

2024* Water Quality Report

177,000 Constituents | 18% Rely on Private Wells for Drinking Water

Drinking Water Quality Violations

Approximately 3% of public water systems reported contaminant violations between 2022 and 2024.

Outstanding/Exceptional Surface Waters

No rivers, streams, nor lakes are classified as quality surface water.

Biosolids/Waste Landspreading Sites

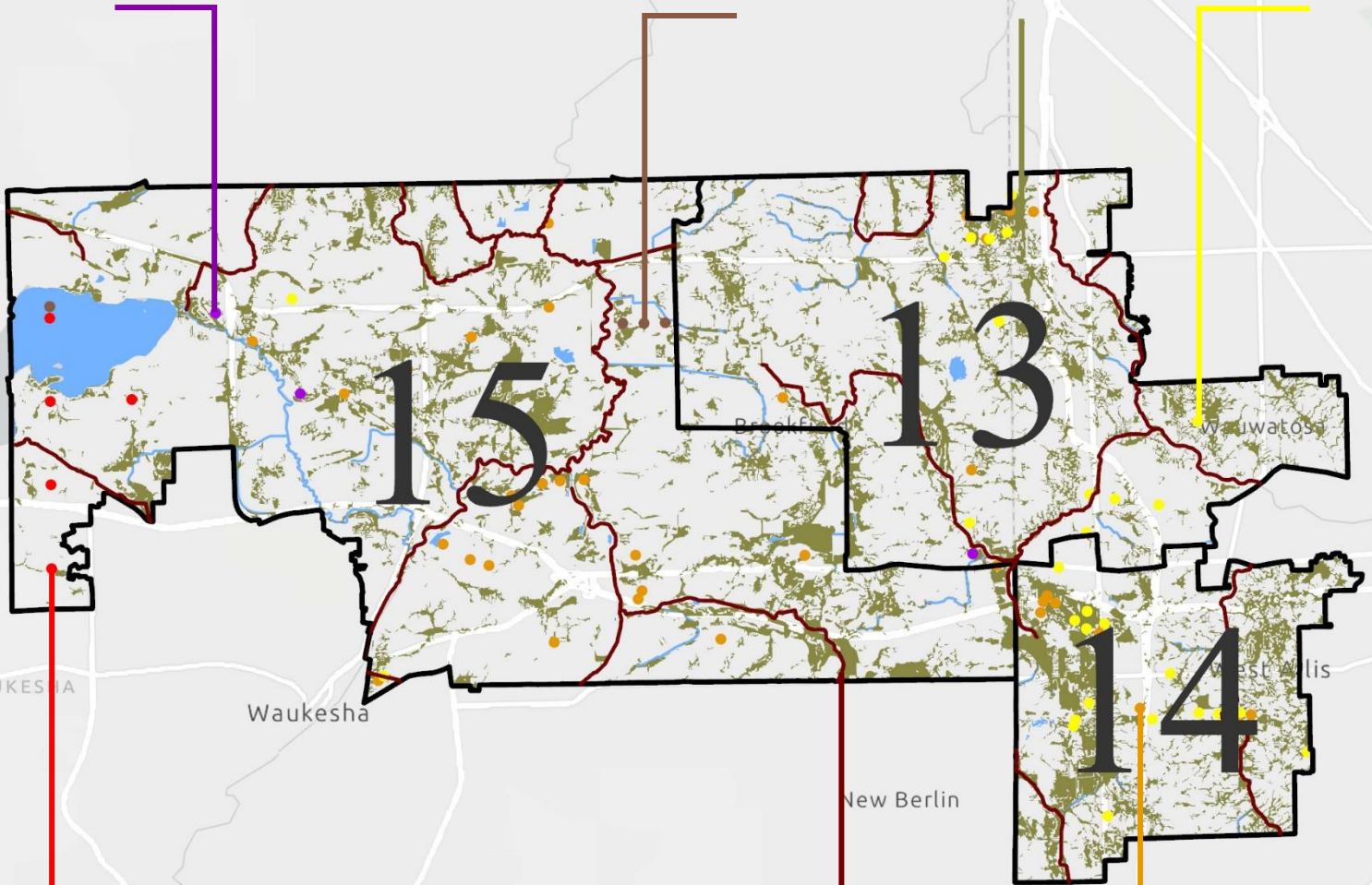
Septage, municipal, and industrial wastes are applied to 45 acres.

