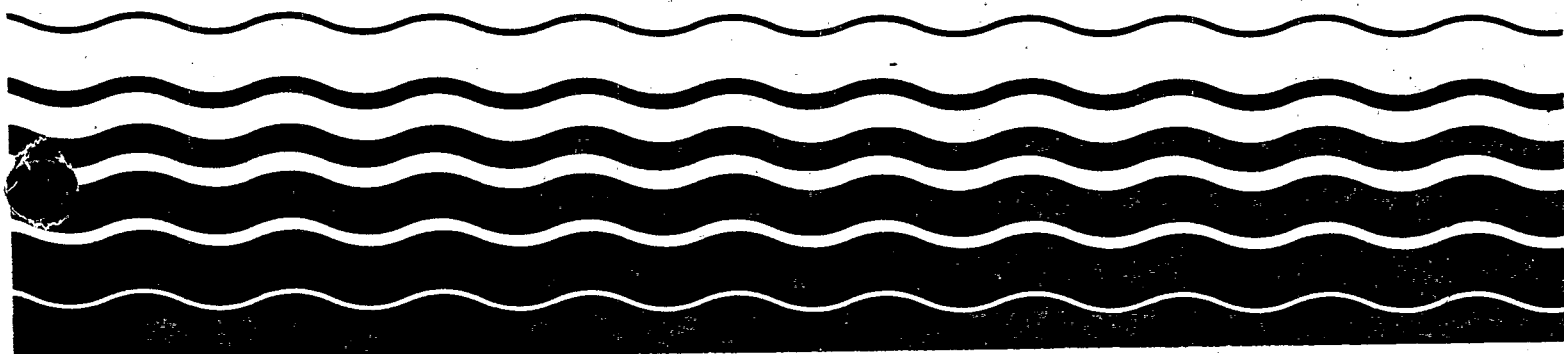


Water



State Water Quality Standards Summary: Arizona



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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: PB89-141683.

ARIZONA

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State Narrative Language For: Antidegradation

- A. Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. No further surface water quality degradation which would interfere with or become injurious to these existing uses is allowable.
- B. Surface waters whose existing quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall be maintained and protected unless and until the Council finds, after full satisfaction of the intergovernmental coordination and public participation provisions contained in the document "Revised Continuing Planning Process for Water Quality Management", dated June 1981, that allowing lower quality is necessary to accommodate important economic and social development in the area in which the waters are located. In no event, however, any degradation of surface water quality interfere with or become injurious to existing uses. The document (cited above) is hereby adopted and incorporated by reference and is on file with the Arizona Department of Health Services and the Office of the Sec. of State.
- C. No further degradation shall be allowed in high quality waters which constitute an outstanding public resource or in waters of exceptional recreational or ecological significance. Streams and lakes which receive their protection shall be classified as unique waters by the Council and included in R9-21-303.
- D. No further degradation shall be allowed in any stream or lake which would destroy the critical habitat for a threatened or endangered species which is historically or presently known to be associated with such waters. Streams and lakes which receive this protection shall be classified unique waters by the Council and included in R9-21-303.

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

State Narrative Language For: Toxics

- All surface waters shall be free from toxic, corrosive, or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or in combinations sufficient to be toxic to human, animal, plant, or aquatic life. With respect to fish toxicity, receiving waters outside mixing zones shall not have a concentration of toxic materials exceeding 1/10 of the 96-hour LC50, where the bioassay is conducted using fish inhabiting the receiving waters and where water quality conditions approximate those of the stream or lake as closely as practical. Compliance shall be indicated when survival of test group organisms is not less than that of the control group organisms exposed to an appropriate water sample.
- a. No person shall cause toxic substances to be present at concentrations which interfere with designated protected uses.
- b. Compliance with a. (above) shall be determined on a site-specific basis for each discharge.
- c. To determine compliance with this Section and other water quality standards, and to determine whether toxic, carcinogenic, mutagenic, teratogenic, corrosive or otherwise deleterious substances attributable to pollutants, effluent, sewage or waste in concentrations or combinations which interfere directly or indirectly with protected uses are being discharged, the Department may require chemical, physical, biological, radiological or other testing by dischargers.

