MONTHLY WATER INVENTORY REPORT FOR OHIO

January 2006

http://www.dnr.state.oh.us/water/pubs/newsltrs/mwirmain.html

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PRECIPITATION during January was above normal across most of the state, but below normal in west-central and areas of southwestern Ohio. The average for the state as a whole was 3.13 inches, 0.56 inch above normal. Regional averages ranged from 4.17 inches, 1.19 inches above normal, for the South Central Region to 2.17 inches, 0.25 inch below normal, for the West Central Region. South Point (Lawrence County) reported the greatest amount of January precipitation, 5.35 inches. West Manchester (Preble County) reported the least amount, 1.20 inches.

Precipitation during January fell mostly in the form of rain. With temperatures averaging much above normal for the month, snow amounts were significantly below normal throughout the state. Widespread precipitation fell across Ohio on January 2 with most of the state receiving around 0.50 to 1.0 inch of rain, but less in west-central Ohio. Precipitation fell on most days during January 10-14. While much of the state received around 0.50 inch of precipitation during this period, heavier rain across southwestern Ohio brought amounts in excess of 1 inch. The most significant precipitation during the month fell on January 17 and 18 during which time 1-2 inches of precipitation fell across the southern half of the state and 0.50-1.0 inch fell across the northern half. Showers crossed the state again during January 21-25. Most of the state received 0.25 inch or less of precipitation during this period, but scattered locations in southwestern Ohio reported around 1 inch. The month's last significant precipitation occurred on January 29 with precipitation amounts of 0.50-1.0 inch falling in northwestern Ohio and generally less than 0.25 inch falling elsewhere.

Precipitation for the 2006 water year is above normal across most of the state, but below normal in the Northeast and Southwest regions. The state average is 11.30 inches, 0.52 inch above normal. Regional averages range from 13.02 inches, 1.96 inches above normal, for the Southeast Region to 10.16 inches, 0.31 inch above normal, for the North Central Region.

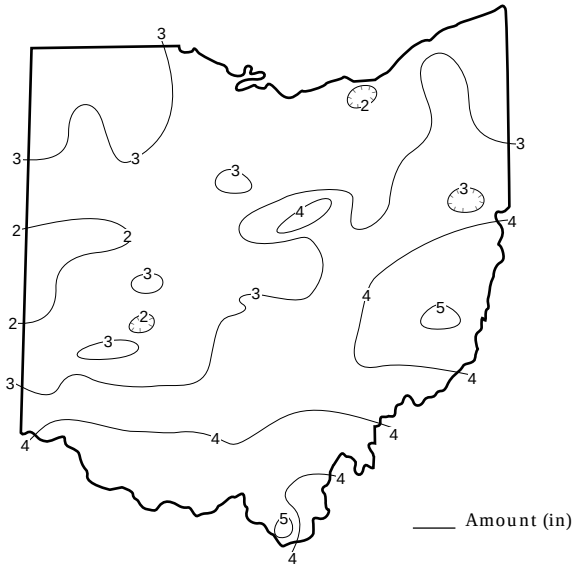
The 2006 calendar year is off to a good start in most areas of the state as far as precipitation is concerned. Near-normal precipitation and other climatic conditions during the next several months will benefit Ohio's water supplies, agriculture and recreational activities.

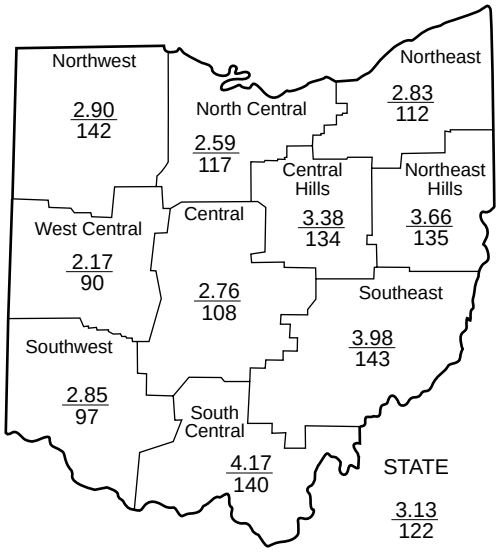
PRECIPITATION

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	+0.86	+2.38	+2.08	-1.44	+3.85	+1.8
North Central	+0.38	-0.14	+2.97	+2.27	+12.01	+2.2
Northeast	+0.31	-0.94	+1.36	+1.02	+12.02	+1.9
West Central	-0.25	+0.24	+5.05	+1.25	+9.76	+2.6
Central	+0.21	+0.46	+3.96	-0.64	+12.65	+1.6
Central Hills	+0.86	-0.51	+2.85	-0.65	+14.52	+1.5
Northeast Hills	+0.94	-0.08	+3.58	-0.02	+20.09	+1.2
Southwest	-0.08	-0.59	+0.63	-5.17	-0.01	+1.3
South Central	+1.19	-0.03	+0.10	-4.43	+5.18	-1.2
Southeast	+1.20	+0.94	+2.54	-0.54	+18.47	+1.4
State	+0.56	+0.18	+2.52	-0.83	+10.87	

