



MONTHLY WATER INVENTORY REPORT FOR OHIO

June 2007

<http://www.dnr.state.oh.us/water/pubs/newsltrs/mwirmain.htm>

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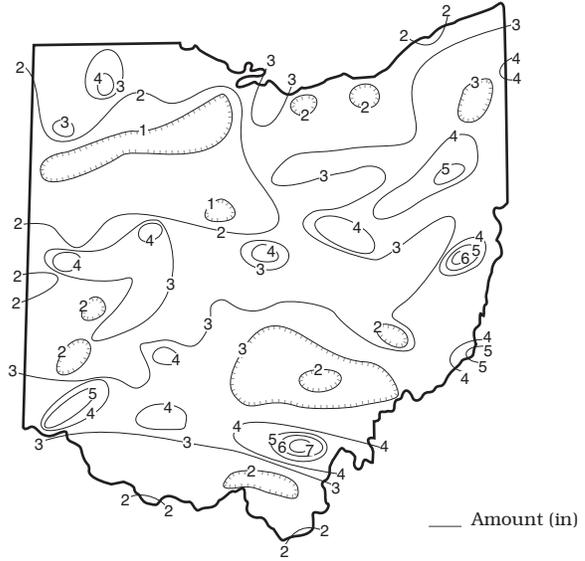
PRECIPITATION during June was below normal across much of the state, but above normal in areas of eastern, south-central and a few other scattered locations around Ohio. The state average was 2.92 inches, 0.93 inch below normal. Regional averages ranged from 3.78 inches, 0.20 inch below normal, for the Northeast Hills Region to 2.04 inches, 1.63 inches below normal, for the Northwest Region. Salem Center (Meigs County) received the greatest amount of June precipitation, 7.23 inches. Ottawa (Putnam County) received the least amount, 0.41 inch.

Following a noticeably dry May, much needed rain spread across the state during the first 5 days of June. Most areas of Ohio received 0.50-1.0 inch of rain during this period with some locations receiving from 1 to more than 2 inches; however, areas of southeastern Ohio received less than 0.25 inch. Rain amounts during June 8 and 9 were greatest in eastern Ohio where generally 0.50-1.0 inch fell, tapering to little or no rain at all in western Ohio. The next 10 days were dry across most of the state, further augmenting unusually dry conditions existing in many areas. Scattered showers and thunderstorms during June 19-21 were most numerous across eastern Ohio. The rains were isolated with some locations receiving between 1 and 2 inches, while other locations received little or no rain. There were several days with rain during the last week of the month across the southern half of the state. Most areas in southern Ohio received at least 0.50 inch of rain during this period with some areas receiving more than 2 inches. Conditions in northern Ohio were rather dry during this period with the only significant rain falling during June 27-28. A few locations reported between 1 and 2 inches of rain from heavier downpours, but much of northern Ohio received less than 0.25 inch during the last week of the month.

Precipitation for the 2007 water year is above normal across most of the state, but below normal in the Southeast and South Central regions. The average for the state as a whole is 30.04 inches, 2.49 inches above normal. Regional averages range from 33.08 inches, 6.26 inches above normal, for the West Central Region to 27.30 inches, 2.18 inches below normal, for the South Central Region.

Precipitation for the 2007 calendar year is above normal in northeastern, west-central and central Ohio and below normal elsewhere. The average for the state as a whole is 18.91 inches, 0.43 inch below normal. Regional averages range from 21.70 inches, 2.74 inches above normal, for the West Central Region to 16.36 inches, 4.71 inches below normal, for the South Central Region (see Precipitation table, departure from normal, past 6 months column).

