

CHAPTER 7050

MINNESOTA POLLUTION CONTROL AGENCY

WATERS OF THE STATE

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7050.0185 NONDEGRADATION FOR ALL WATERS.

[For text of subps 1 to 3, see M.R.]

Subp 4. **Additional requirements for significant discharges.** If a person proposes a new or expanded significant discharge from either a point or nonpoint source, the agency shall determine whether additional control measures beyond those required by subpart 3 can reasonably be taken to minimize the impact of the discharge on the receiving water. In making the decision, the agency shall consider the importance of economic and social development impacts of the project, the impact of the discharge on the quality of the receiving water, the characteristics of the receiving water, the cumulative impacts of all new or expanded discharges on the receiving water, the costs of additional treatment beyond what is required in subpart 3, and other matters as shall be brought to the agency's attention.

Subp 5 **Determination of significance.** A person proposing a new or expanded discharge of sewage, industrial waste, or other wastes shall submit to the commissioner the information required to determine whether the discharge is significant under subpart 2. If the discharge is sewage, the flow rate used to determine significance under this part is the design average wet weather flow for the wettest 30-day period. For discharges of industrial and other wastes, the flow rate to be used is the design maximum daily flow rate. In determining the significance of a discharge to a lake or other nonflowing receiving water, a mixing zone may be established under the guidelines of part 7050.0210, subpart 5.

[For text of subps 6 to 9, see M.R.]

Statutory Authority: *MS s 115 03; 115 44*

History: *24 SR 1105*

7050.0200 WATER USE CLASSIFICATIONS FOR WATERS OF THE STATE.

[For text of subps 1 to 7, see M.R.]

Subp 8 **Class 7 waters, limited resource value waters.** Limited resource value waters include surface waters of the state which have been subject to a use attainability analysis and have been found to have limited value as a water resource. Water quantities in these waters are intermittent or less than one cubic foot per second at the once in ten year, seven-day low flow as defined in part 7050.0210, subpart 7. These waters shall be protected so as to allow secondary body contact use, to preserve the groundwater for use as a potable water supply, and to protect aesthetic qualities of the water. It is the intent of the agency that very few waters be classified as limited resource value waters. The use attainability analysis must take into consideration those factors listed in Minnesota Statutes, section 115 44, subdivisions 2 and 3. The agency, m

cooperation and agreement with the Department of Natural Resources with respect to determination of fisheries values and potential, shall use this information to determine the extent to which the waters of the state demonstrate:

[For text of items A to C, see M.R.]

Statutory Authority: *MS s 115.03, 115.44*

History: *24 SR 1105*

7050.0210 GENERAL STANDARDS FOR DISCHARGERS TO WATERS OF THE STATE.

[For text of subps 1 to 6c, see M.R.]

Subp 7 Minimum stream flow. Dischargers of sewage, industrial waste, or other wastes shall be controlled so that the water quality standards will be maintained at all stream flows which are equal to or exceeded by 90 percent of the seven consecutive daily average flows of record (the lowest weekly flow with a once in ten-year recurrence interval) for the critical month(s), except for the purpose of setting ammonia effluent limits. Dischargers of ammonia in sewage, industrial waste, or other wastes shall be controlled so that the ammonia water quality standard will be maintained at all stream flows which are equal to or exceeded by 90 percent of the 30 consecutive daily average flows of record (the lowest 30-day flow with a once in ten-year recurrence interval) for the critical month(s). The period of record for determining the specific flow for the stated recurrence interval, where records are available, shall include at least the most recent ten years of record, including flow records obtained after establishment of flow regulation devices, if any. The calculations shall not be applied to lakes and their embayments which have no comparable flow recurrence interval. Where stream flow records are not available, the flow may be estimated on the basis of available information on the watershed characteristics, precipitation, run-off, and other relevant data.

Allowance shall not be made in the design of treatment works for low stream flow augmentation unless the flow augmentation of minimum flow is dependable and controlled under applicable laws or regulations.

[For text of subps 9 and 10, see M.R.]

Subp 12 Liquid substances. Liquid substances which are not commonly considered to be sewage or industrial waste but which could constitute a pollution hazard shall be stored in accordance with chapter 7151. Other wastes as defined by law or other substances which could constitute a pollution hazard, including substances from nonpoint sources and households, shall not be deposited in any manner such that the same may be likely to gain entry into any waters of the state in excess of or contrary to any of the standards herein adopted, or cause pollution as defined by law.

[For text of subps 13 to 18, see M.R.]

Statutory Authority: *MS s 115.03, 115.44*

History: *24 SR 1105*

7050.0211 FACILITY STANDARDS.

Subpart 1 Minimum secondary treatment for municipal point source and other point source dischargers of sewage. It is established that the agency shall require secondary treatment as a minimum for all municipal point source dischargers and other point source dischargers of sewage. For purposes of this part, municipal has the adjective meaning of municipality, as defined in part 7001.1020, subpart 18. Secondary treatment facilities are defined as works which will provide effective sedimentation, biochemical oxidation, and disinfection, or the equivalent, including effluents conforming to the following:

Substance or Characteristic	Limiting Concentration or Range*
Five-day carbonaceous biochemical oxygen demand*	25 milligrams per liter
Fecal coliform group organisms **	200 organisms per 100 milliliters
Total suspended solids*	30 milligrams per liter
Oil	Essentially free of visible oil
Phosphorus	See subpart 1a
pH range	6.0 - 9.0
Toxic or corrosive pollutants	Concentrations of toxic or corrosive pollutants shall not cause acute toxicity to humans or other animals or plant life or directly damage real property or exceed the final acute value unless the effluent satisfies the whole effluent toxicity test below. If a whole effluent toxicity test performed on the effluent results in less than 50 percent mortality of the test organisms, the effluent will not be considered acutely toxic unless the commissioner finds that the test species do not represent sensitive organisms in the affected surface water body or the whole effluent test was performed on a sample not representative of the effluent quality. The final acute value and whole effluent toxicity test are defined in part 7050.0218, subpart 3, items O and HH, respectively.

*The arithmetic mean for concentrations of five-day carbonaceous biochemical oxygen demand and total suspended solids shall not exceed the stated values in any calendar month. In any calendar week, the arithmetic mean for concentrations of five-day carbonaceous biochemical oxygen demand shall not exceed 40 milligrams per liter and total suspended solids shall not exceed 45 milligrams per liter.

**Disinfection of wastewater effluents to reduce the levels of fecal coliform organisms to the stated value is required from April 1 through October 31 (Class 2 waters) and May 1 through October 31 (Class 7 waters) except that where the effluent is discharged 25 miles or less upstream of a water intake supplying a potable water system, the reduction to the stated value is required year around. The stated value is not to be exceeded in any calendar month as determined by the geometric mean of all the samples collected in a given calendar month. The application of the fecal coliform group organism standards shall be limited to sewage or other effluents containing admixtures of sewage and shall not apply to industrial wastes except where the

presence of sewage, fecal coliform organisms, or viable pathogenic organisms in such wastes is known or reasonably certain. Analysis of samples for fecal coliform group organisms by either the multiple tube fermentation or the membrane filter techniques is acceptable

Subp 1a **Total phosphorus effluent limits.** Where the discharge of effluent is directly to or affects a lake or reservoir, phosphorus removal to one milligram per liter shall be required. The limit must be a calendar month arithmetic mean unless the commissioner finds, after considering the criteria listed in items A and B, that a different averaging period is acceptable. In no case shall the one milligram per liter limit exceed a moving mean of 12 monthly values reported on a monthly basis, or a simple mean for a specified period, not to exceed 12 months. Calendar month effluent limits in effect on February 7, 2000, must remain in effect unless an assessment of the criteria listed in items A and B indicate a different averaging period is acceptable. A different averaging period is acceptable when

A the effects of the phosphorus loading from the facility on the receiving water or downstream water resources is generally not measurable, and

B the treatment technologies being considered offer environmental, financial, or other benefits

In addition, removal of nutrients from all wastes shall be provided to the fullest practicable extent wherever sources of nutrients are considered to be actually or potentially detrimental to preservation or enhancement of the designated water uses. Dischargers required to control nutrients by this subpart are subject to the variance provisions of part 7050.0190

[For text of subs 2 and 3, see MR]

Statutory Authority: *MS s 115 03, 115 44*

History: *24 SR 1105*

7050.0213 ADVANCED WASTEWATER TREATMENT REQUIREMENTS.

In any instance where it is evident that the minimal treatment specified in part 7050.0211, subpart 1, or 7050.0212 and dispersion are not effective in preventing pollution, or if at the applicable flows it is evident that the specified stream flow is inadequate to protect the specified water quality standards, the specific standards may be interpreted as effluent standards for control purposes. In addition, the following effluent standards may be applied without any allowance for dilution where stream flow or other factors are such as to prevent adequate dilution, or where it is otherwise necessary to protect the waters of the state for the stated uses:

Item	Limits*
Five-day carbonaceous biochemical oxygen demand	5 milligrams per liter (arithmetic mean of all samples taken during any calendar month)

*If a discharger is required by the commissioner to implement a pretreatment program for the control of toxic pollutants from industrial contributors and the program has not yet been implemented, the discharger's effluent limitation for total suspended solids shall be five milligrams per liter until such time as the program has been implemented

The five milligram per liter limit shall not apply to discharges to surface waters classified as limited resource value waters pursuant to parts 7050.0200, subpart 8, and 7050.0400 to 7050.0470

The concentrations specified in part 7050.0211, subpart 1, or, if applicable, part 7050.0212 may be used in lieu of this limit if the discharge of effluent is restricted to the spring flush or other high runoff periods when the stream flow rate above the

discharge point is sufficiently greater than the effluent flow rate to insure that the applicable water quality standards are met during such discharge period.

If treatment works are designed and constructed to meet the specified limits given above for a continuous discharge, at the discretion of the agency the operation of such works may allow for the effluent quality to vary between the limits specified above and in part 7050.0211, subpart 1, or, if applicable, part 7050.0212, provided the water quality standards and all other requirements of the agency and the United States Environmental Protection Agency are being met. Such variability of operation must be based on adequate monitoring of the treatment works and the effluent and receiving waters as specified by the agency.

Statutory Authority: MS s 115.03; 115.44

History: 24 SR 1105

7050.0214 REQUIREMENTS FOR POINT SOURCE DISCHARGERS TO LIMITED RESOURCE VALUE WATERS.

Subpart 1. Effluent limitations. For point source discharges of sewage, industrial, or other wastes to surface waters classified as limited resource value waters pursuant to parts 7050.0200, subpart 8, and 7050.0400 to 7050.0470, the agency shall require treatment facilities which will provide effluents conforming to the following limitations.

Substance or Characteristic

Limiting Concentration*

Five-day carbonaceous

biochemical oxygen demand

15 milligrams per liter

(arithmetic mean of all samples taken during any calendar month)

*This limit shall not apply to discharges to limited resource value waters if the principal method of treatment is through stabilization ponds, in which case the limitations in parts 7050.0211, subpart 3, and 7050.0212, subpart 5, shall apply. All effluent limitations specified in part 7050.0211, subpart 1, shall also be applicable to dischargers of sewage to limited resource value waters, provided that toxic or corrosive pollutants shall be limited to the extent necessary to protect the designated uses of the receiving water or affected downstream waters.

[For text of subps 2 to 4, see M.R.]

Statutory Authority: MS s 115.03; 115.44

History: 24 SR 1105

7050.0218 METHODS FOR PROTECTION OF SURFACE WATERS FROM TOXIC POLLUTANTS FOR WHICH NUMERICAL STANDARDS NOT PROMULGATED.

[For text of subps 1 to 4, see M.R.]

Subp 5. Toxicity-based criteria. Toxicity-based aquatic life criteria shall be determined using the methods in this subpart when no USEPA criterion is available.

[For text of items A to F, see M.R.]

G: If the acute data available do not meet the requirements in items A and B, toxicity-based criteria can be determined by the method in this item. This method is not applicable to ionizable organic chemicals, or to bioaccumulative organic chemicals and pesticides with BCFs greater than 5,000 or log K_{ow} values greater than 5.19.

(1) Acute data are assembled. A minimum of two acute values in the following groups must be available:

(a) a member of the class Osteichthyes (fish), and

(b) a member of one of the following genera in the family Daphnidae: *Daphnia*, *Ceriodaphnia*, *Simocephalus*.

