

Mean temperatures for June 23-29 were near to below normal, ranging from 68.7°F in northern Indiana to 77.5°F in southern Indiana. Departure from normal temperatures ranged from -4.5°F to +1.9°F.

Most of the state received trace to 1.0" of rainfall during the week of June 23-29, which is below normal. Isolated areas across the state received near normal amounts of 1.0-2.0".

4" soil water content from the Purdue Mesonet Data Hub on June 29, 2023, indicates a range of 11.3% available water in northern Indiana to 34.1% in southern Indiana with a statewide average of 21.9%.

Soil moisture data from the NASA SPORT Real-time 3km Land Information System is currently unavailable due to a technical outage.

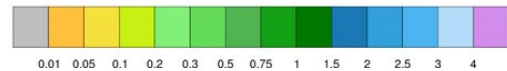
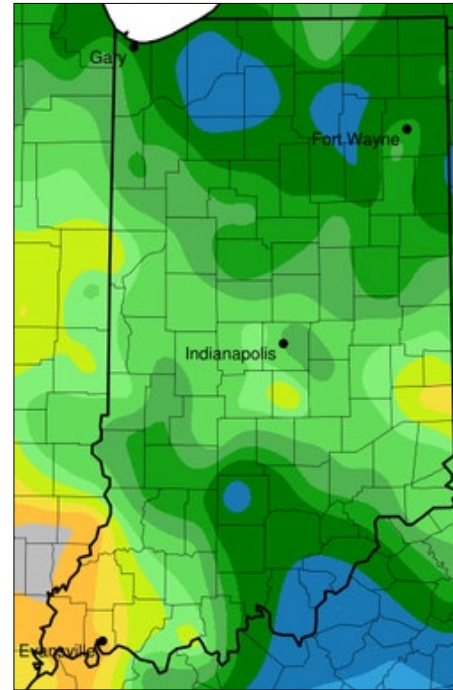
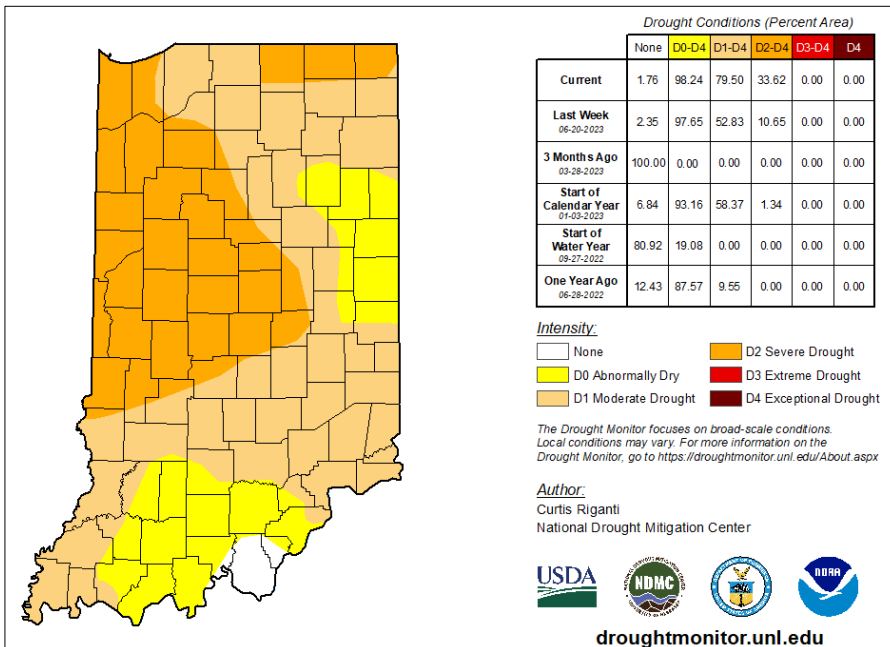


Figure 1. Accumulated precipitation (in.) for June 23-29, 2023, from MRCC.

