

2024* Water Quality Report

177,000 Constituents | 45% Rely on Private Wells for Drinking Water

Impaired Surface Waters

Over 83% of total lake acres and 28% of river and stream miles are listed as impaired.

Groundwater Contamination Cleanup Sites

There are nine state-identified open groundwater contamination sites.

Nitrate Exceedances

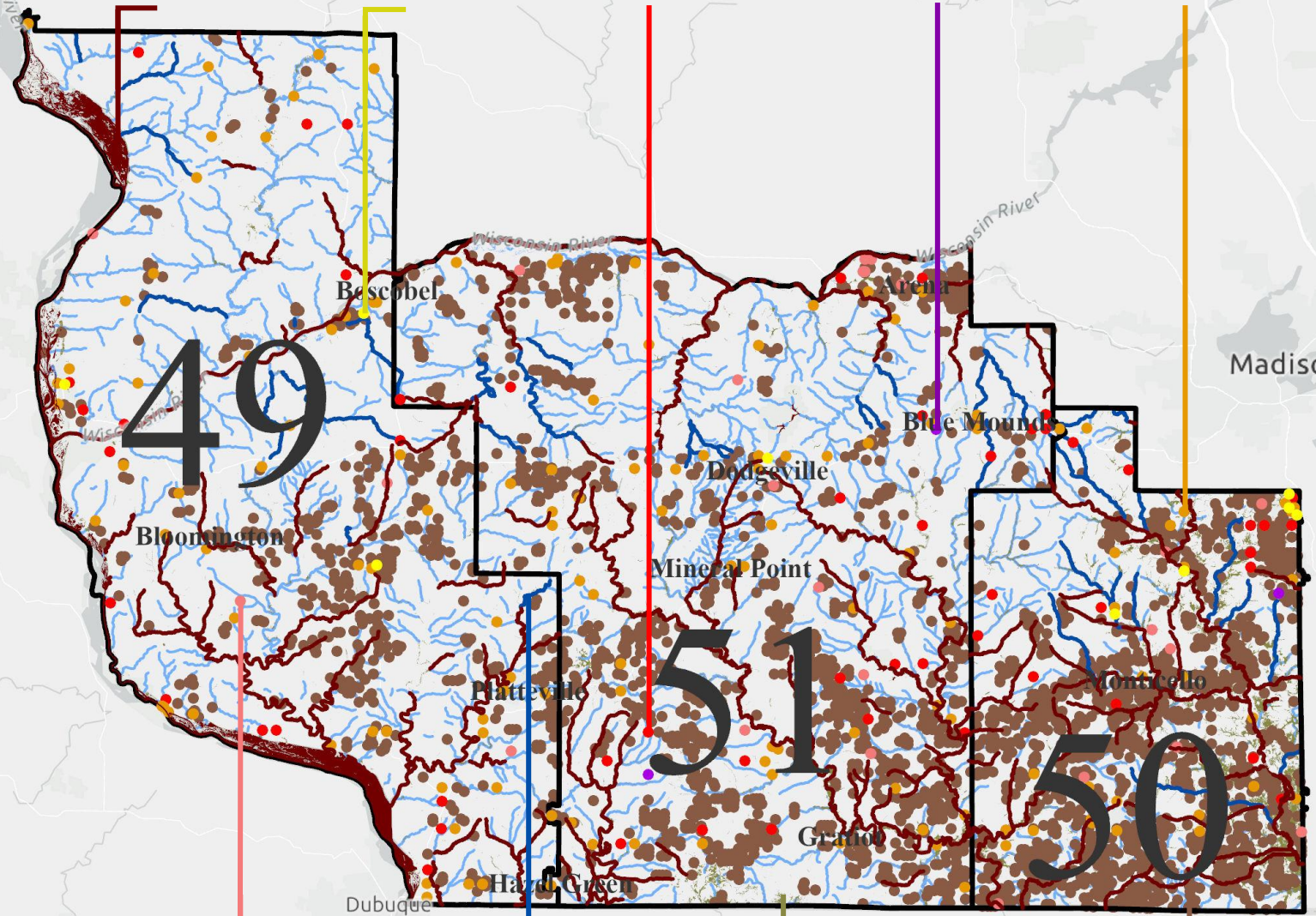
In the past three years, 45% of public and 63% of private wells sampled exceeded the Preventive Action Limit for nitrate in drinking water.

