

The state of Indiana generally received near to above normal precipitation over the week of September 26-October 2, 2024. The state received 0.01” to 5.0” of rainfall with the lowest amounts in the northern part of the state grading to the highest amounts in the southern part of the state.

Mean temperatures for the week were above normal for the state. Mean temperatures ranged from 63.2°F in northern Indiana to 71.0°F in central Indiana. Departure from normal temperature ranged from 0.2°F to 10.9°F.

4” soil water content from the Purdue Mesonet Data Hub on October 3, 2024, has increased over the week and indicates a range of 5.0% (very sandy soil) to 39.0% available water with a statewide average of 26.8%.

Soil moisture data from the NASA SPORT Real-time 3km Land Information System is increasing ranging from 15 to 50% in much of the state and isolated areas up to 65% in the northern half of the state of available water in the 0-100cm soil depth.

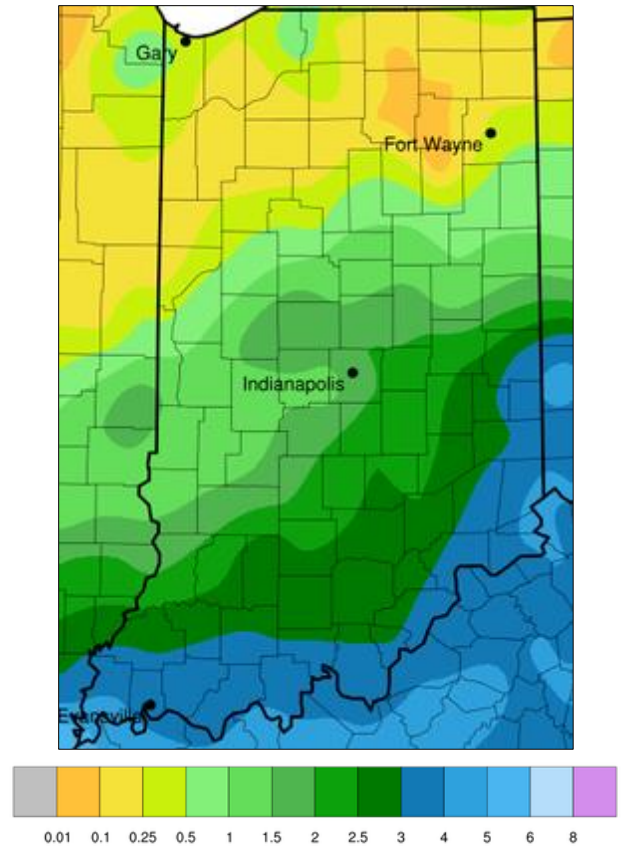
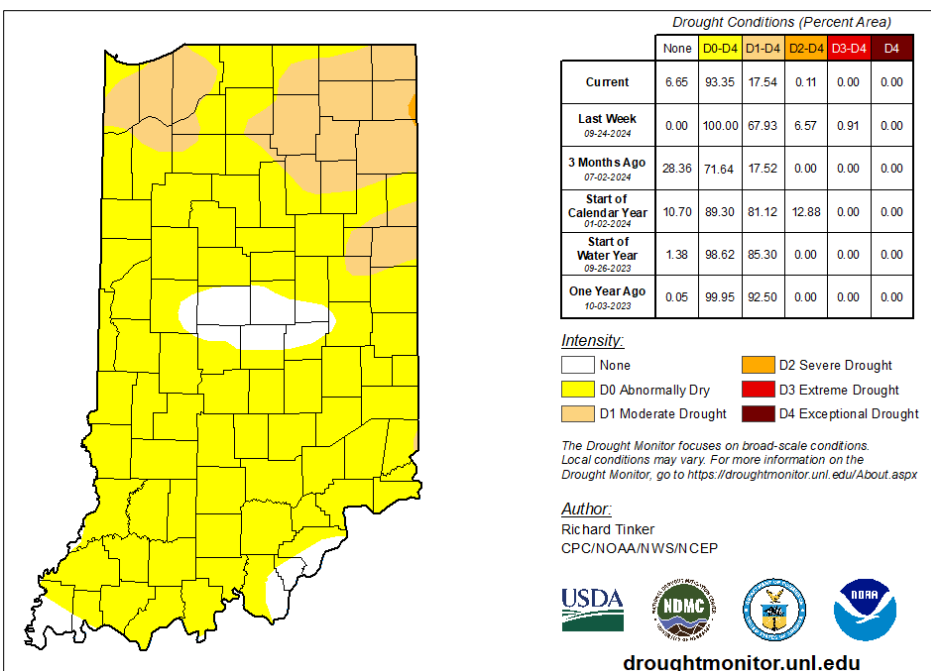


Figure 1. Accumulated rainfall (in.) for September 26-October 2, 2024, from MRCC.

