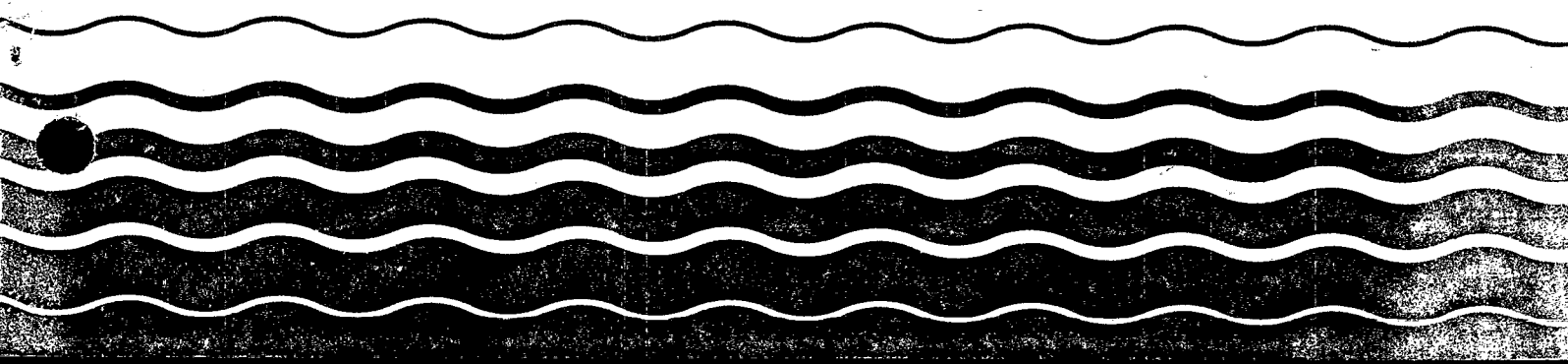


Water



State Water Quality Standards Summary: Ohio





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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
5285 Front Royal Road
Springfield, Virginia 22161
703-487-4650

The NTIS order number is: PB89-14020.



OHIO

Responsible Agency:

Ohio Environmental Protection Agency
P.O. Box 1049.
1800 Water Mark Drive

Columbus, OH 43266-0149
614-644-3020

State Contact:

Mr. Daniel Dudley
Manager
Standards and Toxics
Ohio Environmental Protection Agency
P.O. Box 1049, 1800 Water Mark Drive
Columbus, OH 43266-0149 614-644-2856

Standards Available From:

Mary Cavin
Haring Clerk
Ohio Environmental Protection Agency
1800 Water Mark Drive, P.O. Box 1049
Columbus, OH 43266-0149
614-644-2115 Fee: \$30.00 Mailing List: no

State Contact:

Mr. Robert Heitzman
Group Leader
Water Quality Standards
Ohio Environmental Protection Agency
P.O. Box 1049, 1800 Water Mark Drive
Columbus, OH 43266-0149 614-644-2856

State Narrative Language For: Antidegradation

Existing instream water uses as defined in Rule 3745-1-07 of the Administrative Code and designated in Rules 3745-1-08 to 3745-1-32 of the Ohio Administrative Code shall be maintained and protected. No further water quality degradation which would interfere with or become injurious to existing designated uses is allowable. Waters in which existing water quality is better than the criteria prescribed in these rules and exceeds those levels necessary to support propagation of fish, shellfish, wildlife and recreation in and on the water shall be maintained and protected. However, the Director of the Ohio Environmental Protection Agency may, after compliance with public notice and intergovernmental coordination requirements of any applicable statutes and regulations, and after due consideration of such technical, economic, social and other criteria as provided by sections 301 and 302 of the act, 33 U.S.C. sections 1311 and 1312, choose to allow lower water quality. Degradation of water quality shall not interfere with or become injurious to existing or planned uses, and the director shall require that the most stringent statutory and regulatory controls for waste treatment be employed by all new and existing point sources, and that feasible management or regulatory programs pursuant to sections 208 and 303 of the act, 33 U.S.C. sections 1288 and 1313, be applied to nonpoint sources. Present ambient water quality in state resource waters will not be degraded for all substances determined to be toxic or to interfere with any designated use as determined by the director of the Ohio Environmental Protection Agency. All other substances shall be limited to the criteria associated with each designated use, as outlined in Rules 3745-1-07 to 3745-1-32 of the Administrative Code. Areas that do not meet general water quality standards as defined in Rules 3745-1-07 to 3745-1-32 of the Administrative Code shall not be degraded as stated above for all such classified areas.

Additional language in: "EPA Water Quality Criteria Summaries: A Compilation of Federal/State Criteria."

State Narrative Language For: Toxics

Free from substances entering the waters as a result of human activities in concentrations that are toxic or harmful to human, animal, or aquatic life and/or are rapidly lethal in the mixing zone.