Drinking Water Quality Violations

Approximately 1% of public water systems reported contaminant violations from 2022 to 2024.

PFAS Sources and Detects

There are 19 presumed sources of PFAS, and 19% of state-tested wells had detectable levels of at least one of the chemicals in 2023.



Neonicotinoid Detects

Between 2019 and 2023, 14% of state-tested wells contained detectable levels of one of three neonicotinoids.

Outstanding/Exceptional Surface Waters

Almost 13% of total river and stream miles are classified as high-quality surface water.

Wetland Loss

More than 75,000 acres of wetland are categorized by the state as lost but potentially restorable.

Biosolids/Waste Landspreading Sites

Septage, municipal, and industrial wastes are applied to over 109,000 acres.





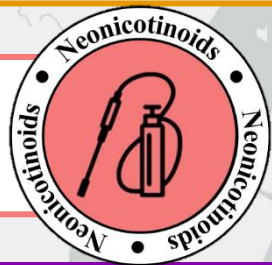
- **Sixty-five public and 17 private wells sampled exceeded the Preventative Action Limit from 2022-2024¹**
- Elevated levels of nitrate are generally due to agricultural runoff and industrial discharges
- Nitrate has been linked to blue baby syndrome, colon cancer, thyroid disease, and neural tube defects



- **Current permit holders have applied over 664 million gallons of waste to more than 3,600 separate fields²**
- The liquid and solid waste is generated from paper mills, septic operations, and food processing plants
- Landspreading can transport contaminants by contaminating groundwater and crops grown in the area



- **Nineteen percent of private and municipal wells tested by the state had detectable levels of PFAS in 2023³**
- The 19 presumed sources include facilities that manufacture, manage, or discharge PFAS materials⁴
- PFAS consumption can cause developmental effects in children, decreased fertility, and some cancers



- **More than 14% of state-tested private and monitoring wells contained one or more neonicotinoids⁵**
- Neonicotinoid insecticides are applied to agricultural crops, lawns and gardens, golf courses, and more
- Negative impacts to non-target species, such as fish and birds, raise potential human health concerns



- **Elevated levels of radium, arsenic, and nitrate were found in three public water systems⁶**
- These often enter drinking water from natural sources, agricultural operations, and septic systems
- Sustained ingestion at high levels can cause tissue damage, stomach ailments, and cancer, respectively



- **Nine groundwater sites are contaminated with solvents, gasoline, and volatile organic compounds⁷**
- They enter the water through industrial discharges, underground storage tank leaks, and landfill leachate
- If ingested through drinking water, these pollutants pose serious cancer and organ damage health risks



- **Of the thousands of wetland acres lost, 2.8% of the total land has the potential for restoration³**
- Degradation and loss of Wisconsin wetlands is primarily due to development, drainage, and agriculture
- Wetlands absorb pollutants before they enter drinking water; without them, we lose natural water filters



- **Over 34,700 acres and 1,074 miles of surface waters are impaired under the Clean Water Act³**
- The phosphorus, heavy metal, and PCB contamination is often from agricultural and industrial discharges
- Ingestion of the pollutants can lead to organ damage, cardiovascular and reproductive issues, and cancer



- **Four hundred and eighty miles of surface waters are classified as Outstanding or Exceptional by the state³**
- These waterbodies support fisheries and wildlife and have high water quality from effective management
- As some drinking water is sourced from surface water, these are essential public health resources

Waukegan



cleanwisconsin

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)