PRECIPITATION JUNE

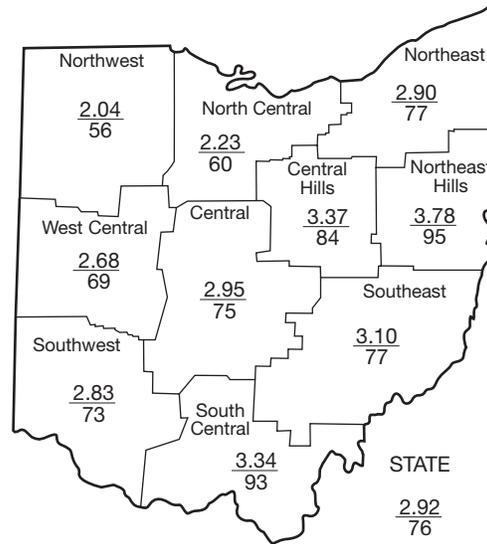


PRECIPITATION

Region	DEPARTURE FROM NORMAL (IN.) Base period 1951-2000					Palmer Drought Severity Index*
	This Month	Past				
		3 Mos.	6 Mos.	12 Mos.	24 Mos.	
Northwest	-1.63	-2.70	-0.58	+5.56	+9.21	-2.5
North Central	-1.51	-3.33	+0.40	+5.75	+13.00	-2.3
Northeast	-0.89	-2.99	+0.20	+8.34	+12.45	-2.4
West Central	-1.21	-3.17	+2.74	+9.01	+14.35	-1.9
Central	-0.96	-3.98	+0.78	+7.97	+10.59	-3.2
Central Hills	-0.65	-3.25	-0.37	+4.93	+7.13	-2.6
Northeast Hills	-0.20	-2.07	+0.39	+4.20	+8.16	-2.6
Southwest	-1.06	-4.52	-1.47	+4.01	+4.00	-2.9
South Central	-0.27	-4.09	-4.71	+2.43	-2.06	-3.5
Southeast	-0.92	-4.08	-1.69	+2.99	+1.79	-3.2
State	-0.93	-3.41	-0.43	+5.51	+7.86	

*Above +4 = Extreme Moist Spell
3.0 To 3.9 = Very Moist Spell
2.0 To 2.9 = Unusual Moist Spell
1.0 To 1.9 = Moist Spell
0.5 To 0.9 = Incipient Moist Spell
0.4 To -0.4 = Near Normal

-0.5 To -0.9 = Incipient Drought
-1.0 To -1.9 = Mild Drought
-2.0 To -2.9 = Moderate Drought
-3.0 To -3.9 = Severe Drought
Below -4.0 = Extreme Drought



Average (in)
Percent of normal

MEAN STREAM DISCHARGE

This Month

River and Location	Drainage Area (Sq. Mi.)	Mean Discharge (CFS)	% of Normal	% of Normal Past		
				3 Mos.	6 Mos.	12 Mos.
Grand River near Painesville	685	101	7	67	223	176
Great Miami River at Hamilton	3,630	1,568	51	75	147	156
Huron River at Milan	371	157	74	86	143	155
Killbuck Creek at Killbuck	464	164	49	58	106	127
Little Beaver Creek near East Liverpool	496	181	43	54	115	119
Maumee River at Waterville	6,330	1,191	30	74	129	144
Muskingum River at McConnelsville	7,422	2,880	48	102	163	115
Scioto River near Prospect	567	72	24	66	152	171
Scioto River at Higby	5,131	1,277	36	53	119	137
Stillwater River at Pleasant Hill	503	103	27	65	156	150