(2) For insecticides, a third acute value must be available for an insect species in addition to the acute values required in subitem (1)

(3) For herbicides, two acute values for plant species, one of which is an algal species, must be available in addition to the acute values required in subitem (1)

(4) Data for saltwater species shall not be used except for purposes of determining ACRs

(5) SMAVs are calculated as the geometric mean of all the acute values for one species

(6) GMAVs are calculated as the geometric mean of the SMAVs.

(7) The lowest GMAV from among the available GMAVs is selected.

(8) The FAV is calculated by dividing the lowest GMAV by the appropriate factor listed below, depending on the number of GMAVs available that meet the minimum data requirements in subitems (2) and (3) and in item A

Number of GMAVs	Factor
2	13.0
3	8.0
4	7.0
5	6.1
6	5.2
7	4.3

(9) The MC is calculated by dividing the FAV by two.

(10) A final ACR is determined as described in item F, except that the default ACR shall be 18 for all chemicals for which this method is applicable as specified in this item.

(11) The CC is calculated by dividing the FAV by the appropriate ACR

(12) If chronic data are available, they are used to determine measured ACRs as described in item F, and chronic data are compared to the CC.

[For text of subs 6 to 10, see MR]

Statutory Authority: *MS s 115.03; 115.44*

History: *24 SR 1105*

7050.0220 SPECIFIC STANDARDS OF QUALITY AND PURITY BY ASSOCIATED USE CLASSES.

Subpart 1 **General.** The numerical and narrative water quality standards in parts 7050.0221 to 7050.0227 prescribe the qualities or properties of the waters of the state that are necessary for the designated public uses and benefits. If the standards in this part are exceeded, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to designated uses or established classes of the waters of the state.

Standards for metals are expressed as total metal but must be converted to dissolved metal standards to determine water quality-based effluent limits. Water quality-based effluent limits for metals are expressed as total metal. Conversion factors for converting total to dissolved metal standards are listed in part 7050.0222, subpart 9. The conversion factor for metals not listed in part 7050.0222, subpart 9, is one. The dissolved metal standard equals the total metal standard times the conversion factor.

The standards are listed for associated classes in tables under subparts 3a to 6a.

A. subpart 3a, Classes 1B, 2A, 3A or 3B, 4A and 4B, and 5,

B. subpart 4a, Classes 1B or 1C, 2Bd, 3A or 3B, 4A and 4B, and 5,

C. subpart 5a, Classes 2B, 2C, or 2D, 3A, 3B, 3C, or 3D, 4A and 4B or 4C, and 5, and

D. subpart 6a, Classes 3C, 4A and 4B, 5, and 7.

Subp 2 **Explanation of tables.** Class 1 standards listed in the tables in subparts 3a and 4a are the United States Environmental Protection Agency primary (maximum contaminant levels) and secondary drinking water standards, as contained in Code of Federal Regulations, title 40, part 141, subparts B and G, and part 143 (1992), and sections 141.61 and 141.62 as amended through July 17, 1992, excluding the bacteriological, radiological, treatment technological, and water treatment additive standards

The tables include the following abbreviations and acronyms:

AN	means aesthetic enjoyment and navigation, Class 5 waters
(c)	means the chemical is assumed to be a human carcinogen
CS	or "chronic standard" means the highest water concentration of a toxicant to which organisms can be exposed indefinitely without causing chronic toxicity
DC	means domestic consumption (drinking water), Class 1 waters
exp ()	means the natural antilogarithm (base e) of the expression in parenthesis
FAV	or "final acute value" means an estimate of the concentration of a pollutant corresponding to the cumulative probability of 0.05 in the distribution of all the acute toxicity values for the genera or species from the acceptable acute toxicity tests conducted on a pollutant
IC	means industrial consumption, Class 3 waters
IR	means agriculture irrigation use, Class 4A waters
LS	means agriculture livestock and wildlife use, Class 4B waters
MS	or "maximum standard" means the highest concentration of a toxicant in water to which aquatic organisms can be exposed for a brief time with zero to slight mortality. The MS equals the FAV divided by two
(S)	means the associated value is a secondary drinking water standard
su	means "standard unit." It is the reporting unit for pH
TH	means total hardness in mg/l, which is the sum of the calcium and magnesium concentrations expressed as CaCO_3
TON	means threshold odor number

For the FAV and MS values noted with an asterisk (*), see part 7050.0222, subpart 7, item E.

Important synonyms or acronyms for some chemicals are listed in parentheses below the primary name. Standards that vary with total hardness or pH are in the form of formulas and are listed as numbered notes at the end of the tables.

When two or more use classes have standards for the same pollutant, the most stringent standard applies pursuant to part 7050.0450. All surface waters are protected for Class 6, but this class has no numerical standards so it is not included in the tables

Subp 3. [Repealed, 24 SR 1105]

Subp 3a **Water quality standards applicable to use Classes 1B, 2A, 3A or 3B, 4A and 4B, and 5.**

A. MISCELLANEOUS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2A CS	2A MS	2A FAV	1B DC	3A/3B IC	4A IR	4B LS	5 AN
(1) Ammonia, un-ionized as N - Units $\mu\text{g/l}$							
16	none	none	-	-	-	-	-
(2) Asbestos, >10 μm (c) - Units fibers/l							
-	-	-	7 0e+06	-	-	-	-
(3) Bicarbonates (HCO_3) - Units meq/l							
-	-	-	-	-	5	-	-
(4) Chloride - Units. mg/l							
230	860	1720	250(S)	50/100	-	-	-
(5) Chlorine, total residual - Units $\mu\text{g/l}$							
11	19	38	-	-	-	-	-
(6) Color - Units Pt-Co							
30	none	none	15(S)	-	-	-	-
(7) Cyanide, free - Units $\mu\text{g/l}$							
5 2	22	45	200	-	-	-	-
(8) Dissolved oxygen - Units mg/l							
-	7 as a daily minimum	-	-	-	-	-	-
(9) Fecal coliform organisms - See Note No. 1 below							
(10) Fluoride - Units mg/l							
-	-	-	4	-	-	-	-

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(11) Fluoride - Units: mg/l

- - - 2(S) - - -

(12) Foaming agents - Units: µg/l

- - - 500(S) - - -

(13) Hardness, Ca + Mg as CaCO₃ - Units: mg/l

- - - - 50/250 - - -

(14) Hydrogen sulfide - Units: mg/l

- - - - - - - 0.02

(15) Nitrate, as N - Units: mg/l

- - - 10 - - -

(16) Nitrite, as N - Units: mg/l

- - - 1 - - -

(17) Nitrate + Nitrite, as N - Units: mg/l

- - - 10 - - -

(18) Odor - Units: TON

- - - 3(S) - - -

(19) Oil - Units: µg/l

500 5000 10000 - - -

(20) pH, low - Units: su

6.5 none none 6.5(S) 6.5/6.0 6.0 6.0 6.0

(21) pH, high - Units: su

8.5 none none 8.5(S) 8.5/9.0 8.5 9.0 9.0

(22) Radioactive materials - See Note No. 2 below

(23) Salinity, total - Units: mg/l

- - - - - 1000 -

(24) Sodium - Units: meq/l

- - - - - 60% of total cations - -

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(25) Sulfate - Units mg/l

-	-	-	250(S)	-	-	-	-
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(26) Sulfates, wild rice present - Units mg/l

-	-	-	-	-	10	-	-
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(27) Specific conductance, at 25°C - Units: µmhos/cm

-	-	-	-	-	1000	-	-
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(28) Temperature - Units °F - No material increase

(29) Total dissolved salts - Units mg/l

-	-	-	-	-	700	-	-
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(30) Total dissolved solids - Units mg/l

-	-	-	500(S)	-	-	-	-
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(31) Turbidity - Units NTU

10	none	none	1-5	-	-	-	-
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B. METALS AND ELEMENTS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2A	2A	2A	1B	3A/3B	4A	4B	5
CS	MS	FAV	DC	IC	IR	LS	AN

(1) Aluminum - Units µg/l

87	748	1496	50-200 (S)	-	-	-	-
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(2) Antimony - Units µg/l

55	90	180	6	-	-	-	-
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(3) Arsenic - Units µg/l

20	360	720	50	-	-	-	-
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(4) Barium - Units µg/l

-	-	-	2000	-	-	-	-
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(5) Beryllium - Units µg/l

-	-	-	40	-	-	-	-
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(6) Boron - Units. $\mu\text{g/l}$

- - - 500 - -

(7) Cadmium - Units $\mu\text{g/l}$ - See Note No. 3 below

- - - 5 - -

(8) Chromium, +3 - Units $\mu\text{g/l}$ - See Note No. 4 below

(9) Chromium, +6 - Units $\mu\text{g/l}$

11 16 32 - - -

(10) Chromium, total - Units $\mu\text{g/l}$

- - - 100 - -

(11) Cobalt - Units $\mu\text{g/l}$

2.8 436 872 - - -

(12) Copper - Units $\mu\text{g/l}$ - See Note No. 5 below

- - - 1000(S) - -

(13) Iron - Units $\mu\text{g/l}$

- - - 300(S) - -

(14) Lead - Units $\mu\text{g/l}$ - See Note No. 6 below

(15) Manganese - Units $\mu\text{g/l}$

- - - 50(S) - -

(16) Mercury - Units $\mu\text{g/l}$

0.0069 2.4* 4.9* 2 - -

(17) Nickel - Units $\mu\text{g/l}$ - See Note No. 7 below

- - - 100 - -

(18) Selenium - Units $\mu\text{g/l}$

5.0 20 40 50 - -

(19) Silver - Units $\mu\text{g/l}$ - See Note No. 8 below

0.12 - - 100(S) - -

(20) Thallium - Units $\mu\text{g/l}$

0.28 64 128 2 - -

(21) Zinc - Units: $\mu\text{g/l}$ - See Note No 9 below

-	-	-	5000(S)	-	-	-	-
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C. ORGANICS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2A CS	2A MS	2A FAV	1B DC	3A/3B IC	4A IR	4B LS	5 AN
(1) Acenaphthene - Units: $\mu\text{g/l}$							
20	56	112	-	-	-	-	-
(2) Acrylonitrile (c) - Units $\mu\text{g/l}$							
0.38	1140*	2281*	-	-	-	-	-
(3) Alachlor (c) - Units: $\mu\text{g/l}$							
3.8	800*	1600*	2	-	-	-	-
(4) Aldicarb - Units $\mu\text{g/l}$							
-	-	-	3	-	-	-	-
(5) Aldicarb sulfone - Units $\mu\text{g/l}$							
-	-	-	2	-	-	-	-
(6) Aldicarb sulfoxide - Units $\mu\text{g/l}$							
-	-	-	4	-	-	-	-
(7) Anthracene - Units $\mu\text{g/l}$							
0.035	0.32	0.63	-	-	-	-	-
(8) Atrazine (c) - Units: $\mu\text{g/l}$							
3.4	323	645	3	-	-	-	-
(9) Benzene (c) - Units $\mu\text{g/l}$							
9.7	4487*	8974*	5	-	-	-	-
(10) Benzo(a)pyrene - Units $\mu\text{g/l}$							
-	-	-	0.2	-	-	-	-
(11) Bromoform - Units $\mu\text{g/l}$							

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33	2900	5800	-	-	-	-	-	-
(12) Carbofuran - Umts. µg/l								
-	-	-	40	-	-	-	-	-
(13) Carbon tetrachloride (c) - Units µg/l								
1.9	1750*	3500*	.5	-	-	-	-	-
(14) Chlordane (c) - Units. ng/l								
0.073	1200*	2400*	2000	-	-	-	-	-
(15) Chlorobenzene (Monochlorobenzene) - Units: µg/l								
20	423	846	100	-	-	-	-	-
(16) Chloroform (c) - Units µg/l								
53	1392	2784	-	-	-	-	-	-
(17) Chlorpyrifos - Units µg/l								
0.041	0.083	0.17	-	-	-	-	-	-
(18) Dalapon - Units µg/l								
-	-	-	200	-	-	-	-	-
(19) DDT (c) - Units: ng/l								
0.11	550*	1100*	-	-	-	-	-	-
(20) 1,2-Dibromo-3-chloropropane (c) - Units µg/l								
-	-	-	0.2	-	-	-	-	-
(21) Dichlorobenzene (ortho) - Units µg/l								
-	-	-	600	-	-	-	-	-
(22) 1,4-Dichlorobenzene (para) (c) - Units: µg/l								
-	-	-	75	-	-	-	-	-
(23) 1,2-Dichloroethane (c) - Units µg/l								
3.5	45050*	90100*	5	-	-	-	-	-
(24) 1,1-Dichloroethylene - Units µg/l								
-	-	-	7	-	-	-	-	-

