	16	13.45

P4 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 23	13.76	Aug. 11	13.37	Sept. 29	13.51	Nov. 17	13.34
30	14.00	18	13.29	Oct. 6	13.50	23	13.32
July 7	13.86	25	13.35	13	13.76	30	13.10
14	13.92	Sept. 1	13.32	20	13.64	Dec. 19	12.88
21	13.41	8	13.28	27	13.95	22	12.78
28	13.53	15	13.60	Nov. 3	13.30	29	12.65
Aug. 4	13.49	22	13.66	10	13.55		

P5. United States Navy. In south Philadelphia, at Philadelphia Naval Hospital. Highest water level, Jan. 11, 1946, 22.82; lowest, Nov. 9, 1945, 30.70. Records available: 1944-49.

Jan. 6	28.47	Apr. 7	27.73	July 7	27.51	Oct. 6	28.50
13	28.67	14	28.40	14	28.97	13	28.74
20	29.13	21	27.52	21	28.61	20	28.81
27	28.42	28	27.44	28	28.05	27	28.99
Feb. 3	28.23	May 5	26.91	Aug. 4	28.28	Nov. 3	27.98
10	28.55	12	28.54	11	28.14	8	27.64
17	28.95	19	26.88	18	28.08	10	27.29
24	28.61	26	26.88	25	28.32	17	28.13
Mar. 3	28.51	June 2	26.90	Sept. 1	28.97	23	29.12
10	28.03	9	27.18	9	28.58	30	28.43
17	28.40	16	26.98	15	28.31	Dec. 7	29.18
24	28.22	23	27.31	22	28.70	19	28.20
31	26.72	30	27.68	29	28.60	29	27.76

P6. United States Navy. In south Philadelphia, at Philadelphia Naval Hospital. Highest water level, Apr. 8, 1946, 23.73; lowest, Nov. 9, 1945, 29.19. Records available: 1944-49.

Jan. 6	26.90	Apr. 14	25.92	July 14	27.09	Oct. 13	27.22
13	27.10	21	25.85	21	26.84	20	27.10
20	27.40	28	25.85	28	27.03	27	27.11
27	26.85	May 5	25.39	Aug. 4	26.64	Nov. 3	26.98
Feb. 3	26.65	12	25.46	11	26.59	8	26.80
10	26.85	19	25.41	18	26.44	10	26.09
17	26.70	26	25.40	25	26.78	17	26.91
24	26.80	June 2	25.43	Sept. 1	27.09	23	27.66
Mar. 3	26.69	9	25.64	8	26.98	30	27.05
10	26.32	16	25.50	15	26.86	Dec. 7	26.98
17	26.57	23	25.74	22	27.11	19	26.50
24	26.43	30	26.04	29	27.04	22	27.10
31	25.11	July 7	25.98	Oct. 6	26.80	29	26.60
Apr. 7	26.02						

P8. McCahan Sugar Co. In south Philadelphia. Highest water level, Dec. 29, 1947, 33.24; lowest, Sept. 16, 1944, 61.57. Records available: 1944-49.

Jan. 13	39.83	May 19	44.61	Aug. 11	37.90	Nov. 10	35.01
20	35.52	June 2	38.37	18	37.41	17	34.91
Feb. 24	47.01	9	37.88	25	37.60	23	34.41
Mar. 10	38.82	16	37.32	Sept. 22	36.37	30	34.16
17	39.14	23	37.17	Oct. 6	37.34	Dec. 7	34.45
Apr. 21	49.18	30	37.35	13	36.00	19	34.14
28	51.95	July 14	35.61	20	35.85	22	34.49
May 5	47.90	28	37.29	27	35.37	29	34.38
12	48.53	Aug. 4	37.63				

P9. Crown Paperboard Co. In south Philadelphia. Highest water level, Nov. 13, 1949, 29.57; lowest, Oct. 10, 1947, 45.72. Records available: 1947-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.55	40.75	35.20	34.46	33.44	34.60	32.82	32.29	31.75
2	41.69	41.40	34.68	33.07	34.23	34.70	32.35	32.52	31.70
3	40.57	41.20	34.90	32.36	34.45	33.60	32.69	32.50	31.71
4	35.68	.....	41.70	34.31	32.29	34.79	32.10	.....	32.44	30.22
5	34.73	.....	41.96	33.20	32.99	34.55	32.00	.....	31.95	30.49

P9 --Continued.

Daily noon water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	.....	.....	33.40	.....	42.10	33.10	33.48	33.73	33.10	.....	31.10	32.09
7	34.60	.....	34.86	.....	41.66	35.62	33.42	32.47	34.00	.....	30.76	31.80
8	33.82	.....	35.50	43.20	39.66	34.51	33.41	.....	33.83	.....	31.88	32.17
9	32.47	.....	35.91	42.34	40.74	34.70	32.33	34.56	33.92	.....	32.52	32.38
10	.....	.....	35.46	41.16	42.01	34.28	32.11	34.70	33.64	.....	32.63	31.70
11	.....	.....	35.51	42.90	.....	34.12	32.81	35.25	33.28	.....	32.20	31.23
12	.....	.....	35.05	43.00	.....	32.22	32.50	34.56	33.20	.....	31.80	31.23
13	.....	.....	35.08	45.61	42.17	33.62	35.11	33.93	33.72	.....	29.57	32.00
14	33.86	.....	35.09	43.64	40.62	35.14	35.23	32.43	34.12	.....	30.78	32.31
15	33.58	.....	35.09	44.01	39.09	33.67	33.63	32.93	34.30	.....	31.79	31.93
16	32.07	.....	35.75	42.79	39.52	34.79	32.53	33.62	33.92	.....	32.31	32.14
17	32.49	.....	35.61	41.38	40.20	34.20	31.24	34.38	33.20	.....	32.12	31.14
18	32.33	43.50	35.30	41.52	40.73	33.46	32.46	34.70	31.65	.....	32.13	30.36
19	32.68	43.29	34.75	42.41	38.58	32.24	33.26	34.00	31.80	.....	31.90	31.00
20	33.10	40.30	33.53	42.62	38.00	32.19	35.47	33.29	32.82	.....	.....	32.07
21	32.39	.....	33.82	.....	37.63	33.34	33.37	32.45	33.30	.....	31.25	31.87
22	31.30	.....	34.28	43.77	34.61	.....	34.57	33.00	33.50	32.31	32.17	32.10
23	31.39	.....	34.17	43.82	34.60	33.46	33.64	33.97	33.10	31.76	32.15	32.19
24	32.02	.....	34.23	41.73	35.20	33.90	32.22	34.26	33.17	32.32	31.51	31.46
25	33.30	40.46	34.08	43.00	35.31	32.87	32.74	34.82	32.60	32.42	30.79	29.98
26	33.90	39.31	33.33	43.58	35.70	32.39	33.51	34.45	31.90	32.62	31.24	29.30
27	.....	36.78	32.09	45.02	36.33	32.62	34.09	33.89	32.69	33.34	30.04	30.48
28	36.10	35.57	.....	45.12	35.41	34.20	34.80	32.34	32.95	32.64	31.19	32.00
29	35.91	.....	.....	44.88	34.29	34.33	34.70	32.73	33.54	32.40	31.25	31.82
30	35.08	.....	.....	42.83	33.68	34.72	33.99	34.30	33.82	31.51	31.58	32.01
31	35.64	.....	.....	.....	34.32	.....	33.54	34.33	.....	31.32	.....	30.80

N1. United States Navy. In south Philadelphia, on League Island.
 Lowest water level, pumping, Oct. 29, 1949, 183.0. Records available:
 1943-49.

Daily noon water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	138.0	.....	148.0	153.5	.....	.....	156.5	156.5	163.7	.....	165.5	162.0
2	149.0	.....	148.5	156.0	152.0	.....	156.5	156.5	166.0	.....	165.5	164.0
3	144.5	148.0	148.0	152.5	155.5	.....	156.5	156.5	.....	163.5	165.0	165.5
4	145.5	.....	148.0	153.5	155.0	.....	156.5	156.5	.....	165.5	165.5	164.0
5	144.5	.....	146.0	154.0	156.5	.....	156.5	156.5	.....	165.5	165.0	165.0
6	137.5	.....	142.0	.....	154.5	.....	156.5	156.5	.....	164.0	165.5	165.5
7	138.0	146.5	146.0	152.0	155.0	.....	156.5	156.5	165.0	165.5	165.0	165.5
8	136.5	148.0	147.5	150.5	147.5	.....	156.5	.....	165.5	.....	165.0	164.0
9	132.5	148.0	147.5	150.0	154.0	.....	156.5	.....	164.0	.....	165.0	163.0
10	135.0	148.5	147.5	.....	156.0	.....	156.5	.....	.....	162.0	166.0	163.5
11	137.0	.....	147.5	155.0	156.0	.....	156.5	.....	.....	.....	169.5	163.5
12	137.5	144.5	144.5	156.5	156.0	.....	156.5	.....	163.5	160.0	169.0	164.0
13	138.0	143.0	.....	156.5	156.5	159.0	156.5	.....	164.5	165.5	169.0	165.5
14	138.0	148.5	146.0	155.5	155.0	157.0	156.5	.....	165.0	.....	165.0	166.0
15	.....	149.5	147.0	152.5	.....	157.0	156.5	.....	165.0	.....	166.5	166.0
16	.....	150.0	148.0	.....	150.5	157.0	156.5	.....	166.0	.....	166.5	166.0
17	137.0	.....	149.0	153.5	156.0	157.0	156.4	.....	163.5	.....	167.0	166.0
18	136.5	.....	147.5	153.5	156.5	157.0	156.5	.....	.....	165.5	165.5	162.0
19	137.0	.....	.....	151.0	.....	157.0	156.5	.....	163.5	.....	165.5	164.5
20	138.5	144.5	.....	151.0	.....	156.5	156.5	.....	166.0	165.0	.....	166.0
21	136.0	147.0	151.0	152.0	.....	156.5	156.5	.....	162.0	.....	162.5	166.5
22	135.0	148.0	152.0	152.5	.....	156.5	156.5	156.5	166.5	.....	164.5	167.0
23	136.5	148.5	152.5	.....	.....	156.5	156.5	159.0	165.0	.....	164.5	167.0
24	136.5	149.5	152.5	.....	.....	156.5	156.5	159.0	165.5	165.0	162.5	169.0
25	138.5	149.5	151.0	155.0	.....	156.5	156.5	161.5	.....	169.5	166.0	168.0
26	138.0	.....	150.5	156.5	.....	156.5	156.5	163.5	165.0	169.5	169.5	168.5
27	138.0	.....	.....	157.5	.....	156.5	156.5	163.5	167.0	.....	.....	168.0
28	137.0	146.5	151.5	154.0	.....	156.5	156.5	163.5	168.0	170.0	162.0	168.0
29	.....	.....	152.0	153.5	.....	156.5	156.5	163.7	168.0	183.0	162.5	161.5
30	.....	.....	152.5	153.0	.....	156.5	156.5	163.7	168.5	165.5	162.0	162.5
31	.....	.....	152.5	.....	.....	.....	156.5	163.7	.....	164.0	.....	.....

N2. United States Navy. In south Philadelphia, on League Island.
Lowest water level pumping, Sept. 25, 1949, 193.5. Records available:
1943-49. Daily noon water level from recorder graph *

Day	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.
1	.....	137.5	144.5	139.5	127.5	.....	176.0
2	.....	137.5	144.5	140.5	129.0	169.7	.....
3	.....	138	145.5	140.5	129.0	169.7	176.5
4	.....	138	146.0	140.5	129.5	169.7	182.0
5	.....	.....	.....	141.0	129.5	.....	184.0
6	.....	143.5	.....	144.0	130.0	.....	174.5
7	.....	144.5	145.5	137.0	129.5	175.0	178.5
8	.....	144.5	146.0	.....	127.5	175.0	177.0
9	.....	144.5	147.5	145.5	.....	175.0	.....
10	146	143.5	146.5	146.0	.....	170.0	174.0
11	146.5	143	146.0	140.5	.....	171.0	177.0
12	.....	143	144.5	142.0	.....	175.0	179.5
13	.....	143.5	145.5	141.0	.....	180.0	183.5
14	.....	143.5	143.0	141.0	.....	180.0	182.0
15	.....	145.5	143.5	146.0	.....	179.0	178.5
16	.....	144.0	142.5	.....	.....	180.5	177.0
17	.....	140.5	143.0	144.5	.....	173.5	178.5
18	.....	141.0	138.0	139.0	.....	.....	184.0
19	.....	142.0	137.5	142.5	.....	187.0	182.5
20	.....	142.0	138.0	138.5	.....	183.0	186.5
21	138	145.5	139.0	139.0	.....	183.5	185.0
22	136	147.0	140.0	141.5	.....	184.0	185.0
23	.....	146.0	139.0	141.0	.....	177.5	184.5
24	138	146.5	140.0	.....	115.0	183.0	.....
25	138	147.0	140.0	129.0	115.0	193.5	.....
26	137.5	145.0	140.5	129.5	115.0	183.5	.....
27	137.5	145.0	140.0	130.5	115.0	186.0	.....
28	139	145.5	139.0	145.0	115.0	189.0	.....
29	137	.....	140.0	128.0	115.0	182.0	.....
30	.....	.....	140.0	128.5	.....	178.0	.....
31	.....	.....	138.5	.....	.....	.....	.....

N3. United States Navy. In south Philadelphia, on League Island.
Lowest water level pumping, Jan. 24, Feb. 26, 1944, 90.0. Records available: 1943-49. Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	79.0	79.0	75.5	74.0	74.0	.....	.....	76.0	73.5	73.0	76.0
2	.....	73.5	79.5	77.0	75.0	75.0	.....	75.0	78.0	.....	72.5	75.0
3	74.5	76.5	79.5	75.0	73.0	73.0	.....	75.0	78.5	74.0	73.0	76.0
4	79.0	77.5	79.5	76.5	71.5	71.5	.....	75.5	70.0	76.5	74.0	68.0
5	79.0	77.0	78.5	77.0	71.5	71.0	.....	73.0	70.0	77.0	75.0	72.5
6	79.0	77.0	69.0	76.0	71.5	71.0	71.5	.....	68.0	71.0	70.0	73.0
7	79.5	.....	77.5	77.0	71.0	70.5	.....	.....	76.0	71.0	73.0	75.5
8	78.0	78.0	78.5	76.0	.....	73.5	.....	72.5	77.0	68.0	74.0	76.0
9	69.5	79.0	79.0	.....	.....	74.0	.....	74.0	76.0	.....	73.5	76.5
10	77.0	79.5	79.0	.....	75.5	74.0	.....	74.5	69.0	69.0	74.0	76.0
11	78.5	79.5	79.0	75.5	75.0	73.5	.....	75.0	73.5	74.5	73.0	68.0
12	79.5	77.0	77.0	77.5	74.0	68.5	75.5	74.5	75.0	75.0	73.0	75.0
13	79.5	.....	.....	77.5	74.0	.....	74.5	67.5	75.5	76.0	73.0	76.5
14	80.0	.....	77.5	77.0	70.0	73.5	76.0	.....	76.0	74.0	73.0	77.0
15	72.0	79.0	78.5	75.5	73.0	73.5	76.0	73.0	75.5	66.5	76.0	.....
16	68.0	79.5	79.0	70.0	72.5	74.0	74.5	74.0	76.0	66.5	76.0	76.0
17	77.0	80.0	79.5	.....	73.5	73.5	74.5	74.0	69.5	67.0	76.0	76.5
18	.....	80.0	78.5	.....	74.0	71.5	75.0	74.5	73.5	74.5	76.5	68.0
19	.....	.....	.....	.....	74.0	66.0	75.5	74.5	73.0	71.0	69.5	75.0
20	81.0	.....	.....	.....	73.0	72.5	76.0	.....	74.0	76.0	70.0	76.5
21	79.5	.....	76.0	.....	72.5	74.0	76.0	.....	76.0	74.5	75.0	76.5
22	79.5	.....	78.0	.....	72.0	74.5	76.0	73.0	76.0	69.5	76.5	77.0
23	70.5	.....	78.5	.....	71.5	74.5	72.0	74.0	74.5	.....	76.5	70.5
24	73.5	.....	77.5	.....	.....	74.5	.....	74.5	69.0	71.5	75.5	72.0
25	75.5	79.5	75.5	.....	73.0	74.0	74.0	75.0	.....	.....	74.0	70.0
26	75.0	78.5	75.0	.....	74.0	70.0	75.0	76.5	73.5	.....	70.5	71.0
27	75.0	.....	73.0	77.0	74.5	72.5	75.0	77.5	.....	74.0	68.0	71.0
28	74.0	77.5	75.0	.....	74.5	74.0	76.0	70.0	76.0	74.0	74.5	.....
29	74.5	.....	75.0	.....	68.5	75.0	.....	77.0	76.5	74.0	75.5	.....
30	74.5	.....	76.0	.....	.....	.....	75.0	78.0	.....	70.0	.....	.....
31	76.5	.....	76.0	.....	73.5	.....	68.5	77.5	.....	71.0	.....	.....

