

The state of Indiana received below normal precipitation across much of the state over the week of April 12-18, 2024. Much of Indiana received 0.3-1.00" of rainfall. The central and eastern portions of the state received 0.75-2.00" of rainfall.

Mean temperatures for the week were near to above normal throughout the state. Mean temperatures ranged from 47.5°F in northern Indiana to 67.8°F in southern Indiana. Departure from normal temperature ranged from -1.8°F to 14.9°F.

4" soil water content from the Purdue Mesonet Data Hub on April 18, 2024, indicates a range of 5.4% (very sandy soil) to 41.0% available water with a statewide average of 31.6%.

Soil moisture data from the NASA SPORT Real-time 3km Land Information System ranges from 55% to 70% available water in the 0-100cm soil depth.

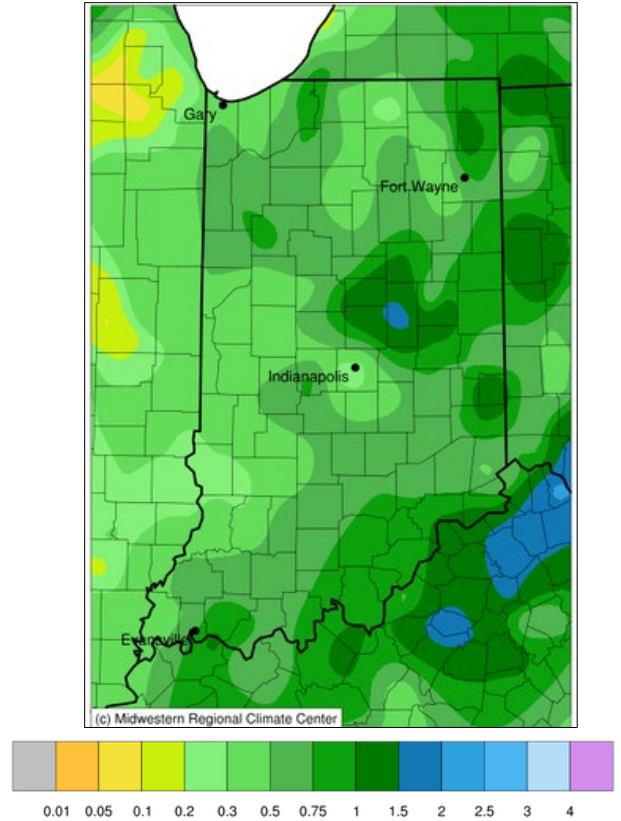
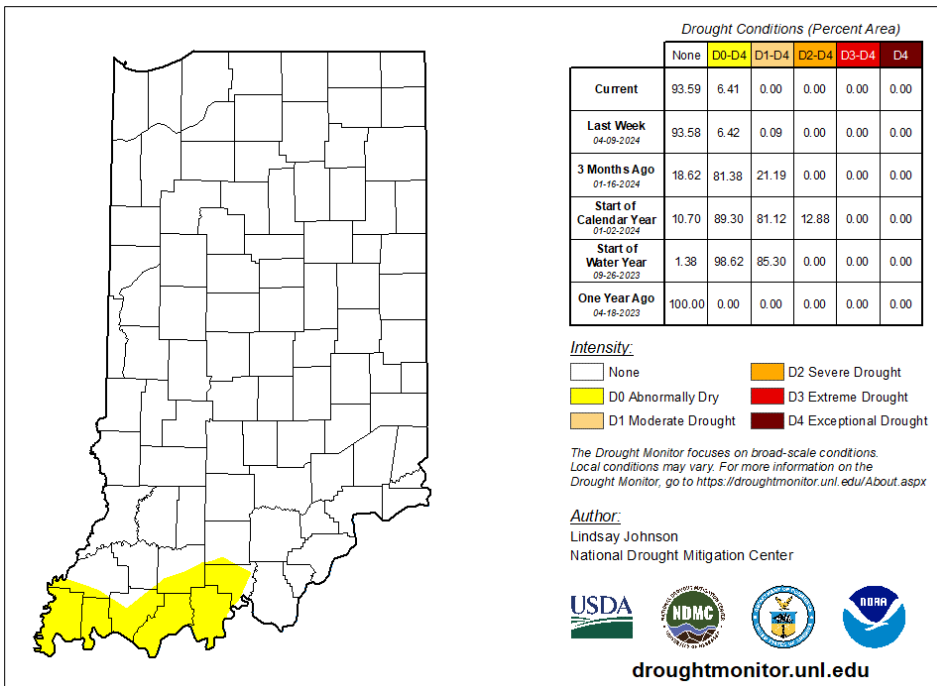


Figure 1. Accumulated rainfall (in.) for April 12-18, 2024, from MRCC.

