The state of Indiana received near to below normal precipitation over the week of June 21-27, 2024. Most of the state of Indiana received 0.25"-1.50" of rainfall with an isolated area of 1.00"-2.00" of rainfall in the northwestern portion of the state. Portions of southern Indiana received 0.01"-0.25" of rainfall.

Indiana Department

of Natural Resources

Mean temperatures for the week were above normal throughout the state. Mean temperatures ranged from 72.4 °F in north-central Indiana to 83.1°F in southwest Indiana. Departure from normal temperature ranged from 0.1°F to 6.8°F.

4" soil water content from the Purdue Mesonet Data Hub on June 27, 2024, indicates a range of 4.6% (very sandy soil) to 30.8% available water with a statewide average of 19.2%.

Soil moisture data from the NASA SPORT Real-time 3km Land Information System ranges from 25% to 50% available water in the 0-100cm soil depth. A small area of northeastern Indiana indicates as much as 70% available water.



Figure 1. Accumulated rainfall (in.) for June 21-27, 2024, from MRCC.



USDM for the State of Indiana

For June 25, 2024, the USDM shows much of the state is experiencing "abnormally dry" conditions. A small area in west central and a large area in southeastern Indiana are experiencing "moderate drought" conditions. The northern portion and the southwestern boundary of the state indicate no drought conditions.

Figure 2. US Drought Monitor for the State of Indiana on June 25, 2024.

Reservoir Levels as of June 27, 2024

Reservoir	Brookville	Cecil Harden	Cagles Mill	Monroe	Patoka	JE Roush	Salamonie	Mississinewa
Winter Pool ¹	740.0	640.0	636.0	538.0	532.0	737.0	730.0	712.0
Summer Pool ¹	748.0	662.0	639.5	538.0	536.0	749.0	755.0	737.0
Current Pool ¹	748.6	662.2	639.8	538.3	534.0	749.47	755.34	737.45
% Utilization ²	1.75	0.47	0.20	1.31	-14.09	0.3	0.5	0.5

Table 1. Reservoirs managed by United States Army Corp of Engineers.

Table 2. Reservoirs managed by Citizens Energy Group* and NIPSCO**.

Reservoir	Eagle Creek ^{3*}	Geist ^{3*}	Morse ^{3*}	Lake Freeman ^{4**}	Lake Schafer ^{4**}
Normal Pool	790	784.26	809.44	610.35	645.15
Current Pool	790.75	784.50	809.77	610.36	645.16
% Utilization ²	3.5%				

¹All units in feet and datum NGVD29

²Percent of designed flood storage utilized. The other named reservoirs are not designed for flood storage.

³All units in feet and datum NAVD88.

⁴All units in feet Local Datum.

Groundwater Monitoring Network as of June 26, 2024

Groundwater wells across the state are generally reporting below normal but range from low to near normal. Data is reported from the U.S. Geological Survey Ohio-Kentucky-Indiana Water Science Center.

	Low			
	<5%			
Bartholomew 4	Knox 8	Wells 4		
Hamilton 7	Randolph 3			
Knox 7	Tippecanoe 18			
	Much Below			
	5-10%			
Harrison 8	Morgan 4	Vanderburgh 7		
	Below			
	10-25%			
Benton 4	Jasper 13	Noble 8		
Boone 17	Jefferson 5	Parke 6		
Clark 20	LaGrange 2	Posey 3		
Decatur 2	La Porte 9	Shelby 2		
Elkhart 4	Marion 35	Vigo 7		
Fulton 7	Marion 39	Wayne 6		
Grant 8	Martin 5	Whitley 3		
	Near Normal	•		
	25-75%			
Cass 3	Grant 10	Newton 8		
Delaware 4	Lake 13	Pulaski 7		
Above	Much Above	High		
75-90%	90-95%	>95%		
None	None	None		



Figure 3. Map of USGS real-time groundwater monitoring wells.

Streamflow Conditions as of June 27, 2024

Streamflow conditions are generally normal to below normal across the state. There are 98 gages reporting normal and 34 reporting below normal, for the date. There are 11 reporting above normal, 0 reporting much above normal, 1 reporting an all-time high for the date, 4 reporting much below normal, and 0 reporting an all-time low for the date.

Currently, 35% of stream gages indicate steady flow conditions; 28% are increasing and 35% are decreasing.

Average observed streamflow at real-time USGS observing sites over the past 7-days ending June 25, 2024, averaged 0% reporting an all-time low, 12% much below normal, 46% below normal, 42% near normal, 0% above normal, 0% much above normal, and 0% reporting an all-time high.

USGS and NWS reports 0 gages currently in "action stage" or flood stage. The NWS Long Range Flood Outlook predicts 0 gages in flood stage with a 50% or greater chance of exceeding river flood levels.



Figure 4. Map of USGS streamflow gages for Indiana.

NOAA 7-Day Quantitative Precipitation Forecast

For June 27, 2024, the 7-Day Quantitative Precipitation Forecast valid for June 27 – July 4, 2024, predicts 0.50"-1.0" throughout the state. Precipitation is during the early and later days the week.



Figure 5. NOAA 7-Day Quantitative Precipitation Forecast, June 27 – July 4, 2024.

NOAA National Weather Service 6-10 Day Outlook

The 6-10 Day Temperature Outlook for June 25-29, 2024, projects a 33-70% chance of above normal conditions, increasing to the south. The Precipitation Outlook projects a 33-40% chance of above normal conditions for much of the state. Near normal precipitation is projected along the southern border and 40-50% of above normal conditions is projected in northwestern Indiana.



Figures 6-7. 6-10 Day Temperature and Precipitation Outlook for the US

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Temperature and precipitation data:

Midwestern Regional Climate Center

CoCoRaHS Mapping System

Soil data:

NASA, Short-term Prediction Research and Transition Center Purdue Mesonet Data Hub

Reservoir data:

US Army Corp of Engineers, Louisville District US Army Corp of Engineers, Chicago District Citizens Reservoirs at NWS River Observations NIPSCO Hydro Plant Lakes

Groundwater data:

U.S. Geological Survey Ohio-Kentucky-Indiana Water Science Center

Streamflow data:

USGS National Water Dashboard <u>NWS River Forecasts</u> USGS WaterWatch

Drought data:

US Drought Monitor

Forecast:

National Weather Service, Climate Prediction Center National Weather Service, Weather Prediction Center