N4. United States Navy. In south Philadelphia, on League Island.
Lowest water level pumping, Jan. 27, 29, 1944, 90.0. Records available:
1943-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	58.5	56.0	66.0	67.0	....	64.0	66.5	....	69.0	64.5	60.5	68.5
2	57.0	59.0	66.5	68.5	....	64.5	65.0	....	....	70.0	65.0	67.0
3	60.5	58.5	66.5	67.0	....	64.0	62.5	65.0	....	61.0	64.5	69.0
4	68.5	59.5	67.0	68.0	....	61.5	61.0	67.0	....	66.5	65.0	67.5
5	69.0	58.0	66.0	68.5	53.0	61.0	57.5	60.0	....	67.5	65.0	62.5
6	69.0	54.0	....	68.0	53.0	61.0	60.0	59.5	....	60.5	66.5	67.0
7	69.0	60.5	....	69.5	53.0	60.5	66.0	52.5	....	69.5	62.0	69.0
8	69.0	61.0	68.5	69.0	54.5	63.0	57.0	61.5	....	70.0	66.5	69.5
9	....	61.5	70.0	66.0	59.0	64.0	57.0	64.0	56.0	70.0	66.0	70.0
10	61.5	62.0	70.0	57.0	66.5	64.0	56.5	65.0	63.0	70.5	66.5	70.0
11	67.0	61.0	70.0	67.0	64.5	64.0	57.0	65.5	64.5	66.0	65.5	65.0
12	68.0	58.0	69.0	70.0	63.0	60.0	66.0	65.5	....	66.5	65.5	67.0
13	68.5	52.5	59.5	70.0	63.5	62.0	65.5	....	....	67.0	65.5	70.0
14	69.0	59.5	68.0	70.0	61.0	63.5	66.5	....	....	66.0	64.5	70.5
15	57.0	62.0	70.5	68.5	62.5	63.5	67.0	59.5	64.0	69.5	69.0	70.5
16	56.0	63.0	71.5	....	61.0	63.5	66.0	63.5	65.0	71.0	69.0	70.0
17	63.0	63.0	71.5	....	63.0	63.5	65.5	64.0	56.0	71.0	69.0	70.0
18	66.5	63.5	70.5	....	63.0	63.5	66.0	64.5	50.5	65.0	69.5	69.0
19	68.0	59.0	69.5	64.5	63.0	56.0	67.0	65.0	59.0	68.5	....	68.0
20	69.5	59.5	61.0	66.5	62.5	55.0	67.0	59.5	59.0	66.0	....	71.0
21	68.5	57.5	63.5	68.5	62.0	53.5	67.0	55.0	65.5	67.0	....	71.0
22	70.0	57.0	70.0	69.0	61.5	53.0	67.5	61.5	65.5	....	....	71.5
23	....	61.5	70.0	68.0	61.0	54.0	65.0	64.5	64.5	....	66.0	67.0
24	....	63.5	70.5	57.5	54.0	54.0	55.5	65.0	66.5	61.0	66.0	68.0
25	....	63.5	67.5	64.5	62.0	53.5	64.5	....	69.0	....	63.0	68.5
26	....	63.0	67.0	69.5	64.0	53.5	67.0	....	62.0	58.5	....	67.0
27	....	54.0	65.5	....	64.0	60.0	67.5	....	62.0	62.5	....	63.0
28	....	63.5	66.0	....	64.5	66.0	68.0	....	65.5	64.0	61.0	64.5
29	....	....	67.0	....	62.5	66.5	67.5	68.0	66.0	64.0	65.0	64.5
30	....	....	67.0	....	63.0	66.5	67.5	69.5	66.0	62.0	....	57.0
31	....	....	67.0	....	61.0	....	69.0	69.0	....	61.5	....	53.5

N5. United States Navy. In south Philadelphia, on League Island.
Highest water level, May 5, 1946, 35.5; lowest, Jan. 3, May 1, 1944, 59.0.
Records available: 1943-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	47.6	48.4	44.6	41.8	46.2	47.3	45.6	48.6	48.4	....	49.2
2	....	47.5	48.5	44.8	42.1	46.3	46.8	47.6	49.4	43.8	....	49.0
3	....	46.8	48.7	44.4	44.2	46.4	45.5	47.7	47.6	45.8	45.3	....
4	....	46.9	48.6	45.4	44.4	45.3	44.8	47.7	46.6	48.6	46.6	44.6
5	....	47.4	46.0	46.0	44.5	44.9	43.8	47.0	43.4	49.0	48.4	45.8
6	....	45.7	43.6	46.7	44.8	44.8	44.7	46.0	46.6	49.0	45.5	48.2
7	48.0	46.8	46.2	47.4	44.4	45.0	46.8	43.0	48.4	46.4	46.0	48.5
8	48.0	48.0	47.6	47.5	40.6	46.1	44.7	45.4	48.8	45.6	46.7	49.5
9	43.7	49.4	48.0	46.5	43.9	46.3	44.3	47.0	48.4	43.2	45.6	49.6
10	45.4	48.4	47.7	43.1	46.8	46.6	43.8	47.2	44.8	43.8	49.1	49.4
11	47.5	47.7	48.1	46.2	46.8	46.2	44.0	47.4	42.2	47.6	45.2	46.1
12	47.9	45.8	47.6	47.8	46.1	44.3	47.4	47.5	46.4	48.0	45.2	47.2
13	48.1	43.9	44.3	47.6	46.3	45.2	46.7	45.9	47.6	49.0	45.0	49.3
14	48.4	46.7	46.5	47.0	45.0	46.0	48.0	45.0	48.2	48.4	44.8	49.6
15	45.1	47.7	47.8	46.7	45.7	46.3	48.2	46.6	48.5	45.9	49.0	49.7
16	43.2	48.4	48.2	45.0	45.1	46.2	47.9	47.0	48.5	43.5	49.2	49.7
17	45.6	48.6	48.6	41.2	46.2	46.2	47.7	47.3	45.5	44.4	....	49.6
18	47.1	48.8	48.1	42.0	46.3	45.6	47.3	....	43.0	46.6	....	47.3
19	47.8	47.3	48.0	45.8	46.2	43.0	47.9	47.6	45.5	46.9	47.4	48.0
20	49.2	46.5	44.5	46.8	46.0	43.6	48.1	46.4	47.5	48.0	44.1	49.4
21	48.6	45.9	45.9	46.9	45.4	46.2	48.5	44.4	48.5	48.5	47.4	49.6
22	48.6	46.3	47.6	47.2	44.9	46.6	48.3	46.0	48.6	47.0	....	49.4
23	45.5	47.2	47.8	46.7	45.0	46.9	47.1	47.3	47.8	43.5	....	47.6
24	44.5	48.1	47.8	41.1	42.2	47.1	43.5	47.6	46.6	45.5	....	47.4
25	46.8	48.3	44.7	43.0	45.6	47.0	46.2	47.4	42.6	46.0	48.4	46.8
26	45.9	48.4	44.2	45.1	46.0	45.0	47.4	48.4	45.6	45.5	47.8	46.2
27	45.8	44.1	43.4	47.4	46.5	44.4	47.7	48.8	46.2	....	44.8	46.8
28	45.1	46.6	43.9	....	46.4	46.5	48.1	46.9	47.9	....	47.4	47.8
29	46.6	....	44.0	45.4	44.0	47.1	48.0	....	47.6	48.2	48.3	....
30	45.8	....	44.3	45.1	41.8	47.3	47.9	....	49.0	43.8	48.8	47.4
31	45.9	....	44.4	....	44.8	....	45.8	49.2	....	45.2	....	46.6

N8. United States Navy. In south Philadelphia, on League Island.
Lowest water level pumping, Oct. 20, Dec. 8, 13, 1949, 91.5. Records available: 1945-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	82.0	75.0	78.0	72.0	82.5	83.0	80.5	....	81.5	86.5	90.5
2	....	81.0	75.5	78.0	76.0	83.0	81.0	83.0	....	73.0	86.5	90.0
3	74.0	79.5	75.5	77.0	78.5	81.0	79.0	83.5	....	81.0	87.5	90.5
4	77.0	80.5	75.5	81.0	79.0	79.5	77.5	83.5	....	84.0	87.5	82.5
5	76.5	80.5	74.0	81.5	82.0	79.0	76.0	81.0	....	84.5	89.0	86.5
6	76.5	77.5	....	80.5	79.0	79.5	79.5	78.5	....	79.0	84.0	89.0
7	76.5	81.0	74.0	82.5	78.0	79.5	80.5	73.0	....	76.5	87.0	90.5
8	75.0	83.0	74.5	81.0	....	81.5	77.5	78.5	....	75.5	88.5	91.5
9	....	83.5	75.5	75.5	81.0	82.0	77.0	81.0	86.0	73.0	88.0	....
10	74.5	83.5	74.5	71.0	82.0	82.0	76.0	82.0	86.0	76.0	88.5	91.0
11	76.0	79.5	75.0	81.0	81.5	81.0	77.0	82.0	86.0	78.0	87.5	85.0
12	77.0	78.5	73.0	82.5	81.0	77.5	83.0	....	86.5	89.0	87.0	89.5
13	76.5	74.0	....	82.5	81.0	80.0	82.5	....	86.5	91.0	86.5	91.5
14	77.0	81.5	74.0	81.5	....	81.5	84.0	....	87.0	89.0	88.0	....
15	71.5	....	74.5	80.5	....	81.5	84.0	....	....	83.0	90.5	....
16	....	83.5	75.0	75.0	80.0	82.0	82.5	....	....	80.5	91.0	....
17	75.0	84.5	75.0	....	82.0	81.5	82.0	....	....	82.0	....	....
18	76.0	84.0	74.5	75.0	81.5	79.5	82.5	80.0	....	89.0	....	84.5
19	76.5	78.0	73.5	79.5	81.5	74.5	84.0	75.5	....	87.5	....	89.5
20	78.0	79.5	....	80.5	81.0	80.0	84.0	....	....	91.5	....	....
21	77.0	73.5	77.5	82.0	80.0	82.0	84.0	....	....	89.0	....	....
22	76.5	....	74.0	82.0	79.0	82.5	84.0	....	83.5	84.0	....	83.5
23	....	....	75.0	80.0	79.5	83.0	80.5	....	....	79.5	90.5	88.0
24	73.0	75.0	75.0	....	....	83.0	74.0	....	....	86.5	....	88.0
25	79.0	75.0	76.5	75.5	81.0	81.5	81.5	....	....	89.5	....	87.0
26	79.0	75.0	76.0	79.5	82.5	77.5	83.0	81.0	....	85.5	....	86.0
27	76.5	....	74.0	83.5	82.5	79.5	83.5	82.0	....	89.0	....	89.5
28	77.5	73.0	76.5	80.5	82.0	82.5	84.0	79.0	....	88.5	90.5	89.0
29	78.5	....	76.5	80.0	77.0	83.0	84.0	81.0	....	88.0	....	87.0
30	77.5	....	....	78.0	72.5	83.5	83.5	80.0	84.0	80.5	....	87.0
31	79.5	....	77.5	....	81.0	....	79.5	75.0	....	85.0	....	85.5

N0-1. United States Navy. In south Philadelphia, on League Island.
Highest water level May 5, 1946, 30.13; lowest, Jan. 20, 1949, 35.93. Records available: 1945-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.14	....	35.29	34.20	31.81	33.01	34.75	33.99	35.56	....	....	35.31
2	32.40	....	35.63	34.45	31.89	33.29	34.31	34.81	36.07	....	....	35.40
3	....	....	....	34.39	32.90	33.18	33.35	35.06	35.30	....	....	35.67
4	34.67	....	....	34.38	33.22	32.67	33.03	35.20	34.56	....	34.27	35.15
5	34.77	....	....	34.68	33.32	32.24	33.08	34.72	....	....	34.78	....
6	34.38	....	....	34.29	33.17	32.13	33.26	33.95	....	35.21	34.22	....
7	34.60	....	....	34.73	32.86	32.19	34.11	32.98	....	35.22	34.00	....
8	34.61	....	34.98	34.60	31.61	32.96	34.03	33.50	35.36	34.66	34.59	35.22
9	33.30	....	35.09	34.89	32.19	33.67	34.09	34.40	34.96	33.21	34.29	35.68
10	33.80	....	34.82	33.11	33.16	33.60	33.71	34.65	34.30	33.02	....	35.86
11	34.73	....	34.83	33.97	33.36	33.31	33.69	34.70	32.84	34.88	33.95	34.60
12	34.87	....	....	34.77	33.31	32.10	34.62	34.70	34.56	34.99	34.03	33.80
13	34.89	....	....	34.57	33.22	32.60	34.50	34.45	35.10	35.13	34.01	....
14	34.98	....	....	34.23	32.92	33.11	34.68	....	....	....	....	....
15	34.22	....	....	33.98	32.87	33.22	35.10	....	35.00	....	....	....
16	35.30	....	....	33.66	32.50	33.30	34.85	....	35.53	....	....	....
17	33.71	35.64	35.54	32.42	33.19	33.42	34.78	....	34.48	....	35.06	....
18	34.73	....	....	32.51	33.24	33.33	34.69	....	32.93	....	35.20	....
19	34.99	....	....	33.37	33.12	32.55	....	....	33.80	....	34.89	....
20	35.93	....	....	34.26	32.61	....	....	....	35.05	....	32.83	....
21	35.64	....	....	34.43	32.59	....	35.24	....	35.53	35.07	....	....
22	35.57	....	....	34.33	32.40	....	35.25	....	35.59	34.38	....	....
23	34.28	....	....	33.78	32.11	....	34.39	....	35.06	33.00	35.47	....
24	34.22	35.69	....	31.51	31.79	34.07	33.20	....	34.93	....	35.38	....
25	35.13	35.51	....	32.60	32.34	33.99	34.08	....	33.36	....	....	....
26	35.19	....	....	33.41	32.88	32.83	34.72	35.30	34.10	....	35.39	....
27	34.92	33.88	....	34.00	32.93	33.05	34.98	35.49	35.02	....	....	....
28	34.36	34.75	....	34.01	33.00	....	34.98	34.81	....	35.18	....	....
29	34.31	....	....	33.92	32.60	....	34.90	....	35.40	34.83	....	....
30	....	....	....	33.51	31.71	34.78	34.81	....	35.66	33.10	34.78	....
31	....	....	34.21	....	32.23	....	34.02	....	....	....	....	....

NO-2. United States Navy. In south Philadelphia, on League Island.
Highest water level, May 5, 1946, 30.45; lowest, Feb. 18, 1949, 35.51.
Records available: 1944-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.42	34.71	34.02	34.03	31.45	32.56	33.97	33.50	.....	34.58	34.09	34.62
2	31.70	34.60	34.61	33.96	32.00	32.90	33.46	33.83	35.07	33.42	33.83	34.24
3	32.73	34.59	35.29	33.87	32.62	32.69	32.88	34.27	34.37	34.50	34.03	34.70
4	33.70	33.60	34.89	33.70	32.48	31.97	32.60	34.61	33.99	34.90	33.77	33.29
5	33.90	33.99	34.28	34.08	32.91	31.54	32.67	33.95	33.09	34.94	33.97	33.40
6	33.61	33.64	32.95	33.45	32.38	31.80	32.82	33.34	33.53	34.53	33.62	34.10
7	33.79	33.78	33.72	33.93	32.09	31.77	33.35	32.70	34.23	34.69	33.99	34.11
8	33.62	34.37	34.11	33.70	31.11	32.61	33.39	33.50	34.23	34.81	34.17	34.32
9	32.76	34.08	34.20	33.80	32.19	33.17	33.40	33.72	34.65	32.99	33.86	35.20
10	33.30	34.70	33.64	32.83	32.70	32.77	33.05	33.87	33.14	33.09	33.82	34.80
11	33.75	34.20	34.19	33.50	32.82	32.48	33.52	33.90	32.81	34.11	33.41	34.01
12	33.70	34.00	33.74	33.88	32.79	31.51	33.98	33.91	34.64	.....	33.63	34.31
13	34.11	33.19	32.80	33.60	32.49	32.50	33.47	33.33	34.58	.....	33.44	31.68
14	34.00	34.12	.....	33.24	32.10	32.69	33.71	33.40	34.80	.....	33.01	35.00
15	33.51	34.06	34.19	32.93	32.20	32.37	34.40	.....	34.70	.....	33.74	34.99
16	32.77	34.45	34.53	32.89	32.09	32.50	33.74	.....	34.97	.....	34.47	34.55
17	33.29	35.26	34.57	32.24	32.85	32.87	33.62	.....	33.78	.....	34.14	34.57
18	34.05	35.51	34.27	32.10	32.44	32.50	34.31	.....	32.67	.....	34.62	33.62
19	34.43	34.30	34.78	32.41	32.60	32.03	34.46	33.60	34.06	.....	33.88	33.80
20	35.35	33.79	33.90	33.10	31.67	32.13	34.59	33.46	34.49	.....	32.44	34.79
21	34.79	34.41	34.20	33.69	31.92	32.54	34.60	33.00	34.54	.....	34.00	34.36
22	34.62	34.49	34.30	33.28	31.66	32.83	.....	33.38	34.87	33.43	34.63	34.52
23	33.73	34.14	34.04	32.75	31.72	32.97	33.63	33.80	34.60	32.78	34.23	33.79
24	33.74	35.07	34.93	31.03	31.13	33.60	32.83	33.83	34.15	33.75	34.21	34.61
25	34.52	34.68	34.18	32.65	31.71	33.11	33.61	34.11	33.25	34.26	33.67	34.53
26	34.60	34.40	33.93	33.02	32.27	32.30	34.23	34.63	34.35	34.04	33.91	33.99
27	34.59	33.35	33.12	33.30	32.14	32.66	34.53	34.53	.....	34.82	33.04	33.73
28	33.70	33.62	33.41	33.45	32.20	33.44	34.04	33.58	.....	34.79	33.90	33.98
29	33.64		33.90	33.51	31.89	34.19	34.00	.....	.....	34.06	34.28	33.42
30	33.80		33.79	32.82	31.20	34.22	33.88	.....	35.10	32.67	34.18	33.59
31	33.89		33.68		32.09		33.08	.....		33.45		33.51

NO-3. United States Navy. In south Philadelphia, on League Island.
Highest water level, Sept. 22, 1947, 25.96; lowest, Oct. 1, 1949, 31.17.
Records available: 1945-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.71	30.32	30.03	30.00	29.49	29.13	30.47	30.40	30.47	31.17	30.54	30.32
2	29.23	29.51	30.58	30.32	29.27	29.31	.....	30.40	30.96	31.09	30.35	30.42
3	29.68	30.58	30.62	30.29	29.28	29.38	.....	.....	30.90	30.81	30.21	30.63
4	29.96	29.96	30.70	30.07	29.44	29.21	.....	30.59	30.68	30.68	30.18	30.89
5	29.69	30.25	30.28	30.48	29.37	28.90	.....	30.61	30.42	30.59	30.52	30.14
6	29.13	30.38	29.97	29.57	29.26	28.76	.....	30.60	30.22	30.75	30.72	30.24
7	29.40	29.86	30.30	30.17	29.07	28.50	30.14	30.50	30.45	30.70	30.42	30.01
8	29.71	28.97	30.31	30.11	29.27	29.24	30.30	30.33	30.30	30.73	30.18	30.50
9	29.82	29.80	30.07	30.33	29.11	29.61	30.33	30.28	30.42	30.55	30.28	30.78
10	29.82	30.09	29.77	30.53	29.09	29.65	30.04	30.57	30.74	30.40	30.22	30.88
11	29.81	30.66	29.68	30.26	29.28	29.38	30.04	30.36	30.78	30.37	29.97	30.65
12	29.65	30.70	29.92	30.15	28.94	29.29	30.10	30.38	30.56	27.97	30.25	30.18
13	29.63	30.21	30.18	29.79	29.31	29.29	29.91	30.40	30.35	28.60	30.00	30.20
14	29.48	30.17	30.36	29.62	29.20	29.32	30.03	30.39	.....	30.48	29.70	29.98
15	30.17	29.98	29.98	29.50	29.30	29.35	30.18	30.51	.....	30.44	29.76	30.47
16	29.97	30.29	30.51	29.60	29.31	29.35	30.40	30.56	30.56	30.50	29.98	30.55
17	29.69	30.51	30.52	29.80	29.36	29.35	30.40	30.46	30.68	30.48	29.76	30.61
18	30.22	30.84	30.22	29.68	29.40	29.39	30.40	30.09	30.52	30.44	29.97	30.37
19	29.89	30.60	30.87	29.61	29.08	29.46	30.45	30.12	.....	30.43	30.19	30.15
20	30.69	30.19	31.07	29.84	28.82	29.40	30.24	30.44	.....	30.48	29.80	30.44
21	30.77	30.67	30.76	29.26	29.24	.....	30.62	30.52	.....	30.58	30.10	30.30
22	30.42	30.41	29.05	29.73	29.00	.....	30.68	30.42	.....	30.41	30.25	30.15
23	30.71	29.82	30.07	29.53	28.82	.....	30.73	30.36	30.51	.....	30.23	30.20
24	30.21	30.48	30.64	29.37	29.01	29.60	30.74	30.30	30.83	.....	30.51	30.93
25	30.38	30.16	30.68	29.74	28.93	29.73	30.42	30.57	31.01	.....	29.96	31.08
26	30.47	30.50	30.48	29.49	29.01	29.83	30.39	30.56	30.98	.....	30.45	30.55
27	30.31	30.54	30.06	29.39	29.06	29.89	30.45	30.44	30.76	.....	30.32	30.11
28	29.72	29.79	30.16	29.71	29.12	.....	30.41	30.41	30.43	30.95	30.52	30.37
29	30.19		30.50	29.87	29.22	30.25	30.12	30.12	30.40	30.77	29.98	29.76
30	30.78		30.27	29.66	29.26	30.40	30.26	30.54	30.81	30.59	29.30	30.68
31	30.12		30.15		29.07		30.29	30.55		30.01		30.63