*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

PRECIPITATION JANUARY





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	2,499	165	141	134	125
Great Miami River at Hamilton	3,630	5,825	146	136	135	103
Huron River at Milan	371	788	183	125	126	125
Killbuck Creek at Killbuck	464	748	142	94	96	96
Little Beaver Creek near East Liverpool	496	724	123	89	86	87
Maumee River at Waterville	6,330	14,220	291	162	142	95
Muskingum River at McConnelsville	7,422	13,730	149	161	168	94
Scioto River near Prospect	567	1,198	239	166	199	117
Scioto River at Higby	5,131	8,504	134	104	103	106
Stillwater River at Pleasant Hill	503	673	150	149	150	103

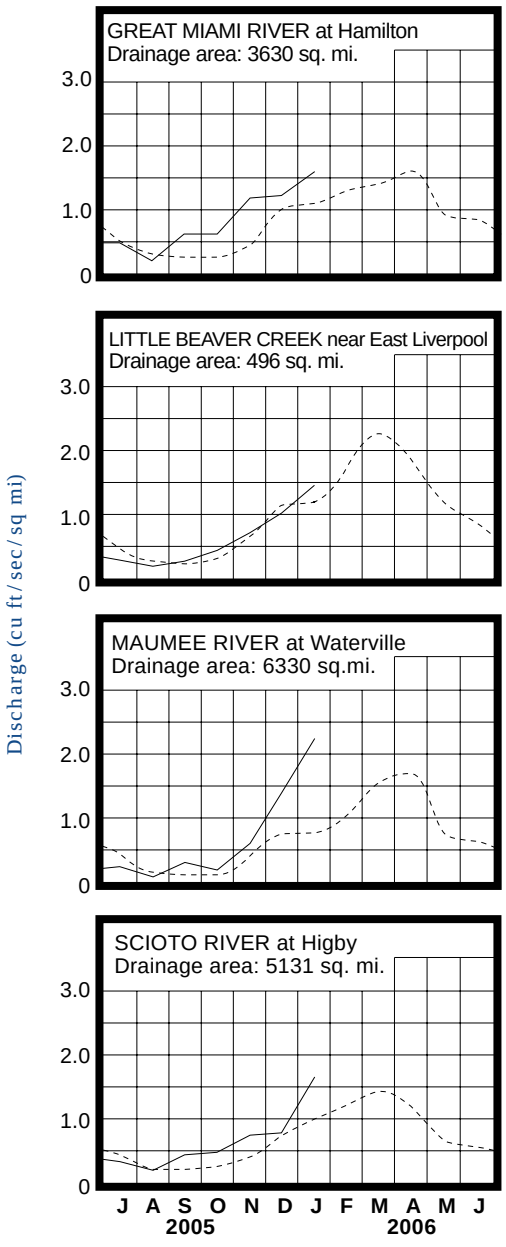
STREAMFLOW during January was above normal statewide. Flows were high enough to be considered excessive across much of the state, especially northern and southeastern Ohio. Streamflow during January was greater than the December flows across most of the state.

Flows at the beginning of January were above normal nearly statewide. Flows increased during the first week of the month in response to the precipitation that fell during this period. Greatest flows for the month were observed between January 3 and 5 in northwestern, eastern and southeastern Ohio. Flows steadily decreased until around mid-month, then increased again in response to widespread precipitation that fell across the state. Greatest flows for the month were observed between January 18 and 20 across the remainder of Ohio. Flows decreased during the last few days of the month and were at their lowest monthly flow near the end of the month throughout most of the state. Flows by the end of the month had declined to below normal across most of the state, but remained above normal in northwestern and northeastern Ohio basins.

RESERVOIR STORAGE during January decreased in the Mahoning River basin and increased in the Scioto River basin. Storage remained above normal in both basins.