(25) 1,2-Dichloroethylene (cis) - Units: $\mu\text{g/l}$

- - - 70 - - -

(26) 1,2-Dichloroethylene (trans) - Units: $\mu\text{g/l}$

- - - 100 - - -

(27) 2,4-Dichlorophenoxyacetic acid (2,4-D) - Units: $\mu\text{g/l}$

- - - 70 - - -

(28) 1,2-Dichloropropane (c) - Units: $\mu\text{g/l}$

- - - 5 - - -

(29) Dieldrin (c) - Units: ng/l

0 0065 1300* 2500* - - -

(30) Di-2-ethylhexyl adipate - Units: $\mu\text{g/l}$

- - - 400 - - -

(31) Di-2-ethylhexyl phthalate (c) - Units: $\mu\text{g/l}$

1 9 none* none* 6 - - -

(32) Di-n-Octyl phthalate - Units: $\mu\text{g/l}$

30 825 1650 - - -

(33) Dinoseb - Units: $\mu\text{g/l}$

- - - 7 - - -

(34) Diquat - Units: $\mu\text{g/l}$

- - - 20 - - -

(35) Endosulfan - Units: $\mu\text{g/l}$

0 0076 0 084 0 17 - - -

(36) Endothall - Units: $\mu\text{g/l}$

- - - 100 - - -

(37) Endrin - Units: $\mu\text{g/l}$

0 0039 0 090 0 18 2 - - -

(38) Ethylbenzene (c) - Units: $\mu\text{g/l}$

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68	1859	3717	700	-	-	-	-
(39) Ethylene dibromide - Units: µg/l							
-	-	-	0.05	-	-	-	-
(40) Fluoranthene - Units: µg/l							
1.9	3.5	6.9	-	-	-	-	-
(41) Glyphosate - Units: µg/l							
-	-	-	700	-	-	-	-
(42) Heptachlor (c) - Units: ng/l							
0.10	260*	520*	400	-	-	-	-
(43) Heptachlor epoxide (c) - Units: ng/l							
0.12	270*	530*	200	-	-	-	-
(44) Hexachlorobenzene (c) - Units: ng/l							
0.061	none*	none*	1000	-	-	-	-
(45) Hexachlorocyclopentadiene - Units: µg/l							
-	-	-	50	-	-	-	-
(46) Lindane (c) (Hexachlorocyclohexane, gamma-) - Units: µg/l							
0.0087	1.0*	2.0*	0.2	-	-	-	-
(47) Methoxychlor - Units: µg/l							
-	-	-	40	-	-	-	-
(48) Methylene chloride (c) (Dichloromethane) - Units: µg/l							
45	13875*	27749*	5	-	-	-	-
(49) Oxamyl (Vydate) - Units: µg/l							
-	-	-	200	-	-	-	-
(50) Naphthalene - Units: µg/l							
81	409	818	-	-	-	-	-
(51) Parathion - Units: µg/l							
0.013	0.07	0.13	-	-	-	-	-

(52) Pentachlorophenol - Units: $\mu\text{g/l}$

0.93	See Note	-	1	-	-	-	-
-	No. 10	-	-	-	-	-	-
	below						

(53) Phenanthrene - Units: $\mu\text{g/l}$

3	6	32	64	-	-	-	-
---	---	----	----	---	---	---	---

(54) Phenol - Units: $\mu\text{g/l}$

123	2214	4428	-	-	-	-	-
-----	------	------	---	---	---	---	---

(55) Picloram - Units: $\mu\text{g/l}$

-	-	-	500	-	-	-	-
---	---	---	-----	---	---	---	---

(56) Polychlorinated biphenyls (c) (PCBs, total) - Units: ng/l

0	014	1000*	2000*	500	-	-	-
---	-----	-------	-------	-----	---	---	---

(57) Simazine - Units: $\mu\text{g/l}$

-	-	-	4	-	-	-	-
---	---	---	---	---	---	---	---

(58) Styrene (c) - Units: $\mu\text{g/l}$

-	-	-	100	-	-	-	-
---	---	---	-----	---	---	---	---

(59) 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD-dioxin) - Units: ng/l

-	-	-	0	03	-	-	-
---	---	---	---	----	---	---	---

(60) 1,1,2,2-Tetrachloroethane (c) - Units: $\mu\text{g/l}$

1	1	1127*	2253*	-	-	-	-
---	---	-------	-------	---	---	---	---

(61) Tetrachloroethylene (c) - Units: $\mu\text{g/l}$

3	8	428*	857*	5	-	-	-
---	---	------	------	---	---	---	---

(62) Toluene - Units: $\mu\text{g/l}$

253	1352	2703	1000	-	-	-	-
-----	------	------	------	---	---	---	---

(63) Toxaphene (c) - Units: ng/l

0.31	730*	1500*	3000	-	-	-	-
------	------	-------	------	---	---	---	---

(64) 2,4,5-TP (Silvex) - Units: $\mu\text{g/l}$

-	-	-	50	-	-	-	-
---	---	---	----	---	---	---	---

(65) 1,2,4-Trichlorobenzene - Units $\mu\text{g/l}$

-	-	-	70	-	-	-	-
---	---	---	----	---	---	---	---

(66) 1,1,1-Trichloroethane - Units: $\mu\text{g/l}$

329	2957	5913	200	-	-	-	-
-----	------	------	-----	---	---	---	---

(67) 1,1,2-Trichloroethane - Units: $\mu\text{g/l}$

-	-	-	5	-	-	-	-
---	---	---	---	---	---	---	---

(68) 1,1,2-Trichloroethylene (c) - Units $\mu\text{g/l}$

25	6988*	13976*	5	-	-	-	-
----	-------	--------	---	---	---	---	---

(69) 2,4,6-Trichlorophenol - Units $\mu\text{g/l}$

2.0	102	203	-	-	-	-	-
-----	-----	-----	---	---	---	---	---

(70) Trihalomethanes, total (c) (Bromodichloromethane) (Bromoform) (Chlorodibromomethane) (Chloroform) - Units: $\mu\text{g/l}$

-	-	-	100	-	-	-	-
---	---	---	-----	---	---	---	---

(71) Vinyl chloride (c) - Units: $\mu\text{g/l}$

0.17	none*	none*	2	-	-	-	-
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(72) Xylenes, total - Units $\mu\text{g/l}$

166	1407	2814	10000	-	-	-	-
-----	------	------	-------	---	---	---	---

Note No. 1, FECAL COLIFORM ORGANISMS

Not to exceed 200 organisms per 100 milliliters as a geometric mean of not less than five samples in any calendar month, nor shall more than ten percent of all samples taken during any calendar month individually exceed 400 organisms per 100 milliliters. The standard applies only between April 1 and October 31.

Note No. 2, RADIOACTIVE MATERIALS

See parts 7050.0221, subparts 2, 3, 4, and 5, 7050.0222, subparts 4, 5, and 6; and 7050.0224, subparts 2, 3, and 4.

Note No. 3, CADMIUM**STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)****EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF.**

50	100	200	300	400
----	-----	-----	-----	-----

CS =

 $\exp.(0.7852[\ln(\text{TH mg/l})]-3.49)$

0.66	1.1	2.0	2.7	3.4
------	-----	-----	-----	-----

MS =

 $\exp.(1.128[\ln(\text{TH mg/l})]-3.828)$

1.8	3.9	8.6	14	19
-----	-----	-----	----	----

FAV =					
$\exp(1.128[\ln(\text{TH mg/l})]-3.1349)$	3.6	7.8	17	27	37

Note No 4, CHROMIUM +3

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF:

50	100	200	300	400
----	-----	-----	-----	-----

CS =					
$\exp(0.819[\ln(\text{TH mg/l})]+1.561)$	117	207	365	509	644
MS =					
$\exp.(0.819[\ln(\text{TH mg/l})]+3.688)$	984	1737	3064	4270	5405
FAV =					
$\exp.(0.819[\ln(\text{TH mg/l})]+4.380)$	1966	3469	6120	8530	10797

Note No. 5, COPPER

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF:

50	100	200	300	400
----	-----	-----	-----	-----

CS =					
$\exp.(0.620[\ln(\text{TH mg/l})]-0.57)$	6.4	9.8	15	19	23
MS =					
$\exp(0.9422[\ln(\text{TH mg/l})]-1.464)$	9.2	18	34	50	65
FAV =					
$\exp.(0.9422[\ln(\text{TH mg/l})]-0.7703)$	18	35	68	100	131

Note No 6, LEAD

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF:

50	100	200	300	400
----	-----	-----	-----	-----

CS =					
$\exp(1.273[\ln(\text{TH mg/l})]-4.705)$	1.3	3.2	7.7	13	19
MS =					
$\exp.(1.273[\ln(\text{TH mg/l})]-1.460)$	34	82	197	331	477
FAV =					
$\exp.(1.273[\ln(\text{TH mg/l})]-0.7643)$	68	164	396	663	956

Note No 7, NICKEL

STANDARDS THAT VARY WITH

EXAMPLE STANDARDS IN $\mu\text{g/l}$

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TOTAL HARDNESS (TH)	AT TOTAL HARDNESS OF				
	50	100	200	300	400

CS = exp (0 846[ln(TH mg/l)] + 1 1645)	88	158	283	297	297
not to exceed 297 µg/l					

MS = exp (0 846[ln(TH mg/l)] + 3 3612)	789	1418	2549	3592	4582
---	-----	------	------	------	------

FAV = exp (0 846[ln(TH mg/l)] + 4 0543)	1578	2836	5098	7185	9164
--	------	------	------	------	------

Note No 8, SILVER

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	EXAMPLE STANDARDS IN µg/l AT TOTAL HARDNESS OF:				
	50	100	200	300	400

CS = 0.12	0 12	0.12	0 12	0.12	0 12
-----------	------	------	------	------	------

MS = exp (1.72[ln(TH mg/l)]-7 2156)	0.61	2 0	6 7	13	22
--	------	-----	-----	----	----

FAV = exp (1 72[ln(TH mg/l)]-6 520)	1.2	4 1	13	27	44
The MS and FAV shall be no less than 0 12 Sg/l					

Note No 9, ZINC

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	EXAMPLE STANDARDS IN µg/l AT TOTAL HARDNESS OF				
	50	100	200	300	400

CS = exp (0.8473[ln(TH mg/l)] + 0.7615)	59	106	191	269	343
--	----	-----	-----	-----	-----

MS = exp (0 8473[ln(TH mg/l)] + 0 8604)	65	117	211	297	379
--	----	-----	-----	-----	-----

FAV = exp.(0 8473[ln(TH mg/l)] + 1 5536)	130	234	421	594	758
---	-----	-----	-----	-----	-----

Note No 10, PENTACHLOROPHENOL

STANDARD THAT VARIES WITH pH	EXAMPLE STANDARDS IN $\mu\text{g/l}$ AT pH OF				
	6.5	7.0	7.5	8.0	8.5
CS = 0.93	0.93	0.93	0.93	0.93	0.93
MS = exp (1.005(pH)-4.830)	5.5	9.1	15	25	41
FAV = exp (1.005(pH)-4.1373)	11	18	30	50	82

Subp. 4 [Repealed, 24 SR 1105]

Subp. 4a **Water quality standards applicable to use Classes 1B or 1C, 2Bd, 3A or 3B, 4A and 4B, and 5.**