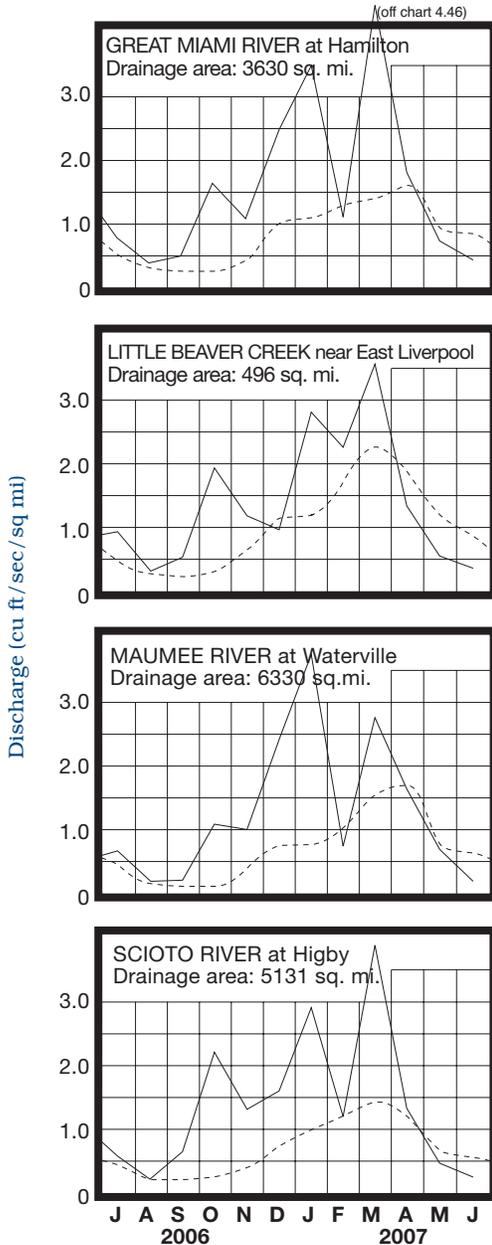
STREAMFLOW during June was below normal statewide. Flows were low enough to be considered deficient across most of the state. June flows were significantly lower than the flows recorded during May.

Streamflow at the beginning of the month was below normal statewide. Flows increased during the first week of the month in response to precipitation that fell during this period. Greatest flows for the month were recorded around June 5 and 6 across much of the state. In some basins in eastern and southeastern Ohio, greatest flows were established between June 9 and 11 following the June 8-9 precipitation. Except for some temporary increases noted following local precipitation, flows generally declined from these peaks until the last week of the month. Lowest flows for June were recorded during the last week of the month. Flows in a few streams were rising at the end of June in response to precipitation. However, at the end of June, flows were below normal across nearly the entire state.

RESERVOIR STORAGE during June decreased in both the Mahoning and Scioto river basins. Storage remained below normal in the Mahoning basin reservoirs and fell to below normal in the Scioto basin reservoirs.

Reservoir storage at the end of June in the Mahoning basin index reservoirs was 91 percent of rated capacity for water supply compared with 97 percent for last month and 105 percent for June 2006. Month-end storage in the Scioto basin index reservoirs was 90 percent of rated capacity for water supply compared with 97 percent for both last month and June 2006. Surface water supplies remain adequate in spite of the below normal precipitation and reduced streamflow of the past 2 months.

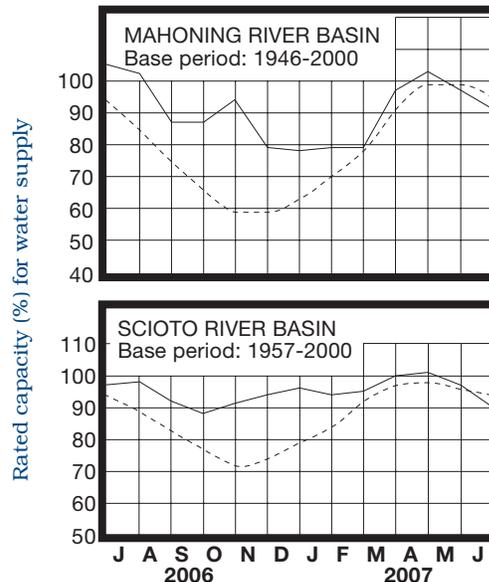
MEAN STREAM DISCHARGE



Base period for all streams: 1971-2000

Normal - - - - Current ———

RESERVOIR STORAGE FOR WATER SUPPLY



GROUND-WATER LEVELS

Based on daily lowest level in feet below land-surface datum

GROUND WATER levels during June declined throughout Ohio. Net changes during the month from last month's levels were greater than usually observed. A few aquifers rose slightly early in June, but the general trend for most aquifers across the state was a steady decline throughout the month. A few aquifers, especially unconsolidated aquifers in southern Ohio, showed some slight improvement at the end of the month as they responded to the precipitation that fell during the last week of June.

