

Assessing Water Availability and Vulnerability in the Memphis Aquifer Area in West Tennessee



What's the Memphis Aquifer?

The Memphis Aquifer is an indispensable source of water for municipal, agricultural, and industrial use across west Tennessee. The aquifer is recharged by rainfall that percolates down to maintain the groundwater supply.

Earth Observations







Urbanization increases impervious surface cover, which prevents infiltration of water to the aquifer.



Ford's proposed Blue Oval City is 3,600 acres and sits atop of the sensitive and narrow aquifer recharge zone.

Credits: Earthstar Geographics, ESRI, US Census TIGERLINE, USGS

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Looking Ahead

Create a suitability map to better understand thriving areas.

Elena Pilch

Michael Pazmino

Continue to use Earth observation tools to detect changes to the water supply.

 \Box miles

Katera Lee

Add updated data products into the thriving index upon availability.

Share knowledge about the water supply to inform decision makers and the public.

Team Members

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Protect Our Aquifer & University of Memphis' Center for Applied Earth

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