USDM for the State of Indiana



For June 27, 2023, the USDM shows “abnormally dry” conditions in small areas in southern and east-central Indiana. Northeastern and western Indiana extending towards central Indiana are indicating “severe drought” conditions. The remainder of the state is experiencing “moderate drought” conditions.

Figure 2. US Drought Monitor for the state of Indiana on June 27, 2023.

Reservoir Levels as of June 29, 2023

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

Reservoir	Brookville	Cecil Hardin	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	748.4	661.9	639.7	538.0	536.4	750.91	751.41	737.44
% Utilization ²	1.21	-0.36	0.13	0.21	2.69	1.3	0.0	0.5

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	789.77	784.36	809.63	610.39	645.17
% Utilization ²	-1.1%	--	--	--	--

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 28, 2023

Groundwater wells across the state are generally reporting much below normal but range from low to normal. 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 Benton 4 Cass 3 Clark 20 Fulton 7 Jasper 13 Jefferson 5 Knox 7 Knox 8 La Porte 9 Montgomery 7 Morgan 4 Shelby 2 Wells 4	Boone 17 Grant 8 Hamilton 7 Newton 8 Parke 6 Tippecanoe 18 Vanderburgh 7 Wayne 6	Decatur 2 Elkhart 4 LaGrange 2 Lake 13 Marion 39 Posey 3 Pulaski 7 Randolph 3 Vigo 7
Near Normal 25-75%		
Delaware 4 Grant 10 Harrison 8	Marion 35 Martin 5 Noble 8	Whitley 3
Above 75-90%	Much Above 90-95%	High >95%
None	None	None

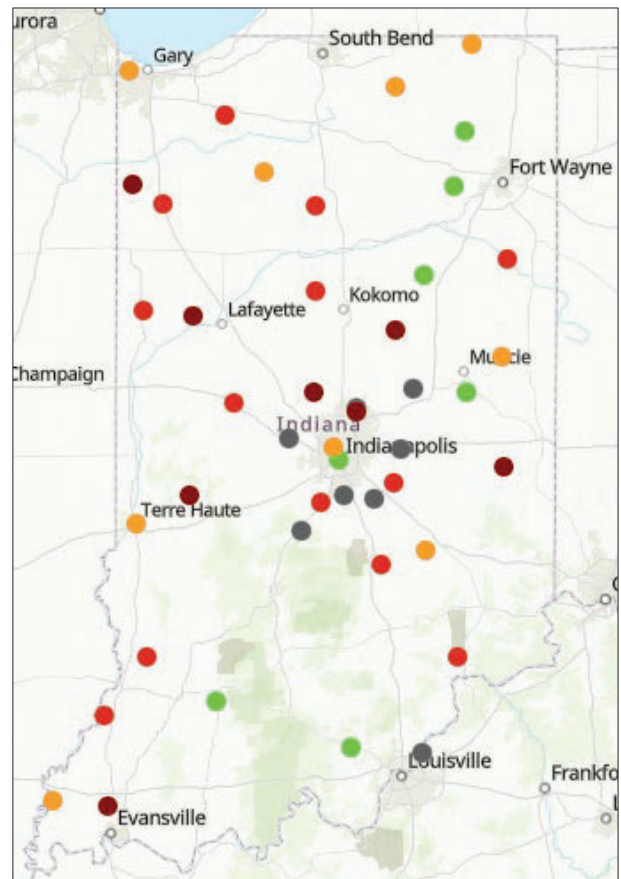


Figure 3. Map of USGS real-time groundwater monitoring wells.

Streamflow Conditions as of June 28, 2023

Streamflow conditions are remaining steady with the small amount of precipitation received over the week. They are generally near normal to much below normal. There are 4 gages reporting above normal, 0 reporting much above normal conditions, and 0 reporting an all-time high for the date. There are 52 gages reporting normal conditions, 57 reporting below normal, 33 reporting much below normal, and 5 reporting an all-time low for the date.

