23
SENATE DISTRICT

2024* Water Quality Report

177,000 Constituents | 69% Rely on Private Wells for Drinking Water

PFAS Sources and Detects

There are 28 presumed PFAS sources, and 38% of state-tested wells had at least one of the chemicals in 2023.

Nitrate Exceedances

From 2022 to 2024, 50% of public and 59% of private wells sampled exceeded the Preventive Action Limit for nitrate in drinking water.

Drinking Water Quality Violations

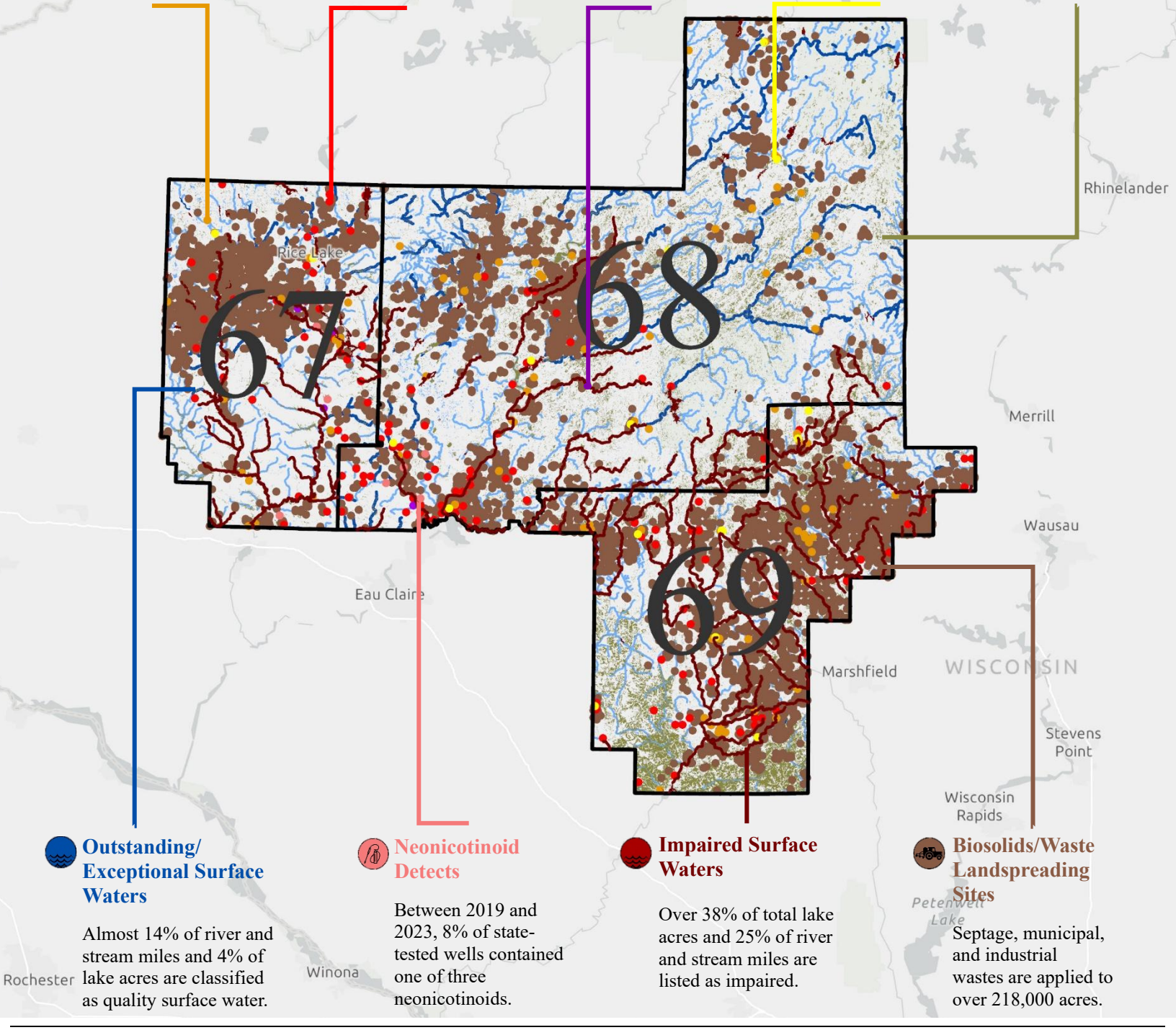
Approximately 1% of public water systems reported contaminant violations between 2022 and 2024.

Groundwater Contamination Cleanup Sites

Seventeen groundwater sites are listed as contaminated.

Wetland Loss

More than 481,000 acres of wetlands are categorized as lost but potentially restorable.



Outstanding/ Exceptional Surface Waters

Almost 14% of river and stream miles and 4% of lake acres are classified as quality surface water.

Neonicotinoid Detects

Between 2019 and 2023, 8% of state-tested wells contained one of three neonicotinoids.

Impaired Surface Waters

Over 38% of total lake acres and 25% of river and stream miles are listed as impaired.

Biosolids/Waste Landspreading Sites

Septage, municipal, and industrial wastes are applied to over 218,000 acres.

For policy questions, contact Water and Agriculture Program Director Sara Walling at swalling@cleanwisconsin.org.
For data questions, contact Clean Water Manager Hannah Richerson at hricherson@cleanwisconsin.org.

**Data available as of December 31, 2024.*

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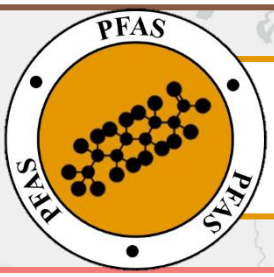
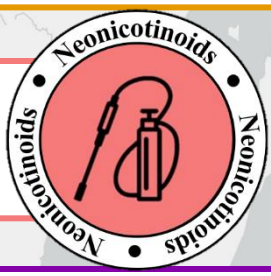
- **Seventeen private and 163 public wells sampled exceeded the Preventative Action Limit from 2022-2024.[1]**
- Elevated levels of nitrate are generally due to agricultural runoff and industrial discharges.
- Nitrate has been linked to blue baby syndrome, colon cancer, thyroid disease, and neural tube defects.

- **Current permit holders have applied over 1.2 billion gallons of waste to over 7,200 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.



- **Twenty-three private and 32 municipal wells tested by the state had detectable levels of PFAS in 2023.[3]**
- The 28 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, eight private and monitoring wells 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.

- **Nitrate and bacteria violations occurred in four public water systems from 2022-2024.[6]**
- These contaminants often enter drinking water from agricultural and industrial operations.
- Sustained ingestion at high levels can cause cancer and gastrointestinal issues, respectively.

- **Seventeen groundwater sites are contaminated with metals, 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 cancer, organ damage, and/or other serious health risks.

- **Of the thousands of wetland acres lost, 11% 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 47,200 acres and 1,200 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 670 miles and 5,200 acres of surface waters are classified as Outstanding or Exceptional 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.

[1]Wisconsin Department of Natural Resources (WDNR) Groundwater Retrieval Network (GRN); [2]WDNR data request; [3]WDNR GIS Open Data Portal; [4]Adapted from Salvatore et al. (2022); [5]Department of Agriculture, Trade, and Consumer Protection (DATCP) data request; [6]Environmental Protection Agency (EPA) Enforcement and Compliance History Online (ECHO); [7]WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS)

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