Ground water levels are below normal in most aquifers across the state with the exception of a few consolidated aquifers in eastern Ohio where they remain above normal. Current levels are also lower than last year's levels across most of the state. Rain during the last week of June across some areas of the state helped improve the soil moisture conditions slightly. However, even with near-normal precipitation during the next few months, little recharge can be expected. The Ohio Agricultural Statistics Service reported that near the end of June, soil moisture was rated as being short or very short in 75 percent of the state, adequate in 24 percent of the state and surplus in 1 percent of the state. In spite of the recent dry conditions that have existed during the past 2 months, ground water supplies remain adequate across the state. However, the dry conditions have had a noticeable impact on agriculture, with crops and pastures in most areas of the state still in need of additional rain.

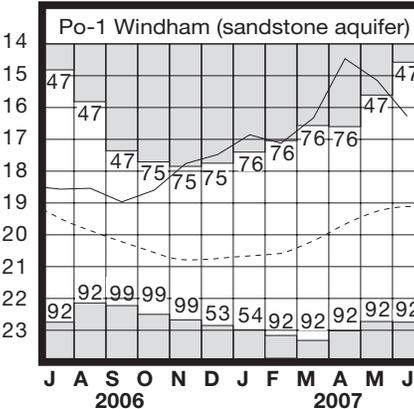
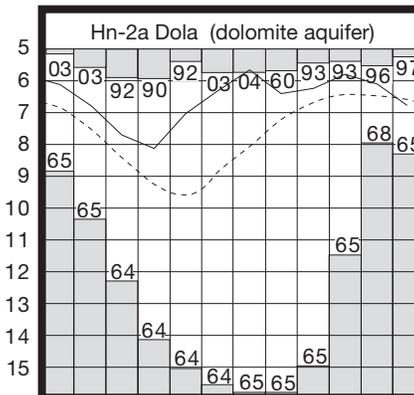
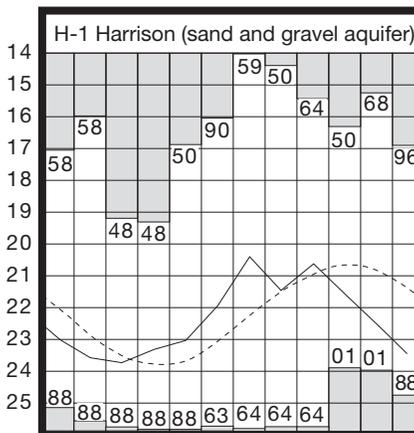
LAKE ERIE level declined during June. The mean level was 571.79 feet (IGLD-1985), 0.26 foot lower than last month's mean level and 0.19 foot below normal. This month's mean level is 0.07 foot higher than the June 2006 level and 2.59 feet above Low Water Datum.

The U.S. Army Corps of Engineers (USACE) reports that precipitation in the Lake Erie basin during June averaged 2.29 inches, 1.16 inches below normal. For the entire Great Lakes basin, June precipitation averaged 2.67 inches, 0.53 inch below normal. For calendar year 2007 through June, the Lake Erie basin has averaged 15.20 inches, 1.99 inches below normal, while the entire Great Lakes basin has averaged 12.92 inches, 1.86 inches below normal.

In addition, the USACE reports that based on the current condition of the Great Lakes basin and anticipated weather patterns, the level of Lake Erie should remain below normal for the foreseeable future. Deviations from the anticipated weather patterns could result in the level of Lake Erie ranging from near-normal to as much as 17 inches below the normal seasonal average.