NO-4. United States Navy. In south Philadelphia, on League Island.
Highest water level, Sept. 22, 1947, 29.19; lowest, Oct. 1, 1949, 33.12.
Records available: 1945-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.10	.....	31.92	31.60	31.00	30.63	32.34	32.13	32.47	33.12	32.24	32.34
2	.....	.....	.....	.....	30.75	30.80	32.34	32.18	33.00	33.01	32.12	32.37
3	31.10	32.50	32.67	.....	30.76	30.88	32.07	32.38	32.97	32.79	32.05	32.82
4	31.54	31.76	32.78	.....	30.90	30.65	31.89	32.43	32.61	32.61	32.00	32.49
5	31.22	.....	32.21	.....	30.91	30.28	31.77	32.48	32.50	32.54	32.31	32.01
6	30.88	.....	31.82	31.68	30.73	30.18	31.75	32.44	32.11	32.70	32.49	32.19
7	31.08	31.74	.....	32.10	30.54	30.24	31.89	32.28	32.39	.....	32.22	31.88
8	31.43	.....	.....	32.03	30.69	30.71	32.08	32.10	32.20	.....	32.13	.....
9	31.56	31.76	31.90	32.20	30.61	31.15	32.17	32.04	32.40	32.47	32.30	.....
10	31.60	32.02	31.71	32.33	30.63	31.16	31.88	32.09	.....	32.28	32.22	.....
11	31.65	32.61	31.54	32.04	30.86	30.89	31.87	32.10	32.69	32.30	31.90	.....
12	31.47	32.64	31.79	31.92	30.84	30.70	31.91	32.11	32.55	31.65	32.11	32.21
13	31.48	32.10	31.93	31.43	30.90	30.70	31.80	32.11	32.32	31.78	31.91	32.19
14	31.41	32.08	32.21	31.36	30.87	30.79	31.85	32.15	32.31	32.38	31.60	32.38
15	.....	31.91	32.11	31.30	30.75	30.83	31.98	32.16	32.38	32.23	31.71	32.48
16	31.87	.....	32.47	31.32	30.78	30.84	.....	32.28	.....	32.24	31.95	32.60
17	31.57	32.68	32.47	31.47	30.80	30.90	.....	32.24	.....	32.31	31.96	32.69
18	.....	33.11	32.08	31.46	30.84	30.99	.....	31.80	.....	32.23	.....	32.32
19	.....	32.85	32.80	31.32	30.59	31.03	.....	31.90	.....	32.25	32.29	32.07
20	32.72	32.38	33.03	31.61	30.23	31.01	.....	32.22	.....	32.38	31.69	32.21
21	32.82	32.83	32.70	31.60	30.70	30.92	32.44	32.32	.....	32.40	31.91	32.21
22	32.49	32.62	32.18	31.31	30.49	30.90	32.50	32.30	.....	32.18	32.27	31.99
23	32.75	32.31	32.03	31.04	30.30	31.30	32.58	32.20	32.27	32.38	32.12	32.02
24	32.17	32.58	32.55	30.60	30.41	31.49	32.56	32.15	32.66	32.27	32.38	.....
25	32.37	32.26	32.60	31.22	30.39	31.48	32.18	32.47	32.80	32.60	31.70	.....
26	32.42	32.53	32.40	31.01	30.45	31.50	32.20	32.49	32.80	32.29	32.23	.....
27	32.41	32.51	31.88	.....	30.56	31.56	32.29	32.40	32.62	32.80	32.11	31.92
28	31.77	31.76	.....	31.28	30.62	31.91	32.29	32.30	32.28	32.76	32.37	.....
29	.....	.....	.....	31.48	30.70	31.98	32.19	32.00	32.23	32.51	31.92	.....
30	.....	.....	.....	31.30	30.69	32.27	32.12	32.48	32.69	32.23	31.94	32.50
31	31.90	.....	31.99	.....	30.53	.....	32.09	32.48	.....	31.68	.....	32.46

NO-5. United States Navy. In south Philadelphia, on League Island.
Highest water level, Sept. 22, 1947, 28.13; lowest, Oct. 1, 1949, 32.78.
Records available: 1945-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.00	32.09	31.66	31.62	30.86	30.53	32.09	31.98	32.12	32.78	31.99	32.10
2	30.51	31.60	32.22	31.97	30.60	30.70	32.03	31.99	32.69	32.75	31.88	32.19
3	30.98	32.14	32.27	31.93	30.62	30.80	31.84	32.08	32.60	32.48	31.75	32.59
4	31.37	31.50	32.39	31.81	30.80	30.63	31.65	32.16	32.35	32.32	31.77	32.35
5	31.03	31.84	31.89	32.10	30.74	30.28	31.55	32.24	32.05	32.22	32.10	31.84
6	30.64	31.98	31.55	31.36	30.45	30.16	31.53	32.20	31.89	32.42	32.24	31.98
7	30.98	31.47	31.86	31.79	30.40	30.06	31.65	32.04	32.10	32.39	31.97	31.70
8	31.31	31.11	31.84	31.74	30.61	30.67	31.81	31.87	31.94	32.40	31.82	32.13
9	31.41	31.45	31.61	31.92	30.43	31.05	31.88	31.80	32.12	32.23	31.98	32.50
10	31.42	31.72	31.44	32.10	30.49	30.99	31.60	31.91	32.45	32.02	31.89	32.62
11	31.42	32.30	31.28	31.80	30.70	30.71	31.60	31.95	32.42	32.00	31.72	32.43
12	31.26	32.34	31.54	31.69	30.51	30.59	31.66	31.95	32.19	30.52	31.93	31.94
13	31.30	31.85	31.74	31.28	30.72	30.59	31.49	31.95	32.02	30.60	31.73	31.96
14	31.21	31.79	31.92	31.14	30.60	30.67	31.58	32.04	32.01	32.05	31.40	32.10
15	31.90	31.60	31.69	31.00	30.67	30.67	31.66	32.05	32.10	32.01	31.53	32.24
16	31.62	32.00	32.10	31.11	30.67	30.70	31.92	32.12	32.19	32.04	31.75	32.36
17	31.39	32.19	32.12	31.28	30.71	30.74	31.94	32.01	32.32	32.09	31.65	32.43
18	31.90	32.60	31.80	31.17	30.76	30.80	31.93	31.62	32.13	32.02	31.71	32.13
19	31.58	32.37	32.51	31.15	30.45	30.89	32.01	31.67	31.82	32.03	31.97	31.87
20	32.33	31.93	32.72	31.37	30.18	30.80	31.99	32.00	31.96	32.11	31.49	32.07
21	32.43	32.40	32.38	31.08	30.62	30.73	32.18	32.09	32.34	32.17	31.68	31.97
22	32.29	32.15	31.30	31.13	30.39	30.70	32.22	32.01	32.24	31.97	31.99	31.75
23	32.29	31.79	31.71	30.91	30.20	31.09	32.30	31.93	32.00	32.11	31.91	31.82
24	31.80	32.16	32.23	30.73	30.33	31.20	32.30	31.90	32.41	32.06	32.12	32.59
25	32.28	31.83	32.29	31.09	30.31	31.23	31.91	32.14	32.58	32.34	31.50	32.74
26	31.90	32.18	32.08	30.85	30.35	31.30	31.99	32.16	32.54	32.18	32.03	32.19
27	32.09	32.17	31.60	30.74	30.47	31.35	32.01	32.07	32.33	32.52	31.93	31.77
28	31.48	31.40	31.73	31.08	30.52	31.69	32.01	32.00	32.01	32.48	32.12	31.99
29	31.99	.....	32.09	31.24	30.60	31.80	31.86	31.60	31.99	32.28	31.65	31.79
30	32.50	.....	31.83	31.07	30.60	.....	31.83	32.13	32.43	32.08	31.60	32.28
31	31.70	.....	31.72	.....	30.45	.....	31.85	32.12	.....	31.47	.....	32.25

NO-6. United States Navy. In south Philadelphia, on League Island.
Highest water level, Apr. 2, 1948, 27.10; lowest, Feb. 12, 1947, 32.49.
Records available: 1945-49.

Daily noon water level, from recorder graph

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	29.67	29.90	30.38	29.23	29.16
2	.....	29.69	30.40	30.20	29.10	29.26
3	.....	29.77	30.32	29.95	28.92	29.70
4	.....	29.82	30.10	29.81	28.95	29.42
5	.....	29.82	29.76	29.72	29.27	28.85
6	.....	29.80	29.67	29.92	29.39	28.97
7	.....	29.67	29.88	29.86	29.03	28.72
8	.....	29.47	29.70	29.87	28.77	29.11
9	.....	29.42	29.85	29.69	28.93	29.51
10	.....	29.50	30.14	29.50	28.92	29.60
11	.....	29.59	30.18	29.50	28.71	29.41
12	29.47	29.50	29.92	28.05	29.02	28.98
13	29.25	29.51	29.73	.....	28.77	28.99
14	.....	29.60	29.76	29.69	28.47	29.08
15	29.44	29.64	29.82	29.62	28.58	29.27
16	29.64	29.67	29.85	29.68	28.80	29.37
17	29.64	29.59	29.92	29.71	.....	29.45
18	29.62	29.22	29.80	29.61	28.75	29.21
19	29.67	29.40	29.50	29.62	28.93	28.96
20	29.57	29.72	29.63	29.70	28.82	29.20
21	29.78	29.80	30.03	29.60	28.75	29.06
22	29.82	29.70	29.89	29.41	29.02	28.88
23	29.91	29.62	29.64	29.39	28.86	28.95
24	29.89	29.60	30.02	29.38	29.17	29.68
25	29.51	29.88	30.16	29.74	28.59	29.83
26	29.62	29.84	30.12	.....	29.14	29.25
27	29.61	29.76	29.91	.....	29.05	28.82
28	29.62	29.74	29.58	29.77	29.26	29.08
29	29.50	29.40	29.56	29.48	28.74	.....
30	29.50	29.90	30.04	29.27	28.43	29.37
31	29.55	29.90	.....	28.70	.....	29.33

NO-8. United States Navy. In south Philadelphia, on League Island.
Highest water level, May 30, 1949, 40.30; lowest, June 19, 1946, 51.45.
Records available: 1946-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	45.70	48.62	49.60	48.63	.....	44.93	46.42	45.49	49.05	.....	.....	48.43
2	44.40	47.81	50.22	.....	.....	45.42	43.39	46.90	49.40	.....	.....	48.21
3	47.20	47.81	50.08	.....	.....	45.10	41.91	46.82	45.52	.....	.....	48.54
4	49.98	48.10	50.06	.....	.....	43.50	41.32	47.06	44.90	.....	46.12	43.30
5	50.34	47.50	49.40	.....	46.53	43.01	43.70	45.50	42.78	.....	46.73	45.91
6	.....	45.90	45.16	.....	46.74	42.85	43.96	42.51	47.65	.....	45.51	45.07
7	49.96	48.48	47.58	.....	46.00	42.65	45.86	40.50	48.78	.....	.....	48.11
8	48.80	49.62	48.75	46.53	41.30	45.16	45.43	44.32	48.92	.....	.....	48.55
9	45.37	49.89	49.18	46.64	45.43	45.86	45.50	44.62	47.30	.....	.....	49.28
10	47.69	50.30	49.19	40.40	45.92	45.70	44.77	46.59	41.75	.....	.....	48.59
11	49.20	46.98	49.93	47.07	45.58	45.01	44.81	47.03	.....	.....	46.38	.....
12	49.65	46.90	47.70	48.29	45.64	41.19	46.61	46.82	.....	.....	.....	.....
13	49.80	45.08	44.21	48.38	45.68	44.93	46.42	43.50	.....	.....	.....	.....
14	50.70	49.15	48.44	47.50	44.50	45.52	46.96	43.65	.....	46.17	.....	.....
15	46.71	49.90	49.60	46.48	44.86	45.75	47.20	.....	.....	.....	.....	.....
16	44.22	50.40	.....	44.36	44.65	45.49	44.57	.....	48.80	.....	.....	.....
17	48.51	50.51	50.39	44.43	45.62	45.90	44.30	.....	45.29	.....	.....	.....
18	48.71	50.72	49.70	44.77	45.59	.....	46.31	.....	.....	.....	48.97	.....
19	.....	46.65	48.70	45.73	45.71	.....	46.90	.....	.....	.....	47.88	.....
20	51.00	46.66	45.31	46.00	43.11	.....	47.59	44.00	.....	.....	42.47	.....
21	49.68	47.80	47.78	47.49	43.44	.....	47.43	41.45	.....	45.95	46.48	.....
22	49.90	48.52	49.10	47.51	42.93	.....	47.32	44.55	.....	45.39	48.58	.....
23	44.37	.....	.....	45.28	42.97	.....	43.32	46.69	.....	.....	48.64	48.67
24	48.10	50.49	49.71	.....	40.78	46.11	40.69	.....	41.90	.....	47.11	50.06
25	.....	50.37	48.52	45.36	.....	46.70	45.71	47.10	41.31	.....	45.49	48.75
26	.....	48.43	47.78	46.86	44.93	42.20	46.73	48.25	44.51	.....	47.45	48.96
27	49.52	44.39	45.23	48.40	45.24	44.40	47.12	49.19	.....	.....	44.50	49.05
28	48.48	48.00	47.72	47.39	45.39	46.16	47.20	45.14	.....	47.08	46.80	49.40
29	45.52	.....	48.22	47.56	44.20	46.52	47.58	48.50	48.84	46.56	47.77	45.49
30	44.71	.....	48.51	46.80	40.30	46.72	47.10	.....	.....	41.20	48.25	45.62
31	46.61	.....	48.56	.....	44.35	.....	44.01	.....	.....	.....	.....	44.71

NO-9. United States Navy. In south Philadelphia, on League Island.
Highest water level, Apr. 24, 1949, 39.13; lowest, Aug. 6, 1948, 56.09.
Records available: 1946-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	45.66	51.93	.....	52.48	43.17	49.70	49.92	48.28	.....	.....	53.48	.....
2	43.78	50.71	.....	52.11	45.73	49.83	47.98	49.99	.....	.....	53.14	.....
3	46.10	49.14	54.74	.....	49.65	49.40	45.17	50.49	.....	.....	53.25	.....
4	51.76	50.80	54.57	.....	50.14	46.37	44.36	50.57	.....	.....	47.80	.....
5	.....	50.24	52.25	.....	49.78	45.60	44.90	49.04	.....	.....	49.50	.....
6	.....	48.02	46.06	50.13	50.49	45.68	45.55	46.32	.....	48.95	51.68	.....
7	52.80	51.39	50.60	53.30	50.01	45.72	47.73	42.35	52.61	49.10	53.31	.....
8	51.76	53.36	53.03	51.06	43.98	48.39	36.74	46.10	49.00	51.31	54.10	.....
9	45.40	54.12	53.64	48.51	49.60	48.88	46.46	49.15	44.82	51.95	54.45	.....
10	.....	54.70	53.99	.....	49.83	49.01	45.39	49.59	47.50	52.22	53.98	.....
11	.....	49.97	53.92	.....	49.26	48.36	45.30	.....	52.32	51.10	50.09	.....
12	.....	48.75	50.98	.....	48.90	44.39	48.98	.....	52.61	51.00	52.80	.....
13	52.93	.....	.....	.....	48.65	46.09	49.32	.....	54.51	50.82	.....	.....
14	53.61	.....	.....	51.20	46.30	47.86	49.59	.....	52.80	51.34	.....	.....
15	49.06	.....	.....	50.10	47.11	40.11	50.30	.....	48.54	53.02	.....	.....
16	45.30	.....	.....	46.56	46.70	48.30	49.58	.....	.....	53.13	.....	.....
17	49.62	55.10	53.80	44.81	48.60	48.41	.....	.....	.....	53.70	.....	.....
18	50.59	54.73	53.51	46.60	49.17	48.13	.....	.....	.....	53.71	.....	.....
19	.....	49.70	51.85	48.40	48.52	45.45	.....	50.08	.....	51.21	.....	.....
20	.....	.....	.....	.....	47.97	44.72	.....	48.34	.....	46.18	.....	.....
21	.....	.....	.....	.....	47.03	48.56	50.98	44.78	52.98	50.00	.....	.....
22	.....	.....	.....	51.66	46.40	48.90	50.83	47.28	49.92	53.73	.....	.....
23	.....	.....	.....	49.72	46.30	49.21	46.91	49.60	44.61	53.50	54.04	.....
24	.....	54.72	52.72	39.13	41.36	49.32	42.24	49.98	48.97	52.90	54.97	.....
25	.....	54.50	51.33	.....	48.33	49.12	.....	50.95	49.95	52.14	53.16	.....
26	.....	53.05	51.40	.....	49.81	44.77	.....	52.29	48.82	52.15	52.99	.....
27	51.81	.....	48.76	.....	50.10	46.63	.....	53.78	51.47	48.60	53.93	.....
28	50.50	.....	51.09	52.09	49.68	48.79	.....	50.20	51.69	.....	54.65	.....
29	48.60	.....	51.00	51.01	47.39	49.71	50.76	.....	51.95	.....	.....	.....
30	46.14	.....	52.00	48.85	.....	49.94	50.09	.....	45.55	.....	52.93	.....
31	48.80	.....	51.77	.....	48.57	.....	46.71	.....	.....	.....	51.42	.....

