

7050.0224 SPECIFIC WATER QUALITY STANDARDS FOR CLASS 4 WATERS OF THE STATE; AGRICULTURE AND WILDLIFE.

Subpart 1. **General.** The numeric and narrative water quality standards in this part prescribe the qualities or properties of the waters of the state that are necessary for the agriculture and wildlife designated public uses and benefits. Wild rice is an aquatic plant resource found in certain waters within the state. The harvest and use of grains from this plant serve as a food source for wildlife and humans. In recognition of the ecological importance of this resource, and in conjunction with Minnesota Indian tribes, selected wild rice waters have been specifically identified [WR] and listed in part 7050.0470, subpart 1. The quality of these waters and the aquatic habitat necessary to support the propagation and maintenance of wild rice plant species must not be materially impaired or degraded. If the standards in this part are exceeded in waters of the state that have the Class 4 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses.

Subp. 2. **Class 4A waters.** The quality of Class 4A waters of the state shall be such as to permit their use for irrigation without significant damage or adverse effects upon any crops or vegetation usually grown in the waters or area, including truck garden crops. The following standards shall be used as a guide in determining the suitability of the waters for such uses, together with the recommendations contained in Handbook 60 published by the Salinity Laboratory of the United States Department of Agriculture, and any revisions, amendments, or supplements to it:

Substance, Characteristic, or Pollutant	Class 4A Standard
Bicarbonates (HCO ₃)	5 milliequivalents per liter
Boron (B)	0.5 mg/L
pH, minimum value	6.0
pH, maximum value	8.5
Specific conductance	1,000 micromhos per centimeter at 25°C
Total dissolved salts	700 mg/L
Sodium (Na)	60% of total cations as milliequivalents per liter

Sulfates (SO ₄)	10 mg/L, applicable to water used for production of wild rice during periods when the rice may be susceptible to damage by high sulfate levels.
Radioactive materials	Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as prescribed by the appropriate authority having control over their use.

Subp. 3. **Class 4B waters.** The quality of Class 4B waters of the state shall be such as to permit their use by livestock and wildlife without inhibition or injurious effects. The standards for substances, characteristics, or pollutants given below shall not be exceeded in the waters of the state:

Substance, Characteristic, or Pollutant	Class 4B Standard
pH, minimum value	6.0
pH, maximum value	9.0
Total salinity	1,000 mg/L
Radioactive materials	Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as prescribed by the appropriate authority having control over their use.
Toxic substances	None at levels harmful either directly or indirectly

Additional selective limits may be imposed for any specific waters of the state as needed.

Subp. 4. **Class 4C waters; wetlands.** The quality of Class 4C wetlands shall be such as to permit their use for irrigation and by wildlife and livestock without inhibition or injurious effects and be suitable for erosion control, groundwater recharge, low flow augmentation, storm water retention, and stream sedimentation. The standards for Classes 4A and 4B waters shall apply to these waters except as listed below:

Substance, Characteristic, or Pollutant	Class 4C Standard
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pH	Maintain background
Settleable solids	Shall not be allowed in concentrations sufficient to create the potential for significant adverse impacts on one or more designated uses.

For the purposes of this subpart, "maintain background" means the concentration of the water quality substance, characteristic, or pollutant shall not deviate from the range of natural background concentrations or conditions such that there is a potential significant adverse impact to the designated uses.

Statutory Authority: *MS s 115.03; 115.44*

History: *18 SR 2195; 22 SR 1466; 24 SR 1105; 32 SR 1699*

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