A MISCELLANEOUS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2Bd CS	2Bd MS	2Bd FAV	1B/1C DC	3A/3B IC	4A IR	4B LS	5 AN
(1) Ammonia, un-ionized as N - Units: $\mu\text{g/l}$							
40	none	none	-	-	-	-	-
(2) Asbestos, >10 μm (c) - Units: fibers/l							
-	-	-	7.0e+06	-	-	-	-
(3) Bicarbonates (HCO_3) - Units: meq/l							
-	-	-	-	-	5	-	-
(4) Chloride - Units: mg/l							
230	860	1720	250(S)	50/100	-	-	-
(5) Chlorine, total residual - Units: $\mu\text{g/l}$							
11	19	38	-	-	-	-	-
(6) Color - Units: Pt-Co							
-	-	-	15(S)	-	-	-	-
(7) Cyanide, free - Units: $\mu\text{g/l}$							
5.2	22	45	200	-	-	-	-
(8) Dissolved oxygen - Units: mg/l - See part 7050.0222, subp. 3							
(9) Fecal coliform organisms - See Note No. 1 below							
(10) Fluoride - Units: mg/l							
-	-	-	4	-	-	-	-

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(11) Fluoride - Units mg/l

-	-	-	2(S)	-	-	-	-
---	---	---	------	---	---	---	---

(12) Foaming agents - Units µg/l

-	-	-	500(S)	-	-	-	-
---	---	---	--------	---	---	---	---

(13) Hardness, Ca + Mg as CaCO₃ - Units mg/l

-	-	-	-	50/250	-	-	-
---	---	---	---	--------	---	---	---

(14) Hydrogen sulfide - Units mg/l

-	-	-	-	-	-	-	0.02
---	---	---	---	---	---	---	------

(15) Nitrate, as N - Units mg/l

-	-	-	10	-	-	-	-
---	---	---	----	---	---	---	---

(16) Nitrite, as N - Units mg/l

-	-	-	1	-	-	-	-
---	---	---	---	---	---	---	---

(17) Nitrate + Nitrite, as N - Units mg/l

-	-	-	10	-	-	-	-
---	---	---	----	---	---	---	---

(18) Odor - Units TON

-	-	-	3(S)	-	-	-	-
---	---	---	------	---	---	---	---

(19) Oil - Units µg/l

500	5000	10000	-	-	-	-	-
-----	------	-------	---	---	---	---	---

(20) pH, low - Units su

6.5	none	none	6.5(S)	6.5/6.0	6.0	6.0	6.0
-----	------	------	--------	---------	-----	-----	-----

(21) pH, high - Units: su

9.0	none	none	8.5(S)	8.5/9.0	8.5	9.0	9.0
-----	------	------	--------	---------	-----	-----	-----

(22) Radioactive materials - See Note No. 2 below

(23) Salinity, total - Units mg/l

-	-	-	-	-	-	1000	-
---	---	---	---	---	---	------	---

(24) Sodium - Units meq/l

-	-	-	-	-	60% of total cations	-	-
---	---	---	---	---	----------------------	---	---

(25) Specific conductance, at 25°C - Units $\mu\text{mhos/cm}$

-	-	-	-	-	1000	-	-
---	---	---	---	---	------	---	---

(26) Sulfate - Units. mg/l

-	-	-	250(S)	-	-	-	-
---	---	---	--------	---	---	---	---

(27) Sulfates, wild rice present - Units: mg/l

-	-	-	-	-	10	-	-
---	---	---	---	---	----	---	---

(28) Temperature - Units °F - See Note No. 3 below

(29) Total dissolved salts - Units. mg/l

-	-	-	-	-	700	-	-
---	---	---	---	---	-----	---	---

(30) Total dissolved solids - Units mg/l

-	-	-	500(S)	-	-	-	-
---	---	---	--------	---	---	---	---

(31) Turbidity - Units NTU

25	none	none	1-5/25	-	-	-	-
----	------	------	--------	---	---	---	---

B METALS AND ELEMENTS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2Bd CS	2Bd MS	2Bd FAV	1B/1C DC	3A/3B IC	4A IR	4B LS	5 AN
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(1) Aluminum - Units. $\mu\text{g/l}$

125	1072	2145	50-200 (S)	-	-	-	-
-----	------	------	---------------	---	---	---	---

(2) Antimony - Units $\mu\text{g/l}$

5.5	90	180	6	-	-	-	-
-----	----	-----	---	---	---	---	---

(3) Arsenic - Units $\mu\text{g/l}$

20	360	720	50	-	-	-	-
----	-----	-----	----	---	---	---	---

(4) Barium - Units $\mu\text{g/l}$

-	-	-	2000	-	-	-	-
---	---	---	------	---	---	---	---

(5) Beryllium - Units $\mu\text{g/l}$

-	-	-	4	-	-	-	-
---	---	---	---	---	---	---	---

(6) Boron - Units $\mu\text{g/l}$

-	-	-	-	-	500	-	-
---	---	---	---	---	-----	---	---

(7) Cadmium - Units: $\mu\text{g/l}$ - See Note No. 4 below

-	-	-	5	-	-	-	-
---	---	---	---	---	---	---	---

(8) Chromium, +3 - Units: $\mu\text{g/l}$ - See Note No. 5 below(9) Chromium, +6 - Units: $\mu\text{g/l}$

11	16	32	-	-	-	-	-
----	----	----	---	---	---	---	---

(10) Chromium, total - Units $\mu\text{g/l}$

-	-	-	100	-	-	-	-
---	---	---	-----	---	---	---	---

(11) Cobalt - Units $\mu\text{g/l}$

2.8	436	872	-	-	-	-	-
-----	-----	-----	---	---	---	---	---

(12) Copper - Units: $\mu\text{g/l}$ - See Note No. 6 below

-	-	-	1000(S)	-	-	-	-
---	---	---	---------	---	---	---	---

(13) Iron - Units: $\mu\text{g/l}$

-	-	-	300(S)	-	-	-	-
---	---	---	--------	---	---	---	---

(14) Lead - Units: $\mu\text{g/l}$ - See Note No. 7 below(15) Manganese - Units: $\mu\text{g/l}$

-	-	-	50(S)	-	-	-	-
---	---	---	-------	---	---	---	---

(16) Mercury - Units $\mu\text{g/l}$

0.0069	2.4*	4.9*	2	-	-	-	-
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(17) Nickel - Units $\mu\text{g/l}$ - See Note No. 8 below

-	-	-	100	-	-	-	-
---	---	---	-----	---	---	---	---

(18) Selenium - Units $\mu\text{g/l}$

5.0	20	40	50	-	-	-	-
-----	----	----	----	---	---	---	---

(19) Silver - Units: $\mu\text{g/l}$ - See Note No. 9 below

1.0	-	-	100(S)	-	-	-	-
-----	---	---	--------	---	---	---	---

(20) Thallium - Units: $\mu\text{g/l}$

0.28	64	128	2	-	-	-	-
------	----	-----	---	---	---	---	---

(21) Zinc - Units. $\mu\text{g/l}$ - See Note No 10 below

-	-	-	5000(S)	-	-	-	-
---	---	---	---------	---	---	---	---

C ORGANICS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2Bd CS	2Bd MS	2Bd FAV	1B/1C DC	3A/3B IC	4A IR	4B LS	5 AN
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(1) Acenaphthene - Units: $\mu\text{g/l}$

20	56	112	-	-	-	-	-
----	----	-----	---	---	---	---	---

(2) Acrylonitrile (c) - Units $\mu\text{g/l}$

0 38	1140*	2281*	-	-	-	-	-
------	-------	-------	---	---	---	---	---

(3) Alachlor (c) - Units: $\mu\text{g/l}$

4 2	800*	1600*	2	-	-	-	-
-----	------	-------	---	---	---	---	---

(4) Aldicarb - Units $\mu\text{g/l}$

-	-	-	3	-	-	-	-
---	---	---	---	---	---	---	---

(5) Aldicarb sulfone - Units $\mu\text{g/l}$

-	-	-	2	-	-	-	-
---	---	---	---	---	---	---	---

(6) Aldicarb sulfoxide - Units $\mu\text{g/l}$

-	-	-	4	-	-	-	-
---	---	---	---	---	---	---	---

(7) Anthracene - Units. $\mu\text{g/l}$

0 035	0.32	0.63	-	-	-	-	-
-------	------	------	---	---	---	---	---

(8) Atrazine (c) - Units: $\mu\text{g/l}$

3 4	323	645	3	-	-	-	-
-----	-----	-----	---	---	---	---	---

(9) Benzene (c) - Units: $\mu\text{g/l}$

11	4487*	8974*	5	-	-	-	-
----	-------	-------	---	---	---	---	---

(10) Benzo(a)pyrene - Units $\mu\text{g/l}$

-	-	-	0 2	-	-	-	-
---	---	---	-----	---	---	---	---

(11) Bromoform - Units $\mu\text{g/l}$

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41	2900	5800	-	-	-	-	-	-
(12) Carbofuran - Units. µg/l								
-	-	-	40	-	-	-	-	-
(13) Carbon tetrachloride (c) - Units: µg/l								
1 9	1750*	3500*	5	-	-	-	-	-
(14) Chlordane (c) - Units ng/l								
0 29	1200*	2400*	2000	-	-	-	-	-
(15) Chlorobenzene (Monochlorobenzene) - Units: µg/l								
20	423	846	100	-	-	-	-	-
(16) Chloroform (c) - Units µg/l								
53	1392	2784	-	-	-	-	-	-
(17) Chlorpyrifos - Units µg/l								
0 041	0 083	0 17	-	-	-	-	-	-
(18) Dalapon - Units µg/l								
-	-	-	200	-	-	-	-	-
(19) DDT (c) - Units ng/l								
1 7	550*	1100*	-	-	-	-	-	-
(20) 1,2-Dibromo-3-chloropropane (c) - Units µg/l								
-	-	-	0.2	-	-	-	-	-
(21) Dichlorobenzene (ortho) - Units. µg/l								
-	-	-	600	-	-	-	-	-
(22) 1,4-Dichlorobenzene (para) (c) - Units: µg/l								
-	-	-	75	-	-	-	-	-
(23) 1,2-Dichloroethane (c) - Units µg/l								
3.8	45050*	90100*	5	-	-	-	-	-
(24) 1,1-Dichloroethylene - Units: µg/l								
-	-	-	7	-	-	-	-	-

(25) 1,2-Dichloroethylene (cis) - Units. µg/l

- - - 70 - - -

(26) 1,2-Dichloroethylene (trans) - Units: µg/l

- - - 100 - - -

(27) 2,4-Dichlorophenoxyacetic acid (2,4-D) - Units. µg/l

- - - 70 - - -

(28) 1,2-Dichloropropane (c) - Units. µg/l

- - - 5 - - -

(29) Dieldrin (c) - Units: ng/l

0 026 1300* 2500* - - -

(30) Di-2-ethylhexyl adipate - Units. µg/l

- - - 400 - - -

(31) Di-2-ethylhexyl phthalate (c) - Units: µg/l

1.9 none* none* 6 - - -

(32) Di-n-Octyl phthalate - Units µg/l

30 825 1650 - - -

(33) Dinoseb - Units µg/l

- - - 7 - - -

(34) Diquat - Units µg/l

- - - 20 - - -

(35) Endosulfan - Units. µg/l

0.029 0.28 0.56 - - -

(36) Endothall - Units µg/l

- - - 100 - - -

(37) Endrin - Units µg/l

0.016 0 090 0 18 2 - - -

(38) Ethylbenzene (c) - Units µg/l

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68	1859	3717	700	-	-	-	-
(39) Ethylene dibromide - Units µg/l							
-	-	-	0 05	-	-	-	-
(40) Fluoranthene - Units µg/l							
1.9	3.5	6 9	-	-	-	-	-
(41) Glyphosate - Units µg/l							
-	-	-	700	-	-	-	-
(42) Heptachlor (c) - Units ng/l							
0.39	260*	520	400	-	-	-	-
(43) Heptachlor epoxide (c) - Units: ng/l							
0 48	270	530*	200	-	-	-	-
(44) Hexachlorobenzene (c) - Units ng/l							
0 24	none*	none*	1000	-	-	-	-
(45) Hexachlorocyclopentadiene - Units µg/l							
-	-	-	50	-	-	-	-
(46) Lindane (c) (Hexachlorocyclohexane, gamma-) - Units: µg/l							
0 032	4 4	8 8	0 2	-	-	-	-
(47) Methoxychlor - Units: µg/l							
-	-	-	40	-	-	-	-
(48) Methylene chloride (c) (Dichloromethane) - Units µg/l							
46	13875*	27749*	5	-	-	-	-
(49) Oxamyl (Vydate) - Units µg/l							
-	-	-	200	-	-	-	-
(50) Naphthalene - Units µg/l							
81	409	818	-	-	-	-	-
(51) Parathion - Units. µg/l							
0 013	0 07	0 13	-	-	-	-	-