Wetland Loss

More than 9,800 acres of wetlands are categorized as lost but potentially restorable.

Groundwater Contamination Cleanup Sites

Thirty groundwater sites are listed as contaminated.



Nitrate Exceedances

From 2022 to 2024, 16% of public and 13% of private wells sampled exceeded the Preventive Action Limit for nitrate in drinking water.

Neonicotinoid Detects

Between 2019 and 2023, no wells were tested by the state for neonicotinoids.

Impaired Surface Waters

Almost 1% of total lake acres and 60% of river and stream miles are listed as impaired.

PFAS Sources and Detects

There are 30 presumed PFAS sources, and 33% of state-tested wells had at least one of the chemicals in 2023.

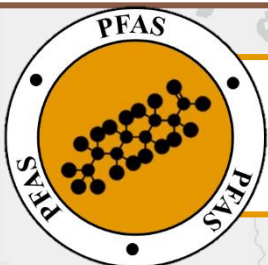




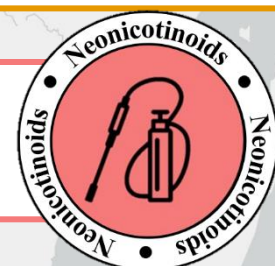
- **One private and eight public* wells sampled exceeded the Preventative Action Limit from 2022-2024.¹**
- Elevated levels of nitrate are generally due to agricultural runoff and industrial discharges.
- Nitrate has been linked to blue baby syndrome, colon cancer, thyroid disease, and neural tube defects.



- **Current permit holders have not applied any waste, though four separate fields are permitted.²**
- The liquid and solid waste is generated from paper mills, septage operations, and food processing plants.
- Landspreading waste can transport contaminants by contaminating groundwater and food and feed crops in the area.



- **Thirteen municipal wells tested (no private wells were tested) by the state had detectable levels of PFAS in 2023.³**
- The 30 presumed sources include facilities that manufacture, manage, and/or discharge PFAS materials.⁴
- PFAS consumption can cause developmental effects in children, decreased fertility, and some cancers.



- **From 2019-2023, no private nor monitoring wells were sampled for neonicotinoids.⁵**
- Neonicotinoid insecticides are applied to agricultural crops, lawns and gardens, golf courses, and more.
- Negative impacts to non-target insect species cause food chain issues in fish, birds, and potentially other taxa.



- **Bacteria, radon, and chlorine violations occurred in three public* water systems from 2022-2024.⁶**
- These contaminants often enter drinking water from agricultural operations, natural sources, and water treatment facilities.
- Sustained ingestion at high levels can cause gastrointestinal ailments, cancer, and respiratory issues, respectively.



- **Thirty groundwater sites are contaminated with PAHs, solvents, gasoline, heavy metals, cyanide, and/or VOCs.⁷**
- These chemical mixtures enter water through industrial discharges, underground storage tank leaks, and landfill leachate.
- If ingested through drinking water, the pollutants pose serious cancer and organ damage health risks.



- **Of the thousands of wetland acres lost, 18% of the total land acreage has the potential for restoration.³**
- Degradation and loss of Wisconsin wetlands is primarily due to invasives, development, and conversion to cropland.
- Wetlands absorb pollutants before they enter water, including drinking water; without them, we lose natural filters.



- **More than four acres and 50 miles of surface waters are listed as impaired under the Clean Water Act.³**
- The mercury, phosphorus, lead, and/or PCBs throughout are often from agricultural and industrial discharges.
- Ingestion of these pollutants can lead to organ damage, cardiovascular and reproductive issues, cancer, and more.



- **No surface waters are classified as Outstanding or Exceptional Resource Waters by the state.³**
- These waterbodies support fisheries and wildlife and have high water quality from effective management and protection.
- As some drinking water is sourced from surface water, these are essential public health resources, too.



*Public wells include [municipal, other than municipal, non-transient non-community, and transient non-community systems](#). ¹Wisconsin Department of Natural Resources (WDNR) Groundwater Retrieval Network; ²WDNR data request; ³WDNR GIS Open Data Portal; ⁴Adapted from Salvatore et al. (2022); ⁵Department of Agriculture, Trade, and Consumer Protection data request; ⁶Environmental Protection Agency Enforcement and Compliance History Online; ⁷WDNR Bureau for Remediation and Redevelopment Tracking System