**USDM for the State of Indiana**



For October 1, 2024, the USDM identifies much of the state in “abnormally dry” conditions. Three areas experiencing “moderate drought” conditions were identified in the northeastern and northwestern portions of the state. A small area experiencing “severe drought” conditions was identified in northeastern Indiana. Areas of no drought were identified in the central, south-central and southwestern portions of the state.

Figure 2. US Drought Monitor for the State of Indiana on October 1, 2024.

## Reservoir Levels as of October 3, 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 <sup>1</sup>	740.0	640.0	636.0	538.0	532.0	737.0	730.0	712.0
Summer Pool <sup>1</sup>	748.0	662.0	639.5	538.0	536.0	749.0	755.0	737.0
Current Pool <sup>1</sup>	748.2	660.8	638.7	537.2	534.1	747.34	753.64	737.15
% Utilization <sup>2</sup>	0.54	-2.98	-0.43	-3.35	-11.91	0.3	0.0	0.2

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

Reservoir	Eagle Creek <sup>3*</sup>	Geist <sup>3*</sup>	Morse <sup>3*</sup>	Lake Freeman <sup>4**</sup>	Lake Schafer <sup>4**</sup>
Normal Pool	790	784.26	809.44	610.35	645.15
Current Pool	790.63	784.39	809.56	610.40	645.21
% Utilization <sup>2</sup>	2.9%	--	--	--	--

<sup>1</sup>All units in feet and datum NGVD29

<sup>2</sup>Percent of designed flood storage utilized. The other named reservoirs are not designed for flood storage.

<sup>3</sup>All units in feet and datum NAVD88.

<sup>4</sup>All units in feet Local Datum.

## Groundwater Monitoring Network as of October 2, 2024

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

Table 3. Groundwater level rankings relative to normal.

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

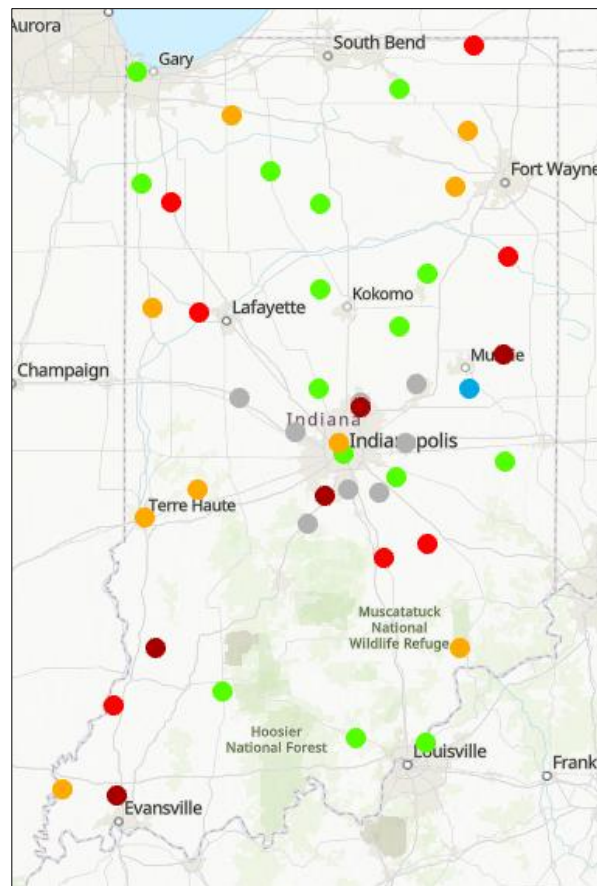


Figure 3. Map of USGS real-time groundwater monitoring wells.