(52) Pentachlorophenol - Units: $\mu\text{g/l}$ - See Note No 11 below

1.9	-	-	1	-	-	-	-
-----	---	---	---	---	---	---	---

(53) Phenanthrene - Units $\mu\text{g/l}$

3 6	32	64	-	-	-	-	-
-----	----	----	---	---	---	---	---

(54) Phenol - Units: $\mu\text{g/l}$

123	2214	4428	-	-	-	-	-
-----	------	------	---	---	---	---	---

(55) Picloram - Units: $\mu\text{g/l}$

-	-	-	500	-	-	-	-
---	---	---	-----	---	---	---	---

(56) Polychlorinated biphenyls (c) (PCBs, total) - Units. ng/l

0.029	1000*	2000*	500	-	-	-	-
-------	-------	-------	-----	---	---	---	---

(57) Simazine - Units $\mu\text{g/l}$

-	-	-	4	-	-	-	-
---	---	---	---	---	---	---	---

(58) Styrene (c) - Units $\mu\text{g/l}$

-	-	-	100	-	-	-	-
---	---	---	-----	---	---	---	---

(59) 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD-dioxin) - Units ng/l

-	-	-	0.03	-	-	-	-
---	---	---	------	---	---	---	---

(60) 1,1,2,2-Tetrachloroethane (c) - Units $\mu\text{g/l}$

1 5	1127*	2253*	-	-	-	-	-
-----	-------	-------	---	---	---	---	---

(61) Tetrachloroethylene (c) - Units: $\mu\text{g/l}$

3 8	428 ¹	857 ²	5	-	-	-	-
-----	------------------	------------------	---	---	---	---	---

(62) Toluene - Units $\mu\text{g/l}$

253	1352	2703	1000	-	-	-	-
-----	------	------	------	---	---	---	---

(63) Toxaphene (c) - Units ng/l

1 3	730 [~]	1500*	3000	-	-	-	-
-----	------------------	-------	------	---	---	---	---

(64) 2,4,5-TP (Silvex) - Units $\mu\text{g/l}$

-	-	-	50	-	-	-	-
---	---	---	----	---	---	---	---

(65) 1,2,4-Trichlorobenzene - Units $\mu\text{g/l}$

-	-	-	70	-	-	-	-
(66) 1,1;1-Trichloroethane - Units µg/l							
329	2957	5913	200	-	-	-	-
(67) 1,1,2-Trichloroethane - Units µg/l							
-	-	-	5	-	-	-	-
(68) 1,1,2-Trichloroethylene (c) - Units µg/l							
25	6988*	13976*	5	-	-	-	-
(69) 2,4,6-Trichlorophenol - Units µg/l							
20	102	203	-	-	-	-	-
(70) Trihalomethanes, total (c) (Bromodichloromethane) (Bromoform) (Chlorodibromomethane) (Chloroform) - Units µg/l							
-	-	-	100	-	-	-	-
(71) Vinyl chloride (c) - Units µg/l							
0.18	none*	none*	2	-	-	-	-
(72) Xylenes, total - Units µg/l							
166	1407	2814	10000	-	-	-	-

Note No. 1, FECAL COLIFORM ORGANISMS

Not to exceed 200 organisms per 100 milliliters as a geometric mean of not less than five samples in any calendar month, nor shall more than ten percent of all samples taken during any calendar month individually exceed 2,000 organisms per 100 milliliters. The standard applies only between April 1 and October 31.

Note No. 2, RADIOACTIVE MATERIALS

See parts 7050.0221, subparts 2, 3, 4, and 5, 7050.0222, subparts 4, 5, and 6; and 7050.0224, subparts 2, 3, and 4.

Note No. 3, TEMPERATURE

Five degrees Fahrenheit above natural in streams and three degrees Fahrenheit above natural in lakes, based on monthly average of maximum daily temperature, except in no case shall it exceed the daily average temperature of 86 degrees Fahrenheit.

Note No. 4, CADMIUM

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN µg/l
AT TOTAL HARDNESS OF.

50	100	200	300	400
----	-----	-----	-----	-----

CS =
 $\exp(0.7852[\ln(\text{TH mg/l})] - 3.490)$

0.66	1.1	2.0	2.7	3.4
------	-----	-----	-----	-----

MS = exp (1 128[ln(TH mg/l)]-1 685)	15	33	73	116	160
--	----	----	----	-----	-----

FAV = exp (1 128[ln(TH mg/l)]-0 9919)	31	67	146	231	319
--	----	----	-----	-----	-----

Note No 5, CHROMIUM +3

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF

50	100	200	300	400
----	-----	-----	-----	-----

CS = exp (0 819[ln(TH mg/l)] + 1.561)	117	207	365	509	644
--	-----	-----	-----	-----	-----

MS = exp (0 819[ln(TH mg/l)] + 3 688)	984	1737	3064	4270	5405
--	-----	------	------	------	------

FAV = exp (0 819[ln(TH mg/l)] + 4 380)	1966	3469	6120	8530	10797
---	------	------	------	------	-------

Note No 6, COPPER

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF

50	100	200	300	400
----	-----	-----	-----	-----

CS = exp (0 620[ln(TH mg/l)]-0 57)	6 4	9 8	15	19	23
---------------------------------------	-----	-----	----	----	----

MS = exp (0.9422[ln(TH mg/l)]-1 464)	9 2	18	34	50	65
---	-----	----	----	----	----

FAV = exp (0 9422[ln(TH mg/l)]-0 7703)	18	35	68	100	131
---	----	----	----	-----	-----

Note No. 7, LEAD

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF

50	100	200	300	400
----	-----	-----	-----	-----

CS = exp (1 273[ln(TH mg/l)]-4 705)	1.3	3.2	7.7	13	19
--	-----	-----	-----	----	----

MS = exp (1 273[ln(TH mg/l)]-1 460)	34	82	197	331	477
--	----	----	-----	-----	-----

FAV = exp (1 273[ln(TH mg/l)]-0 7643)	68	164	396	663	956
--	----	-----	-----	-----	-----

Note No. 8, NICKEL

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF
50 100 200 300 400

CS =

 $\exp(0.846[\ln(\text{TH mg/l})] + 1.1645)$

88 158 283 297 297

not to exceed 297 $\mu\text{g/l}$

MS =

 $\exp(0.846[\ln(\text{TH mg/l})] + 3.3612)$

789 1418 2549 3592 4582

FAV =

 $\exp(0.846[\ln(\text{TH mg/l})] + 4.0543)$

1578 2836 5098 7185 9164

Note No. 9, SILVER

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF
50 100 200 300 400

CS = 1.0

1.0 1.0 1.0 1.0 1.0

MS =

 $\exp(1.72[\ln(\text{TH mg/l})] - 7.2156)$

1.0 2.0 6.7 13 22

FAV =

 $\exp(1.72[\ln(\text{TH mg/l})] - 6.520)$

1.2 4.1 13 27 44

The MS and FAV shall be no less than 1.0 $\mu\text{g/l}$

Note No. 10, ZINC

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF
50 100 200 300 400

CS =

 $\exp(0.8473[\ln(\text{TH mg/l})] + 0.7615)$

59 106 191 269 343

MS =

 $\exp(0.8473[\ln(\text{TH mg/l})] + 0.8604)$

65 117 211 297 379

FAV =

 $\exp(0.8473[\ln(\text{TH mg/l})] + 1.5536)$

130 234 421 594 758

Note No. 11, PENTACHLOROPHENOL

STANDARD THAT VARIES WITH pH	EXAMPLE STANDARDS IN $\mu\text{g/l}$ AT pH OF:				
	6.5	7.0	7.5	8.0	8.5
CS = 19	19	19	19	19	19
MS = exp (1 005(pH)-4.830)	5.5	9.1	15	25	41
FAV = exp (1 005(pH)-4.1373)	11	18	30	50	82

Subp 5 [Repealed, 24 SR 1105]

Subp 5a **Water quality standards applicable to use Classes 2B, 2C, or 2D; 3A, 3B, 3C, or 3D; 4A and 4B or 4C; and 5.** See Note No 1 below

A. MISCELLANEOUS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2B,C&D CS	2B,C&D MS	2B,C&D FAV	3A/3B/3C IC	4A IR	4B LS	5 AN
(1) Ammonia, un-ionized as N - Units: $\mu\text{g/l}$						
40	none	none	-	-	-	-
(2) Bicarbonates (HCO_3) - Units: meq/l						
-	-	-	-	5	-	-
(3) Chloride - Units: mg/l						
230	860	1720	50/100/250	-	-	-
(4) Chlorine, total residual - Units: $\mu\text{g/l}$						
11	19	38	-	-	-	-
(5) Cyanide, free - Units: $\mu\text{g/l}$						
5.2	22	45	-	-	-	-
(6) Dissolved oxygen - Units: mg/l - See Note No 2 below						
(7) Fecal coliform organisms - See Note No 3 below						
(8) Hardness, Ca + Mg as CaCO_3 - Units: mg/l						
-	-	-	50/250/500	-	-	-
(9) Hydrogen sulfide - Units: mg/l						
-	-	-	-	-	-	0.02
(10) Oil - Units: $\mu\text{g/l}$						
500	5000	10,000	-	-	-	-

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(11) pH, low - Units su - See Note No 4 below

6 5	-	-	6 5/6 0/6 0	6 0	6.0	6.0
-----	---	---	-------------	-----	-----	-----

(12) pH, high - Units: su - See Note No 4 below

9 0	-	-	8 5/9 0/9 0	8 5	9 0	9 0
-----	---	---	-------------	-----	-----	-----

(13) Radioactive materials - See Note No 5 below

(14) Salinity, total - Units: mg/l

-	-	-	-	-	1000	-
---	---	---	---	---	------	---

(15) Sodium - Units meq/l

-	-	-	-	60% of total cations	-	-
---	---	---	---	----------------------------	---	---

(16) Specific conductance, at 25°C - Units: μmhos/cm

-	-	-	-	1000	-	-
---	---	---	---	------	---	---

(17) Sulfates, wild rice present - Units mg/l

-	-	-	-	10	-	-
---	---	---	---	----	---	---

(18) Temperature - Units °F - See Note No 6 below

(19) Total dissolved salts - Units mg/l

-	-	-	-	700	-	-
---	---	---	---	-----	---	---

(20) Turbidity - Units NTU

25	none	none	-	-	-	-
----	------	------	---	---	---	---

B METALS AND ELEMENTS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2B,C&D	2B,C&D	2B,C&D	3A/3B/3C	4A	4B	5
CS	MS	FAV	IC	IR	LS	AN

(1) Aluminum - Units: μg/l

125	1072	2145	-	-	-	-
-----	------	------	---	---	---	---

(2) Antimony - Units μg/l

31	90	180	-	-	-	-
----	----	-----	---	---	---	---

(3) Arsenic - Units μg/l

53	360	720	-	-	-	-
----	-----	-----	---	---	---	---

(4) Boron - Units $\mu\text{g/l}$

-	-	-	-	500	-	-
---	---	---	---	-----	---	---

(5) Cadmium - Units $\mu\text{g/l}$ - See Note No. 7 below(6) Chromium, +3 - Units: $\mu\text{g/l}$ - See Note No. 8 below(7) Chromium, +6 - Units $\mu\text{g/l}$

11	16	32	-	-	-	-
----	----	----	---	---	---	---

(8) Cobalt - Units $\mu\text{g/l}$

5.0	436	872	-	-	-	-
-----	-----	-----	---	---	---	---

(9) Copper - Units $\mu\text{g/l}$ - See Note No. 9 below(10) Lead - Units: $\mu\text{g/l}$ - See Note No. 10 below(11) Mercury - Units $\mu\text{g/l}$

0.0069	2.4*	4.9*	-	-	-	-
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(12) Nickel - Units: $\mu\text{g/l}$ - See Note No. 11 below(13) Selenium - Units $\mu\text{g/l}$

