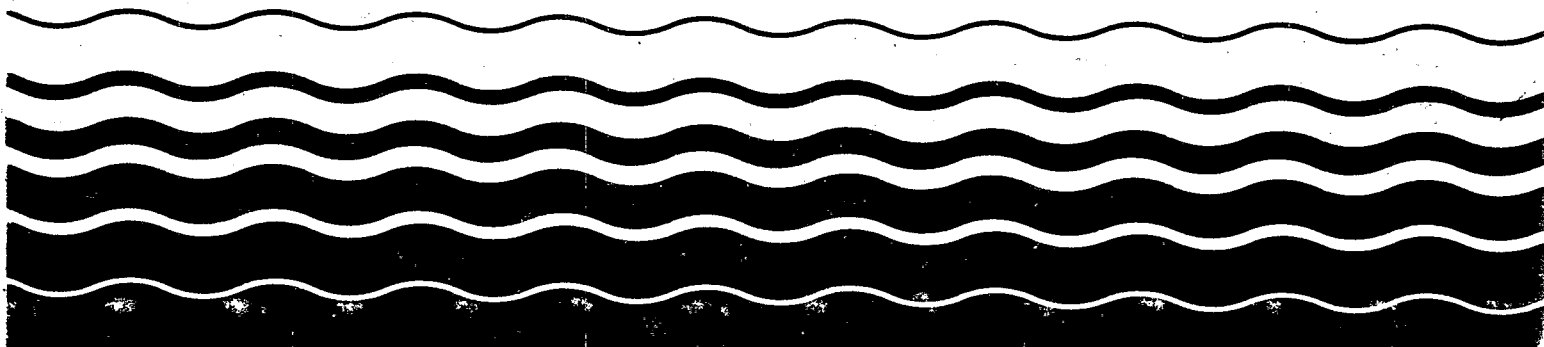


Water



# State Water Quality Standards Summary: Wisconsin





# DISCLAIMER

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The reader should consult the water quality standards of a particular State for exact regulatory language applicable to that State. Copies of State water quality standards may be obtained from the State's Water Pollution Control Agency or its equivalent.

Additional information may also be obtained from the:

Standards Branch  
Criteria and Standards Division (WH-585)  
Office of Water Regulations and Standards  
U.S. Environmental Protection Agency  
Washington, D.C. 20460  
202-475-7315

This document may be obtained only from the National Technical Information Service (NTIS) at the following address:

National Technical Information Service  
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Springfield, Virginia 22161  
703-487-4650

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### Responsible Agency:

Wisconsin Department of Natural Resources  
Box 7921

Madison

53707

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### State Contact:

### State Narrative Language For: Antidegradation

No waters of the state shall be lowered in quality unless it has been affirmatively demonstrated to the department (Wisconsin Department of Natural Resources) that such a change is justified as a result of necessary economic and social development provided that no new or increased effluent interferes with or becomes injurious to any assigned uses made of or presently possible in such waters.

### State Narrative Language For: Toxics

Substances in concentrations or combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

Unauthorized concentrations of substances are not permitted that alone or in combination with other materials present are toxic to fish or other aquatic life. The determination of the toxicity of a substance shall be based upon the available scientific data base. References to be used in determining the toxicity of a substance shall include, but not be limited to:

1. "Quality Criteria for Water". EPA-440/9-76-003. United States Environmental Protection Agency, Washington, D.C., 1976, and
2. "Water Quality Criteria 1972". EPA-R3-73-033. National Academy of Sciences, National Academy of Engineering. United States Government Printing Office, Washington, D.C., 1974.
3. Questions concerning the permissible levels, or changes in the same, of a substance, or combination of substances, of undefined toxicity to fish and other biota shall be resolved in accordance with the methods specified in "Water Quality Criteria 1972", "Standard Methods for the Examination of Water and Wastewater", 14th Edition, 1975 (American Public Health Association, New York) or other methods approved by the department of natural resources.

The intake water supply will be such that by appropriate treatment and adequate safeguards it will meet the Public Health Service Drinking Water Standards, 1962.

Concentrations of other constituents must not be hazardous to health.

### State Narrative Language For: Free From

Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all waters including the mixing zone and the effluent channel meet the following conditions at all times and under all flow conditions:

- A. Substances that will cause objectionable deposits, on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- B. Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.
- C. Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- D. Substances in concentrations or combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are

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acutely harmful to animal, plant or aquatic life.

### State Narrative Language For: Low Flow

Water quality standards will not be maintained under all natural occurrences of flow, temperature or other water quality characteristics. The design of water quality related effluent limitations or other management practices shall be based upon:

- a. The average minimum 7-day low stream flow which occurs once in 10 years (7-day Q10); or
- b. In the case of dissolved oxygen and wherever sufficient data on stream flow and temperature are available, by application of a 0.274% level of nonattainment. This is equivalent to an expected nonattainment of the dissolved oxygen criterion of one day per year.

### State Narrative Language For: Mixing Zones

Water quality standards must be met at every point outside of a mixing zone. The size shall be based on such factors as effluent quality and quantity, available dilution, temperature, current, type of outfall, channel configuration and restrictions to fish movement. As a guide to the delineation of a mixing zone, the following shall be taken into consideration:

- (a) Limiting mixing zones to as small an area as practicable, and conforming to the time exposure responses of aquatic life.
- (b) Providing passageways in rivers for fish and other mobile aquatic organisms.
- (c) Where possible, mixing zones being no larger than 25 percent of the cross-sectional area or volume of flow of the stream and not extending more than 50 percent of the width.
- (d) For contaminants other than heat, the 96-hour TL<sub>m</sub> to indigenous fish and fish food organisms not being exceeded at any point in the mixing zone.
- (e) Mixing zones not exceeding 10 percent of a lake's total surface area.
- (f) Mixing zones not interfering with spawning or nursery areas, migratory routes, nor mouths of tributaries.
- (g) Mixing zones not overlapping, but where they do, taking measures to prevent adverse synergistic effects.
- (h) Restricting the pH to values greater than 4.0 s.u. and to values less than 11.0 s.u. at any point in the mixing zone for the protection of indigenous fish and food organisms.

The thermal mixing zone provisions of this chapter are not applicable to municipal waste and water treatment plants, to vessels, or to discharges to enclosed harbors.

Application of chemicals for water resource management purposes in accordance with statutory provisions is not subject to the requirements of the standards except in case of water used for public water supply.

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### Classifications:

Fish and Aquatic  
Life

Recreational Use

Public Water Supply

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	All Classes	Fish and Aquati..	Recreational Us..	Public Water Su..
Physical				
pH				
Upper Value		9.0		
Lower Value		6.0		
Dissolved Oxygen				
Lower Value		5	mg/L	
Temperature				
Upper Value		89	F	
Temperature Change				
Upper Value		5	F	
Secondary Upper Limit		3	F	
Total Dissolved Solids				
Upper Value				750 mg/L
Nutrients				
Ammonia				
Upper Value		3	mg/L ave	
Secondary Upper Limit		6	mg/L ave	
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Coliform				
Upper Value			Narr.	