Currently, 37% of stream gages indicate steady flow conditions; 28% are increasing and 32% are decreasing.

Average observed streamflow at real-time USGS observing sites over the past 7-days ending June 27, 2023, averaged 3% reporting an all-time low, 35% much below normal, 39% below normal, 21% near normal, 2% above normal, 0% much above normal, and 0% reporting an all-time high.

USGS and NWS reports 0 gages in “action stage” or “minor flood stage”. The NWS 4-Day Maximum Flood category forecasts 0 gages with up to “near flood stage or “minor flood stage”.

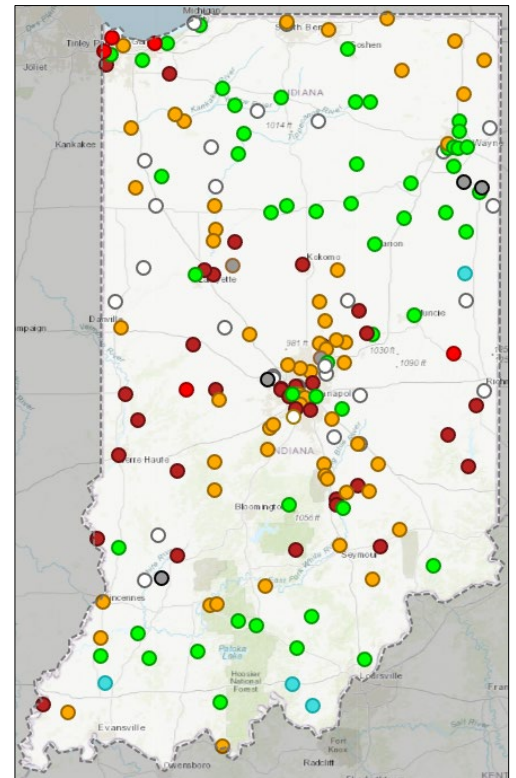


Figure 4. Map of USGS streamflow gages for Indiana

NOAA 7-Day Quantitative Precipitation Forecast

For June 29, 2023, the 7-Day Quantitative Precipitation Forecast valid for June 29-July 6, 2023, predicts rain for the entire state. Up to 5.0” of total rainfall is predicted for southwestern Indiana. The amount decreases towards the northeast with up to 1.5” predicted. Rain chances are predicted to occur through the entire week, with the heavier amount occurring through July 2, 2023.