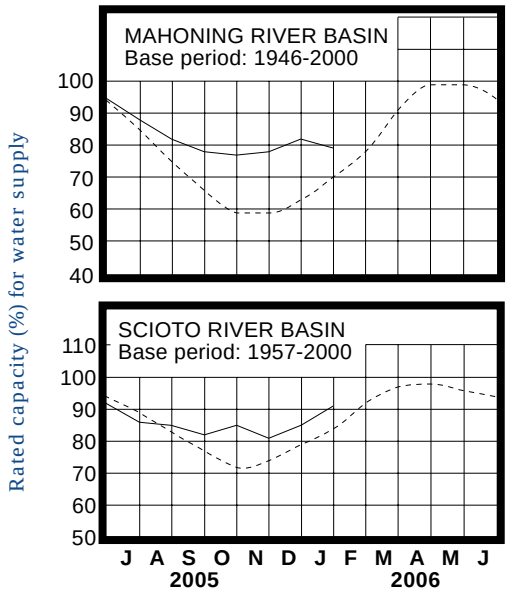
Reservoir storage at the end of January in the Mahoning basin index reservoirs was 79 percent of rated capacity for water supply, compared with 82 percent for last month and 80 percent for January 2005. Month-end storage in the Scioto basin index reservoirs was 91 percent of rated capacity for water supply, compared with 85 percent for last month and 104 percent for January 2005.

MEAN STREAM DISCHARGE



Base period for all streams: 1971-2000

RESERVOIR STORAGE FOR WATER SUPPLY



Normal – – – – Current ———

GROUND-WATER LEVELS

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

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	12.60	+3.19	+1.64	-3.28
Fa-1	Jasper Mill, Fayette Co.	Limestone	8.70	-1.18	+1.10	-1.36
Fr-10	Columbus, Franklin Co.	Gravel	44.21	-0.87	+0.35	-0.89
H-1	Harrison, Hamilton Co.	Gravel	22.59	-0.36	+0.81	-2.88
Hn-2a	Dola, Hardin Co.	Dolomite	6.19	+1.89	+0.62	-0.28
Po-1	Windham, Portage Co.	Sandstone	19.34	+1.33	+0.21	-1.03
Tu-1	Strasburg, Tuscarawas Co.	Gravel	13.07	+0.05	+0.87	-2.65

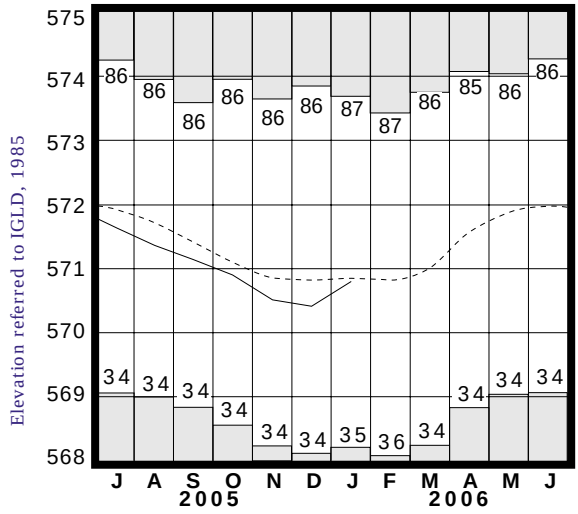
GROUND WATER levels during January showed net improvement throughout the state. Net changes during January from the December levels ranged from about the same to nearly twice that usually observed. While levels in most aquifers rose steadily throughout the month, levels in some unconsolidated aquifers in southwestern Ohio rose during the first week of the month, declined during the second week and then rose again the remainder of the month.

Ground water supplies are adequate throughout the state. Ground water levels at the end of January were above normal across much of Ohio, but below normal in the southwestern quarter of the state. Current levels are lower than they were a year ago throughout Ohio, ranging from about 0.25 foot to more than 3 feet below the January 2005 levels. The hydrologic conditions that existed during January were positive for the improvement in ground water storage. Above normal temperatures kept soils across the state unfrozen for most of the month, helping increase the rate of infiltration from precipitation. However, even though conditions favor continued improvement in ground water storage, near normal precipitation and other hydrologic conditions are necessary during the next several months to sustain the improvement that can be expected throughout the recharge period.

LAKE ERIE level rose during January. The mean level was 570.80 feet (IGLD-1985), 0.39 foot higher than last month's mean level and 0.07 foot below normal. This month's mean level is 0.85 foot lower than the January 2005 level and 1.60 feet above Low Water Datum.

The U.S. Army Corps of Engineers (USACE) reports that precipitation in the Lake Erie basin during January averaged 2.90 inches, 0.43 inch above normal. For the entire Great Lakes basin, January precipitation averaged 2.63 inches, 0.42 inch above normal. In addition, the USACE reports that based on the current condition of the Great Lakes basin and anticipated weather conditions, the level of Lake Erie should range from slightly above to about 4 inches below normal for the foreseeable future. Deviations from the anticipated weather patterns could result in the level of Lake Erie ranging from about 6 inches above to as much as 15 inches below the normal seasonal average.

