

Understanding impacts on Great Lakes agriculture and water use under changing climate conditions

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Great Lakes Commission

Regional Body/Compact Council Science Team Meeting
January 27, 2026

Background

- GLC Policy Resolution: Understanding impacts to Great Lakes Agriculture and Water Use Under Changing Climate Conditions
- Support from The Joyce Foundation
- Regional Body/Compact Council Science Strategy

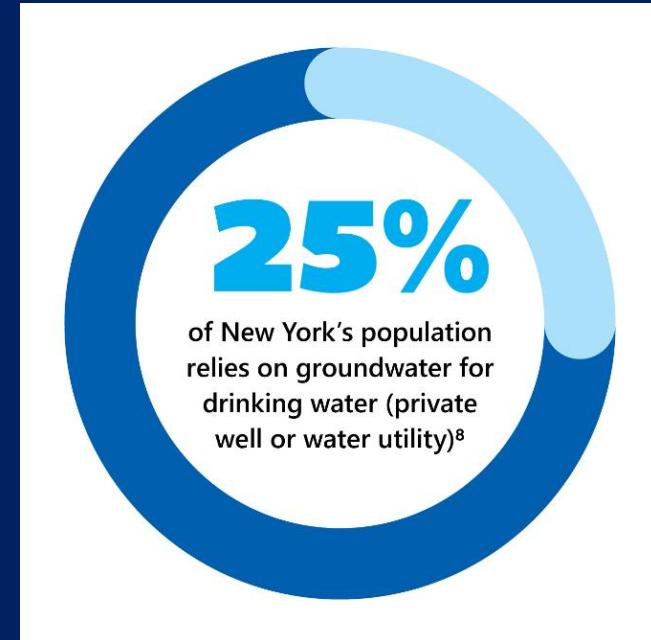
Agriculture in the Great Lakes Dashboard

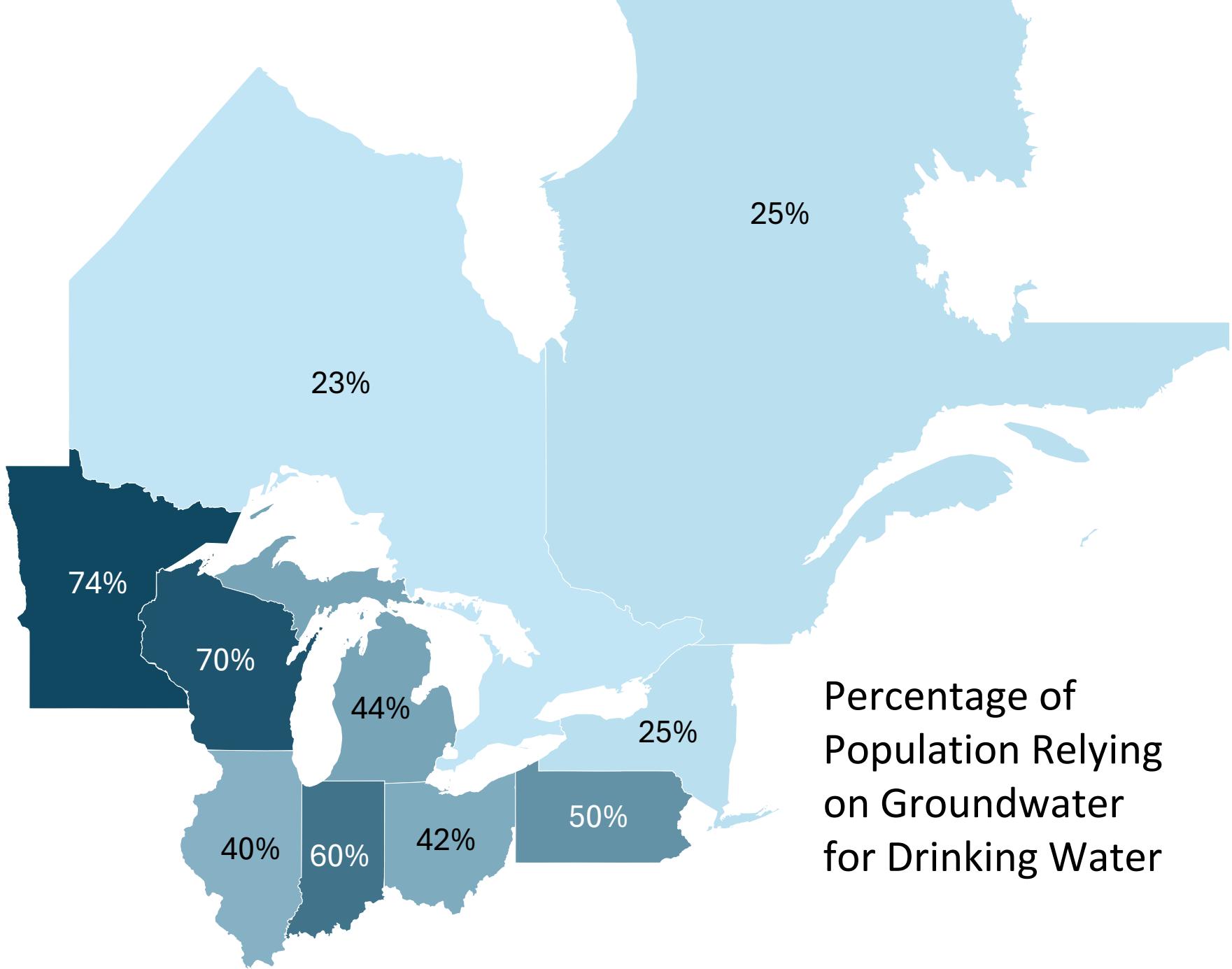
- Agricultural Commodities
- Watershed-scale patterns
- Climate change impacts