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State Narrative Language For: Free From

- All surface waters shall be free from:
- Substances attributable to domestic or industrial waste or other controllable sources that will settle to form sludge or bottom deposits which result in unsightly, putrescent or odorous conditions in the receiving water or which adversely affect the ecosystem.
 - Floating debris, oil, grease, scum, and other floating materials attributable to domestic or industrial waste or other controllable sources which result in unsightly conditions in the receiving water or produce a deposit on a shoreline or bank bordering such waters or which adversely affect the ecosystem. A spill or discharge of oil into surface waters of the State in amounts sufficient to be harmful to the public health or welfare, or cause a film or iridescent appearance on the surface of the water, shall be a violation.
 - Materials attributable to domestic or industrial waste or other controllable sources in amounts sufficient to produce taste or odor in the water or detectable off flavor in the flesh of fish, or change the existing color, turbidity or other conditions in the receiving stream or to adversely affect the ecosystem.
 - Toxic, corrosive, or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or in combinations sufficient to be toxic to human, animal, plant, or aquatic life.
 - Substances attributable to point source discharges or nonpoint sources in concentrations which produce undesirable aquatic life or result in the dominance of nuisance species.

State Narrative Language For: Mixing Zones

- The following requirements establish the allowable conditions for a mixing zone:
 - The shape of a mixing zone should be a simple configuration;
 - Shore and bottom hugging plumes shall be avoided;
 - A zone of passage of not less than one-half of the stream cross-sectional area shall be provided when the receiving water is a flowing stream;
 - The length of a mixing zone shall not exceed 500 meters in a flowing stream;
 - The surface area of a mixing zone shall not exceed 10% of the surface area of a lake, reservoir or other impoundment;
 - In no case shall water quality in a mixing zone:
 - Interfere with the protected uses in areas beyond such zone;
 - Interfere with the established community of aquatic life in areas of the water body beyond such zone;
 - Impinge in biologically-important areas in areas beyond such zone;
 - Contain materials in concentrations that exceed the 96-hour LC 50 for biota significant to the indigenous aquatic community.
- The Council (Arizona Water Quality Control Council) shall determine conformance with R9-21-211.A. when requested.
- When the Council determines that a proposed mixing zone satisfies the requirements given in R9-21-211.A., the Council may specify that within the approved mixing zone, one or more pollutants, but not fecal coliform may be allowed to exceed the limits established in R9-21-203, D., R9-21-205, or R9-21-208.

ARIZONA

Classifications:

Full Body Contact

Incidental Human
Contact

Aquatic and Wildlife

Cold Water Fishery

Warm Water Fishery

Agricultural
Irrigation

Agricultural
Livestock Watering

Domestic Water
Source

ARIZONA

	All Classes	Full Body Conta..	Incidental Huma..	Aquatic and Wil..
Physical				
pH				
Upper Value		9.0	9.0	9.0
Lower Value		6.5	6.5	6.5
Dissolved Oxygen				
Lower Value		6.0 mg/L		6.0 mg/L
Temperature Change				
Upper Value		3 C	3 C	3 C
Turbidity				
Upper Value	50 NTU	50 NTU	50 NTU	50 NTU
Secondary Upper Limit	NTU	25 NTU	25 NTU	25 NTU
Total Dissolved Solids				
Upper Value	Narr. site-spec.			
Nutrients				
Total Nitrogen				
Upper Value	Narr.			
Phosphates				
Upper Value	Narr.			
Toxic Metals				
Arsenic				
Upper Value		0.050 mg/L D	0.050 mg/L D	0.050 mg/L D
Cadmium				
Upper Value		0.010 mg/L T	0.010 mg/L T	0.010 mg/L D
Chromium - Total				
Upper Value		0.050 mg/L D	0.050 mg/L D	0.050 mg/L D
Copper				
Upper Value				0.050 mg/L D
Cyanide				
Upper Value		0.200 mg/L	0.200 mg/L	0.020 mg/L
Lead				
Upper Value		0.050 mg/L D	0.050 mg/L D	0.050 mg/L D
Mercury				
Upper Value		0.002 mg/L T	0.002 mg/L T	0.0002 mg/L T
Zinc				
Upper Value				0.500 mg/L D
Barium				
Upper Value		1.000 mg/L D	1.000 mg/L D	Narr.
Boron				
Upper Value		Narr.	Narr.	Narr.
Manganese				
Upper Value		Narr.	Narr.	Narr.
Selenium				
Upper Value		0.010 mg/L D	0.010 mg/L D	0.050 mg/L T
Silver				
Upper Value		0.050 mg/L D	0.050 mg/L D	0.050 mg/L D
Pesticides				