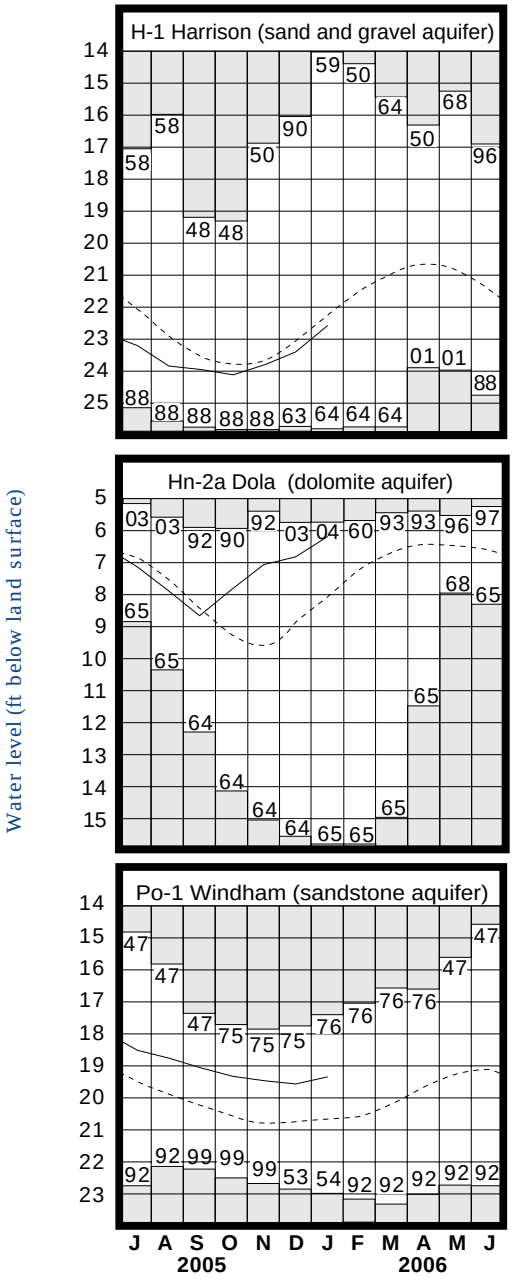
LAKE ERIE LEVELS



Base period: 1918-2000

Record high and low, year of occurrence

GROUND-WATER LEVELS



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

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

Normal– – – – Current———

SUMMARY

Precipitation during January was above normal across most of the state, but below normal in west-central and areas of southwestern Ohio. Streamflow was above normal statewide. Reservoir storage decreased in the Mahoning River basin and increased in the Scioto River basin. Storage remained above normal in both basins. Ground water levels rose throughout the state. Lake Erie mean level rose 0.39 foot and was 0.07 foot below the long-term January average.

NOTES AND COMMENTS

Annex Implementing Agreements On Great Lakes Protection

On December 13, 2005, the governors and premiers of the Great Lakes states and provinces approved the agreements to implement Annex 2001. The agreements were approved after a review process that included comments from the public. Improvements in the current agreements over the earlier draft agreements were due in part to many of these comments.

The Annex and its agreements were created to update and strengthen the way in which the Great Lakes and the waters of the Great Lakes basin are managed, protected, conserved, restored and improved. The Annex Implementing Agreements will help improve the health and economic vitality of the Great Lakes and provide the tools necessary to protect the Great Lakes for future generations. The agreements address a ban on diversions out of the Great Lakes basin with limited exceptions, water conservation for existing water withdrawals and management of new or increased uses of Great Lakes basin waters. The agreements include: the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement, a good-faith agreement among the Great Lakes states, Ontario and Quebec; and the Great Lakes-St. Lawrence River Basin Water Resources Compact, an agreement among the Great Lakes states that will eventually be passed into law through an interstate compact. The Agreement and Compact documents are available in their entirety for viewing at the Ohio Department of Natural Resources (ODNR) Division of Water website at: www.dnr.state.oh.us/water/ and the Council of Great Lakes Governors website at: www.cglg.org.

It is through the Council of Great Lakes Governors that the governors have been able to collectively deal with the environmental and economic challenges facing the Great Lakes region. The Council of Great Lakes Governors is a non-profit, non-partisan partnership comprised of governors from the eight Great Lakes states. The premiers of Ontario and Quebec are associate members.

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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