NO-10. United States Navy. In south Philadelphia, on League Island.
Highest water level, Apr. 24, 1949, 43.61; lowest, Dec. 5, 1949, 63.80.
Records available: 1946-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.14	56.59	57.81	53.72	47.19	54.93	56.14	53.70	58.31	56.81	54.65	58.41
2	.....	56.11	57.82	54.12	49.00	55.13	54.79	56.16	56.80	.....	54.50	58.07
3	.....	55.24	58.18	53.40	51.52	54.65	53.00	56.51	53.50	.....	54.56	58.17
4	56.53	55.88	58.00	54.48	51.80	53.17	51.90	56.53	51.12	.....	55.38	50.70
5	56.86	55.99	56.70	55.10	52.00	52.70	50.54	54.74	49.65	.....	57.28	53.80
6	56.89	53.56	50.16	55.52	52.10	52.61	52.32	53.50	55.60	.....	52.20	57.03
7	57.11	56.00	54.35	56.64	51.58	52.70	53.54	49.21	57.37	53.90	53.99	57.90
8	56.88	57.32	56.83	55.86	45.51	54.33	51.23	53.33	57.70	52.61	56.11	58.55
9	49.73	58.00	57.29	53.65	52.10	.....	50.14	55.40	57.35	49.03	55.13	59.02
10	53.80	57.93	57.43	48.68	55.81	54.98	49.94	55.80	.....	50.00	55.21	58.60
11	56.46	56.10	57.46	54.65	55.40	54.55	50.70	55.89	.....	56.52	54.62	53.00
12	56.99	54.10	56.35	56.56	54.57	51.80	56.16	.....	.....	56.99	54.60	56.53
13	57.21	50.59	50.80	56.58	54.70	53.42	55.30	.....	.....	58.22	54.41	58.90
14	57.63	55.91	56.40	55.76	51.55	54.33	56.46	.....	.....	57.20	54.57	59.25
15	51.91	57.14	57.08	55.03	53.70	54.52	56.87	.....	.....	52.15	58.28	59.25
16	49.03	57.84	57.57	51.03	53.10	54.59	56.70	.....	57.68	49.52	58.60	59.02
17	54.61	58.48	57.84	45.80	54.66	54.47	55.51	.....	52.23	50.70	58.65	58.97
18	56.10	58.14	57.35	48.67	54.89	53.75	55.98	.....	58.26	55.87	58.90	55.49
19	57.07	54.77	56.48	53.92	54.71	48.97	56.71	56.78	53.80	55.04	54.05	57.45
20	58.77	54.70	51.22	55.17	54.28	51.00	56.94	.....	.....	58.29	49.85	59.20
21	57.70	53.35	.....	55.78	53.46	55.03	57.07	.....	.....	57.42	56.50	59.36
22	57.66	53.93	.....	56.08	52.84	55.39	56.99	.....	.....	53.30	58.90	59.26
23	51.45	56.32	.....	54.92	52.88	55.61	54.73	.....	56.22	49.24	58.25	55.08
24	52.40	57.86	56.70	43.61	47.97	55.67	49.16	.....	.....	53.76	58.65	55.33
25	54.53	57.77	53.44	50.11	54.02	55.30	54.82	.....	.....	52.98	57.27	54.22
26	53.42	57.32	53.22	53.14	54.87	52.00	56.09	57.58	.....	53.80	54.92	52.80
27	53.40	50.73	51.90	56.55	55.19	52.60	56.49	58.18	.....	56.37	52.77	55.00
28	52.54	55.82	52.81	54.41	55.06	55.20	56.71	55.15	.....	57.32	55.80	55.97
29	54.70	.....	53.00	52.71	50.54	55.99	56.73	.....	.....	56.42	57.79	54.09
30	53.58	.....	53.51	52.06	47.33	56.00	56.49	59.50	58.32	49.70	58.27	55.08
31	54.62	.....	53.37	.....	53.40	.....	51.80	58.53	.....	52.85	.....	54.08

Pike County

F5. Commonwealth of Pennsylvania, at Twelvemile Pond. Highest water level, Apr. 30, 1949, 2.00; lowest, Nov. 23, 1948, 16.33. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	6.60	Feb. 26	6.40	Apr. 2	7.80	May 9	6.80
22	6.35	Mar. 5	7.00	9	2.93	16	7.70
29	5.60	12	7.10	16	6.00	28	7.10
Feb. 5	7.00	15	7.54	23	2.95	June 27	11.30
12	7.30	19	7.90	30	2.00	July 4	12.30
19	6.37						

F6. Commonwealth of Pennsylvania, near Edgemere. Highest water level Jan. 10, 1949, 28.10; lowest, Oct. 17, 1949, 34.35. Records available: 1948-49.

Jan. 3	29.50	Mar. 28	29.09	June 20	30.15	Sept. 19	33.88
10	28.10	Apr. 4	29.13	27	30.41	26	34.04
17	28.78	11	29.16	July 4	31.85	Oct. 3	34.03
24	28.81	18	28.96	11	31.13	10	33.70
31	28.63	25	28.50	18	31.02	17	34.35
Feb. 7	28.67	May 1	28.57	25	31.20	24	34.16
14	28.78	9	28.52	Aug. 2	31.70	31	34.03
21	28.52	16	28.68	8	31.69	Nov. 8	33.92
28	28.43	23	28.73	15	31.89	14	33.66
Mar. 7	28.77	30	28.92	29	33.32	21	33.56
14	28.95	June 6	29.26	Sept. 5	33.54	28	33.79
21	29.17	13	29.68	14	33.72		

F7. Commonwealth of Pennsylvania. (Near Lords Valley. About 4.1 miles northwest of Lords Valley.) Highest water level, Jan. 8, 1949, 10.88; lowest, Dec. 18, 1948, 35.49. Records available: 1948-49.

Jan. 8	10.88	Apr. 11	15.99	July 11	24.00	Oct. 2	28.78
15	12.29	25	14.10	18	24.15	8	27.86
22	13.27	May 1	13.05	23	24.70	16	30.70
30	13.59	7	13.40	Aug. 1	24.30	23	31.76
Feb. 6	13.78	16	14.46	7	22.20	30	30.97
13	14.60	23	13.16	14	23.59	Nov. 6	29.35
20	13.64	29	13.55	21	24.60	20	25.98
28	13.32	June 4	13.44	28	24.97	27	25.22
Mar. 6	13.60	12	13.58	Sept. 4	25.40	Dec. 4	24.80
13	13.60	20	16.30	12	25.80	17	17.24
20	14.03	26	19.19	18	27.35	24	16.07
28	15.79	July 4	23.24	25	27.97	31	15.20
Apr. 3	15.87						

Schuylkill County

72. Nick C. Donofrio. Near Pine Grove. Highest water level, Aug. 31, 1940, 4.14; lowest, Nov. 5, 1944, 31.78. Records available: 1931-49.

Jan. 1	14.00	Apr. 9	14.80	July 9	24.90	Oct. 8	28.40
8	14.10	16	13.40	16	24.80	15	28.30
15	16.40	23	12.40	23	24.40	22	28.80
22	17.00	30	16.30	31	25.30	29	28.60
29	13.30	May 7	17.00	Aug. 6	26.00	Nov. 5	28.40
Feb. 1	15.40	14	19.00	13	27.20	12	28.00
12	14.60	21	19.80	21	26.30	19	27.90
19	14.40	28	19.90	27	26.80	26	27.80
26	14.90	June 4	20.60	Sept. 5	25.90	Dec. 3	28.00
Mar. 5	15.40	11	20.80	10	24.80	13	27.80
12	17.00	18	22.80	17	26.40	17	27.80
19	17.70	25	23.78	24	27.60	26	25.80
26	18.00	July 2	24.30	Oct. 1	27.90	31	20.40
Apr. 2	17.40						

127. Ira Kramer. At Dreherstown. Highest water level, Nov. 27, 1948, 6.06; lowest, Sept. 27, Oct. 14, 28, 1948, Aug. 10-26, 1949, dry. Records available: 1948-49.

127 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	6.28	Apr. 21	6.35	July 19	9.70	Oct. 13	9.13
13	6.54	28	6.48	21	10.24	17	9.98
18	7.55	May 5	7.58	25	10.31	20	10.29
20	7.93	6	7.60	28	9.80	24	10.60
27	6.34	11	8.08	Aug. 4	10.58	27	9.77
Feb. 3	6.58	12	8.26	10	(a)	31	9.28
10	6.56	19	8.74	11	(a)	Nov. 4	6.67
17	6.36	25	6.36	18	(a)	9	7.09
25	6.35	26	6.34	25	(a)	10	7.79
Mar. 3	7.05	June 1	7.80	26	(a)	15	7.07
9	7.76	2	7.90	Sept. 1	10.56	18	6.56
17	8.42	8	8.66	8	9.60	21	7.05
22	8.71	9	8.20	14	10.30	24	7.94
25	8.62	16	9.62	15	8.06	Dec. 1	9.06
28	8.41	17	9.73	20	6.15	8	9.67
31	8.55	23	9.72	22	7.11	14	6.33
Apr. 5	6.40	30	10.26	27	8.67	15	6.32
7	6.36	July 7	10.74	29	8.49	20	8.42
11	6.56	13	10.29	Oct. 3	6.82	22	6.35
14	6.34	14	10.34	6	7.87	29	6.28

a Dry.

129. John Perla. Highest water level, Feb. 4, 1949, 19.09; lowest, Nov. 10, 1948, 29.56. Records available: 1948-49.

Jan. 18	19.74	Mar. 20	23.40	May 26	22.98	Sept. 16	29.43
Feb. 4	19.09	Apr. 8	23.85	July 14	27.14	28	29.47
14	21.52	25	20.23	Aug. 17	28.35	Nov. 10	27.53
Mar. 4	20.07	May 10	21.65	31	28.56	22	26.70

130. Paul Fritz. At Adamsdale. Highest water level, Apr. 14, 1949, 3.39; lowest, Aug. 10, 1949, 9.59. Records available: 1948-49.

Mar. 10	5.26	May 11	5.70	July 21	7.75	Oct. 11	8.85
22	5.69	18	5.15	27	8.17	28	8.93
30	5.66	June 2	5.86	Aug. 10	9.59	Nov. 2	8.09
Apr. 7	3.68	7	6.36	23	9.46	9	8.50
14	3.39	16	7.00	Sept. 16	9.14	21	8.43
28	3.98	July 8	9.42	27	9.37	Dec. 28	3.45
May 5	5.13						

132. George Mingle. Near Auburn. Highest water level, May 13, 1949, 24.36; lowest, Dec. 20, 1949, 30.09. Records available: 1948-49.

Jan. 3	25.96	Apr. 28	24.43	Aug. 3	28.59	Oct. 11	29.77
7	25.33	May 6	25.30	9	28.70	21	29.87
Feb. 15	25.30	13	24.36	18	29.00	28	29.89
Mar. 2	25.00	18	25.86	23	29.00	Nov. 2	29.95
10	25.15	31	26.38	Sept. 2	29.27	9	30.05
16	25.60	June 7	26.59	9	29.33	23	29.79
22	25.68	15	26.93	12	29.44	Dec. 20	30.09
Apr. 12	26.09	July 11	28.00	20	29.50	28	28.50
20	25.74	20	28.28	Oct. 7	29.70		

Somerset County

16. N. B. Sanner. At Markleton. Highest water level, Apr. 12, 1948, 11.02; lowest, Sept. 24, 1944, 16.99. Records available: 1931-49.

Jan. 3	13.61	Feb. 27	12.45	Apr. 17	13.25	May 31	14.52
10	13.46	Mar. 6	12.17	18	13.17	June 5	14.71
17	13.50	8	12.42	24	13.36	12	15.01
24	12.23	13	12.45	May 1	13.63	20	15.08
30	12.73	20	12.90	8	14.08	27	15.15
Feb. 7	12.80	28	13.05	15	14.40	July 4	15.18
13	12.89	Apr. 3	12.69	22	14.58	11	15.15
22	12.62	10	12.61	29	14.44	18	14.45

16 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 25	14.60	Sept. 12	15.26	Oct. 24	15.90	Nov. 28	15.15
Aug. 1	14.43	19	15.47	31	15.36	Dec. 5	14.70
8	14.65	26	15.50	Nov. 7	15.22	11	14.65
15	14.98	Oct. 3	15.70	14	15.35	19	14.26
22	14.65	7	15.82	15	14.10	26	13.46
29	14.85	10	15.85	21	15.30	30	12.72
Sept. 5	15.05	17	15.78				

115. National Park Service. Near Trent. Highest water level, May 3, 1948, 32.35; lowest, Nov. 2, 1949, 43.38. Records available: 1937-49.

Jan. 3	34.53	Apr. 11	33.67	July 5	34.38	Oct. 3	34.43
10	34.45	18	33.67	11	34.46	11	34.41
17	34.43	25	33.93	18	34.29	17	34.41
24	34.16	May 2	33.90	26	34.35	27	34.43
31	34.00	9	33.80	Aug. 1	34.32	Nov. 2	34.38
Feb. 7	34.19	18	33.80	8	34.51	7	34.35
14	34.09	24	33.75	17	34.51	21	34.22
21	34.19	31	33.84	23	34.46	28	34.21
28	33.94	June 1	33.84	30	34.39	Dec. 5	34.13
Mar. 7	33.82	6	33.85	Sept. 8	34.35	12	34.06
14	33.80	13	34.30	12	34.39	20	33.99
21	33.85	20	34.14	19	34.38	27	33.84
28	33.85	27	34.26	27	34.39	30	33.94
Apr. 4	33.77						

Sullivan County

105. Carl D. Molyneux. Near Millview. Highest water level, Mar. 3, 1945, 18.22; lowest, dry, several periods 1935-39, 1941, 1943-44, 1946-49. Records available: 1935-49.

Jan. 3	21.86	Apr. 16	22.64	July 16	(a)	Oct. 15	25.86
15	23.07	23	22.18	23	(a)	22	25.93
22	23.28	30	22.79	30	(a)	29	25.81
29	22.69	May 7	21.36	Aug. 6	(a)	Nov. 5	25.32
Feb. 5	22.94	14	22.62	13	(a)	12	25.21
12	23.18	21	21.74	20	(a)	19	25.48
26	23.66	28	22.08	27	(a)	26	25.69
Mar. 5	23.93	June 4	23.16	Sept. 3	(a)	Dec. 3	25.82
12	24.06	11	24.44	10	(a)	10	25.93
19	24.38	18	25.19	17	26.63	17	25.72
26	24.83	25	26.66	24	24.63	24	25.59
Apr. 2	24.78	July 2	26.82	Oct. 1	25.36	31	23.37
9	24.92	9	(a)	8	25.48		

a Dry.

Susquehanna County

100. Carlton Farm. At Montrose. Highest water level, Mar. 18, 1936, 1.80; lowest, Oct. 6, 13, 1939, 10.40. Records available: 1931-49.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.52	5.28	....	6.13	4.77	5.20	9.23	9.87	9.47	8.47	7.40	6.64
2	3.97	5.29	....	6.15	4.90	5.30	9.28	9.87	9.41	8.32	7.37	6.65
3	4.15	5.33	....	6.17	4.99	5.45	9.40	9.86	9.39	8.26	7.32	6.68
4	4.30	5.36	....	6.19	5.10	5.58	9.41	9.86	9.35	8.16	7.27	6.69
5	4.41	5.44	....	6.23	5.20	5.70	9.44	9.86	9.32	8.08	7.23	6.68
6	2.64	5.51	4.27	6.19	4.90	5.89	9.49	9.86	....	8.01	7.27	6.68
7	2.96	5.56	4.04	5.99	4.51	6.03	9.50	9.85	....	7.92	7.25	6.67
8	3.26	5.66	4.08	5.84	4.40	6.27	9.52	9.85	9.23	7.87	7.23	6.67
9	3.57	5.77	4.18	5.67	4.45	6.52	9.57	9.84	9.20	7.82	7.21	6.70
10	3.79	5.87	4.28	5.58	4.54	6.80	9.59	9.84	9.18	7.82	7.21	6.75
11	3.98	5.95	4.41	5.52	4.68	7.04	9.63	9.84	9.15	7.78	7.20	6.82
12	4.09	6.09	4.55	5.50	4.80	7.27	9.65	9.84	9.13	7.74	7.20	6.87
13	4.20	6.26	4.69	5.49	4.93	7.55	9.67	9.83	9.12	7.71	7.23	5.18
14	4.32	6.28	4.81	5.18	5.08	7.77	9.68	9.83	9.12	7.70	7.22	4.69
15	4.47	5.55	4.89	4.94	5.27	7.97	9.69	9.82	9.11	7.69	7.20	4.66

100 --Continued.

Daily noon water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	4.64	4.60	5.02	4.80	5.45	8.12	9.69	9.82	9.10	7.58	7.16	4.71
17	4.73	4.43	5.09	4.76	5.62	8.26	9.81	9.82	9.09	7.57	7.12	4.74
18	4.88	4.44	5.18	4.80	5.80	8.38	9.82	9.83	9.12	7.53	7.07	4.90
19	4.98	4.50	5.30	4.19	5.97	8.50	9.84	9.83	9.12	7.49	7.02	5.00
20	5.10	4.65	5.44	4.05	6.03	8.60	9.85	9.84	9.11	7.44	6.97	5.01
21	5.23	4.69	5.57	4.10	5.93	8.69	9.87	9.84	9.11	7.39	....	5.21
22	5.37	4.71	5.63	4.21	5.91	8.76	9.88	9.85	9.10	7.36	6.96	5.31
23	5.50	4.58	5.69	4.21	5.90	8.83	9.89	9.85	9.04	7.34	6.88	5.34
24	5.53	4.39	5.78	3.87	5.90	8.90	9.82	9.86	9.00	7.37	6.84	....
25	5.58	4.14	5.86	3.93	5.45	8.97	9.83	9.86	8.92	7.39	6.77	....
26	5.53	3.80	5.91	4.06	5.20	9.01	9.84	9.87	8.87	7.40	6.75	5.32
27	5.67	3.87	5.96	4.20	5.06	9.06	9.85	9.87	8.80	7.43	6.72	4.75
28	5.70	....	5.98	4.35	5.03	9.10	9.86	9.88	8.73	7.44	6.71	4.45
29	5.46		6.03	4.50	5.00	9.16	9.87	9.86	8.65	7.44	6.70	4.38
30	5.34		6.09	4.63	5.02	9.20	9.88	9.85	8.57	7.43	6.69	4.42
31	5.31		6.12		5.10		9.89	9.51		7.42		4.51

Tioga County

106. Lewis R. Kohler. At Gaines. Highest water level, Mar. 21, 1936, 8.45; lowest, Sept. 16, 1939, 24.98. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	9.90	Apr. 9	10.50	July 9	20.65	Oct. 8	21.34
8	10.00	16	10.64	16	20.98	15	21.90
15	11.00	23	11.56	23	21.20	22	22.32
22	11.75	30	11.65	30	21.06	29	22.40
29	9.38	May 7	13.38	Aug. 6	21.65	Nov. 5	22.10
Feb. 5	11.10	14	14.97	13	21.97	12	21.90
12	12.45	21	15.10	20	21.25	19	21.93
19	11.00	28	14.97	27	21.64	26	20.40
26	10.88	June 4	16.06	Sept. 3	20.84	Dec. 3	20.56
Mar. 5	11.56	11	17.32	10	21.66	10	20.60
12	11.20	18	18.10	17	21.80	17	19.56
19	12.75	25	18.20	24	21.99	24	18.12
22	13.60	July 2	19.12	Oct. 1	20.97	31	14.55
Apr. 2	12.75						

Union County

122. D. R. Fursley. At Laurelton. Highest water level, Apr. 1, 16, Nov. 26, 1948, 5.40; lowest, Oct. 1, 1948, 10.70. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	5.70	Apr. 1	6.00	June 24	8.10	Oct. 21	9.00
8	5.80	8	6.40	July 1	8.50	28	9.00
14	6.20	15	5.80	8	8.60	Nov. 4	8.69
21	7.00	22	6.20	16	8.80	12	9.61
Feb. 4	6.70	29	6.40	Aug. 20	9.10	18	9.07
12	6.90	May 6	6.70	Sept. 3	8.57	26	8.83
18	6.60	13	7.40	10	8.70	Dec. 3	8.83
26	6.40	20	7.10	16	8.40	9	8.71
Mar. 5	6.40	27	6.70	Oct. 1	8.30	16	7.63
11	6.50	June 4	7.00	8	8.40	23	6.73
19	6.90	10	7.30	14	8.50	29	6.93
26	7.00	17	8.40				

Washington County

112. Mrs. J. B. Luellen. At Amity. Highest water level, June 22, 1946, 9.09; lowest, Oct. 1, 1938, 34.84. Records available: 1936-46, 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	12.10	Feb. 17	12.20	Mar. 31	12.60	May 10	17.85
13	11.80	24	11.30	Apr. 7	11.50	19	12.50
20	12.70	3	12.40	13	12.10	28	14.00
27	10.10	10	11.60	22	14.10	June 3	18.00
Feb. 3	12.50	17	12.10	28	15.70	11	18.50
10	12.90	24	14.10	May 5	18.30	16	22.90

112 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 23	28.30	Aug. 11	27.10	Sept. 29	26.40	Nov. 17	30.50
July 2	18.85	18	27.60	Oct. 6	26.10	24	29.80
8	24.30	25	24.10	13	27.30	Dec. 3	30.30
14	25.30	Sept. 1	21.70	20	28.40	11	30.30
21	21.20	8	22.90	27	30.10	17	29.10
28	22.00	15	24.70	Nov. 4	29.50	25	26.90
Aug. 4	25.10	22	27.10	10	30.40		

Wayne County

83. A. H. Tyce. Near Hawley. Highest water level, May 23, 1942, 2.08; lowest, Oct. 25, Nov. 15-Dec. 20, 1941, dry. Records available: 1931-42, 1944-49.