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	All Classes	Full Body Conta..	Incidental Huma..	Aquatic and Wil..
Aldrin & Dieldrin Upper Value	0.003 ug/L			
DDT Upper Value	0.001 ug/L			
DDD Upper Value	0.001 ug/L			
DDE Upper Value	0.001 ug/L			
Endrin Upper Value	0.004 ug/L			
Toxaphene Upper Value	0.005 ug/L			
Organics				
Phenolics Upper Value		0.005 mg/L	0.005 mg/L	0.005 mg/L
PCBs Upper Value	0.001 ug/L			
Bacteria				
Fecal Coliform Upper Value		200 cfu/100 ml	1000 cfu/100 ml	1000 cfu/100 ml

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	Cold Water Fish..	Warm Water Fish..	Agricultural	Agricultural
Physical				
pH				
Upper Value			9.0	9.0
Lower Value			4.5	6.4
Dissolved Oxygen				
Lower Value	6.0	mg/L		
Temperature Change				
Upper Value	1	C		
Turbidity				
Upper Value	10	NTU		
Nutrients				
Toxic Metals				
Arsenic				
Upper Value			2.000 mg/L T	2.000 mg/L T
Cadmium				
Upper Value	0.001	mg/L	0.050 mg/L T	0.050 mg/L T
Chromium - Total				
Upper Value			1.000 mg/L T	
Copper				
Upper Value			5.000 mg/L T	0.500 mg/L T
Cyanide				
Upper Value			Narr.	0.200 mg/L
Lead				
Upper Value			10.000 mg/L T	0.100 mg/L T
Mercury				
Upper Value				0.010 mg/L T
Zinc				
Upper Value			10.000 mg/L T	25.000 mg/L T
Barium				
Upper Value			Narr.	Narr.
Boron				
Upper Value			1.000 mg/L T	Narr.
Manganese				
Upper Value			10.000 mg/L T	Narr.
Selenium				
Upper Value			0.020 mg/L T	0.050 mg/L T
Silver				
Upper Value			Narr.	Narr.
Pesticides				
Organics				
Phenolics				
Upper Value				0.005 mg/L
Bacteria				
Fecal Coliform				
Upper Value			1000 cfu/100 ml	1000 cfu/100 ml

ARIZONA

Domestic Water

Physical

Nutrients

Toxic Metals

Arsenic

Upper Value

0.050 mg/L D

Cadmium

Upper Value

0.010 mg/L T

Chromium - Total

Upper Value

0.050 mg/L D

Copper

Upper Value

1.000 mg/l D

Cyanide

Upper Value

0.200 mg/L

Lead

Upper Value

0.050 mg/L D

Mercury

Upper Value

0.002 mg/L T

Zinc

Upper Value

5.000 mg/L D

Barium

Upper Value

1.000 mg/L D

Boron

Upper Value

Narr.

Manganese

Upper Value

Narr.

Selenium

Upper Value

0.010 mg/L D

Silver

Upper Value

0.050 mg/L D

Pesticides

Organics

Phenolics

Upper Value

0.005 mg/L

Bacteria

Fecal Coliform

Upper Value

1000 cfu/100 ml

