

The state of Indiana received near to slightly above normal precipitation over the week of November 7-13, 2024. The state received 0.2"-2.50" of rainfall with lower amounts in the northwest and higher along the southern border.

Mean temperatures for the week were above to significantly above normal for the state. Mean temperatures ranged from 45.9°F in north-central Indiana to 55.9°F in southern Indiana. Departure from normal temperature ranged from 2.9°F to 10.6°F.

4" soil water content from the Purdue Mesonet Data Hub on November 14, 2024, has increased and indicates a range of 9.1% (very sandy soil) to 23.1% available water with a statewide average of 29.9%.

Soil moisture data from the NASA SPORT Real-time 3km Land Information System is ranging from 10% to 60% available water in the 0-100cm soil depth, with the lowest values in the northeast and the highest in the south.

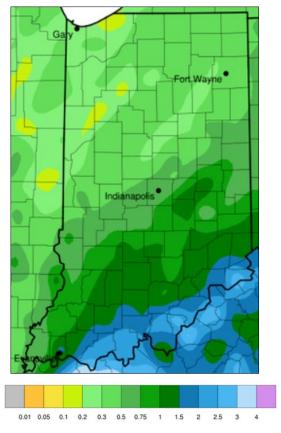


Figure 1. Accumulated rainfall (in.) for November 7-13, 2024, from MRCC.

USDM for the State of Indiana

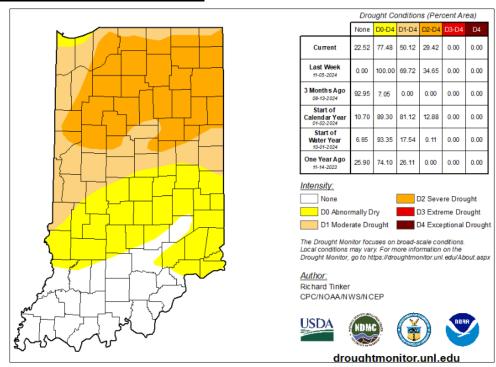


Figure 2. US Drought Monitor for the State of Indiana on November 12, 2024.

For November 12, 2024, the USDM identifies the northern half of the state with "moderate drought" or "severe drought" conditions. The southern half of the state is identified with "abnormally dry" conditions or no drought conditions.

Reservoir Levels as of November 14, 2024

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

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	743.1	647.9	637.3	536.6	533.9	740.88	736.34	724.29
% Utilization ²	0.15	-4.60	0.30	-5.58	-8.96	0.2	0.0	0.0

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

Reservoir	Eagle Creek ^{3*}	Geist³*	Morse ^{3*}	Lake Freeman ⁴ **	Lake Schafer ^{4**}
Normal Pool	790	784.26	809.44	610.35	645.15
Current Pool	788.76	784.13	809.68	610.36	645.17
% Utilization ²	-5.8%				

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.

Groundwater Monitoring Network as of November 14, 2024

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

Table 3. Groundwater level rankings relative to normal.

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

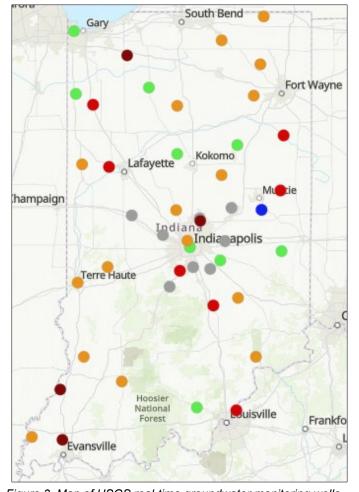


Figure 3. Map of USGS real-time groundwater monitoring wells.

⁴All units in feet Local Datum.

Streamflow Conditions as of November 14, 2024

Streamflow conditions are generally normal across the state. There are 85 gages reporting normal conditions for the date. There are 8 reporting above normal, 17 reporting much above normal, 8 reporting an all-time high for the date, 15 reporting below normal, 5 reporting much below normal, and 3 reporting an all-time low for the date.

Currently, 27% of stream gages indicate steady flow conditions; 38% are increasing and 31% are decreasing.

Average observed streamflow at real-time USGS observing sites over the past 7-days ending November 12, 2024, averaged 2% reporting an all-time low, 6% much below normal, 17% below normal, 61% near normal, 11% above normal, 4% much above normal, and 0% reporting an all-time high.

USGS and NWS report 0 gages in "action", "minor flood", or "moderate flood" stage. The NWS Long Range Flood Outlook predicts 8 gages in southern Indiana with a 50% or greater chance of exceeding river flood levels for "minor flood stage".

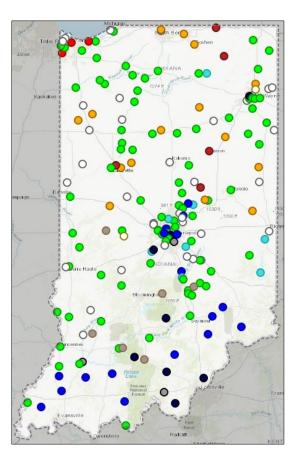


Figure 4. Map of USGS streamflow gages for Indiana.

NOAA 7-Day Quantitative Precipitation Forecast

For November 14, 2024, the 7-Day Quantitative Precipitation Forecast valid for November 14-21, 2024, predicts 0.25"-0.50" of rainfall for the entire state of Indiana. The precipitation is predicted to occur in the middle and late in the week.

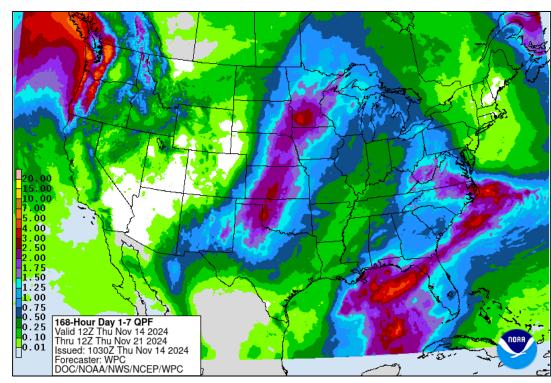
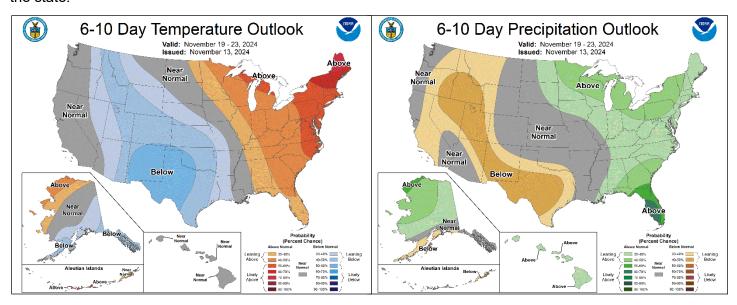


Figure 5. NOAA 7-Day Quantitative Precipitation Forecast, November 14-21, 2024.

NOAA National Weather Service 6-10 Day Outlook

The 6-10 Day Temperature Outlook for November 19-23, 2024, projects a 33-50% chance for above normal conditions for the state. The Precipitation Outlook projects a 33-40% chance of above normal precipitation for the state.



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

Acknowledgments:

Prepared by DNR-Division of Water, Resource Assessment with data from the following organizations:

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

NWS River Forecasts

USGS WaterWatch

Drought data:

US Drought Monitor

Forecast:

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