Jan. 1	13.06	Apr. 9	8.68	July 9	12.03	Oct. 8	15.73
8	9.85	16	8.45	16	12.65	22	15.95
15	9.93	23	6.97	23	12.75	29	15.92
22	10.46	30	7.93	29	14.38	Nov. 5	15.82
29	10.43	May 7	8.38	Aug. 6	14.52	12	15.88
Feb. 5	9.91	14	9.34	13	14.98	19	15.90
12	10.35	21	8.74	20	15.19	26	15.94
19	8.75	28	9.08	27	14.92	Dec. 3	15.47
Mar. 5	8.23	June 4	9.46	Sept. 3	15.18	10	15.55
12	8.26	11	10.03	10	15.54	17	14.55
19	8.71	18	10.62	17	15.74	24	14.35
26	9.26	25	11.15	27	15.83	31	13.94
Apr. 2	9.20	July 2	11.75	Oct. 1	15.48		

RHODE ISLAND

By W. B. Allen

PROGRAM OF WORK

The observation-well program in Rhode Island, begun in 1944, was continued in 1949 in cooperation with the State Port and Industrial Development Commission. Investigations of ground-water resources were started in the East Greenwich and Bristol quadrangles, south and southeast of Providence. The reconnaissance survey of existing ground-water supplies, the monthly sampling of chloride content from two industrial pumping plants in Providence, and the inventory of water wells were also continued. Special studies to alleviate a critical water shortage caused by the prolonged summer and fall drought were made for Bristol, Warren, and Barrington.

At the end of 1948, the observation-well program in Rhode Island included 58 wells. During 1949, 11 new wells were added and measurements of water levels in 5 wells were discontinued. At the end of 1949, the program included 64 wells. Of these wells, 5 were measured daily, 17 weekly, 25 monthly, 13 annually and 4 were equipped with recording gages. A total of about 3,000 individual measurements of water level was made during the year and about 1,400 additional determinations of water level were computed from recorder graphs. The location of the observation wells in Rhode Island are shown on an index map published in Water-Supply Paper 1096.

PRECIPITATION

Precipitation for the State as a whole during 1949 was 35.03 inches or about 11.7 inches less than in 1948 and about 7.6 inches less than normal. The precipitation at Providence during the year was 33.61 inches or about 16.9 inches less than in 1948 and about 4.9 inches less than the normal for the preceding 45 years.

Temperatures averaged three degrees above normal for the year, resulting in excessive losses by evaporation and transpiration. Thus, because of deficient precipitation and above-normal temperatures, conditions were

unusually poor for recharge of ground-water reservoirs. In several rural sections of the State the deficiency reached drought proportions.

FLUCTUATIONS OF WATER LEVELS

Net change in water levels in observation wells in Rhode Island, 1949, in feet

Well	Net change	Well	Net change
Barrington 1	-1.35	Glocester 12	-2.53
Barrington 7	-1.25	Lincoln 84	-1.39
Barrington 10	-1.52	Lincoln 181	-1.13
Charlestown 18	a-1.84	North Kingston 26	a-.64
Coventry 32	-2.34	North Smithfield 21	-1.30
Cranston 3	a-1.10	Portsmouth 72	-9.92
Cranston 4	+1.40	Providence 5	-.71
Cranston 12	-2.00	Providence 48	-.70
Cranston 38	+1.90	Providence 94	-3.24
Cranston 39	-.60	Providence 113	+3.35
Cranston 40	-1.00	Providence 1051	-2.27
Cranston 41	-.90	Providence 1111	-4.04
Cumberland 129	-2.09	Scituate 3	-4.94
Cumberland 265	-.26	Smithfield 116	-.89
East Providence 1	.0	South Kingston 10	-3.42
Exeter 6	-.01	South Kingston 83	-9.92
Exeter 16	+5.55	South Kingston 89	a-5.77
Foster 1	-.98	Tiverton 31	-7.14
Foster 2	a-3.31	Tiverton 47	-10.62
Foster 3	-3.04	Warwick 39	-10.20
Foster 4	-1.25	Warwick 40	+1.40
Foster 5	+1.12		

a Estimated.

There was a net drop in water level in 1949 in all but six observation wells in the State as the result of below-normal precipitation.

At the beginning of the year the water table was at a high stage or about normal throughout the State. In general, water levels throughout the State rose during January and February, declined in March, and rose in April. During May, the seasonal drop of the water table due to an increase in the transpiration at the beginning of the growing season was normal. Thereafter, the seasonal decline of the water table set in and continued through October. However, high temperatures and lack of rain in June, July, and August caused sharp drops in the water level so that by the end of August many wells had reached lowest stages of record for the time of year. During September water levels in most wells declined seasonally, but at the end of the month were below normal. Because of deficient rainfall during October, the general recession of the water table continued. As a result, water levels were considerably below normal and record lows were established in nine wells. During November water levels rose slightly in some wells, but the recovery was less than is usually expected. Thus, at the end of the month ground-water levels were seasonally low, and in

five wells were at their lowest recorded November levels. Precipitation in December was below normal. However, water levels generally rose but were at new lows for this time of year. As a result of the sharp drop from June through October and the lack of recovery in November and December, the water table at the end of the year was low and there was a net loss in ground-water storage during 1949.

WELL-NUMBERING SYSTEM

The identifying symbols for wells in Rhode Island consist of the name of the town or city followed by a number, wells in each town or city being numbered consecutively.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Bristol County

Barrington 1. Town of Barrington. In Department of Public Works Building. Water in bedrock. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	44.42	May 31	43.97	Aug. 31	45.67	Oct. 31	46.20
Mar. 2	43.94	June 29	44.64	Sept. 20	45.94	Nov. 29	46.24
30	43.79	July 29	45.22	29	45.90	Dec. 29	46.21
Apr. 27	43.47						

Barrington 7. Rhode Island Lace Works, Inc. About 80 feet east of Narragansett Ave., 300 feet south of Bay Spring Ave., and 0.5 mile northwest of West Barrington. Measurements made 1 hour after pump shut off. Water in sand and gravel. Records available: 1947-49.

Jan. 3	8.46	Apr. 4	7.16	July 11	8.06	Oct. 3	10.35
10	7.54	11	7.07	18	8.44	10	9.81
17	7.46	18	6.85	25	8.42	17	10.56
24	7.69	25	6.71	Aug. 1	9.79	24	10.66
31	7.56	May 2	7.24	9	9.44	31	10.91
Feb. 7	7.24	9	7.37	16	9.46	Nov. 7	9.22
14	7.44	16	6.44	22	9.71	14	9.25
21	7.35	23	7.37	29	9.44	28	9.56
28	6.88	June 6	7.58	Sept. 6	9.43	Dec. 5	9.21
Mar. 7	6.88	13	7.84	12	9.02	12	9.69
15	6.81	20	7.86	19	10.35	19	9.28
21	7.46	27	8.44	26	10.28	27	9.49
28	6.91						

Barrington 10. Charles Douglas. About 100 feet east of Clark Road, 1,150 feet south of intersection of Clark and Nayatt Roads, and 1.1 miles east of Nayatt Point. Water in sand and gravel. Records available: 1947-49.

Jan. 29	35.13	May 31	34.16	Aug. 31	35.69	Oct. 31	36.47
Mar. 2	34.60	June 29	34.65	Sept. 20	35.95	Nov. 29	36.61
30	34.22	July 29	35.18	29	36.04	Dec. 29	37.06
Apr. 27	33.97						

Bristol 27. H. T. Sullivan. About 50 feet west of Hope Street, opposite Tupelo Street and 0.5 mile south of Bristol-Warren town line. Unused dug well, diameter 30 inches, depth 26.3 feet. Water in glacial till. Records available: 1949.

Bristol 27 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 8	13.00	Aug. 4	15.86	Sept. 9	16.73	Oct. 17	17.58
14	14.07	12	16.17	12	16.82	31	17.87
22	15.00	22	16.34	29	17.23	Nov. 29	16.20
28	15.41	29	16.51	Oct. 10	17.56	Dec. 29	14.36

Kent County

Coventry 32. Warwick and Coventry Water Co. test well. About 50 feet southeast of No. 2 pumping station, 0.35 mile north of State Highway 3 and 0.3 mile southeast of Washington. Driven unused test well, diameter 2.5 inches, depth 34.2 feet. Water level influenced by nearby pumping wells. Water in sand and gravel. Records available: 1948-49. Dec. 6, 1948, 8.50; Dec. 14, 8.50; Dec. 21, 8.47; Dec. 28, 8.40; Dec. 29, 9.07.

1949		Mar. 31	a4.50	July 5	a7.84	Oct. 4	10.82
Jan. 4	7.80	Apr. 5	a4.64	11	a7.83	11	11.11
11	7.05	12	5.36	18	8.56	18	11.36
18	6.65	18	a4.27	26	8.20	25	11.48
24	5.90	25	5.11	Aug. 2	8.62	Nov. 1	11.52
28	5.14	3	5.64	9	8.80	8	11.60
Feb. 1	6.30	9	6.88	16	8.64	15	11.65
7	6.30	17	7.47	23	9.04	22	11.55
15	6.80	24	6.50	29	8.37	29	11.43
22	5.70	30	a5.80	Sept. 7	8.66	Dec. 6	11.18
Mar. 3	6.09	June 7	8.55	14	9.14	13	11.55
15	a4.58	15	8.29	19	9.18	19	11.45
22	5.95	21	a7.83	26	10.22	27	11.41
28	a4.31						

a Wells not pumping.

East Greenwich 3. East Greenwich Water Co. pumping station 3. About 300 feet west of Post Road (U. S. Highway 1), 150 feet north of Hunt River, and 1.6 miles southwest of East Greenwich. Water level influenced by pumping well nearby. Screened in sand and gravel. Records available: 1944-47, 1949.

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.0	6.5	6.6	9.1	10.5	11.5	11.8	12.2	11.3	11.0
2	6.3	6.6	4.3	9.2	10.6	11.5	11.8	12.2	11.3	11.0
3	6.5	6.5	6.8	9.2	10.6	11.5	11.8	12.2	11.3	11.0
4	6.5	a4.3	7.0	9.3	10.7	11.6	11.8	12.0	11.2	11.0
5	6.7	6.3	7.0	9.3	10.7	11.6	11.8	12.0	11.2	11.0
6	6.7	6.3	7.3	9.4	10.7	11.6	11.8	12.0	11.2	10.9
7	6.5	a4.5	7.4	9.4	10.8	11.7	11.8	12.0	11.2	10.9
8	6.8	a4.5	7.4	9.5	10.8	11.7	11.9	12.0	11.2	10.9
9	6.5	6.5	7.6	9.5	10.8	11.7	11.9	12.0	11.2	10.9
10	6.4	6.6	7.7	9.6	10.8	11.7	11.9	12.0	11.0	10.8
11	6.5	a4.2	7.7	9.6	10.8	11.7	11.9	12.0	11.0	10.8
12	6.3	6.7	7.8	9.7	10.8	11.8	11.9	11.8	11.0	10.8
13	6.3	6.7	7.7	9.7	10.9	11.8	12.1	11.8	11.0	10.8
14	6.3	6.5	7.8	9.8	10.9	11.8	12.1	11.8	11.0	10.8
15	6.4	6.5	7.8	9.8	11.0	11.8	12.1	11.7	11.0	10.8
16	6.5	6.7	7.8	9.8	11.0	11.8	12.1	11.7	11.0	10.8
17	6.3	a4.3	8.0	9.9	11.1	11.9	12.1	11.7	11.1	10.8
18	6.3	a4.4	8.2	9.9	11.1	11.9	12.1	11.6	11.1	10.8
19	6.3	6.6	8.3	9.9	11.2	11.9	12.1	11.6	11.1	10.8
20	6.3	6.5	8.3	10.0	11.3	11.9	12.1	11.6	11.1	10.8
21	6.3	6.5	8.3	10.1	11.3	11.9	12.1	11.5	11.1	10.8
22	6.3	6.6	8.4	10.0	11.3	11.9	12.1	11.5	11.1	10.8
23	6.3	6.8	8.5	10.2	11.3	12.0	12.2	11.5	11.1	10.8
24	a4.0	a4.3	8.7	10.2	11.3	12.0	12.2	11.5	11.1	10.8
25	6.5	6.8	8.8	10.3	11.3	12.0	12.2	11.5	11.1	10.7
26	a4.0	6.7	8.8	10.3	11.3	12.0	12.2	11.4	11.1	10.7
27	6.4	6.4	8.9	10.4	11.3	12.0	12.2	11.4	11.0	10.7
28	6.3	6.5	8.9	10.4	11.4	12.0	12.2	11.4	11.0	10.7
29	a4.3	a4.3	9.0	10.5	11.4	11.9	12.2	11.4	11.0	10.7
30	6.5	a4.4	9.1	10.5	11.5	11.9	12.2	11.4	11.0	10.7
31	6.4		9.1		11.5	11.8		11.3		10.5

a Not pumping.

Warwick 33. East Greenwich Water Co. pumping station 2. About 100 feet east of Post Road (U. S. Highway 1), 600 feet north of Hunt River, and 1.6 miles southwest of East Greenwich. Water level influenced by pumping well nearby. Screened in sand and gravel. Records available: 1944-47, 1949.

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.5	5.3	5.5	8.0	9.4	10.5	10.8	11.0	10.3	10.0
2	5.5	5.3	a8.2	8.1	9.4	10.5	10.8	11.0	10.3	10.0
3	5.5	5.3	5.7	8.3	9.5	10.5	10.8	11.0	10.3	10.0
4	5.5	a8.0	5.8	8.3	9.6	10.5	10.8	10.8	10.3	10.0
5	5.6	5.4	6.0	8.3	9.6	10.5	10.8	10.8	10.3	9.8
6	5.6	5.3	6.0	8.4	9.8	10.6	10.8	10.8	10.2	9.8
7	5.5	a7.8	6.1	8.5	9.8	10.6	10.8	10.7	10.2	9.8
8	5.6	a8.0	6.2	8.6	9.8	10.6	10.8	10.7	10.2	9.8
9	5.7	5.5	6.5	8.6	9.8	10.6	10.8	10.6	10.2	9.8
10	5.7	5.4	6.5	8.6	9.8	10.6	10.8	10.6	10.0	9.8
11	5.8	a8.1	6.6	8.7	9.8	10.6	10.8	10.5	10.0	9.8
12	5.8	5.3	6.6	8.7	9.9	10.6	10.8	10.5	10.0	9.8
13	5.7	5.5	6.6	8.8	9.9	10.7	10.9	10.5	10.0	9.8
14	5.7	5.4	6.8	8.8	9.9	10.7	10.9	10.5	10.0	9.8
15	5.7	5.4	6.9	8.8	10.0	10.8	10.9	10.5	10.0	9.8
16	5.6	5.4	6.9	8.8	10.0	10.8	10.9	10.5	10.0	9.8
17	5.8	a8.3	7.0	8.9	10.1	10.8	10.9	10.5	10.1	9.8
18	5.8	a8.0	7.0	8.9	10.1	10.8	10.9	10.5	10.1	9.8
19	5.8	5.8	7.1	8.9	10.2	10.8	10.9	10.5	10.1	9.8
20	5.8	5.4	7.1	9.0	10.2	10.8	10.9	10.5	10.1	9.8
21	5.8	5.3	7.1	9.0	10.3	10.8	10.9	10.5	10.1	9.8
22	5.8	5.5	7.1	9.1	10.3	10.9	10.9	10.4	10.1	9.8
23	5.8	5.4	7.3	9.2	10.3	10.9	11.0	10.4	10.1	9.7
24	a6.8	a8.5	7.5	9.2	10.3	10.9	11.0	10.4	10.1	9.7
25	5.7	5.6	7.5	9.2	10.3	10.9	11.0	10.4	10.1	9.7
26	a7.0	5.4	7.8	9.3	10.3	10.9	11.0	10.3	10.1	9.7
27	5.5	5.4	7.8	9.3	10.3	10.9	11.0	10.3	10.0	9.7
28	5.3	5.5	7.9	9.3	10.4	10.9	11.0	10.3	10.0	9.7
29	a7.8	a8.7	8.0	9.3	10.4	10.8	11.0	10.3	10.0	9.7
30	5.3	a8.7	8.0	9.4	10.4	10.8	11.0	10.3	10.0	9.5
31	5.5		8.0		10.5	10.8		10.3		9.5

a Pumping.

Warwick 39. U. S. Naval Advance Base Depot pumping station 9A, Davisville. About 1,250 feet east of Post Road (U. S. Highway 1), 0.1 mile north of Hunt River, and 1.6 miles southwest of East Greenwich. Water level influenced by pumping well nearby. Screened in sand and gravel. Records available: 1943-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a15.3	23.3	a11.8	a12.5	a11.3	22.3	15.3	26.1	a17.3	27.3	a18.3	27.3
2	26.2	23.4	a11.7	a12.5	a11.0	22.3	15.4	a16.8	a16.9	27.3	28.0	27.5
3	25.8	23.5	a12.3	a12.5	a11.3	22.6	25.3	26.6	a17.8	27.8	28.3	27.6
4	25.7	a13.0	a12.0	a12.5	a11.2	22.3	25.1	a17.0	a17.3	a18.3	a18.8	28.0
5	25.5	a13.6	a12.3	22.4	a11.0	22.0	26.4	a16.7	a17.0	27.5	28.2	27.4
6	a15.0	a13.6	a12.0	22.6	a11.2	22.6	25.9	27.2	a17.1	28.3	28.4	27.0
7	a15.0	a13.3	a12.0	a12.4	a11.0	22.4	25.2	27.2	a17.7	28.3	28.0	27.4
8	25.3	a12.6	23.2	a11.7	a11.0	23.9	a15.1	27.8	a17.3	28.5	27.9	27.6
9	a15.0	a12.4	a12.0	a12.3	a11.3	22.9	a16.3	a17.3	a17.3	28.1	28.0	28.0
10	25.0	23.0	23.5	a11.6	a11.4	23.0	a16.3	a17.8	a17.3	27.9	28.2	28.3
11	a14.6	a12.5	a12.2	22.0	a11.5	22.8	a15.8	a17.9	a17.2	27.1	27.6	27.3
12	24.3	a13.0	a12.6	a11.9	a11.3	24.3	a16.3	a17.8	a18.0	27.4	28.0	27.5
13	24.2	a13.2	22.1	22.2	a11.3	24.8	a16.3	a17.6	28.2	27.9	a18.3	27.8
14	24.0	a12.2	a12.1	a12.0	a11.1	25.3	a16.3	24.4	a17.2	28.1	28.0	28.0
15	25.0	a12.3	22.5	22.2	a11.0	a15.0	a16.3	26.0	a17.8	a18.8	28.3	26.3
16	a14.6	a12.5	a12.0	a11.6	22.2	a14.3	a16.3	26.4	27.7	28.6	27.3	26.3
17	a14.3	a12.3	a12.3	a11.6	22.7	a14.5	25.4	26.2	a17.5	28.7	27.3	26.0
18	24.5	a12.2	a12.5	a11.3	22.8	26.1	25.0	26.4	28.0	28.3	27.5	26.4
19	24.0	a12.8	a12.4	a11.0	22.3	a15.0	25.3	26.2	27.6	28.0	27.6	26.7
20	24.1	a12.7	a12.3	a12.0	22.1	26.2	25.4	17.8	27.9	28.3	28.0	26.8
21	24.7	a12.3	23.0	a11.2	22.1	25.6	26.3	17.8	28.6	27.8	27.8	26.1
22	25.2	a12.3	a12.3	a12.5	22.0	23.7	26.0	a17.3	28.6	27.7	28.0	26.1
23	24.0	22.5	22.8	.....	22.3	25.0	a16.8	a17.5	28.0	28.0	27.4	26.7
24	24.0	a12.3	a12.0	a11.0	22.5	24.6	27.7	a17.5	27.7	27.9	28.0	26.5
25	a14.7	a11.7	a12.2	a11.3	22.4	a15.3	27.7	a17.8	28.0	28.0	27.8	26.0

Warwick 39 --Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	24.0	a12.5	a12.2	a11.3	22.4	a14.9	a17.0	a17.9	28.3	27.8	28.3	25.1
27	23.8	a12.0	a12.2	a10.8	22.1	23.8	a17.3	a18.0	28.1	28.1	28.0	27.3
28	a13.8	a12.5	a12.0	a11.0	22.2	a15.3	a18.3	a17.8	a17.4	27.8	27.8	25.3
29	24.2		22.3	a11.3	22.3	a15.3	a17.1	a17.1	a17.3	28.3	28.0	a16.3
30	24.3		a12.5	a11.3	22.2	a15.8	a16.1	27.1	a17.1	28.0	27.8	a16.3
31	23.8		a12.4		22.3		a17.1	27.0		28.5		26.5

a Not pumping.

