

2024* Water Quality Report

177,000 Constituents | 25% Rely on Private Wells for Drinking Water

PFAS Sources and Detects

There are 38 presumed PFAS sources, and 32% of state-tested wells had at least one of the chemicals in 2023.

Neonicotinoid Detects

Between 2019 and 2023, 42% of state-tested wells contained one of three neonicotinoids.

Impaired Surface Waters

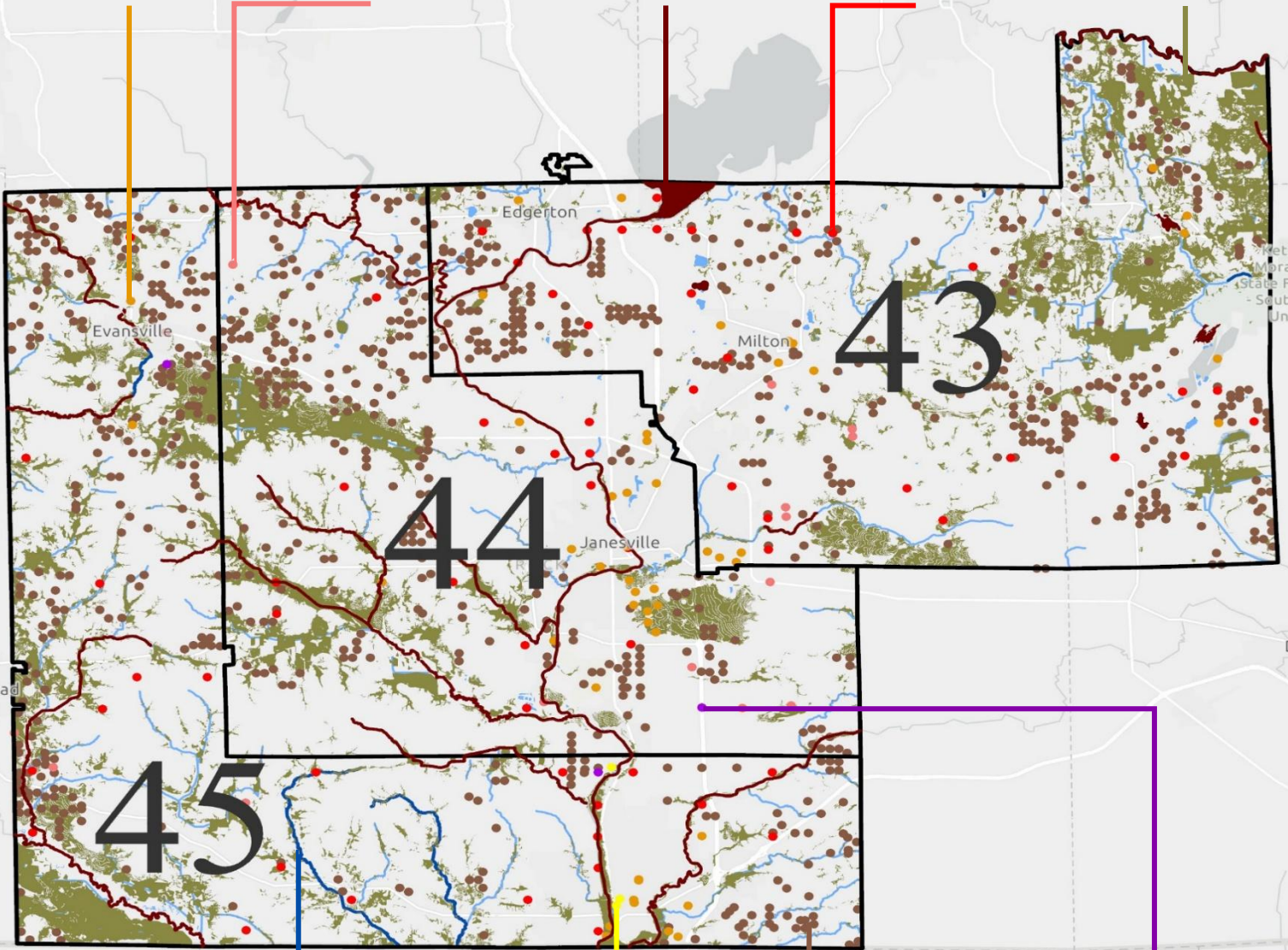
Over 60% of total lake acres and 34% of river and stream miles are listed as impaired.

Nitrate Exceedances

From 2022 to 2024, 75% of public and 71% of private wells sampled exceeded the Preventive Action Limit for nitrate in drinking water.

Wetland Loss

More than 72,300 acres of wetlands are categorized as lost but potentially restorable.



Outstanding/Exceptional Surface Waters

Durand
Almost 16% of river and stream miles and 0% of lake acres are classified as quality surface water.

Groundwater Contamination Cleanup Sites

Three groundwater sites are listed as contaminated.

Biosolids/Waste Landspreading Sites

Septage, municipal, and industrial wastes are applied to over 47,200 acres.

Drinking Water Quality Violations

Approximately 2% of public water systems reported contaminant violations between 2022 and 2024.

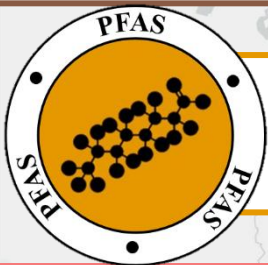




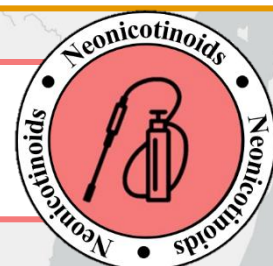
- **Ten private and 86 public wells sampled exceeded the Preventative Action Limit from 2022-2024.**¹
- Elevated levels of nitrate are generally due to agricultural runoff and industrial discharges.
- Nitrate has been linked to blue baby syndrome, colon cancer, thyroid disease, and neural tube defects.



- **Current permit holders have applied over 182 million gallons of waste to over 1,200 separate fields.**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.



- **Five private and nine municipal wells tested by the state had detectable levels of PFAS in 2023.**³
- The 38 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, 14 private and monitoring wells sampled contained one or more 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 and nitrate violations occurred in three public water systems from 2022-2024.**⁶
- These contaminants often enter drinking water from agricultural operations.
- Sustained ingestion at high levels can cause gastrointestinal illnesses and cancer, respectively.



- **Three groundwater sites are contaminated with solvents, gasoline, and/or volatile organic compounds.**⁷
- These chemical mixtures enter water through industrial/military discharges, 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, 15% 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 2,500 acres and 150 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.



- **Over 70 miles of surface waters are classified as Outstanding or Exceptional 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.



¹Wisconsin Department of Natural Resources (WDNR) Groundwater Retrieval Network (GRN); ²WDNR data request; ³WDNR GIS Open Data Portal;

⁴Adapted from Salvatore et al. (2022); ⁵Department of Agriculture, Trade, and Consumer Protection (DATCP) data request; ⁶Environmental Protection Agency (EPA) Enforcement and Compliance History Online (ECHO); ⁷WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS)