2
SENATE DISTRICT

2024* Water Quality Report

177,000 Constituents | 52% Rely on Private Wells for Drinking Water

PFAS Sources and Detects

There are 29 presumed PFAS sources, and 21% of state-tested wells had at least one of the chemicals in 2023.

Nitrate Exceedances

From 2022 to 2024, 27% of public and 18% of private wells sampled exceeded the Preventive Action Limit for nitrate in drinking water.

Groundwater Contamination Cleanup Sites

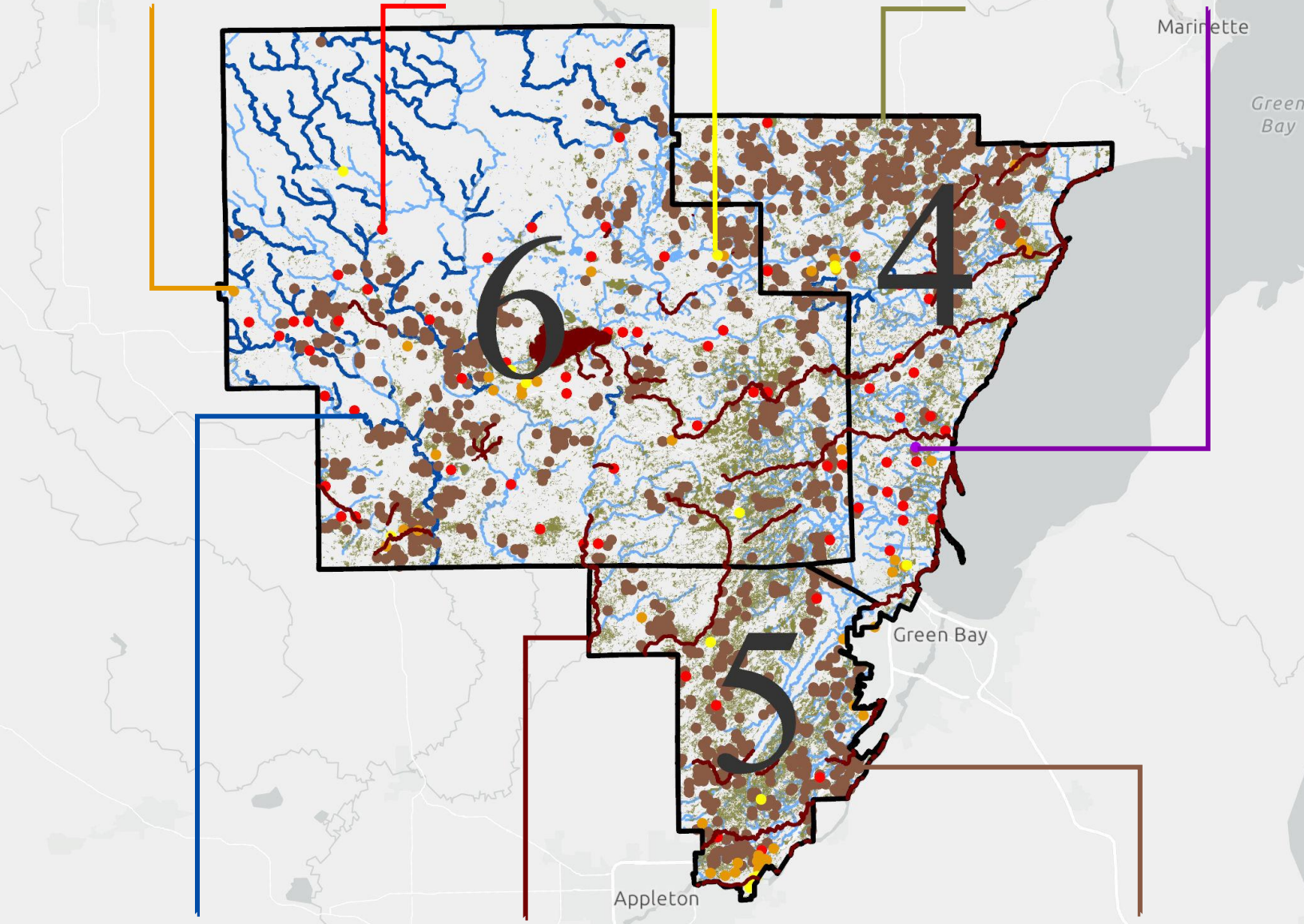
Sixteen groundwater sites are listed as contaminated.

Wetland Loss

More than 202,200 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.



Outstanding/ Exceptional Surface Waters

Almost 17% of river and stream miles and 0% of lake acres are classified as quality surface water.

Impaired Surface Waters

Over 44% of total lake acres and 12% of river and stream miles are listed as impaired.

Neonicotinoid Detects

Between 2019 and 2023, no state-tested wells contained neonicotinoids.

Biosolids/Waste Landspreading Sites

Septage, municipal, and industrial wastes are applied to over 43,600 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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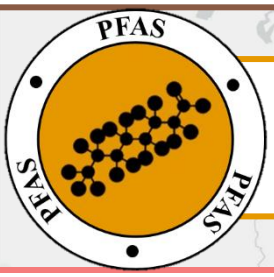
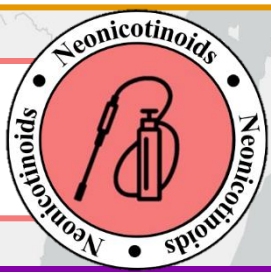
- **Seven private and 11 public wells sampled exceeded the Preventative Action Limit from 2022-2024.[1]**
- Elevated levels of nitrate are generally due to agricultural runoff and industrial discharges.
- Nitrate has been linked to blue baby syndrome, colon cancer, thyroid disease, and neural tube defects.

- **Current permit holders have applied over 707 million gallons of waste to over 1,600 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.



- **Seven private and eight municipal wells tested by the state had detectable levels of PFAS in 2023.[3]**
- The 29 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 contained 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.

- **Radium violations occurred in one public water system from 2022-2024.[6]**
- This contaminant often enters drinking water from natural sources and .
- Sustained ingestion at high levels can cause cancer and other serious health issues.

- **Sixteen groundwater sites are contaminated with solvents, gasoline, heavy metals, and/or VOCs.[7]**
- These chemical mixtures enter water through industrial/military discharges, storage tank leaks, and landfill leachate.
- If ingested through drinking water, these pollutants pose cancer, organ damage, and/or other serious health risks.

- **Of the thousands of wetland acres lost, 16% 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 13,300 acres and 250 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 355 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.

[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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