## Streamflow Conditions as of October 3, 2024

Streamflow conditions are generally normal across the state. There are 98 gages reporting normal conditions for the date. There are 21 reporting above normal, 3 reporting much above normal, 0 reporting an all-time high for the date, 19 reporting below normal, 3 reporting much below normal, and 3 reporting an all-time low for the date.

Currently, 49% of stream gages indicate steady flow conditions; 21% are increasing and 29% are decreasing.

Average observed streamflow at real-time USGS observing sites over the past 7-days ending October 1, 2024, averaged 0% reporting an all-time low, 0% much below normal, 6% below normal, 69% near normal, 19% above normal, 5% 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 no gages in any flood stage, with a 50% or greater chance of exceeding river flood levels.

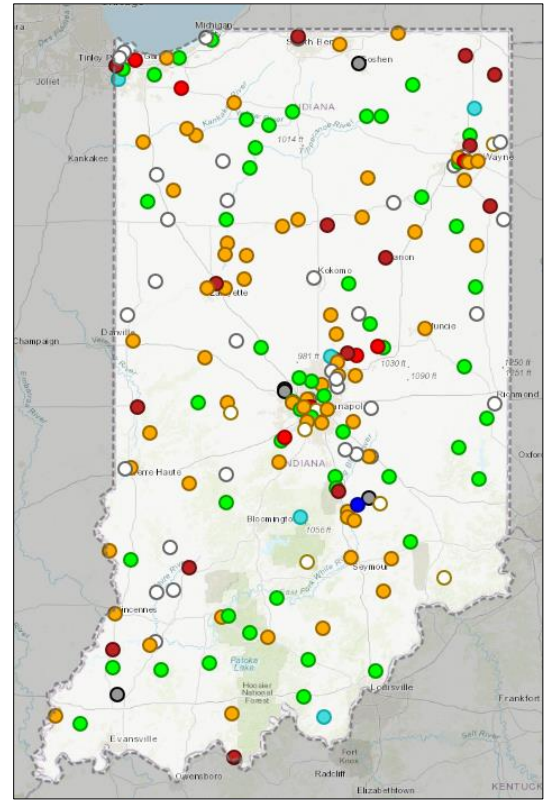


Figure 4. Map of USGS streamflow gages for Indiana.

## NOAA 7-Day Quantitative Precipitation Forecast

For October 3, 2024, the 7-Day Quantitative Precipitation Forecast valid for October 3-10, 2024, predicts 0.1" of rainfall in the northwestern tip of the state. The precipitation is predicted to occur early in the week.