Present ambient water quality in state resource waters will not be degraded for all substances determined to be toxic or to interfere with any designated use as determined by the director of Ohio environmental protection agency.

All pollutants or combinations of pollutants not specifically mentioned in this rule, shall not exceed water quality criteria derived according to the procedures set forth in "Draft Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Life and Its Uses," United States environmental protection agency, July 5, 1983, or, if insufficient data prevent the use of this procedure, shall not exceed, at any time, one-tenth, or, for pollutants or combinations of pollutants which are known to be persistent toxicants in the aquatic environment, one one-hundredth of the ninety-six-hour median tolerance limit (TL_m) of LC50 for any representative aquatic species. However, more stringent application factors shall be imposed where justified by "Ambient Water Quality Criteria," documents, United States environmental protection agency, 1980; "Quality Criteria for Water," U.S. environmental protection agency, 1976; "Water Quality Criteria 1972," "National Academy of Sciences" and "National Academy of Engineering," 1973; or other scientifically based publications.

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Please refer to the "EPA Water Quality Criteria Summaries: A Compilation of State/Federal Criteria" for additional toxic substance language for Ohio.

State Narrative Language For: Free From

The waters of the state shall be free from:

- A. Suspended solids or other substances that enter the waters as a result of human activity and that will settle to form putrescent or otherwise objectionable sludge deposits, or that will adversely affect aquatic life;
- B. Floating debris, oil, scum and other floating materials entering the waters as a result of human activity in amounts sufficient to be unsightly or cause degradation;
- C. Materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance;
- D. Substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life and/or are rapidly lethal in the mixing zone;
- E. Nutrients entering the waters as a result of human activity in concentrations that create nuisance growths of aquatic weeds and algae.

State Narrative Language For: Mixing Zones

Where necessary to attain or maintain the use designated for surface water by these water quality standards, the director may establish, as a term of a discharge permit or a permit to install issued pursuant to Chapter 3745-31 of the Administrative Code, a mixing zone applicable to the non-thermal constituents of the point source discharge authorized by such permit. No mixing zone established by the director will:

- (a) Interdict the migratory routes or interfere with natural movements, survival, reproduction, growth, or increase the vulnerability to predation of any representative aquatic species;
- (b) Include spawning or nursery areas of any representative aquatic species;
- (c) Include a public water supply intake;
- (d) Include any bathing area where bath houses and/or lifeguards are provided;
- (e) Constitute more than one-half of the width of the receiving watercourse nor constitute more than one-third of the area of any cross-section of the receiving watercourse;
- (f) Constitute more than one-fifth of the area of any cross-section of the mouth of a receiving watercourse (the mouth constituting that area of the stream from the confluence upstream for a distance five times the width of the stream at the confluence);
- (g) Extend downstream at any time a distance more than five times the width of the receiving watercourse at the point discharge;

Please refer to the "EPA Water Quality Criteria Summaries: A Compilation of State/Federal Criteria" for additional mixing zone language for Ohio.

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Classifications:

Nuisance Prevention	These waters include acid mine drainage streams where the infauna is substantially degraded and other heavily polluted stream segments where the fauna is degraded and the potential aquatic life use is not being attained due to irretrievable, man-induced conditions or the demonstration that meeting criteria for the support of a balanced aquatic community would cause substantial and widespread economic and social impact. This designation must be recommended in a written report approved by the Director. All stream segments designated Nuisance Prevention will be reviewed on a triennial basis (or sooner) to determine whether the use designation should be changed.
Warmwater Habitat	These are waters capable of supporting reproducing populations of warmwater fish and associated vertebrate and invertebrate organisms and plants on an annual basis.
Limited Warmwater Habitat	These are waters incapable of meeting specific warmwater habitat criteria necessary for the support of populations of fish and associated vertebrate and invertebrate organisms and plants either on a seasonal or year around basis due to natural conditions, irretrievable, man-induced conditions or the demonstration that meeting the criteria would cause substantial and widespread economic & social impact. Criteria for the support of this use designation will be the same as the criteria for the support of the use designation warmwater habitat. However, individual criteria will be varied on a case-by-case basis and will supersede the criteria for warmwater habitat criteria will apply only to specific criteria during specified time periods and/or flow conditions.
Exceptional Warmwater	These are waters capable of supporting exceptional or unusual populations of warmwater fish and associated vertebrate and invertebrate organisms and plants on an annual basis. These would include waters of exceptional chemical quality that support sensitive species of warmwater fish, exceptionally diverse aquatic communities, and/or outstanding recreational or commercial fisheries. In addition to those stream segments designated in rules 3745-1-08 to 3745-1-30 of the Administrative Code, all publicly owned lakes and reservoirs, except upground storage reservoirs, are designated exceptional warmwater habitat.
Seasonal Salmonid Habitat	These are waters capable of supporting the passage of Salmonid from October through May and are water bodies large enough to support recreational fishing. This use will be in effect the months of October through May. Another aquatic life habitat use designation will be enforced the remainder of the year (June through September.)
Coldwater Habitat	These are waters capable of supporting populations of coldwater fish and associated vertebrate and invertebrate organisms and plants on an annual basis. These waters are not necessarily capable of supporting successful reproduction of salmonids and may be periodically stocked with these species.
Public Water Supply	These are waters that with conventional treatment will be suitable for human intake and meet federal regulations for drinking water.
Agricultural Water Supply	These waters are suitable for irrigation and livestock watering without treatment.
Industrial Water Supply	These are waters suitable for commercial and industrial uses, with or without treatment. Criteria for the support of the industrial water supply use designation will vary with the type of industry involved.

