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SENATE DISTRICT

2024* Water Quality Report

177,000 Constituents | 73% Rely on Private Wells for Drinking Water

PFAS Sources and Detects

There are 49 presumed PFAS sources, and 60% of state-tested wells had at least one of the chemicals in 2023.

Nitrate Exceedances

From 2022 to 2024, 35% of public and 18% of private wells sampled exceeded the Preventive Action Limit for nitrate in drinking water.

Wetland Loss

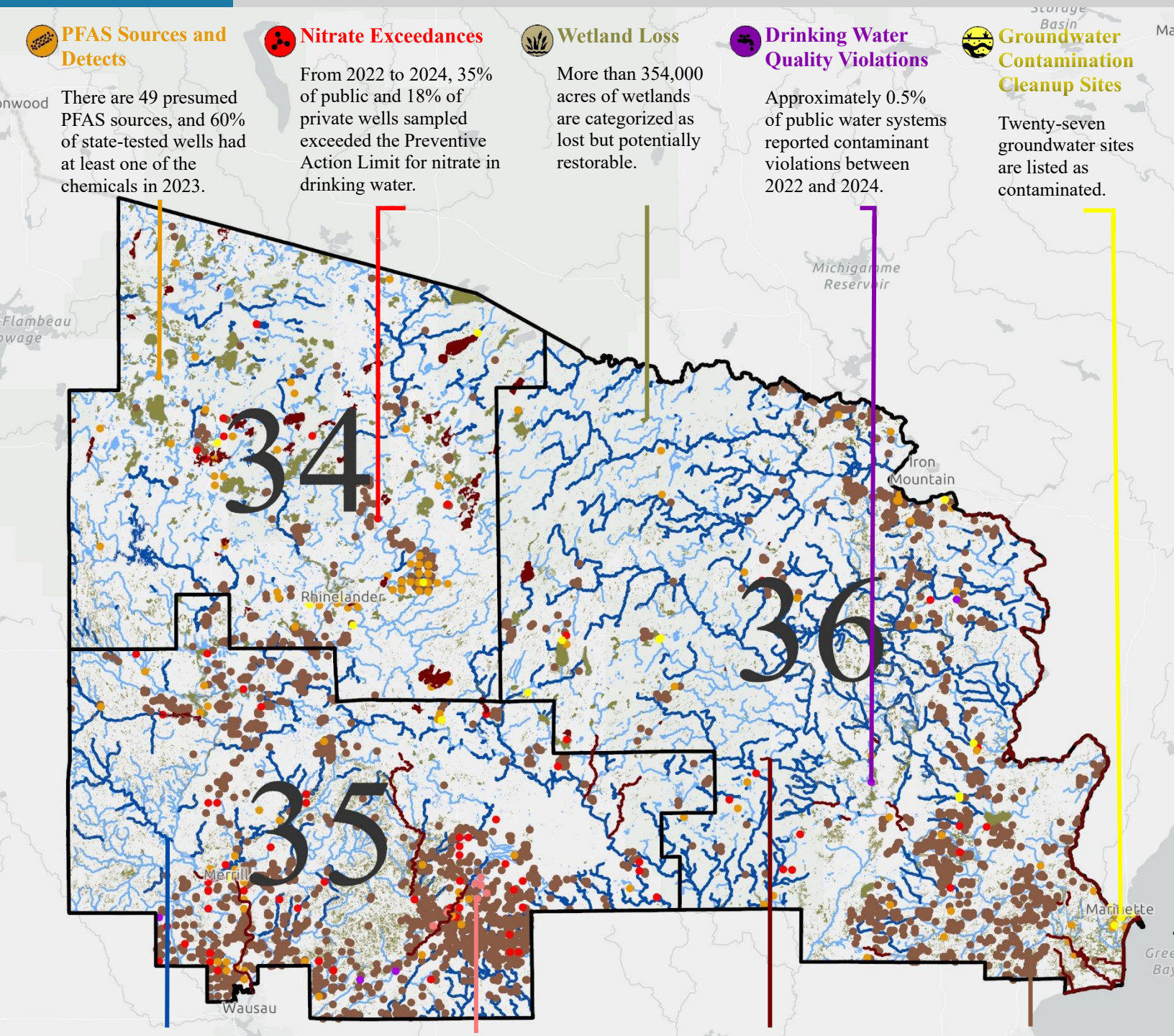
More than 354,000 acres of wetlands are categorized as lost but potentially restorable.

Drinking Water Quality Violations

Approximately 0.5% of public water systems reported contaminant violations between 2022 and 2024.

Groundwater Contamination Cleanup Sites

Twenty-seven groundwater sites are listed as contaminated.



Outstanding/ Exceptional Surface Waters

Almost 41% of river and stream miles and 8% of lake acres are classified as quality surface water.

Neonicotinoid Detects

Between 2019 and 2023, 20% of state-tested wells contained one of three neonicotinoids.

Impaired Surface Waters

Over 14% of total lake acres and 4% of river and stream miles are listed as impaired.

Biosolids/Waste Landspreading Sites

Septage, municipal, and industrial wastes are applied to over 71,000 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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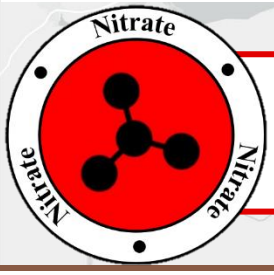
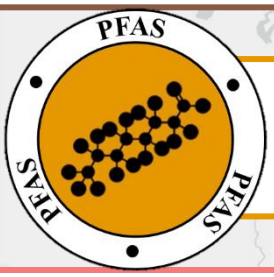
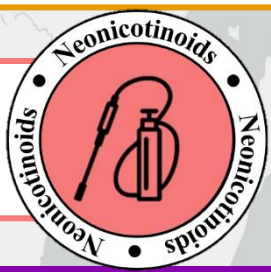


- **Four private and 115 public* wells sampled exceeded the Preventative Action Limit from 2022-2024.[1]**
- Elevated levels of nitrate are generally due to agricultural runoff and industrial discharges.
- Nitrate has been linked to blue baby syndrome, colon cancer, thyroid disease, and neural tube defects.

- **Current permit holders have applied approximately 870 million gallons of waste to over 2,800 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.



- **Ninety-seven private and 49 municipal wells tested by the state had detectable levels of PFAS in 2023.[3]**
- The 49 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, 12 private and monitoring well samples 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 five public* water systems from 2022-2024.[6]**
- These contaminants often enter drinking water from agricultural operations, waste seepage, and natural sources.
- Sustained ingestion at high levels can cause certain cancers and gastrointestinal ailments, respectively.

- **Twenty-seven groundwater sites are contaminated with PFAS, solvents, metals, 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, 7% 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 65,000 acres and 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 2,200 miles and 35,000 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.

*Public wells include municipal, other than municipal, non-transient non-community, and transient non-community systems. [1]Wisconsin Department of Natural Resources (WDNR) Groundwater Retrieval Network; [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 data request; [6]Environmental Protection Agency Enforcement and Compliance History Online; [7]WDNR Bureau for Remediation and Redevelopment Tracking System

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