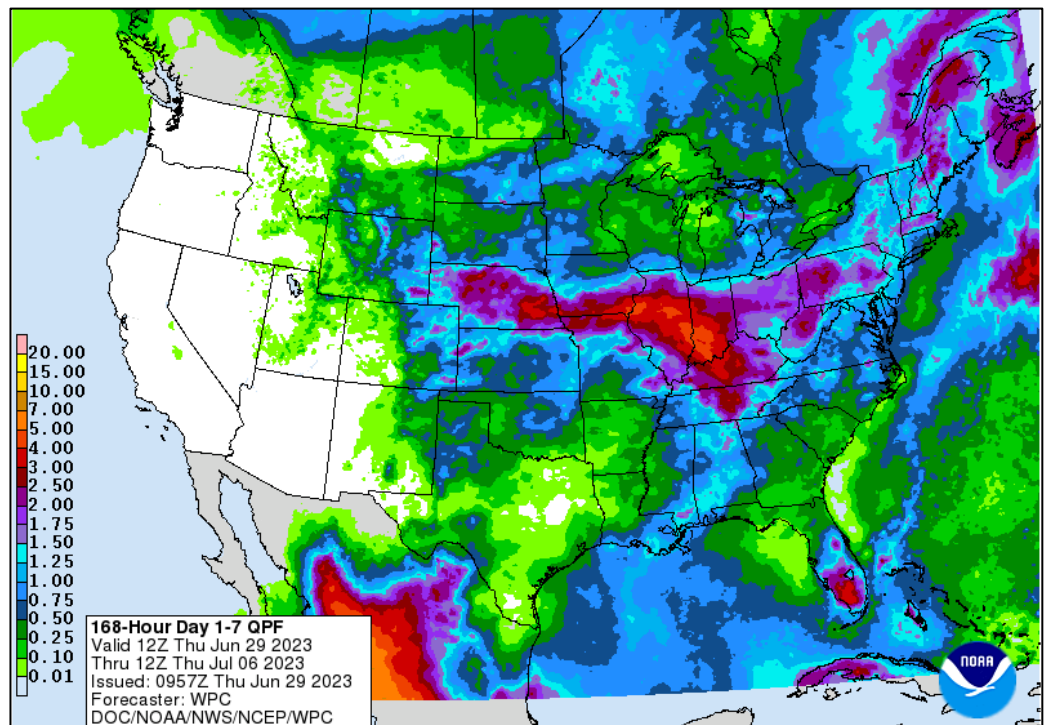
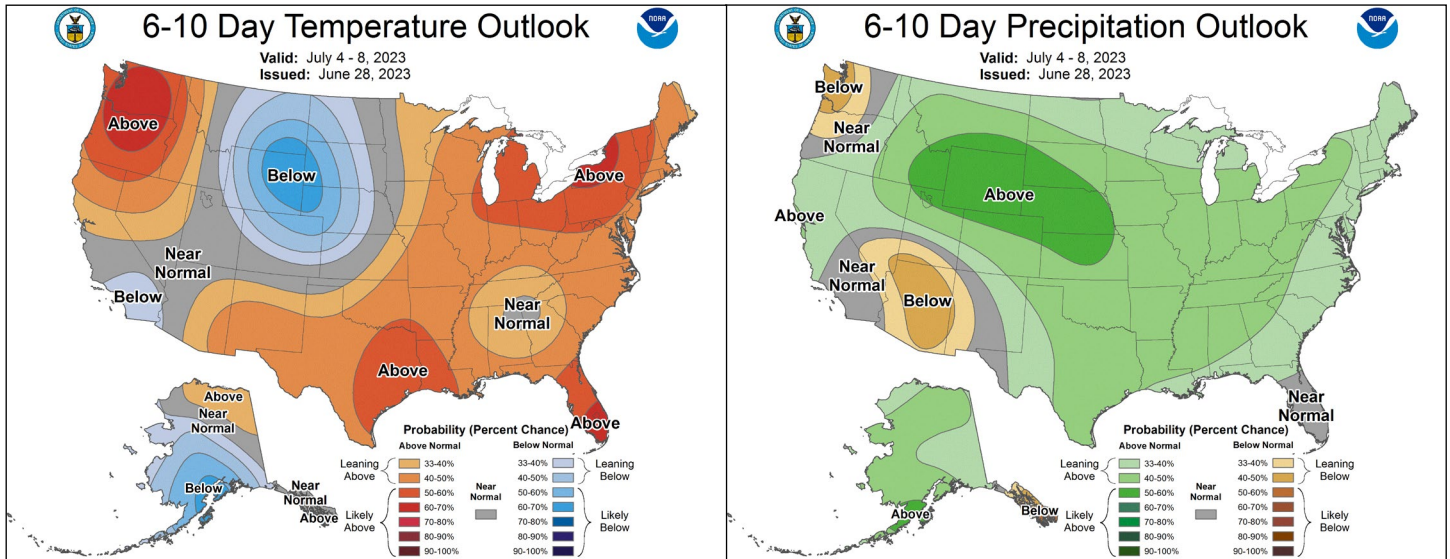


Figure 5. NOAA 7-Day Quantitative Precipitation Forecast, June 29-July 6, 2023.

NOAA National Weather Service 6-10 Day Outlook

The 6-10 Day Temperature Outlook for July 4-8, 2023, projects a 40-60% chance of above normal temperatures with northern Indiana having the greatest probability. The Precipitation Outlook projects 40-50% chances of above normal amounts of 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](#)