USDM for the State of Indiana



For April 16, 2024, the USDM shows an area in southwestern Indiana is experiencing “abnormally dry” conditions. The remainder of the state indicates no drought conditions.

Figure 2. US Drought Monitor for the State of Indiana on April 16, 2024.

Reservoir Levels as of April 18, 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	751.5	663.8	664.1	544.5	533.3	752.31	755.31	746.21
% Utilization ²	15.90	13.13	27.00	30.11	5.43	6.7	6.9	19.9

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	790.73	784.76	809.94	610.33	645.13
% Utilization ²	3.4%	--	--	--	--

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 April 17, 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%
Hamilton 7 Jasper 13 Knox 8 Vanderburgh 7	Bartholomew 4	Benton 4 Boone 17 LaGrange 2 Martin 5 Morgan 4 Newton 8 Noble 8 Parke 6 Posey 3 Pulaski 7 Tiptecanoe 18 Vigo 7 Wells 4
Near Normal 25-75%		
Decatur 2 Elkhart 4 Fulton 7 Harrison 8	Jefferson 5 La Porte 9 Marion 35 Randolph 3	Shelby 2 Wayne 6 Whitley 3
Above 75-90%	Much Above 90-95%	High >95%
Cass 3 Grant 10 Knox 7	Grant 8 Lake 13	Clark 20 Delaware 4 Marion 39

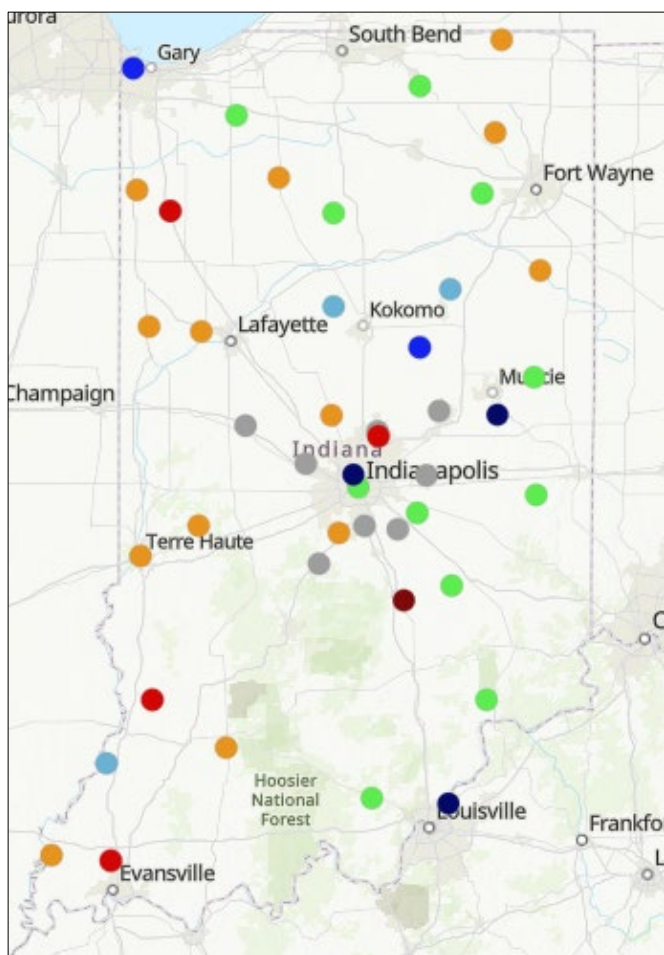


Figure 3. Map of USGS real-time groundwater monitoring wells.