Warwick 40. U. S. Naval Advance Base Depot pumping station 14A, Davisville. About 1,250 feet east of Post Road (U. S. Highway 1), 200 feet north of Hunt River, and 1.6 miles southwest of East Greenwich. Water level influenced by nearby pumping well. Screened in sand and gravel. Records available: 1943-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.5	9.3	8.0	6.9	8.0	6.3	11.3	13.1	13.6	10.8	11.8	11.4
2	9.7	9.3	8.0	6.9	7.8	6.8	11.4	13.2	13.5	10.8	12.0	11.3
3	11.1	9.3	8.2	6.6	8.3	6.7	8.1	13.5	13.8	11.3	11.3	11.4
4	11.0	9.3	8.6	7.6	8.0	6.4	8.0	13.4	13.8	10.8	10.8	11.0
5	11.0	9.4	8.3	6.5	7.7	6.4	11.3	13.3	11.3	11.0	10.6	10.8
6	11.0	8.8	8.3	7.4	7.6	6.5	11.5	13.3	14.0	11.6	10.7	12.1
7	7.6	8.8	8.1	5.2	7.3	8.3	12.0	13.3	13.8	11.8	10.7	15.6
8	8.0	8.8	8.0	5.8	7.6	7.5	12.2	13.6	14.0	12.0	11.2	11.9
9	11.0	8.6	8.1	5.8	8.0	7.3	12.3	13.6	14.0	10.9	10.9	12.1
10	11.0	8.7	...	5.8	8.1	7.2	12.5	13.6	13.9	11.0	10.8	12.3
11	10.8	8.6	6.7	6.0	8.3	6.8	12.3	13.3	13.7	11.9	10.7	10.8
12	7.8	8.3	8.0	7.1	6.2	7.8	11.8	13.5	13.7	12.4	10.8	11.0
13	7.8	8.0	6.3	7.2	8.0	8.1	12.0	13.6	13.5	12.2	10.8	10.8
14	7.6	8.4	7.8	6.2	7.9	8.3	12.3	13.2	13.9	11.0	10.8	11.0
15	7.8	8.5	6.5	5.8	6.2	10.3	12.0	13.5	13.9	11.5	11.3	10.8
16	10.5	8.3	7.8	5.8	6.2	10.7	12.2	13.4	14.0	11.8	10.8	9.8
17	7.7	8.3	6.5	6.0	6.1	10.9	12.6	13.5	12.1	11.3	11.0	10.0
18	7.8	8.4	6.7	6.0	6.6	11.4	12.1	13.4	11.8	11.8	10.8	9.6
19	7.7	8.0	6.7	5.9	6.5	11.5	12.2	13.5	11.6	12.0	10.5	9.3
20	7.6	8.6	6.7	5.9	6.3	12.0	12.3	13.8	12.9	12.3	10.6	9.5
21	7.8	8.3	6.6	6.2	7.0	10.6	12.6	14.1	11.8	12.6	12.0	9.0
22	7.5	8.4	7.8	6.0	6.9	11.2	12.8	14.0	13.5	12.4	10.8	9.2
23	9.3	8.3	7.9	7.0	6.2	11.6	11.3	13.8	13.7	11.9	10.7	9.4
24	9.3	8.5	7.8	7.3	6.1	12.0	11.3	14.0	12.0	11.7	10.5	9.5
25	9.4	8.6	6.6	7.8	6.3	11.6	11.1	14.0	12.0	12.6	10.5	9.3
26	9.5	8.0	6.6	7.9	6.6	11.8	13.0	14.0	11.5	11.7	11.8	9.3
27	9.3	8.6	6.3	8.0	6.4	12.0	13.2	13.9	13.4	12.4	11.3	9.3
28	9.3	8.6	7.7	7.8	6.2	11.8	13.3	13.8	13.5	13.0	11.0	9.5
29	7.3		6.4	8.2	6.4	11.3	13.3	13.8	13.6	11.3	11.3	9.5
30	7.5		7.8	8.2	6.4	11.0	13.4	13.9	14.0	11.3	11.3	9.0
31	7.4		6.4		6.5		13.3	13.5		12.8		9.3

Pumping on Jan. 1, 3-6, 9-11, 16, 23-28, Feb. 1-28, Mar. 1-9, 12, 14, 16, 22-24, 28, 30, Apr. 23-30, May 1-11, 13-14, June 15-30, July 1-2, 5-31, Aug. 1-31, Sept. 1-4, 6-17, 20, 22-23, 27-30, Oct. 12-13, 25, 27-28, 31, Nov. 2, 21, Dec. 6-9. Measured daily by tape.

Warwick 59. Our Lady of Providence Seminary. About 350 feet east of Warwick Neck Ave., 200 feet south of Aldrich Ave., and 1.25 miles north of Warwick Point. Dug unused well, diameter 30 inches, depth 27 feet. Water in glacial till. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 20	4.44	June 29	8.96	Sept. 29	18.18	Nov. 29	19.04
29	5.03	July 29	12.84	Oct. 31	24.77	Dec. 29	16.29
May 31	5.30	Aug. 31	16.14				

Newport County

Portsmouth 72. St. Mary's Church (parish house). About 30 feet west of East Main Road, 3,200 feet northeast of intersection of East Main Road and Mitchell Lane, and 3,200 feet northeast of the Portsmouth-Middletown town line. Water in glacial till. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	16.14	Apr. 5	16.01	July 5	21.67	Oct. 4	28.63
11	13.03	12	15.01	12	22.34	11	29.01
18	15.32	20	16.41	19	22.93	18	29.27
23	15.85	26	16.07	26	23.47	25	29.54
Feb. 1	13.97	May 3	17.08	Aug. 2	23.99	Nov. 1	29.77
8	13.21	11	17.98	9	24.50	8	29.84
15	12.97	17	18.57	16	24.97	15	29.91
23	13.84	24	19.03	23	25.53	22	29.94
Mar. 4	14.31	31	19.30	30	26.07	29	29.90
9	13.72	June 7	19.53	Sept. 6	26.63	Dec. 6	29.62
16	13.79	14	19.98	13	27.21	13	29.15
22	15.51	21	20.50	20	27.73	20	28.70
29	13.44	28	21.05	29	28.33	28	28.20

Tiverton 31. North Tiverton Water District, test well 31, Boesseneau well field. About 0.1 mile west of Eight Rod Way, 0.7 mile north of intersection of Eight Rod Way and Mile Road and 1.5 miles northeast of Tiverton. Water level influenced by pumping wells nearby. Water in sand and gravel. Records available: 1947-49.

Jan. 1	a3.18	Apr. 9	a+0.04	July 9	a8.57	Oct. 8	6.81
8	a+2.88	16	+3.23	16	a9.67	15	7.07
15	+3.33	23	a3.13	23	6.08	22	7.27
22	a1.36	30	a+1.61	30	5.28	30	7.37
29	a.03	May 7	a+.22	Aug. 6	6.09	Nov. 5	7.45
Feb. 5	+3.48	14	a+.22	13	6.51	12	5.77
12	(b)	21	+2.07	21	6.33	19	6.83
19	a.29	28	+2.36	27	6.72	26	5.33
26	a.04	June 4	a3.04	Sept. 3	a12.02	Dec. 3	6.88
Mar. 5	a.73	12	+3.6	10	a7.60	10	6.48
12	a2.60	19	a3.84	17	7.27	17	a11.70
19	+3.26	25	a7.54	24	a2.39	24	a11.33
26	+3.26	July 3	2.92	Oct. 2	6.72	31	4.36
Apr. 2	a.21						

a Pumping.

b Flowing.

Tiverton 47. North Tiverton Water District well 16, McIntyre well field. About 900 feet east of Eight Rod Way, 0.6 mile south of intersection of Eight Rod Way and Mile Road, and about 1 mile east of Tiverton. Water level influenced by pumping wells nearby. Water in sand and gravel. Records available: 1947-49.

Jan. 1	+1.48	Apr. 9	+0.37	July 9	a11.91	Oct. 8	a15.22
8	a2.37	16	+1.26	16	9.48	15	13.78
15	a3.46	23	a2.13	23	a14.70	22	14.14
22	+0.2	30	a2.61	30	a16.47	30	a14.56
29	1.26	May 7	a.16	Aug. 6	a15.97	Nov. 5	a14.62
Feb. 5	+5.8	14	a.16	13	15.41	12	14.10
12	a3.01	21	+6.2	21	15.81	19	14.31
19	a2.59	28	a3.09	27	a15.20	26	a13.45
26	+1.16	June 4	a2.31	Sept. 3	14.10	Dec. 3	a13.26
Mar. 5	a1.98	12	a.92	10	a15.27	10	14.67
12	a3.05	19	a1.37	17	15.07	17	a14.80
19	a3.18	25	a5.64	24	a15.20	24	a13.58
26	+1.02	July 3	a10.90	Oct. 2	a14.46	31	a9.23
Apr. 2	a.99						

a Pumping.

Providence County

Burrillville 21. Cyrille Bruynel. About 25 feet north of Tarkiln Road, 1.25 miles southwest of intersection of Tarkiln Road and Douglas Pike and 1.1 miles south of Oak Valley. Water in glacial till. Records available: 1947-49. Oct. 28, 13.39.

Burrillville 29. Wanskuck Wool Co. well 5. In shelter 70 feet north-east of Douglas Pike, 600 feet northeast of Wanskuck Wool Co. plant, in Mohegan. Water in bedrock. Records available: 1947-49. Oct. 28, 14.40.

Burrillville 54. Vernon Rug Mill. About 100 feet northeast of Tarkiln Road, 675 feet southwest of Douglas Pike, in Oak Valley. Water in sand and gravel. Records available: 1947-49. Oct. 28, 14.43.

Cranston 3. Narragansett Brewing Co. pumping station 1. About 100 feet east of New York, New Haven & Hartford Railroad tracks, and 1,250 feet south of Cranston Street Bridge over railroad tracks, Cranston. Used well, measurements made $\frac{1}{2}$ hour after pump shut off. Screened in sand and gravel. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 18	31.1	Oct. 16	30.9	Nov. 13	30.5	Dec. 11	30.1
25	31.2	23	30.6	20	30.0	18	30.2
Oct. 2	31.0	30	30.5	27	30.3	25	30.3
9	31.0	Nov. 6	30.6	Dec. 4	30.1		

Cranston 4. Narragansett Brewing Co. pumping station 2. About 175 feet east of New York, New Haven & Hartford Railroad tracks and 1,720 feet south of Cranston Street Bridge over railroad tracks, Cranston. Used well, measurements made $\frac{1}{2}$ hour after pump shut off. Screened in sand and gravel. Records available: 1939-49.

Jan. 2	36.7	Apr. 3	35.7	July 3	32.0	Oct. 2	35.5
9	36.7	10	36.4	10	32.1	9	35.5
16	36.7	17	36.6	17	33.5	16	35.2
23	36.7	24	36.2	24	32.8	24	35.4
31	36.6	May 1	35.9	31	33.2	30	34.2
Feb. 6	36.0	8	36.1	Aug. 7	33.0	Nov. 6	35.0
13	35.9	15	35.6	14	34.2	13	35.0
20	35.7	22	32.4	21	33.4	20	34.4
27	35.7	29	32.4	28	33.6	27	34.4
Mar. 6	35.7	June 5	32.9	Sept. 4	33.3	Dec. 4	34.3
13	35.7	12	32.4	11	35.5	11	34.7
20	36.0	19	32.1	18	35.4	18	34.3
27	36.1	26	31.7	25	35.2	25	35.2

Cranston 12. Narragansett Brewing Co. pumping station 3. About 30 feet east of railroad siding, New York, New Haven & Hartford Railroad tracks and 1,350 feet south of Cranston Street Bridge over railroad tracks, Cranston. Water level influenced by pumping wells nearby. Screened in sand and gravel. Records available: 1938-49.

Jan. 2	30.8	Apr. 3	30.9	July 3	31.1	Oct. 2	33.6
9	31.0	10	30.8	10	31.3	9	33.7
16	30.8	17	30.9	17	31.3	16	33.6
23	30.8	24	30.8	24	31.8	23	32.8
31	30.8	May 1	30.8	31	31.6	30	32.8
Feb. 6	30.8	8	30.8	Aug. 7	32.3	Nov. 6	33.0
13	30.7	15	30.8	14	33.6	13	32.8
20	30.8	22	30.1	21	33.4	20	32.4
27	30.8	29	29.9	28	32.8	27	32.6
Mar. 6	30.8	June 5	29.7	Sept. 4	34.0	Dec. 4	32.4
13	30.8	12	30.0	11	34.0	11	32.5
20	30.8	19	30.5	18	33.6	18	32.7
27	30.8	26	31.0	25	33.5	25	32.7

Cranston 38. Narragansett Brewing Co. pumping station 4. Observation well 1. 4.1 feet west of Cranston 36, and about 200 feet east of New York, New Haven & Hartford Railroad tracks, and about 2,600 feet south of Cranston Street Bridge over railroad tracks, Cranston. Water level influenced by pumping well nearby. Water in sand and gravel. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	21.6	Apr. 4	19.7	July 7	22.8	Oct. 3	22.6
10	21.4	11	20.0	11	25.0	10	22.5
17	21.1	18	20.1	18	24.1	17	22.0
24	21.1	25	20.0	25	24.5	24	22.2
31	21.1	May 2	19.6	Aug. 1	24.7	31	22.1
Feb. 7	20.8	9	20.3	8	24.8	Nov. 7	21.5
14	20.0	16	20.0	15	24.6	14	21.2
21	19.8	23	20.1	22	24.9	21	20.8
28	20.0	June 1	20.2	29	25.5	28	20.7
Mar. 7	19.3	6	20.2	Sept. 5	25.1	Dec. 5	20.1
14	19.7	13	22.9	12	23.6	12	20.6
21	19.5	20	23.5	19	25.0	19	21.3
28	19.7	27	24.4	26	24.0	26	19.6

Cranston 39. Narragansett Brewing Co. well 2. About 200 feet east of New York, New Haven & Hartford Railroad tracks and 2,500 feet south of Cranston Street Bridge over railroad tracks, Cranston. Water level influenced by pumping well nearby. Water in sand and gravel. Records available: 1946-49.

Jan. 3	12.1	Apr. 4	11.6	July 5	13.9	Oct. 3	14.5
10	12.1	11	11.5	11	14.5	10	14.6
17	12.2	18	11.6	18	14.3	17	14.2
24	12.1	25	11.6	25	14.7	24	14.2
31	12.1	May 2	11.5	Aug. 1	14.9	31	14.3
Feb. 7	12.1	9	11.7	8	15.1	Nov. 7	14.0
14	11.7	16	11.6	15	15.3	14	13.9
21	11.6	23	11.7	22	15.4	21	13.5
28	11.4	June 1	12.0	29	15.7	28	13.2
Mar. 7	11.3	6	12.4	Sept. 5	15.6	Dec. 5	13.1
14	11.3	13	12.1	12	15.4	12	12.9
21	11.5	20	13.3	19	15.1	19	12.9
28	11.6	27	13.7	26	14.6	26	12.7

Cranston 40. Narragansett Brewing Co. well 3. About 500 feet east of New York, New Haven & Hartford Railroad tracks and about 2,500 feet south of Cranston Street Bridge over railroad tracks, Cranston. Water level influenced by pumping wells nearby. Water in sand and gravel. Records available: 1946-49.

Jan. 3	20.1	Apr. 4	19.4	July 5	21.1	Oct. 3	22.1
10	20.1	11	19.6	11	21.2	10	22.2
17	20.3	18	19.2	18	21.6	17	21.8
24	20.2	25	19.4	25	21.6	24	21.9
31	20.2	May 2	19.3	Aug. 1	21.7	31	21.7
Feb. 7	20.0	9	19.3	8	21.7	Nov. 7	21.5
14	19.5	16	19.2	15	21.8	14	21.4
21	19.2	23	19.3	22	22.0	21	21.2
28	19.2	June 1	19.2	29	22.3	28	20.9
Mar. 7	19.0	6	19.8	Sept. 5	22.2	Dec. 5	21.0
14	19.1	13	20.2	12	22.1	12	20.9
21	19.0	20	20.2	19	22.3	19	21.0
28	19.5	27	21.8	26	22.2	26	21.0

Cranston 41. Narragansett Brewing Co. well 4. About 600 feet east of New York, New Haven & Hartford Railroad tracks and about 3,000 feet south of Cranston Street Bridge over railroad tracks, Cranston. Water level influenced by pumping well nearby. Water in sand and gravel. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	21.1	Apr. 4	20.3	July 5	22.5	Oct. 3	23.1
10	20.9	11	20.3	11	23.1	10	23.1
17	21.1	18	20.3	13	22.9	17	22.6
24	21.0	25	20.3	25	23.3	24	22.8
31	21.1	May 2	20.3	Aug. 1	23.3	31	22.8
Feb. 7	21.2	9	20.3	8	23.5	Nov. 7	22.3
14	20.7	16	20.2	15	23.6	14	22.2
21	20.3	23	20.4	22	23.7	21	22.1
28	20.3	June 1	21.2	29	23.9	28	21.7
Mar. 7	19.9	6	21.0	Sept. 5	24.2	Dec. 5	21.9
14	19.9	13	21.4	12	23.6	12	21.7
21	19.7	20	22.2	19	23.3	19	21.9
28	20.4	27	22.6	26	23.3	26	21.7

Cumberland 64. Rev. W. Bath (parsonage). On north side of Sneece Pond Road, about 0.25 mile west of Arnold Mills. Water in sand and gravel. Records available: 1946-49. Oct. 28, 11.01.

Cumberland 129. Thomas Cooney Estate. About 90 feet west of Mendon Road, 0.4 mile south of Cumberland Hill. Water in glacial till. Records available: 1946-49.

Jan. 29	7.07	Apr. 30	8.05	July 29	16.23	Oct. 28	16.25
Mar. 1	6.82	May 28	9.57	Aug. 31	17.99	Nov. 28	13.65
29	7.31	June 29	13.35	Sept. 29	16.45	Dec. 29	9.78

Cumberland 265. Clarence Lawton. About 55 feet south of Scott Road, 0.25 mile northeast of Ashton. Water in sand and gravel. Records available: 1946-49.