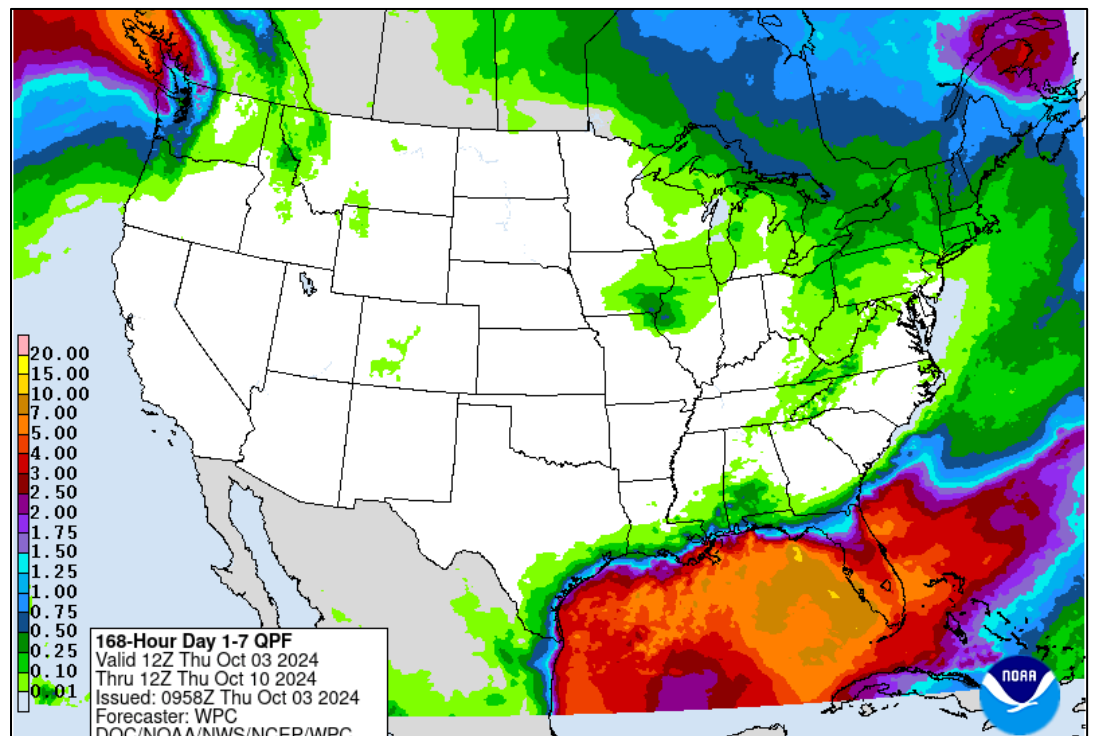
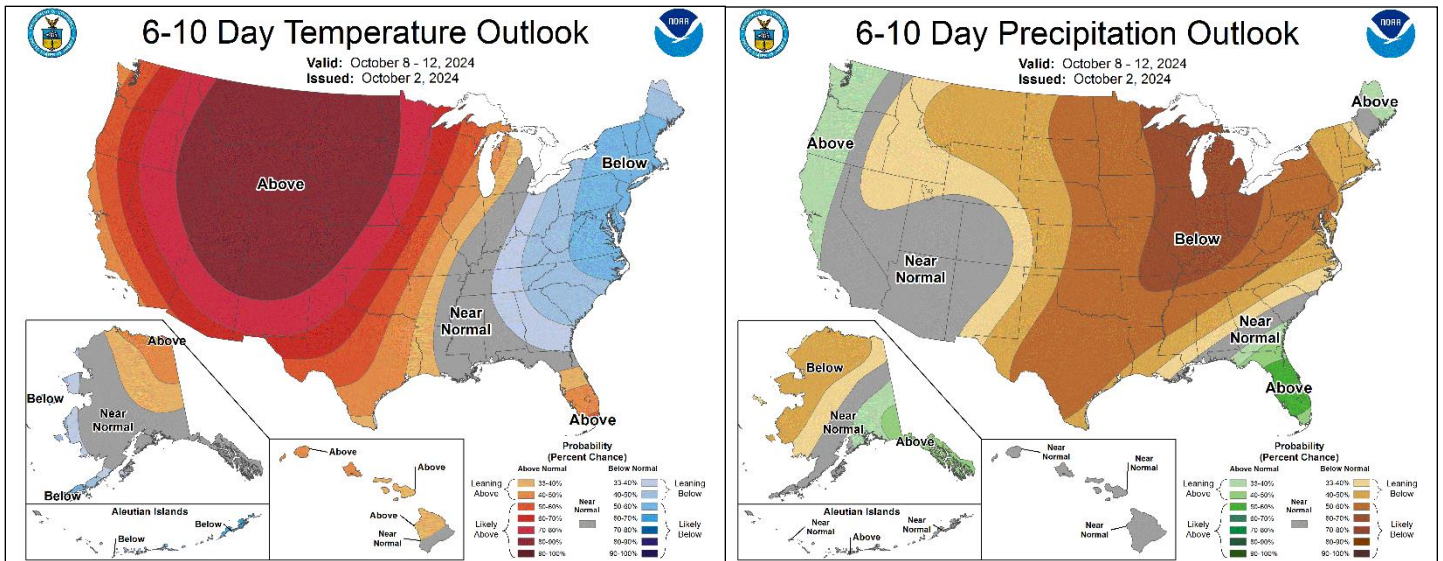


Figure 5. NOAA 7-Day Quantitative Precipitation Forecast, October 3-10, 2024.

## NOAA National Weather Service 6-10 Day Outlook

The 6-10 Day Temperature Outlook for October 8-12, 2024, projects near normal conditions for much of the state except for a 33-40% chance of above normal temperatures in the northwest corner and a 33-40% chance of below normal temperatures in the southwest corner of the state. The Precipitation Outlook projects a 60-70% chance of below normal precipitation throughout 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](#)