Streamflow Conditions as of April 18, 2024

Streamflow conditions are normal to above normal across the state. There are 97 gages reporting normal and 34 reporting above normal, for the date. There are 4 gages reporting below normal, 1 reporting an all-time low for the date, 14 reporting much above normal, and 2 reporting an all-time high for the date.

Currently, 24% of stream gages indicate steady flow conditions; 15% are increasing and 58% are decreasing.

Average observed streamflow at real-time USGS observing sites over the past 7-days ending April 16, 2024, averaged 0% reporting an all-time low, 0% much below normal, 0% below normal, 19% near normal, 21% above normal, 50% much above normal, and 10% reporting an all-time high.

USGS and NWS reports 10 gages in “action stage” and 11 in “minor flood stage”. The NWS 4-Day Maximum Flood category forecasts 16 gages with “near flood stage and 19 gages with “minor flood stage”.

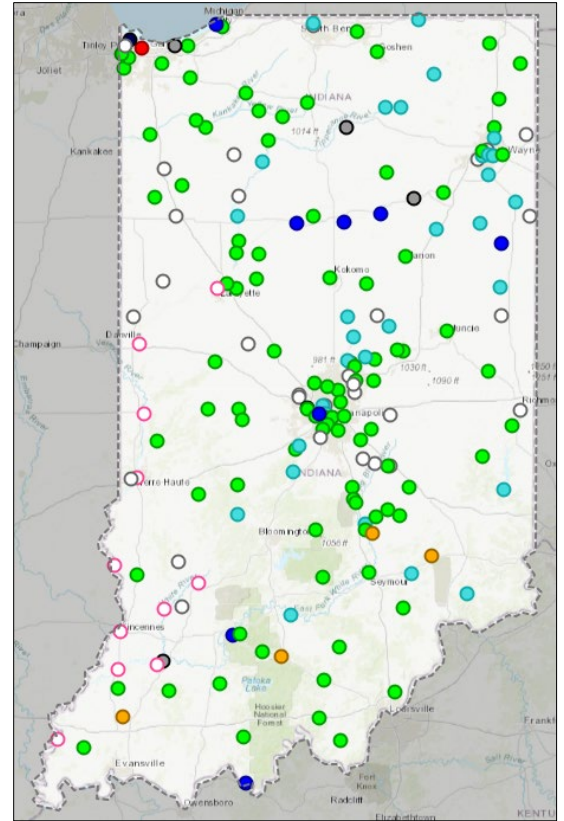


Figure 4. Map of USGS streamflow gages for Indiana.

NOAA 7-Day Quantitative Precipitation Forecast

For April 18, 2024, the 7-Day Quantitative Precipitation Forecast valid for April 18-25, 2024, predicts 0.75” in the southeast and northeast portions of Indiana increasing to 1.50” of precipitation for central part of the state. Precipitation is expected in the early and later parts of the week with drier conditions between.