Index Well	Location	Aquifer	Mean This Month	Departure From Normal	Change in feet from:	
					Last Month	Year Ago
F-1	W. Rushville, Fairfield Co.	Sandstone	14.13	+0.10	-2.06	-1.46
Fa-1	Jasper Mill, Fayette Co.	Limestone	8.94	-1.54	-0.65	-0.49
Fr-10	Columbus, Franklin Co.	Gravel	44.12	-1.36	-1.26	-0.39
H-1	Harrison, Hamilton Co.	Gravel	23.45	-2.06	-0.91	-1.31
Hn-2a	Dola, Hardin Co.	Dolomite	6.78	-0.19	-0.68	-0.91
Po-1	Windham, Portage Co.	Sandstone	16.27	+2.84	-1.13	+2.17
Tu-1	Strasburg, Tuscarawas Co.	Gravel	13.53	-1.43	-0.96	-0.80

GROUND-WATER LEVELS

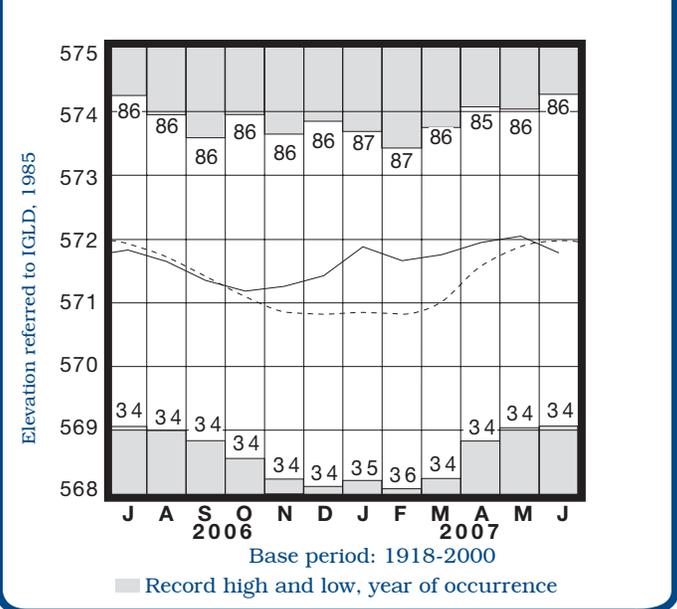


Water level (ft below land surface)

Base periods: H-1, 1951-2000. Hn-2a, 1955-2000.

Po-1, 1947-2000 Record high and low, year of occurrence

LAKE ERIE LEVELS



Normal - - - - Current ———

SUMMARY

Precipitation during June was below normal across much of the state, but above normal across areas of eastern, south-central and a few other scattered locations around Ohio. Streamflow was below normal statewide and was low enough to be considered deficient across most of the state. Reservoir storage decreased in the Mahoning and Scioto river basins and was below normal in both basins. Ground water levels declined statewide and were below normal throughout much of Ohio. Lake Erie level declined 0.26 foot and was 0.19 foot below the long-term June average.

NOTES AND COMMENTS

2007 Ohio Statewide Floodplain Management Conference

The Ohio Department of Natural Resources (ODNR), in coordination with the Federal Emergency Management Agency and the Ohio Floodplain Management Association, is hosting the 2007 Ohio Statewide Floodplain Management Conference. This year's conference is scheduled for August 22 and 23 and will be held at the Embassy Suites in Dublin, Ohio. The 2007 conference has been planned to provide local floodplain managers with information and the skills to implement effective floodplain management programs within their respective communities. This year's theme is "Managing Ohio's Floodplains During Global Climate Change." For more information about this upcoming conference, please contact ODNR, Division of Water at 614-265-1006. To learn more about the conference and view the conference brochure and registration information, please visit this website: <http://www.dnr.state.oh.us/water/floodpln/conference/default.htm>.

ACKNOWLEDGMENTS

This report has been compiled from Division of Water data and from information supplied by the following:

Precipitation data:

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service; The Miami Conservancy District; U.S. Army Corps of Engineers, Muskingum Area.

Streamflow and reservoir storage data:

U.S. Geological Survey, Water Resources Division.

Lake Erie level data:

U.S. Army Corps of Engineers, Detroit District.

Palmer Drought Severity Index:

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service.



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