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Recreational

These use designations are in effect only during the recreation season, which is the period from May first to October fifteenth, for all streams except those designated seasonal salmonid habitat. The recreation season for streams designated seasonal salmonid habitat is June first to September thirtieth.

Bathing Waters

These are waters that, during the recreation season, are suitable for swimming where a lifeguard and/or bathhouse facilities are present, and include any additional such areas where the water quality is approved by the director.

Primary Contact

These are waters that, during the recreation season, are suitable for full body contact recreation, such as, but not limited to, swimming, canoeing, and scuba diving with minimal threat to public health as a result of water quality.

Secondary Contact Recreation

These are waters that, during the recreation season, are suitable for partial body contact recreation such as, but not limited to wading with minimal threat to public health as a result of water quality.

OHIO

All
Classes

Warmwater Habit.. Limited Warmwat.. Exceptional

Physical

Dissolved Oxygen

Lower Value

4.0 mg/L

0 mg/L

Temperature

Upper Value

Narr.

Total Dissolved Solids

Upper Value

1500 mg/L ave.

1500 mg/L ave.

Nutrients

Ammonia

Upper Value

Narr.

Narr.

Phosphorus

Upper Value

1 mg/L ave.

Toxic Metals

Arsenic

Upper Value

36 ug/L ave. 36 ug/L ave. 36 ug/L ave.

Cadmium

Upper Value

Narr. site-spec. Narr. Narr. Narr.

Chromium - Hexavalent

Upper Value

10 ug/L ave. 10 ug/L ave. 10 ug/L ave.

Chromium - Trivalent

Upper Value

Narr. Narr. Narr.

Cyanide

Upper Value

Narr. site-spec. 8.1 ug/L ave. 8.1 ug/L ave.

Iron

Upper Value

1.0 mg/L ave. 1.0 mg/L ave. 1.0 mg/L ave.

Lead

Upper Value

30 ug/L ave. 30 ug/L ave. 30 ug/L ave.

Mercury

Upper Value

0.2 ug/L ave. 0.2 mg/L ave. 0.2 ug/L ave.

Zinc

Upper Value

Narr. Narr. Narr.

Beryllium

Upper Value

Narr. Narr. Narr.

Nickel

Upper Value

Narr. Narr. Narr.

Selenium

Upper Value

34 ug/L 34 ug/L

Silver

Upper Value

1.3 ug/L 1.3 ug/L

Pesticides

Aldrin

Upper Value

0.01 ug/L 0.01 ug/L 0.01 ug/L

Dieldrin

Upper Value

0.005 ug/L 0.005 ug/L 0.005 ug/L

Chlordane

Upper Value

0.01 ug/L 0.01 ug/L 0.01 ug/L

OHIO

All Classes

Warmwater Habit.. Limited Warmwat.. Exceptional

DDT					
Upper Value	0.001	ug/L	0.001	ug/L	0.001 ug/L
Demeton					
Upper Value	0.1	ug/L	0.1	ug/L	0.1 ug/L
Endosulfan					
Upper Value	0.003	ug/L	0.003	ug/L	0.003 ug/L
Endrin					
Upper Value	0.002	ug/L	0.002	ug/L	0.002 ug/L
Guthion					
Upper Value	0.005	ug/L	0.005	ug/L	0.005 ug/L
Heptachlor					
Upper Value	0.001	ug/L	0.001	ug/L	0.001 ug/L
Lindane					
Upper Value	0.01	ug/L	0.01	ug/L	0.01 ug/L
Malathion					
Upper Value	0.1	ug/L	0.1	ug/L	0.1 ug/L
Methoxychlor					
Upper Value	0.005	ug/L	0.005	ug/L	0.005 ug/L
Mirex					
Upper Value	0.001	ug/L	0.001	ug/L	0.001 ug/L
Parathion					
Upper Value	0.008	ug/L	0.008	ug/L	0.008 ug/L
Toxaphene					
Upper Value	0.005	ug/L	0.005	ug/L	0.005 ug/L

Organics

Phenolic Compounds

Upper Value 10 ug/L ave. 10 ug/L ave. 1 ug/L ave.