Jan. 29	12.30	Apr. 30	12.49	July 29	16.40	Oct. 28	16.45
Mar. 1	11.67	May 28	13.53	Aug. 31	16.97	Nov. 29	14.97
29	12.34	June 29	15.09	Sept. 29	17.20	Dec. 29	12.84

Cumberland 315. J. L. Carpenter. Northeast corner of Abbott Run Valley and Bear Hill Roads and 0.9 mile south of Abbott Run. Water in sand and gravel. Records available: 1946-49. Oct. 28, 27.60.

East Providence 1. Hayden Chemical Corporation. Formerly known as Rumford Chemical Co. About 120 feet south of Newman Ave., 800 feet northeast of Greenwood Ave. and 0.6 mile south of Pawtucket Ave. Bridge over railroad tracks, Rumford. Used well, measurements made 4 hours after pump shut off. Water in sand and gravel. Records available: 1944-49.

Jan. 26	22.2	Apr. 28	22.2	July 27	22.2	Oct. 26	22.3
Feb. 25	22.2	May 26	22.2	Aug. 25	22.3	Nov. 23	22.2
Mar. 29	22.2	June 22	22.2	Sept. 27	22.2	Dec. 21	22.2

Foster 1. Old Staples Farm. About 40 feet east of Rams Tail Road, 4,000 feet north of the intersection of Rams Tail Road and Central Pike, and 0.5 mile south of South Foster. Water in overburden. Records available: 1947-49.

Jan. 29	6.16	Mar. 29	6.21	Oct. 28	13.00	Dec. 29	7.27
Mar. 2	6.44	Apr. 30	6.71	Nov. 29	11.17		

Foster 2. Winsor Road well. About 20 feet west of Winsor Road, 3,500 feet southeast of the junction of Winsor and Boss Roads, and about 1.75 miles northwest of South Foster. Water in overburden. Records available: 1947-49.

Foster 2 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	15.08	Apr. 30	10.84	July 29	15.81	Oct. 28	20.84
Mar. 2	11.81	May 28	12.24	Aug. 31	17.64	Nov. 29	(a)
29	11.01	June 29	14.02	Sept. 29	19.34	Dec. 29	(a)

a Dry.

Foster 3. Clarence S. Cook. About 60 feet north of Danielson Pike, 40 feet west of Cucumber Hill Road, and at the Connecticut-Rhode Island State line. Water in glacial till. Records available: 1947-49.

Jan. 29	23.81	Apr. 30	16.15	July 29	25.07	Oct. 28	32.54
Mar. 2	16.60	May 28	17.60	Aug. 31	28.88	Nov. 29	33.62
29	15.77	June 29	20.60	Sept. 29	30.95	Dec. 29	33.60

Foster 4. Cucumber Hill well. About 12 feet north of Cucumber Hill Road, 1.5 miles southeast of intersection of Cucumber Hill and South Killingly Roads, and 1.7 miles southeast of North Sterling church. Water in glacial till. Records available: 1947-49.

Jan. 29	7.64	Apr. 30	8.85	July 29	13.69	Oct. 28	16.71
Mar. 2	8.21	May 28	8.82	Aug. 31	14.12	Nov. 29	12.88
29	8.12	June 29	10.66	Sept. 29	12.68	Dec. 29	10.10

Foster 5. S. J. Chatterson. About 20 feet east of Foster Center Road, 3,000 feet southeast of intersection of Foster Center Road and Danielson Pike, and 0.75 mile north of Foster Center. Water in overburden. Records available: 1947-49.

Jan. 29	8.87	Apr. 30	9.08	July 29	11.48	Oct. 28	10.25
Mar. 2	8.80	May 28	9.18	Aug. 31	11.26	Nov. 29	10.10
29	8.75	June 29	10.86	Sept. 29	10.08	Dec. 29	9.24

Foster 11. Mrs. F. A. Cahoone. About 4 feet southwest of Foster Center Road, 150 feet west of King Randall Road, and 1.4 miles southeast of Foster Center. Unused dug well, diameter 30 inches, depth 14 feet. Water in glacial till. Records available: 1949. Oct. 7, 11.10; Nov. 29, 10.79; Dec. 29, 8.19.

Glocester 12. Glocester Country Club. About 10 feet east of Philips Lane, 600 feet northeast of intersection of Philips Lane and Putnam Pike, and 1,800 feet east of Harmony. Water in glacial till. Records available: 1947-49.

Jan. 29	1.82	Apr. 30	1.88	July 29	(a)	Oct. 28	4.92
Mar. 1	1.85	May 28	3.45	Aug. 31	(a)	Nov. 29	5.68
29	1.84	June 29	6.39	Sept. 29	(a)	Dec. 29	4.34

a Dry.

Glocester 62. Raymond H. Price. About 70 feet south of Douglas Hook Road, 1,300 feet east of intersection of Douglas Hook and Cooper Roads, and 1,800 feet west of Pine Tree Chapel. Water in sand and gravel. Records available: 1947-49. Oct. 28, 17.23.

Lincoln 84. Lincoln Bleachery & Dye Works, Lonsdale. About 5 feet north of machine shop, 0.1 mile northwest of Lonsdale. Water level influenced by pumping wells nearby. Screened in sand and gravel. Records available: 1946-49.

Jan. 7	4.55	Jan. 29	5.45	Feb. 19	4.97	Mar. 12	5.19
15	5.55	Feb. 5	5.57	26	4.61	19	5.38
22	5.58	12	5.51	Mar. 5	5.38	25	4.65

Lincoln 84 --Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 1	5.37	June 10	5.75	Aug. 19	6.14	Oct. 28	6.28
9	4.87	17	5.67	26	6.19	Nov. 5	6.17
15	4.80	24	5.87	Sept. 2	5.88	12	6.66
22	4.86	July 1	5.94	9	6.04	19	6.47
29	5.19	8	6.52	16	6.05	26	6.55
May 7	5.42	15	6.18	23	5.62	Dec. 3	6.49
13	5.61	22	6.05	30	6.00	10	6.36
20	5.52	30	6.30	Oct. 7	6.15	17	6.37
28	5.15	Aug. 5	6.04	14	6.34	23	6.69
June 3	5.43	12	5.97	22	6.44	30	6.36

Lincoln 161. Sayles Finishing Plants, Inc., upper bleachery well. About 0.2 mile southwest of Walker Street and 0.2 mile southwest of Scott Pond. Water level influenced by pumping wells nearby. Screened in sand and gravel. Records available: 1946-49.

Jan. 31	2.60	Apr. 25	1.50	June 30	2.33	Oct. 30	3.17
Feb. 28	2.08	May 31	1.58	July 25	2.67	Dec. 27	3.42
Mar. 28	1.92						

Lincoln 199. Mrs. Mary Greene. 50 feet east of Louisquisset Pike, 0.5 mile south of junction of Washington and Louisquisset Pikes. Water in glacial till. Records available: 1946-49. Oct. 28, 15.16.

North Smithfield 21. James W. Shaw. About 350 feet northeast of Great Road, 0.75 mile northwest of intersection of Great and Pound Hill Roads, in Branch Village. Water in sand and gravel. Records available: 1947-49.

Jan. 29	7.55	Apr. 30	7.64	July 29	10.44	Oct. 28	11.31
Mar. 1	7.25	May 28	8.44	Aug. 31	10.89	Nov. 29	10.46
29	7.33	June 29	9.66	Sept. 29	10.92	Dec. 29	9.53

North Smithfield 103. Douglas Pike well. About 90 feet northeast of Douglas Pike, 0.9 mile northwest of intersection of Douglas and Farnum Pikes, and 0.8 mile west of Primrose. Water in sand and gravel. Records available: 1947-49. Oct. 28, 15.49.

Providence 5. American Silk Spinning Co. 339 feet south of Admiral St., 111 feet southeast of Whipple Street, and 1.1 miles northwest of Providence. Water in bedrock. Records available: 1944-49.

Jan. 29	8.21	Apr. 27	7.67	July 29	8.44	Oct. 31	8.80
Mar. 1	7.88	May 28	7.82	Aug. 31	8.74	Nov. 29	8.94
29	7.91	June 29	8.20	Sept. 29	8.79	Dec. 29	8.99

Providence 48. Gorham Manufacturing Co. On bank of Mashapaug Pond, 700 feet northwest of Adelaide Ave., and 1,050 feet southwest of New York, New Haven & Hartford Railroad tracks, and 2.2 miles southwest of Providence. Water level influenced by pumping wells nearby. Screened in sand. Records available: 1944-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	6.69	6.51	6.48	....	6.37	6.80	....	7.26	7.39	7.42	7.44
2	....	6.70	6.53	6.49	6.27	6.37	6.78	7.02	7.32	7.37	7.35	7.45
3	6.80	6.73	6.54	6.48	6.23	6.40	6.76	7.01	7.29	7.42	7.40	7.40
4	6.81	6.67	6.54	6.53	6.25	6.37	6.78	7.01	7.28	7.44	7.35	7.37
5	6.78	6.68	6.48	6.51	6.25	6.36	6.79	7.06	7.29	7.44	7.35	7.39

Providence 48.--Continued.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	6.74	....	6.44	6.46	6.25	6.42	6.80	6.96	7.35	7.49	7.32	7.46
7	6.74	a6.62	6.49	6.36	6.25	6.45	6.79	6.96	7.37	7.49	7.34	7.41
8	6.72	....	6.48	6.36	6.23	6.48	6.81	7.03	7.37	7.44	7.31	7.46
9	6.70	6.63	6.48	6.32	6.27	6.48	6.84	7.08	7.38	7.41	7.35	7.50
10	6.72	6.64	6.47	6.32	6.28	6.48	6.81	7.11	7.38	7.46	7.35	7.49
11	6.74	6.64	6.43	6.35	6.30	6.46	6.82	7.15	7.36	7.45	7.34	7.47
12	6.73	6.63	6.42	6.35	6.29	6.46	6.86	7.07	7.39	7.45	7.36	7.46
13	6.75	6.59	6.42	6.33	6.33	6.52	6.81	7.03	7.39	7.51	7.36	7.49
14	6.76	6.61	6.48	6.32	6.29	6.55	6.84	6.99	7.36	7.49	7.34	....
15	6.77	6.60	6.47	6.33	6.31	6.56	6.85	7.01	7.37	7.46	7.30	....
16	6.73	6.60	6.49	6.30	6.35	6.58	6.86	7.05	7.37	7.44	7.26	7.49
17	6.77	6.60	6.48	6.30	6.34	6.60	6.85	7.04	7.34	7.50	7.24	7.47
18	6.78	6.60	6.45	6.36	6.36	6.59	6.88	7.07	7.32	7.51	7.19	....
19	6.77	6.57	6.48	6.25	6.33	6.57	6.90	7.12	7.36	7.48	7.19	7.47
20	6.79	6.54	6.47	6.25	6.36	6.60	6.89	7.11	7.37	7.49	7.14	7.50
21	6.78	6.60	6.46	6.23	6.32	6.59	6.88	b7.11	7.39	7.49	7.23	7.46
22	6.67	6.56	6.45	6.25	6.27	6.61	6.91	7.17	7.42	7.45	7.27	7.46
23	6.66	6.55	6.42	6.18	6.19	6.63	6.91	7.18	7.40	7.45	7.30	7.45
24	a6.67	6.55	6.44	6.20	6.19	6.68	6.91	7.22	7.38	7.49	7.28	7.47
25	6.63	6.51	6.42	6.26	6.21	6.67	7.01	7.23	7.36	7.52	7.32	7.42
26	6.62	6.48	6.41	6.24	6.27	6.66	6.99	7.22	7.39	7.44	7.36	7.41
27	....	6.47	6.38	6.27	6.27	6.74	6.99	7.23	7.40	7.45	7.38	7.41
28	....	6.51	6.44	6.26	6.31	6.80	7.00	7.21	7.38	7.40	7.44	7.44
29	....		6.46	6.29	6.29	6.80	7.00	7.24	7.40	7.38	7.41	7.44
30	....		6.45	....	6.30	6.79	6.98	7.28	7.43	7.35	7.41	7.45
31	a6.66		6.45		6.34		6.96	7.28		7.33		7.45

a Tape measurement.

b Fluctuation caused by earthquake in Alaska 0.06 foot.

Providence 81. Nicholson File Co. well 2. About 120 feet west of Acorn St., 230 feet north of Tingley St. and 2 miles west of Providence. Used well, altimeter measurements made about 12 hours after pump shut off. Screened in sand and gravel. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	19.0	Apr. 17	17.0	June 26	20.0	Sept. 25	25.0
16	18.5	24	17.0	July 3	21.0	Oct. 2	20.0
23	18.5	May 1	17.0	10	18.0	9	20.0
Feb. 6	19.5	8	16.5	17	15.0	23	20.5
20	17.5	15	18.0	24	15.0	30	20.0
27	19.0	22	17.5	31	21.0	Nov. 6	20.5
Mar. 6	17.5	29	15.0	Aug. 14	24.5	13	15.0
27	17.5	June 5	16.0	21	24.5	Dec. 11	18.0
Apr. 3	17.5	12	19.0	28	25.0	18	18.5
10	17.0	19	19.5	Sept. 4	22.0		

Providence 82. Nicholson File Co. well 1. About 225 feet west of Acorn St., 360 feet north of Tingley St. and 2 miles west of Providence. Pumping well, altimeter measurements made about 12 hours after pump shut off. Screened in sand and gravel. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	14.0	Apr. 17	12.5	June 26	15.0	Sept. 25	20.0
16	13.5	24	12.0	July 3	16.0	Oct. 2	15.0
23	14.0	May 1	12.0	10	13.5	9	15.0
Feb. 6	15.0	8	12.0	17	10.0	23	15.5
20	13.0	15	13.0	24	10.0	30	15.0
27	14.0	22	13.0	31	16.0	Nov. 6	15.5
Mar. 6	13.0	29	10.0	Aug. 14	19.5	13	10.0
27	13.0	June 5	11.0	21	19.5	Dec. 11	13.0
Apr. 3	13.0	12	14.5	28	20.0	18	13.5
10	12.0	19	14.8	Sept. 4	17.0		

Providence 94. Providence Gas Co. Sassafras Point plant. About 2,050 feet east of Allens Avenue, 1,100 feet north of Terminal Road, and 2.1 miles south of Providence. Water level influenced by tides and pumping well nearby. Screened in sand. Records available: 1944-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a17.47	17.86	.....	18.25	18.66	19.59	19.16	19.87	20.13	19.74
2	17.84	18.15	18.22	18.44	19.59	19.32	19.65	19.74	19.31
3	17.89	18.05	18.23	18.56	19.48	19.39	19.98	19.84	19.20
4	17.53	18.02	18.23	18.72	19.51	19.38	20.28	.....	19.08
5	17.40	17.97	18.17	18.56	19.70	19.41	20.40	.....	19.10
6	17.17	17.94	18.27	18.67	19.90	19.59	20.40	.....	19.00
7	17.38	17.90	18.26	18.55	19.70	19.55	20.39	19.17	19.13
8	a16.70	17.23	18.03	18.32	19.65	19.83	19.52	20.27	19.61	18.80
9	17.80	18.05	18.37	19.67	20.03	19.44	20.26	19.85	18.96
10	17.65	18.05	18.58	19.24	19.89	19.50	20.27	19.75	19.31
11	a16.47	18.00	18.22	18.53	19.33	20.01	19.14	.....	19.67	19.55
12	17.94	18.02	18.56	19.33	19.77	18.96	.....	19.78	19.46
13	18.15	17.90	18.58	19.42	19.73	19.70	.....	19.50	19.52
14	17.56	17.71	17.90	18.57	19.32	19.54	18.86	.....	19.59	19.23
15	17.70	17.82	18.05	18.60	19.06	19.41	19.05	.....	19.67	19.26
16	17.68	17.63	18.00	13.84	19.18	19.15	19.18	.....	19.86	19.19
17	17.79	17.58	18.00	13.04	19.54	.....	19.35	20.24	19.70	19.39
18	17.70	17.41	17.90	12.73	19.59	.....	19.47	20.23	20.04	19.48
19	17.56	17.32	17.78	12.38	19.12	.....	19.72	20.22	20.03	19.58
20	17.35	17.87	12.20	19.03	.....	19.91	20.24	19.88	19.44
21	17.68	17.59	17.72	11.97	19.31	.....	20.02	20.07	19.87	19.44
22	17.70	17.58	17.52	11.84	19.32	.....	19.90	19.82	19.75	19.66
23	17.71	17.51	17.90	11.92	19.07	20.18	19.84	19.62	19.35	19.34
24	17.88	17.51	18.03	11.89	19.65	20.09	20.18	19.16	20.08	19.44
25	17.72	18.05	17.91	11.91	19.54	19.93	20.15	19.33	19.25	19.19
26	17.74	17.64	18.02	12.01	19.91	20.07	20.10	19.07	19.48	19.64
27	17.79	17.74	17.80	11.84	19.91	20.06	19.84	19.98	18.95	.....
28	17.94	17.60	17.85	11.87	19.97	19.64	19.64	19.99	19.21	.....
29	a16.34	.....	18.13	17.73	17.75	11.86	19.98	19.47	19.54	19.95	19.40	.....
30	18.09	.....	17.85	11.82	19.97	19.34	19.69	20.05	19.51	.....
31	18.03	.....	18.00	.....	19.48	19.30	.....	20.12	.....	.....

a Tape measurement.

Providence 113. Providence Young Men's Christian Association. In boiler room, 153 feet northeast of Stewart Street, 68 feet northwest of Conduit Street, and 0.8 mile southwest of Providence. Water in bedrock. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	47.53	Apr. 27	47.38	July 29	47.50	Oct. 31	47.15
Mar. 1	47.48	May 31	47.51	Aug. 31	47.46	Nov. 29	47.07
30	47.50	June 29	47.69	Sept. 29	47.36	Dec. 29	47.07

Providence 1051. U. S. Rubber Co. About 140 feet south of Valley St., 330 feet east of Eagle St. and 2.25 miles west of Providence. Water level influenced by pumping wells nearby. Open end pipe in sand and gravel. Records available: 1948-49.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a9.99	.....	.....	10.35	8.65	12.19	8.31	13.75	12.89	11.53	12.39
2	a9.73	.....	8.07	9.75	12.20	9.14	14.10	12.05	12.30	12.60
3	8.95	10.52	11.52	9.90	14.10	9.24	12.56	12.60
4	9.80	10.61	9.44	10.50	13.40	10.39	12.96	12.00
5	a10.01	.....	.....	8.66	10.53	10.40	8.92	10.82	10.99	11.36	13.10	10.57

Providence 1051.--Continued.

