

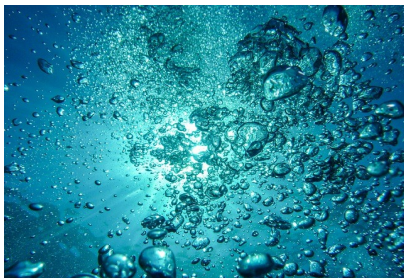


“The Dodge County Board of Supervisors supports the need for a conservation ethic that recognizes and affirms the responsibility of all residents for the health of county waters.”

Dodge County Board Resolution, May 20, 2003



Everyone’s help is needed to reduce water pollution. Homeowners can install rain gardens and use phosphorus-free lawn fertilizer. Developers can design new construction in environmentally-friendly ways. Municipalities can reduce phosphorus discharge of wastewater treatment facilities. Farmers can install buffer strips along field ditches, use minimum tillage and follow nutrient management plans. And regulations to reduce pollution can be rigorously enforced by county and state authorities.



Produced in 2014 by:

Dodge County Lakes Group, an affiliation of lake management districts, lake and river associations and conservation organizations in Dodge County, Wisconsin.

Economic and water quality data from:

US Census Bureau
 US Environmental Protection Agency
 Dodge County Land Resources and Parks Department
 Dodge County Land Conservation Department
 Wisconsin Department of Natural Resources

Dodge County City-Data
 Wisconsin Department of Tourism
 Wisconsin Department of Revenue

2014

DODGE COUNTY SURFACE & GROUND WATER



Dodge County

Water Resources:

Value & Economic Impact

Clean water is an essential element of Dodge County’s economy, our environment and public health and our future quality of life. Waterways and ground water are bountiful resources of natural beauty and economic value, and must be protected and used wisely. Awareness of the indispensable value of our water resources and how to protect them is vital for the future of our county.

How important are our water resources?

- Ground water provides the drinking water for all 88,000 residents of Dodge County.
- The shorelines of lakes and rivers are home to over 8,000 county residents.
- A reliable source of clean water is needed to support business, industry and agriculture in the county.
- Lakes, rivers and wetlands are important attractions for tourism dollars that contribute to the county economy.



Ground water is the only source of drinking water for county residents.

Total withdrawal of ground water for public supply exceeds 7 million gallons each day. Underground aquifers from which drinking water is obtained comprise an indispensable community resource.

“Tourism plays a vital role in Dodge County’s economy.”

Dodge County Year 2030 Comprehensive Plan

Water resources strengthen the economy and improve the quality of life for visitors and residents. Nearly 400,000 people visit the Horicon Marsh annually, boat on our lakes and rivers and enjoy fishing and hunting year-round. Tourism generates \$124 million in total business sales and provides 1,400 jobs with wages of more than \$29 million each year.

What is the condition of our water resources today?

Nineteen rivers and streams, five lakes and major wetlands of Dodge County are affected by high levels of phosphorus and sediment and are included in the federal 303(d) list of impaired waters. Several ground water reservoirs have high levels of nitrates and private wells have been contaminated by livestock manure runoff.



Homes on lakes and rivers represent a significant percentage of county property values.

Over 8,000 county residents are riparian owners with property valued at \$600 million, representing 11% of total county valuation. Riparians account for more than \$200 million of county total income—about 7% — and annually pay more than \$12 million in property taxes.

Water resources of Dodge County must be protected to meet the future needs of business, recreation, industry and agriculture.

The county has over 21,000 acres of surface water comprising 31 lakes and ponds, and 50 rivers and streams. Ground water is the only source of drinking water for humans and livestock and process water for business and industry. The quality and quantity of our water resources and trends of use and consumption will determine whether future water needs can be met.

What threatens our waterways and ground water?

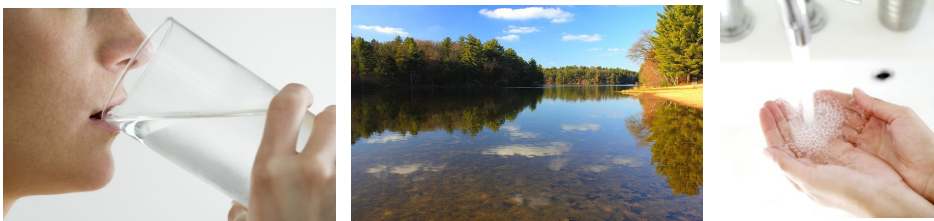
Water resources are threatened by polluted discharge, waste runoff and contamination from urban, rural, industrial and agricultural sources. Long-term efforts by agencies, industries, municipalities, farms and households have led to reductions of some pollutants, but major challenges remain.

- Excess phosphorus and other nutrients from agriculture and wastewater treatment facilities cause eutrophic conditions and algae blooms that choke waterways resulting in lower oxygen and fish kills.
- Erosion and sediment runoff from farm fields and urban areas lead to turbid water and sedimentation of waterways.
- Manure contamination from dairy and beef farms. The amount of manure produced by a farm operation with 700 milking cows is equivalent to the amount of human waste produced by a city of 10,000 residents.



- Nitrates from fertilizer, manure and other organic residue can leach into ground water.
- Land spreading of industrial waste and sewage sludge has the potential of introducing toxic materials to water resources.
- The US Environmental Protection Agency and Wisconsin Department of Natural Resources prepared a technical report identifying the sources of phosphorus and sediment pollution in the Rock River Basin. Those sources and their contributions as a percentage of total loading are:

	Phosphorus	Total Suspended Solids
Agriculture	63.8%	88.6%
Wastewater Treatment Facilities	26.1%	2.5%
Urban	6.7%	5.9%
Background	1.9%	1.9%
Urban (non-permitted)	1.3%	1.0%
General Permits	0.1%	0.1%



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