<https://aggrimm.github.io/charts/joyceag/pbidraft.html>

Groundwater Management Summaries

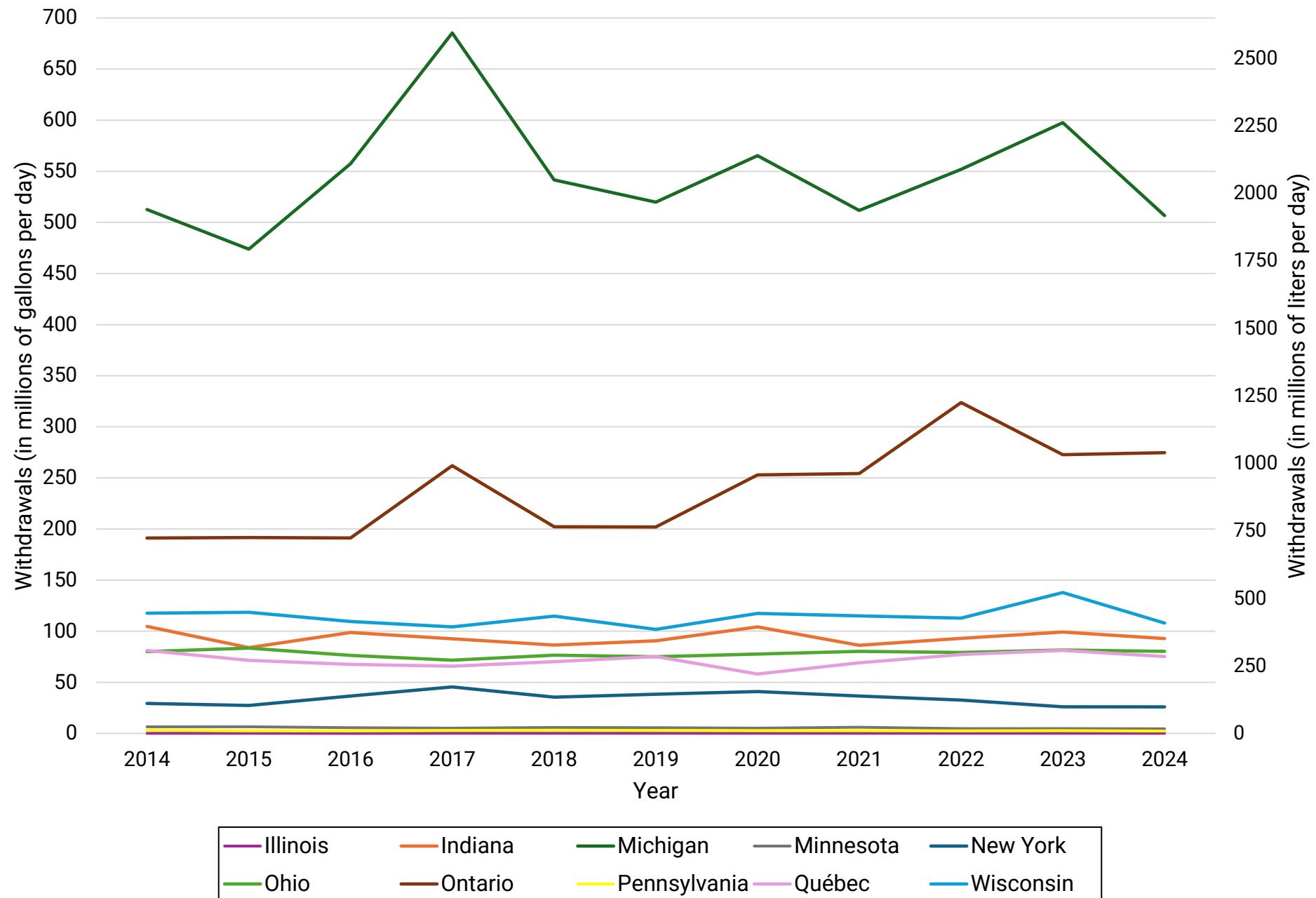
Agency	Pennsylvania Dept. of Environmental Protection	Pennsylvania Dept. of Conservation and Natural Resources
Groundwater Priority Area	Groundwater quality oversight Groundwater appropriation or permitting Drinking water supply Industrial contamination High-capacity well impact investigations State and regional water supply planning	Groundwater availability Water well driller licensing PaGWIS database management