Phthalate Esters

Upper Value 10 ug/L ave. 3 ug/L ave. 3 ug/L ave.

PCBs

Upper Value 0.001 ug/L 0.001 ug/L 0.001 ug/L

Bacteria

OHIO

Seasonal Salmon... Coldwater

Public Water Su.. Agricultural

Physical

Dissolved Oxygen

Upper Value

mg/L

Narr.

Narr.

Lower Value

6.0

mg/L

Total Dissolved Solids

Upper Value

1500 mg/L ave.

1500 mg/L ave.

750 mg/L

Narr.

Nutrients

Ammonia

Upper Value

Narr.

Nitrates & Nitrites

Upper Value

100 mg/L

Nitrate

Upper Value

10 mg/L

Phosphorus

Upper Value

1 mg/L ave.

1 mg/L ave.

1 mg/L ave.

Narr.

Toxic Metals

Arsenic

Upper Value

36 ug/L ave.

36 ug/L ave.

50 ug/L max.

100 ug/L max.

Cadmium

Upper Value

Narr.

Narr.

10 ug/L

50 ug/L

Chromium - Total

Upper Value

50 ug/L

100 ug/L

Chromium - Hexavalent

Upper Value

10 ug/L ave.

10 ug/L ave.

Chromium - Trivalent

Upper Value

Narr.

Narr.

Copper

Upper Value

1000 ug/L

500 ug/L

Cyanide

Upper Value

8.1 ug/L ave.

4.2 ug/L ave.

Iron

Upper Value

1.0 mg/L ave.

1.0 mg/L ave.

0.3 mg/L

5.0 mg/L

Lead

Upper Value

30 ug/L ave.

30 ug/L ave.

50 ug/L

5000 ug/L

Mercury

Upper Value

0.2 ug/L ave.

0.2 ug/L ave.

2.0 ug/L

10 ug/L

Zinc

Upper Value

Narr.

Narr.

5000 ug/L

25000 ug/L

Barium

Upper Value

1.0 ug/L

Beryllium

Upper Value

Narr.

100 ug/L

Manganese

Upper Value

50 ug/L

Nickel

Upper Value

Narr.

200 ug/L

Selenium

Upper Value

34 ug/L

34 ug/L

10 ug/L

50 ug/L

OHIO

Seasonal Salmon.. Coldwater Public Water Su.. Agricultural

Silver

Upper Value

1.3 ug/L

0.06 ug/L

50 ug/L

Pesticides

Aldrin

Upper Value

0.01 ug/L

0.01 ug/L

Narr.

Dieldrin

Upper Value

0.005 ug/L

0.005 ug/L

Narr.

Chlordane

Upper Value

0.01 ug/L

0.01 ug/L

Narr.

2,4-D

Upper Value

100.0 ug/L

2,4,5-TP (Silvex)

Upper Value

10.0 ug/L

DDT

Upper Value

0.001 ug/L

0.001 ug/L

Narr.

Demeton

Upper Value

0.1 ug/L

0.1 ug/L

Endosulfan

Upper Value

0.003 ug/L

0.003 ug/L

74 ug/L

Endrin

Upper Value

0.002 ug/L

0.002 ug/L

1.0 ug/L

Guthion

Upper Value

0.005 ug/L

0.005 ug/L

Heptachlor

Upper Value

0.001 ug/L

0.001 ug/L

.00028 ug/L

Heptachlor Epoxide

Upper Value

0.1 ug/L

Lindane

Upper Value

0.01 ug/L

0.01 ug/L

0.019 ug/L

Malathion

Upper Value

0.1 ug/L

0.1 ug/L

Methoxychlor

Upper Value

0.005 ug/L

0.005 ug/L

100.0 ug/L

Mirex

Upper Value

0.001 ug/L

0.001 ug/L

Parathion

Upper Value

0.008 ug/L

0.008 ug/L

Toxaphene

Upper Value

0.005 ug/L

0.005 ug/L

.00071 ug/L

Organics

Phenolic Compounds

Upper Value

1 ug/L

1 ug/L

Narr.

Phthalate Esters

Upper Value

3 ug/L

Narr.

Narr.

PCBs

Upper Value

0.001 ug/L

0.00

Narr.

Bacteria

OHIO

Industrial

Recreational

Bathing Waters

Primary Contact

Physical

Nutrients

Toxic Metals

Pesticides

Organics

Bacteria

Fecal Coliform

Upper Value

Narr.

Narr.

OHIO

Secondary Conta..

Physical

Nutrients

Toxic Metals

Pesticides

Organics

Bacteria

Fecal Coliform

Upper Value

Narr.