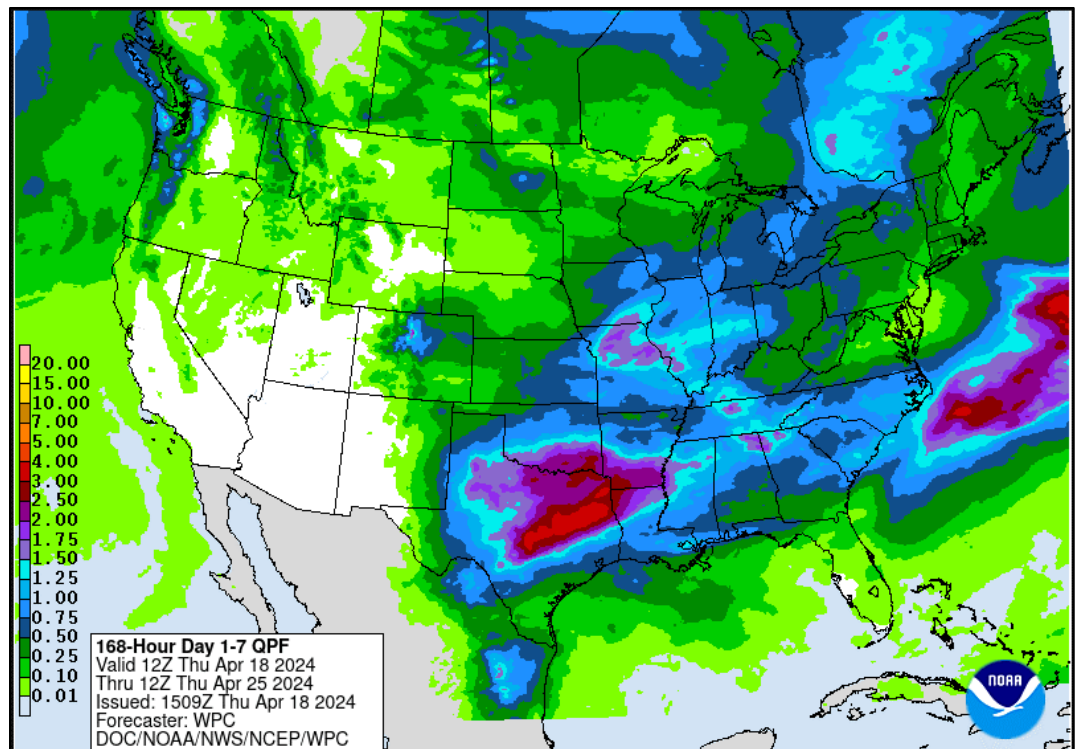
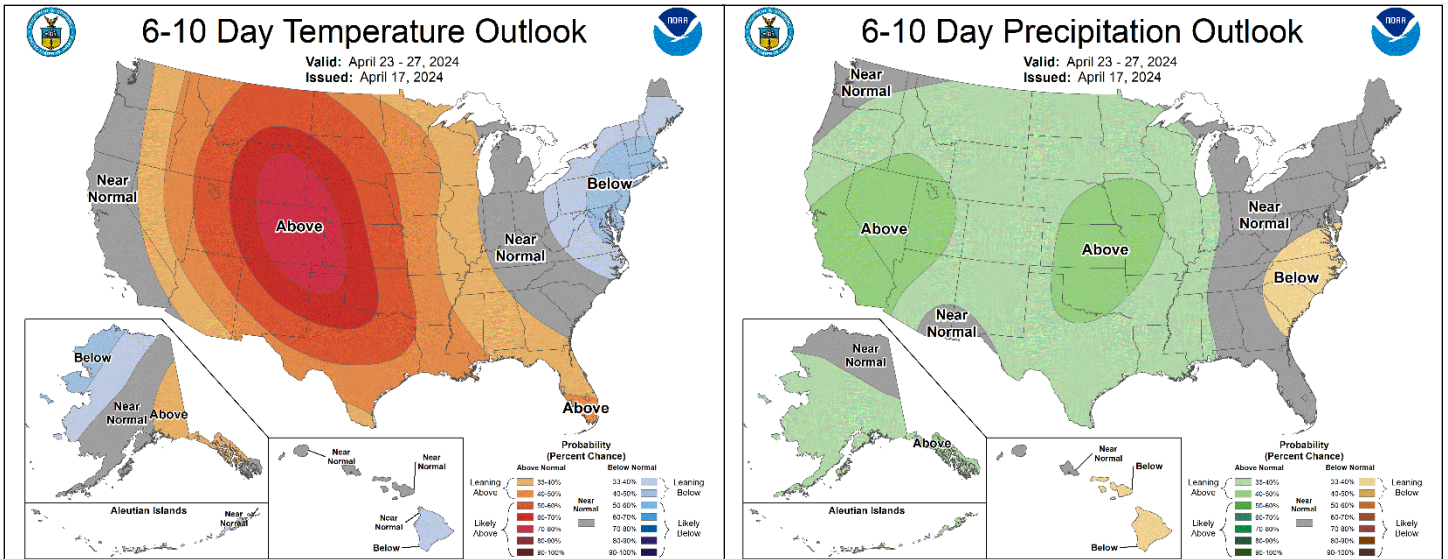


Figure 5. NOAA 7-Day Quantitative Precipitation Forecast, - April 18-25, 2024.

NOAA National Weather Service 6-10 Day Outlook

The 6-10 Day Temperature Outlook for April 23-27, 2024, projects near normal temperatures for much of the state. The Precipitation Outlook projects a 33-40% chance of above normal precipitation for the western side of the state and near normal conditions on the eastern side of 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](#)