Percentage of
Population Relying
on Groundwater
for Drinking Water

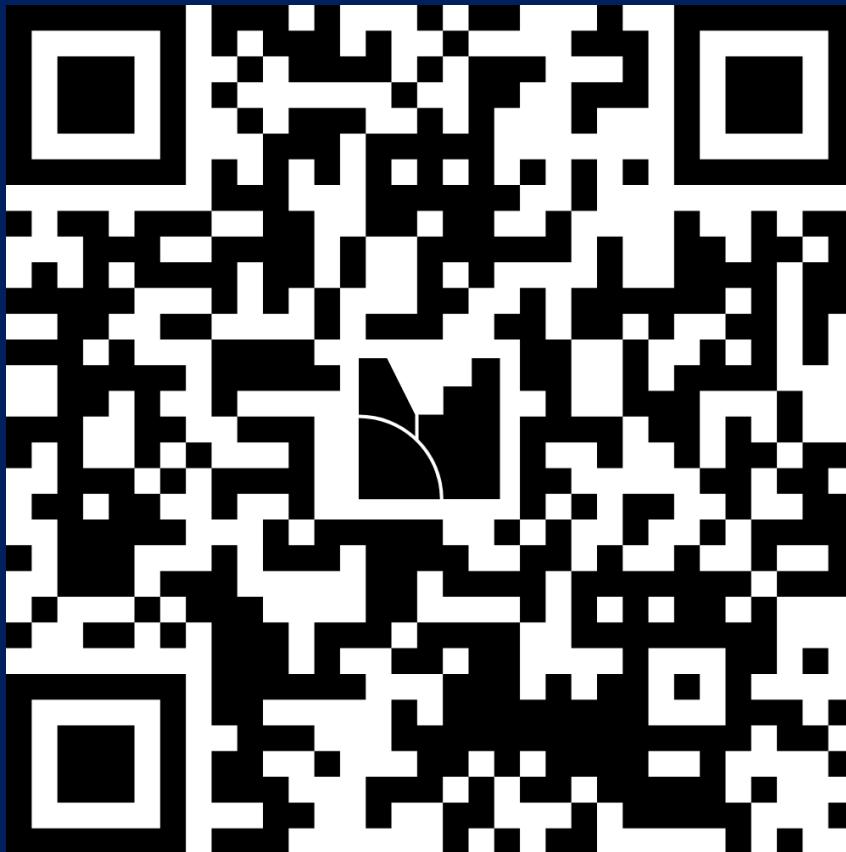
Great Lakes-St. Lawrence River Basin Groundwater Withdrawals from 2014-2024 (As reported to the Great Lakes Regional Water Use Database).



Future Work

- Joyce funding Phase II
- Refining agricultural water use
- Advancing non-potable water reuse
- GLC Policy Resolution: Non-Potable Water Reuse Development in the Great Lakes Basin

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Questions?