5.0	20	40	-	-	-	-
-----	----	----	---	---	---	---

(14) Silver - Units $\mu\text{g/l}$ - See Note No. 12 below

1.0	-	-	-	-	-	-
-----	---	---	---	---	---	---

(15) Thallium - Units $\mu\text{g/l}$

0.56	64	128	-	-	-	-
------	----	-----	---	---	---	---

(16) Zinc - Units: $\mu\text{g/l}$ - See Note No. 13 below

C. ORGANICS SUBSTANCE OR CHARACTERISTIC

STANDARDS FOR USE CLASSES

2B,C&D	2B,C&D	2B,C&D	3A/3B/3C	4A	4B	5
CS	MS	FAV	IC	IR	LS	AN

(1) Acenaphthene - Units $\mu\text{g/l}$

20	56	112	-	-	-	-
----	----	-----	---	---	---	---

(2) Acrylonitrile (c) - Units: $\mu\text{g/l}$

0.89	1140*	2281*	-	-	-	-
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(3) Alachlor - Units $\mu\text{g/l}$

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59	800	1600	-	-	-	-
(4) Anthracene - Units. µg/l						
0 035	0 32	0.63	-	-	-	-
(5) Atrazme - Units µg/l						
10	323	645	-	-	-	-
(6) Benzene - Units: µg/l						
114	4487	8974	-	-	-	-
(7) Bromoform - Units µg/l						
466	2900	5800	-	-	-	-
(8) Carbon tetrachloride (c) - Units µg/l						
5 9	1750*	3500*	-	-	-	-
(9) Chlordane (c) - Units ng/l						
0 29	1200*	2400*	-	-	-	-
(10) Chlorobenzene (Monochlorobenzene) - Units µg/l						
20	423	846	-	-	-	-
(11) Chloroform - Units µg/l						
155	1392	2784	-	-	-	-
(12) Chlorpyrifos - Units µg/l						
0 041	0 083	0 17	-	-	-	-
(13) DDT (c) - Units ng/l						
1 7	550*	1100*	-	-	-	-
(14) 1,2-Dichloroethane (c) - Units µg/l						
190	45050*	90100*	-	-	-	-
(15) Dieldrin (c) - Units ng/l						
0 026	1300*	2500*	-	-	-	-
(16) Di-2-ethylhexyl phthalate (c) - Units µg/l						
2 1	none *	none*	-	-	-	-

(17) Di-n-Octyl phthalate - Units: µg/l

30	825	1650	-	-	-	-
----	-----	------	---	---	---	---

(18) Endosulfan - Units. µg/l

0 031	0 28	0 56	-	-	-	-
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(19) Endrin - Units µg/l

0 016	0 090	0.18	-	-	-	-
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(20) Ethylbenzene (c) - Units: µg/l

68	1859	3717	-	-	-	-
----	------	------	---	---	---	---

(21) Fluoranthene - Units µg/l

1 9	3 5	6 9	-	-	-	-
-----	-----	-----	---	---	---	---

(22) Heptachlor (c) - Units: ng/l

0.39	260*	520*	-	-	-	-
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(23) Heptachlor epoxide (c) - Units ng/l

0 48	270*	530*	-	-	-	-
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(24) Hexachlorobenzene (c) - Units. ng/l

0 24	none*	none*	-	-	-	-
------	-------	-------	---	---	---	---

(25) Lindane (c) (Hexachlorocyclohexane, gamma-) - Units. µg/l

0.036	4 4*	8 8*	-	-	-	-
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(26) Methylene chloride (c) (Dichloromethane) - Units µg/l

1940	13875	27749	-	-	-	-
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(27) Naphthalene - Units µg/l

81	409	818	-	-	-	-
----	-----	-----	---	---	---	---

(28) Parathion - Units µg/l

0.013	0 07	0 13	-	-	-	-
-------	------	------	---	---	---	---

(29) Pentachlorophenol - Units µg/l - See Note No 14 below

(30) Phenanthrene - Units µg/l

3.6	32	64	-	-	-	-
-----	----	----	---	---	---	---

(31) Phenol - Units. µg/l

123	2214	4428	-	-	-	-
-----	------	------	---	---	---	---

(32) Polychlorinated biphenyls (c) (PCBs, total) - Units ng/l

0 029	1000*	2000*	-	-	-	-
-------	-------	-------	---	---	---	---

(33) 1,1,2,2-Tetrachloroethane (c) - Units µg/l

13	1127	2253	-	-	-	-
----	------	------	---	---	---	---

(34) Tetrachloroethylene (c) - Units µg/l

8 9	428	857	-	-	-	-
-----	-----	-----	---	---	---	---

(35) Toluene - Units µg/l

253	1352	2703	-	-	-	-
-----	------	------	---	---	---	---

(36) Toxaphene (c) - Units ng/l

1 3	730*	1500*	-	-	-	-
-----	------	-------	---	---	---	---

(37) 1,1,1-Trichloroethane - Units µg/l

329	2957	5913	-	-	-	-
-----	------	------	---	---	---	---

(38) 1,1,2-Trichloroethylene (c) - Units µg/l

120	6988	13976	-	-	-	-
-----	------	-------	---	---	---	---

(39) 2,4,6-Trichlorophenol - Units µg/l

2.0	102	203	-	-	-	-
-----	-----	-----	---	---	---	---

(40) Vinyl chloride (c) - Units µg/l

9 2	none*	none*	-	-	-	-
-----	-------	-------	---	---	---	---

(41) Xylenes, total - Units µg/l

166	1407	2814	-	-	-	-
-----	------	------	---	---	---	---

Note No. 1, CLASS 3D, 4C, and 5 STANDARDS, applicable to wetlands

In general, if Class 3, 4, or 5 standards are exceeded, background conditions shall be maintained. See parts 7050.0223, subpart 5, 7050.0224, subpart 4, and 7050.0225, subpart 2.

Note No. 2, DISSOLVED OXYGEN

See part 7050.0222, subparts 4 and 5 for the Class 2B and 2C Dissolved Oxygen standards, respectively. Class 2D standard: If background is less than 5 mg/l, as a daily minimum, maintain background.

Note No. 3, FECAL COLIFORM ORGANISMS

Not to exceed 200 organisms per 100 milliliters as a geometric mean of not less than five samples in any calendar month, nor shall more than ten percent

of all samples taken during any calendar month individually exceed 2,000 organisms per 100 milliliters. The standard applies only between April 1 and October 31.

Note No. 4, pH

Class 2D standard: Maintain background

Note No. 5, RADIOACTIVE MATERIALS

See parts 7050.0222, subparts 4, 5, and 6, and 7050.0224, subparts 2, 3, and 4

Note No. 6, TEMPERATURE

Class 2B standard: Five degrees Fahrenheit above natural in streams and three degrees Fahrenheit above natural in lakes, based on monthly average of maximum daily temperature, except in no case shall it exceed the daily average temperature of 86 degrees Fahrenheit. Class 2C standard: five degrees Fahrenheit above natural in streams and three degrees Fahrenheit above natural in lakes, based on monthly average of maximum daily temperature, except in no case shall it exceed the daily average temperature of 90 degrees Fahrenheit. Class 2D standard: Maintain background.

Note No. 7, CADMIUM

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF

50	100	200	300	400
----	-----	-----	-----	-----

CS =

$\exp.(0.7852[\ln(\text{TH mg/l})]-3.490)$

0.66	1.1	2.0	2.7	3.4
------	-----	-----	-----	-----

MS =

$\exp(1.128[\ln(\text{TH mg/l})]-1.685)$

15	33	73	116	160
----	----	----	-----	-----

FAV =

$\exp(1.128[\ln(\text{TH mg/l})]-0.9919)$

31	67	146	231	319
----	----	-----	-----	-----

Note No. 8, CHROMIUM +3

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF

50	100	200	300	400
----	-----	-----	-----	-----

CS =

$\exp(0.819[\ln(\text{TH mg/l})]+1.561)$

117	207	365	509	644
-----	-----	-----	-----	-----

MS =

$\exp(0.819[\ln(\text{TH mg/l})]+3.688)$

984	1737	3064	4270	5405
-----	------	------	------	------

FAV =

$\exp(0.819[\ln(\text{TH mg/l})]+4.380)$

1966	3469	6120	8530	10797
------	------	------	------	-------

Note No. 9, COPPER

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

$$CS = \exp(0.620[\ln(\text{TH mg/l})] - 0.570)$$

$$MS = \exp(0.9422[\ln(\text{TH mg/l})] - 1.464)$$

$$FAV = \exp(0.9422[\ln(\text{TH mg/l})] - 0.7703)$$

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF:

50	100	200	300	400
----	-----	-----	-----	-----

6.4	9.8	15	19	23
-----	-----	----	----	----

9.2	18	34	50	65
-----	----	----	----	----

18	35	68	100	131
----	----	----	-----	-----

Note No 10, LEAD

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

$$CS = \exp(1.273[\ln(\text{TH mg/l})] - 4.705)$$

$$MS = \exp(1.273[\ln(\text{TH mg/l})] - 1.460)$$

$$FAV = \exp(1.273[\ln(\text{TH mg/l})] - 0.7643)$$

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF:

50	100	200	300	400
----	-----	-----	-----	-----

1.3	3.2	7.7	13	19
-----	-----	-----	----	----

34	82	197	331	477
----	----	-----	-----	-----

68	164	396	663	956
----	-----	-----	-----	-----

Note No 11, NICKEL

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

$$CS = \exp(0.846[\ln(\text{TH mg/l})] + 1.1645)$$

$$MS = \exp(0.846[\ln(\text{TH mg/l})] + 3.3612)$$

$$FAV = \exp(0.846[\ln(\text{TH mg/l})] + 4.0543)$$

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF:

50	100	200	300	400
----	-----	-----	-----	-----

88	158	283	399	509
----	-----	-----	-----	-----

789	1418	2549	3592	4582
-----	------	------	------	------

1578	2836	5098	7185	9164
------	------	------	------	------

Note No 12, SILVER

STANDARDS THAT VARY WITH
TOTAL HARDNESS (TH)

$$CS = 1.0$$

$$MS = \exp(1.72[\ln(\text{TH mg/l})] - 7.2156)$$

EXAMPLE STANDARDS IN $\mu\text{g/l}$
AT TOTAL HARDNESS OF:

50	100	200	300	400
----	-----	-----	-----	-----

1.0	1.0	1.0	1.0	1.0
-----	-----	-----	-----	-----

1.0	2.0	6.7	13	22
-----	-----	-----	----	----

FAV =
 $\exp(1.72[\ln(\text{TH mg/l})] - 6.520)$ 1.2 4.1 13 27 44

The MS and FAV shall be no less than 10 µg/l

Note No 13, ZINC

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	EXAMPLE STANDARDS IN µg/l AT TOTAL HARDNESS OF				
	50	100	200	300	400
CS = $\exp(0.8473[\ln(\text{TH mg/l})] + 0.7615)$	59	106	191	269	343
MS = $\exp(0.8473[\ln(\text{TH mg/l})] + 0.8604)$	65	117	211	297	379
FAV = $\exp(0.8473[\ln(\text{TH mg/l})] + 1.5536)$	130	234	421	594	758

Note No 14, PENTACHLOROPHENOL

STANDARD THAT VARIES WITH pH	EXAMPLE STANDARDS IN µg/l AT pH OF				
	6.5	7.0	7.5	8.0	8.5
CS = $\exp(1.005(\text{pH}) - 5.290)$ not to exceed 5.5 µg/l	3.5	5.5	5.5	5.5	5.5
MS = $\exp(1.005(\text{pH}) - 4.830)$	5.5	9.1	15	25	41
FAV = $\exp(1.005(\text{pH}) - 4.1373)$	11	18	30	50	82

Subp. 6 [Repealed, 24 SR 1105]

Subp. 6a. **Water quality standards applicable to use Classes 3C, 4A and 4B, 5, and 7.**

**MISCELLANEOUS SUBSTANCE OR CHARACTERISTIC
STANDARDS FOR USE CLASSES**

**7
LIMITED
RESOURCES**

**3C
IC**

**4A
IR**

**4B
LS**

**5
AN**

(1) Bicarbonates (HCO_3) - Units: meq/l

-

-

5

-

-

(2) Boron - Units: µg/l

- - - - - 500 - - - - -

(3) Chloride - Units: mg/l

- - - - - 250 - - - - -

(4) Dissolved oxygen - Units mg/l - See Note No. 1 below

(5) Fecal coliform organisms - See Note No. 2 below

(6) Hardness, Ca + Mg as CaCO_3 - Units mg/l

- - - - - 500 - - - - -

(7) Hydrogen sulfide - Units mg/l

- - - - - 0.02 - - - - -

(8) pH, low - Units su

6.0 6.0 6.0 6.0 6.0

(9) pH, high - Units su

9.0 9.0 8.5 9.0 9.0

(10) Radioactive materials - See Note No. 3 below

(11) Salinity, total - Units mg/l

- - - - - 1000 - - - - -

(12) Sodium - Units meq/l

- - - - - 60% of
total
cations - - - - -

(13) Specific conductance, at 25°C - Units $\mu\text{mhos/cm}$

- - - - - 1000 - - - - -

(14) Sulfates, wild rice present - Units mg/l

- - - - - 10 - - - - -

(15) Total dissolved salts - Units mg/l

- - - - - 700 - - - - -

(16) Toxic pollutants - See Note No. 4 below

Note No. 1, DISSOLVED OXYGEN

At concentrations which will avoid odors or putrid conditions in the receiving water or at concentrations at not less than 1 mg/l (daily average) provided that measurable concentrations are present at all times.