Lowest daily water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	9.54	10.95	9.13	10.27	10.90	9.65	12.16	12.90	11.20
7	10.08	10.96	9.92	11.21	10.78	11.48	12.64	10.81	11.47
8	10.39	10.10	10.79	11.80	9.67	12.80	12.66	11.02	12.42
9	a10.35	a9.79	10.40	7.94	11.44	11.83	10.65	13.35	12.43	11.33	12.74
10	9.74	9.18	11.89	10.94	11.47	13.34	10.25	11.61	12.75
11	7.70	10.06	11.90	8.54	12.14	12.96	11.03	11.63	12.28
12	a11.80	.....	.....	8.86	10.68	11.44	7.53	12.57	11.02	11.16	10.16	9.83
13	9.78	11.11	9.90	7.50	12.58	12.02	a10.10	7.40	10.93
14	10.53	11.12	10.55	7.41	12.02	12.70	.....	7.10	11.96
15	10.82	10.68	11.25	7.25	10.00	13.19	.....	9.02	12.53
16	a10.47	a9.43	10.82	8.41	11.87	6.70	a9.48	13.51	.....	10.40	13.03
17	9.95	8.47	12.21	6.17	a11.35	13.52	.....	11.40	13.02
18	7.78	9.70	12.22	5.51	.....	12.85	.....	12.27	12.41
19	8.90	10.72	11.80	4.55	.....	9.89	.....	12.28	10.36
20	a11.62	.....	.....	9.68	11.37	9.68	b4.18	.....	10.87	.....	11.89	11.59
21	10.16	11.55	10.47	4.90	.....	11.75	.....	9.80	12.24
22	10.48	.....	11.47	6.18	a10.91	12.53	.....	10.83	12.72
23	a10.28	a9.65	10.49	.....	12.52	6.44	.....	13.02	.....	11.66	12.97
24	9.66	.....	13.12	5.92	.....	13.04	.....	11.80	12.97
25	7.79	a9.84	13.14	5.90	13.34	12.69	.....	10.90	12.17
26	8.87	10.49	12.55	7.70	13.75	10.09	12.03	10.92	9.62
27	9.64	10.68	10.25	9.22	13.77	10.78	12.67	10.86	8.65
28	10.22	10.70	10.90	10.23	13.38	11.79	13.03	10.65	10.16
29	10.67	9.91	11.58	10.92	11.62	12.50	13.03	11.39	11.36
30	a9.30	10.76	7.74	12.10	11.01	12.41	12.88	12.63	12.00	12.17
31	7.26	.....	10.43	13.16	.....	10.53	.....	12.28

a Tape measurement.

b No pumping (static).

c Estimated.

Providence 1110. Roger Williams Brewery, Simon Shatkin, trustee.
About 6 feet south of Oak St., 140 feet west of Troy St., and 1.9 miles
west of Providence. Water in sand and gravel. Records available: 1945-49.
Nov. 1, 6.58.

Providence 1111. Brown University. Opposite corner of George and
Magee Sts., Providence, in basement of Rhode Island Hall. Water in glacial
till. Records available: 1946-49.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.99	.....	.....	.....	.....	15.83	.....	.....	18.39	17.64
2	11.99	.....	.....	.....	.....	.....	18.40	17.62
3	13.27	.....	.....	.....	.....	.....	.....	.....	.....	17.72	18.40	17.60
4	11.73	.....	.....	.....	.....	.....	17.80	18.33	17.58
5	14.92	.....	16.94	17.80	18.14	17.52
6	13.32	.....	.....	.....	17.82	18.08	.....
7	10.84	10.75	.....	.....	.....	.....	.....	.....	.....	18.04	17.41
8	16.09	.....	17.85	18.01	17.37
9	12.49	.....	.....	.....	.....	17.87	17.97	17.31
10	12.65	.....	.....	.....	.....	.....	.....	.....	.....	17.91	17.94	.....
11	10.76	.....	.....	15.19	.....	.....	17.91	.....	17.23
12	17.17	.....	17.88	17.20
13	13.73	.....	.....	.....	17.97	17.85	17.15
14	10.86	11.02	.....	.....	.....	.....	.....	.....	18.00	17.82	17.11
15	16.28	.....	.....	17.81	17.08
16	12.95	.....	.....	.....	.....	18.05	17.80	17.04
17	12.30	.....	.....	.....	.....	.....	.....	.....	.....	18.07	.....	.....
18	11.07	.....	.....	15.44	.....	.....	.....	17.76	.....
19	17.39	18.11	17.75	.....
20	12.29	.....	.....	.....	.....	14.10	.....	.....	.....	.....	17.74	.....
21	18.16	17.71	.....
22	10.20	.....	.....	12.97	.....	.....	16.45	.....	18.20	17.71	.....
23	11.57	.....	.....	.....	.....	.....	.....	18.20	.....	.....
24	11.63	.....	.....	.....	.....	.....	.....	.....	.....	18.23	.....	.....
25	15.64	.....	.....	18.27	17.67	.....

Providence 1111 --Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	11.31	.....	.....	.....	.....	17.62	18.28	.....	.....
27	14.48	.....	.....	.....	18.30	17.68	16.60
28	11.31	.....	.....	.....	.....	.....	.....	18.32	17.67	16.57
29	16.67	.....	.....	17.67	.....
30	12.73	.....	.....	.....	.....	18.36	17.65	.....
31	11.27	.....	.....	.....	.....	.....	.....	.....	.....	18.37	.....	.....

Scituate 3. Philippe Plante. About 60 feet east of Tucker Road, 0.3 mile northwest of intersection of Tucker and Elmdale Roads, and 1.1 miles south of Waldron Corners. Water in glacial till. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	9.41	Apr. 30	11.27	July 29	18.14	Oct. 28	(a)
Mar. 1	10.00	May 28	12.10	Aug. 31	(a)	Nov. 29	(a)
29	10.11	June 29	16.04	Sept. 29	(a)	Dec. 29	15.70

Scituate 4. City of Providence Water Supply Board. About 6 feet east of Round Hill Road, 3,100 feet northwest of intersection of Round Hill Road and Plainfield Pike, and 1.1 miles north of Clayville. Water in sand and gravel. Measurements discontinued after Mar. 29, 1949. Records available: 1947-49. Jan. 29, 15.24; Mar. 1, 15.26; Mar. 29, 15.30.

Smithfield 43. L. M. Gardner. On north side of Washington Pike, 0.1 mile northeast of Jencks Hill Road and 3.3 miles west of Ashton. Water in glacial till. Records available: 1946-49. Oct. 28, 1930.

Smithfield 66. E. Sheffiel. About 2 feet east of Tarkiln Road, 400 feet south of intersection of Tarkiln and Mapleville Roads, and 2 miles north of West Greenville. Water in overburden. Records available: 1947-49. Oct. 28, 15.27.

Smithfield 71. City of Providence Water Supply Board. About 50 feet south of Mountindale Road, 1,650 feet northwest of intersection of Mountindale and Cary Roads, and 0.5 mile southeast of Spragueville. Water in sand and gravel. Records available: 1947-49. Oct. 28, 10.56.

Smithfield 116. Semaco Macaroni Co. About 350 feet south of Stillwater Road, 1,300 feet northeast of intersection of Stillwater Road and Farnum Pike, in Georgiaville. Water in bedrock. Records available: 1947-49.

Jan. 29	8.04	Apr. 30	8.02	July 29	8.24	Oct. 28	9.55
Mar. 1	7.71	May 28	8.08	Aug. 31	8.54	Nov. 29	8.62
29	7.81	June 29	8.33	Sept. 29	8.60	Dec. 29	8.78

Smithfield 213. Northwestern Water Co. well 1. About 240 feet east of Slack Reservoir, 0.1 mile north of Smithfield-Johnston town line and 0.55 mile south of Greenville. Drilled unused test well, diameter 6 inches, depth 28 ft. Water level influenced by nearby pumping well. Water in sand and gravel. Records available: 1945, 1949. Nov. 8, 1945, 13.78.

Apr. 22	12.72	May 28	11.89	Aug. 31	13.89	Nov. 29	16.48
May 4	11.95	July 14	13.09	Sept. 29	14.16	Dec. 29	16.16
12	12.05	29	13.39	Oct. 28	16.13		

Woonsocket 18. French Worsted Co. About 320 feet southeast of Hamlet Ave., 160 feet west of Davison Ave., and 2,910 feet east of Woonsocket courthouse. Water in bedrock. Measurement discontinued after Aug. 31, 1949. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	11.72	Mar. 29	11.37	May 28	11.43	July 29	13.32
Mar. 1	11.05	Apr. 30	11.43	June 29	12.53	Aug. 31	12.60

Washington County

Charlestown 18. U. S. Navy Auxiliary Air Station test well 2, about 0.5 mile south of U. S. Highway 1, 1,000 feet south of water towers and 3 miles southwest of Charlestown. Water in clay. Records available: 1946-49.

Jan. 4	19.65	Apr. 28	16.81	July 27	19.80	Oct. 28	21.43
Feb. 3	17.90	May 25	17.81	Aug. 19	20.40	Nov. 30	21.43
25	16.70	June 28	18.90	Sept. 29	21.09	Dec. 29	21.33
Mar. 30	16.33						

Exeter 6. Wood River Picnic Area. About 175 feet west of Wood River, 275 feet south of Ten Rod Road, and 0.65 mile west of West Exeter Church. Unused dug well, diameter 30 inches, depth 10 feet. Water level probably influenced by nearby Wood River. Water in sand and gravel. Records available: 1946, 1948-49. June 26, 1946, 6.30; Dec. 6, 1948, 6.71; Dec. 29, 1948, 6.84.

Jan. 28	5.73	Apr. 29	5.42	Aug. 2	7.30	Nov. 1	7.37
Mar. 3	5.48	June 1	5.98	Sept. 6	7.49	Dec. 1	7.15
31	5.59	July 13	6.98	30	7.40	30	6.85

Exeter 16. Rhode Island State Department of Social Welfare, Exeter School. About 150 feet south of boiler house, 450 feet west of nurses' home and 3.5 miles south of Exeter. Water level influenced by pumping wells nearby. Screened in sand and gravel. Records available: 1946-49.

Jan. 5	14.55	Mar. 23	10.98	June 22	12.05	Oct. 13	13.84
12	13.95	30	10.95	29	12.11	20	14.07
19	13.92	Apr. 6	10.95	July 6	12.12	26	14.06
26	13.75	13	10.93	13	12.11	Nov. 2	14.12
28	13.74	20	10.92	20	12.24	9	14.12
Feb. 2	13.25	28	10.11	Aug. 3	12.40	16	14.12
9	12.71	May 4	10.17	10	12.84	23	14.15
16	12.42	11	10.08	17	13.08	30	14.28
23	12.08	18	10.38	24	13.11	Dec. 7	14.38
Mar. 2	11.60	25	10.79	31	13.39	14	14.33
3	11.60	June 1	11.39	Sept. 14	13.44	21	14.33
9	11.21	8	11.72	21	13.58	28	14.31
16	10.97	15	11.85	Oct. 6	13.83		

North Kingstown 26. North Kingstown Water Commission pumping station. About 140 feet south of Oak Hill Road, 1.2 miles west of Post Road, and 2 miles southwest of Wickford. Used well, measurements made about 10 hours after pump shut off. Screened in sand and gravel. Records available: 1947-49.

Jan. 1	10.4	June 15	10.54	Aug. 3	12.38	Sept. 29	11.21
31	10.6	23	12.03	16	12.00	Nov. 23	11.45
Feb. 28	10.4	July 1	12.02	25	12.13	Dec. 7	11.11
Mar. 31	10.6	6	12.32	31	11.87	14	10.80
Apr. 29	10.8	13	12.06	Sept. 15	11.74	21	11.16
June 1	12.68	20	11.57	22	11.70	28	11.04
8	11.49	27	11.90				

South Kingstown 10. Village of Kingston. At intersection of South and Kingston Roads. Unused dug well, diameter 36 inches, depth 18 feet. Water in glacial till. Records available: 1947-49. Nov. 4, 1947, 11.67; Dec. 6, 1948, 10.29; 29, 9.78.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	4.76	Apr. 29	3.87	Aug. 2	10.58	Nov. 1	14.09
Feb. 11	3.56	June 1	5.15	Sept. 6	12.24	Dec. 1	14.45
Mar. 3	3.33	July 13	9.35	30	13.14	30	13.20
31	3.46						

South Kingstown 83. Wakefield Water Co. test well 81, 4 feet north of pumping station 2. About 1,240 feet northwest of Tuckertown Road and 1.9 miles west of Wakefield. Drilled unused well, diameter 8 inches, depth 26.5 feet. Water level influenced by pumping wells nearby. Not pumping Jan. 22, 23, 28, Feb. 4, 5, 11-13, 16-23, Mar. 5-21, 24-31, Apr. 1-30, May 1-31, June 1-3. Open end pipe in sand and gravel. Records available: 1944, 1948-49. Sept. 28, 1944, 1.50, tape measurement; Dec. 29, 1948, 2.65, tape measurement.

Lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	9.88	0.66	0.57	5.79	11.97	14.00	14.46	13.32	13.14	12.86
2	.....	.....	9.65	.66	.57	1.07	12.17	14.01	14.18	13.24	13.09	12.84
3	.....	.....	9.45	.63	.58	1.09	12.45	13.93	14.19	13.25	13.14	13.15
4	.....	1.46	9.47	.61	.59	9.32	12.71	13.88	14.19	13.14	13.02	13.26
5	.....	1.47	.97	.63	.60	10.32	12.57	14.01	14.49	13.14	12.97	13.37
6	.....	9.34	.67	.63	.63	10.47	12.47	13.64	12.87	13.13	12.85	13.33
7	.....	.....	.62	.45	.67	10.42	12.22	13.89	13.63	13.15	12.88	12.95
8	.....	.....	.63	.43	.68	10.31	12.68	14.13	14.08	13.15	12.91	13.00
9	.....	.....	.84	.50	.69	10.42	12.82	13.98	14.13	13.06	12.89	12.84
10	10.38	.....	1.04	.51	.70	10.57	13.01	14.22	14.14	13.14	12.82	12.84
11	9.46	1.20	1.14	.55	.74	10.77	13.34	14.28	14.11	13.10	12.76	12.79
12	9.32	1.19	.69	.56	.74	10.41	13.37	14.23	14.12	13.15	12.78	12.77
13	9.31	1.14	.68	.56	.76	.....	13.43	14.30	14.00	13.23	12.75	12.57
14	9.29	.....	1.20	.52	.77	11.16	12.64	14.32	13.90	13.34	12.84	12.62
15	1.97	9.40	1.22	.47	.81	11.09	13.07	14.38	13.85	13.27	12.71	12.62
16	1.97	1.17	1.29	.54	.82	11.12	13.17	14.27	14.74	13.22	12.82	12.82
17	9.27	1.05	1.28	.56	.84	11.08	13.26	14.39	13.77	13.26	12.85	12.79
18	9.31	1.06	.75	.54	.85	10.95	13.24	14.35	13.82	13.21	12.89	12.84
19	9.22	1.06	.72	.45	.86	11.24	13.07	14.47	13.78	13.30	12.89	.....
20	9.20	1.06	.69	.43	.85	10.67	13.32	14.47	13.75	13.45	12.89	12.99
21	10.30	.97	1.58	.47	.84	.....	12.66	14.62	13.69	13.54	13.02	13.02
22	2.44	1.33	10.28	.48	.85	.....	12.69	14.56	13.64	13.62	13.04	13.13
23	a 1.79	1.38	10.75	.37	.81	10.97	13.20	14.60	13.40	13.55	.....	12.79
24	.....	9.75	.89	.40	.87	.....	13.17	14.67	13.48	13.54	12.87	12.85
25	.....	9.27	.57	.45	.87	11.32	13.34	14.36	13.47	13.84	12.91	12.59
26	.....	9.32	.56	.47	.88	11.45	13.52	14.59	13.57	13.47	12.99	12.59
27	.....	9.36	.55	.49	.87	11.53	13.62	14.63	13.50	13.57	12.93	12.44
28	a .76	9.36	.63	.54	.92	11.93	13.74	14.75	13.30	13.47	12.99	12.59
29	.....	.....	.67	.53	.94	11.76	13.44	14.56	13.32	13.34	12.98	12.57
30	.....	.....	.67	.55	.94	12.09	13.79	14.54	13.24	13.28	12.93	12.44
31	.....	.....	.65	.....	.97	.....	13.94	14.57	.....	13.18	.....	12.57

a Tape measurement.

South Kingstown 89. Dr. Oliver Steadman Cemetery. About 40 feet west of Willard Road, 120 feet north of Winter Street and 0.5 mile northwest of Wakefield. Unused dug well, diameter 30 inches, depth 19 feet. Water in overburden. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 29, 1948	13.53	Apr. 29, 1949	6.28	Aug. 2, 1949	12.47	Nov. 1, 1949	(a)
Feb. 11, 1949	7.88	June 1	7.92	Sept. 6	14.38	Dec. 1	(a)
Mar. 3	5.92	July 13	11.15	30	15.52	30	(a)
31	6.00						

a Dry.

VERMONT

By H. L. Free, Jr.

PROGRAM OF WORK

Periodic measurements of water levels in Vermont, begun in October 1942, were continued in 1949. Measurements were made weekly in one water-table observation well in the town of Middlesex, Washington County, near Wrightsville, which is about 3 miles north of Montpelier. Fifty-two measurements were made during the year.

FLUCTUATIONS OF WATER LEVEL

The net change in water level in this well during 1949 was -3.01 feet through December 30. The precipitation, as measured at nearby Northfield, totaled 29.87 inches in 1949, which was 3.97 inches below normal.

The water level in the observation well which, at the end of 1948, was above average for that time of year followed, in general, the usual seasonal pattern of fluctuations throughout 1949. The rise in water level which began on December 27, 1948, continued during the first 10 days of 1949 as a result of mild weather and considerable rain during that period. The water level dropped in the latter part of January and the first week of February when constant below-freezing temperatures prevented ground-water recharge. It rose a little more than a foot over a period of about 2 weeks in the middle of the month when temperatures were above freezing and precipitation totaled nearly an inch. The water level dropped steadily during the last quarter of February and the first two-thirds of March, when temperatures generally were below freezing. During the latter part of March above-freezing temperatures allowed precipitation and melt-water to recharge the ground-water reservoir. This resulted in a rise of the ground-water table despite below-normal precipitation during the month. Near the end of the month the water level was near its highest stage of record for that time of year, almost a foot above the level of March 1948. The fairly steady drop in water level starting late in March, at the beginning of the growing season, continued until the early part of July, when the well was dry.

The well remained dry until the middle of December when, because of rain and mild weather, the water level rose almost 2.5 feet above the bottom of the well.

This is the first year since this well was established in 1942 that it has been dry for such a long period. Although no other observation wells are maintained in Vermont, many private wells in various parts of the State were reported to be dry this summer and fall for the first time. These usually low water levels reflected the deficient annual precipitation throughout the State. The total annual precipitation in 1949 for the State was 29.87 inches, compared to the normal of 33.84 inches, and was the smallest total for many years.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Washington County

US 90. Montpelier 1. Burton Peterson. About 0.7 mile west of North Branch of Winooski River and 3.0 miles north of Montpelier, in Middlesex. Penetrates sandy glacial till. Extremes of observed water level: Lowest, dry, water level below 11.9 feet on Sept. 1, 1944; Oct. 30, 1947; Sept. 26 to Oct. 17, 1948; July 11 to Dec. 12, 1949; highest, 4.72 feet on May 2, 1945. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.56	Feb. 28	6.64	Apr. 25	5.36	June 13	8.91
10	6.10	Mar. 14	6.77	May 2	5.92	20	9.65
17	6.89	21	7.00	9	6.42	27	10.13
24	7.10	28	4.87	16	7.42	July 5	10.72
30	7.45	Apr. 4	4.94	23	7.73	Dec. 19	10.93
Feb. 7	7.64	11	5.30	30	7.92	26	10.25
14	7.34	18	5.57	June 6	8.35	30	9.57
21	6.54						

Dry on July 11, 18, 25, Aug. 1, 8, 15, 22, 29, Sept. 6, 12, 19, 26, Oct. 3, 10, 17, 24, 31, Nov. 9, 14, 21, 28, Dec. 5, 12. Water level below 11.9 feet.