Note No. 2, FECAL COLIFORM ORGANISMS

Not to exceed 1,000 organisms per 100 milliliters in any calendar month as determined by a geometric mean of a minimum of five samples, nor shall more than ten percent of all samples taken during any calendar month individually exceed 2,000 organisms per 100 milliliters. The standard applies only between May 1 and October 31

Note No. 3, RADIOACTIVE MATERIALS

See part 7050 0224, subparts 2, 3, and 4.

Note No 4, TOXIC POLLUTANTS

Toxic pollutants shall not be allowed in such quantities or concentrations that will impair the specified uses

Statutory Authority: *MS s 115 03, 115 44*

History: *24 SR 1105, 24 SR 1133*

7050.0221 SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 1 WATERS OF THE STATE; DOMESTIC CONSUMPTION.

[For text of subps 1 to 3, see M.R.]

Subp 4. **Class 1C waters.** The quality of Class 1C waters of the state shall be such that with treatment consisting of coagulation, sedimentation, filtration, storage, and chlorination, or other equivalent treatment processes, the treated water will meet both the primary (maximum contaminant levels) and secondary drinking water standards issued by the United States Environmental Protection Agency as contained in Code of Federal Regulations, title 40, part 141, subparts B and G, and part 143, (1992); and sections 141.61 and 141.62, as amended through July 17, 1992, except that the bacteriological standards shall not apply, and the turbidity standard shall be 25 NTU. These Environmental Protection Agency standards, as modified in this part, are adopted and incorporated by reference. These standards will ordinarily be restricted to surface waters, and groundwaters in aquifers not considered to afford adequate protection against contamination from surface or other sources of pollution. Such aquifers normally would include fractured and channeled limestone, unprotected impervious hard rock where water is obtained from mechanical fractures or joints with surface connections, and coarse gravels subjected to surface water infiltration. These standards shall also apply to these waters in the untreated state.

[For text of subps 5 and 6, see M.R.]

Statutory Authority: *MS s 115 03, 115 44*

History: *24 SR 1105*

7050.0222 SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 2 WATERS OF THE STATE; AQUATIC LIFE AND RECREATION.

Subpart 1 **General.** The numerical and narrative water quality standards in this part prescribe the qualities or properties of the waters of the state that are necessary for the aquatic life and recreation designated public uses and benefits. If the standards in this part are exceeded in waters of the state that have the Class 2 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

Standards for metals are expressed as total metal but must be converted to dissolved metal standards to determine water quality-based effluent limits. Water quality-based effluent limits for metals are expressed as total metal. Conversion factors for converting total to dissolved metal standards are listed in subpart 9. The conversion factor for metals not listed in subpart 9 is one. The dissolved metal standard equals the total metal standard times the conversion factor.

Subp 2. **Class 2A waters; aquatic life and recreation.** The quality of Class 2A surface waters shall be such as to permit the propagation and maintenance of a healthy community of cold water sport or commercial fish and associated aquatic life, and their habitats. These waters shall be suitable for aquatic recreation of all kinds, including

bathing, for which the waters may be usable. This class of surface waters is also protected as a source of drinking water. The applicable standards are given below, with substances considered carcinogenic followed by a (c). The basis columns to the right of the chronic standards and to the right of the acute standards indicate whether the chronic and acute standards, respectively, are based on the protection of the aquatic community from adverse toxic effects (Tox), or the protection of human consumers of drinking water and sport-caught fish (HH). "NA" means not applicable. Subpart 7, item E, should be referenced for FAV and MS values and "none" noted with an asterisk (*).

Substance or Characteristic (c) = carcinogen	Class 2A Chronic Standard			Class 2A Acute Standards		
	Units	CS	Basis	MS	FAV	Basis
Acenaphthene	µg/l	20	HH	56	112	Tox
Acrylonitrile (c)	µg/l	0.38	HH	1140*	2281*	Tox
Alachlor (c)	µg/l	3.8	HH	800*	1600*	Tox
Aluminum, total	µg/l	87	Tox	748	1496	Tox
Ammonia un-ionized as N	µg/l	16	Tox	None	None	NA

The percent un-ionized ammonia can be calculated for any temperature and pH by using the following formula taken from Emerson, K, R C Russo, R E Lund, and R V Thurston 1975. Aqueous ammonia equilibrium calculations, effect of pH and temperature. Journal of the Fisheries Research Board of Canada 32: 2379-2383.

$$f = \frac{1}{10^{(pK_a - pH)} + 1} \times 100$$

where

f = the percent of total ammonia in the un-ionized state

$$pK_a = 0.09 + \frac{2730}{T}, \text{ dissociation constant for ammonia}$$

T = temperature in degrees Kelvin (273.16° Kelvin = 0° Celsius)

Anthracene	µg/l	0.035	Tox.	0.32	0.63	Tox
Antimony	µg/l	5.5	HH	90	180	Tox
Arsenic, total	µg/l	2.0	HH	360	720	Tox
Atrazine (c)	µg/l	3.4	HH	323	645	Tox
Benzene (c)	µg/l	9.7	HH	4487*	8974*	Tox
Bromoform	µg/l	33	HH	2900	5800	Tox
Cadmium, total	µg/l	Formula	Tox	Formula	Formula	Tox

Cadmium, total

The CS shall not exceed $\exp(0.7852[\ln(\text{total hardness mg/l}) - 3.490])$

The MS shall not exceed $\exp(1.128[\ln(\text{total hardness mg/l}) - 3.828])$

The FAV shall not exceed: $\exp(1.128[\ln(\text{total hardness mg/l})]-3.1349)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Cadmium standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard.	CS	0.66	1.1	2.0		
	MS	1.8	3.9	8.6		
	FAV	3.6	7.8	17		
Carbon tetra-chloride(c)	$\mu\text{g/l}$	1.9	HH	1750*	3500*	Tox
Chlordane (c)	ng/l	0.073	HH	1200*	2400*	Tox.
Chloride	mg/L	230	Tox.	860	1720	Tox
Chlorine, total residual	$\mu\text{g/l}$	11	Tox.	19	38	Tox

Chlorine standard applies to conditions of continuous exposure, where continuous exposure refers to chlorinated effluents that are discharged for more than a total of two hours in any 24-hour period

Chlorobenzene (Monochlorobenzene)	$\mu\text{g/l}$	20	HH	423	846	Tox
Chloroform (c)	$\mu\text{g/l}$	53	HH	1392	2784	Tox
Chlorpyrifos	$\mu\text{g/l}$	0.041	Tox	0.083	0.17	Tox
Chromium +3, total	$\mu\text{g/l}$	Formula	Tox	Formula	Formula	Tox

Chromium +3, total

The CS shall not exceed: $\exp(0.819[\ln(\text{total hardness mg/l})] + 1.561)$

The MS shall not exceed: $\exp(0.819[\ln(\text{total hardness mg/l})] + 3.688)$

The FAV shall not exceed $\exp(0.819[\ln(\text{total hardness mg/l})] + 4.380)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Chromium +3 standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	117	207	365		
	MS	984	1737	3064		
	FAV	1966	3469	6120		
Chromium +6, total	$\mu\text{g/l}$	11	Tox.	16	32	Tox
Cobalt	$\mu\text{g/l}$	2.8	HH	436	872	Tox
Color value	Pt/Co	30	NA	None	None	NA
Copper, total	$\mu\text{g/l}$	Formula	Tox	Formula	Formula	Tox

Copper, total

The CS shall not exceed $\exp(0.620[\ln(\text{total hardness mg/l})]-0.570)$

The MS shall not exceed: $\exp(0.9422[\ln(\text{total hardness mg/l})]-1.464)$

The FAV shall not exceed $\exp(0.9422[\ln(\text{total hardness mg/l})] - 0.7703)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Copper standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	6.4	9.8	15		
	MS	9.2	18	34		
	FAV	18	35	68		
Cyanide, free	$\mu\text{g/l}$	5.2	Tox	22	45	Tox
DDT (c)	ng/l	0.11	HH	550*	1100*	Tox.
1,2-Dichloroethane (c)	$\mu\text{g/l}$	3.5	HH	45,050*	90,100*	Tox
Dieldrin (c)	ng/l	0.0065	HH	1300*	2500*	Tox.
Di-2-ethylhexyl phthalate (c)	$\mu\text{g/l}$	1.9	HH	None*	None*	NA
Di-n-octyl phthalate	$\mu\text{g/l}$	30	Tox	825	1650	Tox
Dissolved oxygen	mg/l	7.0 as a daily minimum				

This dissolved oxygen standard requires compliance with the standard 50 percent of the days at which the flow of the receiving water is equal to the lowest weekly flow, with a once in ten-year recurrence interval (7Q10)

Endosulfan	$\mu\text{g/l}$	0.0076	HH	0.084	0.17	Tox.
Endrin	$\mu\text{g/l}$	0.0039	HH	0.090	0.18	Tox.
Ethylbenzene	$\mu\text{g/l}$	68	Tox	1859	3717	Tox.

Fecal coliform organisms

Not to exceed 200 organisms per 100 milliliters as a geometric mean of not less than five samples in any calendar month, nor shall more than ten percent of all samples taken during any calendar month individually exceed 400 organisms per 100 milliliters. The standard applies only between April 1 and October 31

Fluoranthene	$\mu\text{g/l}$	1.9	Tox	3.5	6.9	Tox
Heptachlor (c)	ng/l	0.10	HH	260*	520*	Tox.
Heptachlor epoxide (c)	ng/l	0.12	HH	270*	530*	Tox
Hexachloro-benzene (c)	ng/l	0.061	HH	None*	None*	Tox

Lead, total	$\mu\text{g/l}$	Formula	Tox.	Formula	Formula	Tox
-------------	-----------------	---------	------	---------	---------	-----

Lead, total

The CS shall not exceed $\exp(1.273[\ln(\text{total hardness mg/l})] - 4.705)$

The MS shall not exceed $\exp(1.273[\ln(\text{total hardness mg/l})] - 1.460)$

The FAV shall not exceed $\exp(1.273[\ln(\text{total hardness mg/l})]-0.7643)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Lead standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	13	32	7.7		
	MS	34	82	197		
	FAV	68	164	396		
Lindane (c) (Hexachlorocyclohexane, gamma-)	$\mu\text{g/l}$	0.0087	HH	1.0*	2.0*	Tox
Mercury, total	$\mu\text{g/l}$	0.0069	HH	2.4*	4.9*	Tox
Methylene chloride (c) (Dichloromethane)	$\mu\text{g/l}$	45	HH	13,875*	27,749*	Tox.
Naphthalene	$\mu\text{g/l}$	81	Tox	409	818	Tox
Nickel, total	$\mu\text{g/l}$	Formula	Tox/HH	Formula	Formula	Tox

Nickel, total

The CS shall not exceed the human health-based standard of 297 $\mu\text{g/l}$. For waters with total hardness values less than 212 mg/l, the CS shall not exceed $\exp(0.846[\ln(\text{total hardness mg/l})]+1.1645)$

The MS shall not exceed $\exp(0.846[\ln(\text{total hardness mg/l})]+3.3612)$

The FAV shall not exceed $\exp(0.846[\ln(\text{total hardness mg/l})]+4.0543)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Nickel standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	88	158	283		
	MS	789	1418	2549		
	FAV	1578	2836	5098		
Oil	$\mu\text{g/l}$	500	NA	5000	10,000	NA
Parathion	$\mu\text{g/l}$	0.013	Tox	0.07	0.13	Tox.
Pentachlorophenol	$\mu\text{g/l}$	0.93	HH	Formula	Formula	Tox.

Pentachlorophenol

The CS shall not exceed 0.93

The MS shall not exceed $\exp(1.005[\text{pH}]-4.830)$

The FAV shall not exceed $\exp(1.005[\text{pH}]-4.1373)$

Pentachlorophenol standards in $\mu\text{g/l}$ for three pH values

pH (su)		7.0	7.5	8.0		
Standard:	CS	0.93	0.93	0.93		
	MS	9.1	15	25		
	FAV	18	30	50		
pH (su)	Not less than 6.5 nor greater than 8.5					
Phenanthrene	µg/l	3.6	Tox.	32	64	Tox.
Phenol	µg/l	123	Tox.	2214	4428	Tox.
Polychlorinated biphenyls, total (c)	ng/l	0.014	HH	1000*	2000*	Tox.
Radioactive materials	Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as permitted by the appropriate authority having control over their use					
Selenium	µg/l	5.0	Tox.	20	40	Tox.
Silver, total	µg/l	0.12	Tox.	Formula	Formula	Tox.
Silver, total						
The CS shall not exceed: 0.12						
The MS shall not exceed: $\exp(1.720[\ln(\text{total hardness mg/l})]-7.2156)$						
The FAV shall not exceed: $\exp(1.720[\ln(\text{total hardness mg/l})]-6.520)$ provided that the MS and FAV shall be no less than 0.12 µg/l						
For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard						
Silver standards in µg/l for three hardness values						
Hardness (mg/l)		50	100	200		
Standard:	CS	0.12	0.12	0.12		
	MS	0.61	2.0	6.7		
	FAV	1.2	4.1	13		
Temperature	No material increase					
1,1,2,2-Tetrachloroethane (c)	µg/l	1.1	HH	1127*	2253*	Tox.
Tetrachloroethylene (c)	µg/l	3.8	HH	428*	857*	Tox.
Thallium	µg/l	0.28	HH	64	128	Tox.
Toluene	µg/l	253	Tox.	1352	2703	Tox.
Toxaphene (c)	ng/l	0.31	HH	730*	1500*	Tox.
1,1,1-Trichloroethane	µg/l	329	Tox.	2957	5913	Tox.
1,1,2-Trichloroethylene (c)	µg/l	25	HH	6988*	13,976*	Tox.
2,4,6-Trichlorophenol	µg/l	2.0	HH	102	203	Tox.
Turbidity value	NTU	10	NA	None	None	NA
Vinyl chloride (c)	µg/l	0.17	HH	None*	None*	NA

Xylene, total m,p,o	µg/l	166	Tox	1407	2814	Tox
Zinc, total	µg/l	Formula	Tox	Formula	Formula	Tox

Zinc, total

The CS shall not exceed $\exp(0.8473[\ln(\text{total hardness mg/l})] + 0.7615)$

The MS shall not exceed $\exp(0.8473[\ln(\text{total hardness mg/l})] + 0.8604)$

The FAV shall not exceed $\exp(0.8473[\ln(\text{total hardness mg/l})] + 1.5536)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Zinc standards in µg/l for three hardness values:

Hardness (mg/l)		50	100	200	
Standard	CS	59	106	191	
	MS	65	117	211	
	FAV	130	234	421	

Subp 3 Class 2Bd waters. The quality of Class 2Bd surface waters shall be such as to permit the propagation and maintenance of a healthy community of cool or warm water sport or commercial fish and associated aquatic life and their habitats. These waters shall be suitable for aquatic recreation of all kinds, including bathing, for which the waters may be usable. This class of surface waters are also protected as a source of drinking water. The applicable standards are given below, with substances considered carcinogenic followed by a (c). The basis columns to the right of the chronic standards and to the right of the acute standards indicate whether the chronic and acute standards, respectively, are based on the protection of the aquatic community from adverse toxic effects (Tox), or the protection of human consumers of drinking water and sport-caught fish (HH). "NA" means not applicable. Subpart 7, item E, should be referenced for FAV and MS values and "none" noted with an asterisk (*):

Substance or Characteristic (c) = carcinogen	Units	Class 2Bd Chronic Standard		Class 2Bd Acute Standards		Basis
		CS	Basis	MS	FAV	
Acenaphthene	µg/l	20	HH	56	112	Tox
Acrylonitrile (c)	µg/l	0.38	HH	1140*	2281*	Tox.
Alachlor (c)	µg/l	4.2	HH	800*	1600*	Tox.
Aluminum, total	µg/l	125	Tox	1072	2145	Tox.
Ammonia un-ionized as N	µg/l	40	Tox	None	None	NA

The percent un-ionized ammonia can be calculated for any temperature and pH as described in subpart 2

Anthracene	µg/l	0.035	Tox.	0.32	0.63	Tox.
Antimony	µg/l	5.5	HH	90	180	Tox
Arsenic, total	µg/l	2.0	HH	360	720	Tox
Atrazine (c)	µg/l	3.4	HH	323	645	Tox
Benzene (c)	µg/l	11	HH	4487*	8974*	Tox
Bromoform	µg/l	41	HH	2900	5800	Tox.

Cadmium, total $\mu\text{g/l}$ Formula Tox. Formula Formula Tox

Cadmium, total

The CS shall not exceed: $\exp(0.7852[\ln(\text{total hardness mg/l})]-3.490)$

The MS shall not exceed: $\exp(1.128[\ln(\text{total hardness mg/l})]-1.685)$

The FAV shall not exceed: $\exp(1.128[\ln(\text{total hardness mg/l})]-0.9919)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Cadmium standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard:						
	CS	0.66	1.1	2.0		
	MS	15	33	73		
	FAV	31	67	146		
Carbon tetra-chloride (c)	$\mu\text{g/l}$	1.9	HH	1750*	3500*	Tox
Chlordane (c)	ng/l	0.29	HH	1200*	2400*	Tox
Chloride	mg/l	230	Tox.	860	1720	Tox
Chlorine, total residual	$\mu\text{g/l}$	11	Tox	19	38	Tox

Chlorine standard applies to conditions of continuous exposure, where continuous exposure refers to chlorinated effluents that are discharged for more than a total of two hours in any 24-hour period

Chlorobenzene (Monochlorobenzene)	$\mu\text{g/l}$	20	HH	423	846	Tox.
Chloroform (c)	$\mu\text{g/l}$	53	HH	1392	2784	Tox.
Chlorpyrifos	$\mu\text{g/l}$	0.041	Tox	0.083	0.17	Tox
Chromium +3, total	$\mu\text{g/l}$	Formula	Tox	Formula	Formula	Tox.

Chromium +3, total

The CS shall not exceed: $\exp(0.819[\ln(\text{total hardness mg/l})]+1.561)$

The MS shall not exceed: $\exp(0.819[\ln(\text{total hardness mg/l})]+3.688)$

The FAV shall not exceed: $\exp(0.819[\ln(\text{total hardness mg/l})]+4.380)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Chromium +3 standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard:						
	CS	117	207	365		
	MS	984	1737	3064		
	FAV	1966	3469	6120		
Chromium +6, total	$\mu\text{g/l}$	11	Tox	16	32	Tox.
Cobalt	$\mu\text{g/l}$	2.8	HH	436	872	Tox.

Copper, total	μg/l	Formula	Tox.	Formula	Formula	Tox.
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Copper, total

The CS shall not exceed: $\exp(0.620[\ln(\text{total hardness mg/l})]-0.570)$ The MS shall not exceed $\exp(0.9422[\ln(\text{total hardness mg/l})]-1.464)$ The FAV shall not exceed $\exp(0.9422[\ln(\text{total hardness mg/l})]-0.7703)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Copper standards in μg/l for three hardness values.

Hardness (mg/l)		50	100	200		
Standard	CS	6.4	9.8	15		
	MS	9.2	18	34		
	FAV	18	35	68		
Cyanide, free	μg/l	5.2	Tox.	22	45	Tox.
DDT (c)	ng/L	1.7	HH	550*	1100*	Tox.
1,2-Dichloroethane (c)	μg/l	3.8	HH	45,050*	90,100*	Tox.
Dieldrin (c)	ng/l	0.026	HH	1300*	2500*	Tox.
Di-2-ethylhexyl phthalate (c)	μg/l	1.9	HH	None*	None*	NA
Di-n-octyl phthalate	μg/l	30	Tox.	825	1650	Tox.
Dissolved oxygen	mg/l	5 as a daily minimum				

This dissolved oxygen standard may be modified on a site-specific basis according to subpart 8, except that no site-specific standard shall be less than 5 mg/l as a daily average and 4 mg/l as a daily minimum. Compliance with this standard is required 50 percent of the days at which the flow of the receiving water is equal to the lowest weekly flow with a once in ten-year recurrence interval (7Q10)

Endosulfan	μg/l	0.029	HH	0.28	0.56	Tox.
Endrin	μg/l	0.016	HH	0.090	0.18	Tox.
Ethylbenzene	μg/l	68	Tox.	1859	3717	Tox.

Fecal coliform organisms

Not to exceed 200 organisms per 100 milliliters as a geometric mean of not less than five samples in any calendar month, nor shall more than ten percent of all samples taken during any calendar month individually exceed 2000 organisms per 100 milliliters. The standard applies only between April 1 and October 31.

Fluoranthene	μg/l	1.9	Tox.	3.5	6.9	Tox.
Heptachlor (c)	ng/l	0.39	HH	260*	520*	Tox.
Heptachlor epoxide (c)	ng/l	0.48	HH	270*	530*	Tox.

Hexachloro- benzene (c)	ng/l	0.24	HH	None*	None*	Tox
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Lead, total	µg/l	Formula	Tox	Formula	Formula	Tox
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Lead, total

The CS shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-4.705)$

The MS shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-1.460)$

The FAV shall not exceed: $\exp.(1.273[\ln(\text{total hardness mg/l})]-0.7643)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Lead standards in µg/l for three hardness values.

Hardness (mg/l)		50	100	200
Standard	CS	13	3.2	7.7
	MS	34	82	197
	FAV	68	164	396

Lindane (c) (Hexachlorocyclo- hexane, gamma-)	µg/l	0.032	HH	4.4*	8.8*	Tox.
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Mercury, total	µg/l	0.0069	HH	2.4*	4.9*	Tox.
Methylene chloride (c) (Dichloromethane)	µg/l	46	HH	13,875*	27,749*	Tox

Naphthalene	µg/l	81	Tox	409	818	Tox
Nickel, total	µg/l	Formula	Tox/HH	Formula	Formula	Tox

Nickel, total

The CS shall not exceed the human health-based standard of 297 µg/l. For waters with total hardness values less than 212 mg/l, the CS shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})]+1.1645)$

The MS shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})]+3.3612)$

The FAV shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})]+4.0543)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Nickel standards in µg/l for three hardness values

Hardness (mg/l)		50	100	200
Standard	CS	88	158	283
	MS	789	1418	2549
	FAV	1578	2836	5098

Oil	µg/l	500	NA	5000	10,000	NA
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Parathion	µg/l	0.013	Tox.	0.07	0.13	Tox.
Pentachlorophenol	µg/l	1.9	HH	Formula	Formula	Tox.

Pentachlorophenol

The CS shall not exceed: 1.9

The MS shall not exceed: exp (1 005[pH]-4 830)

The FAV shall not exceed exp (1 005[pH]-4.1373)

Pentachlorophenol standards in µg/l for three pH values:

pH (su)		7 0	7 5	8 0
Standard	CS	1 9	1 9	1 9
	MS	9 1	15	25
	FAV	18	30	50

pH (su) Not less than 6.5 nor greater than 9 0

Phenanthrene	µg/l	3.6	Tox	32	64	Tox
Phenol	µg/l	123	Tox	2214	4428	Tox.
Polychlorinated biphenyls, total (c)	ng/l	0 029	HH	1000*	2000*	Tox

Radioactive materials Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as permitted by the appropriate authority having control over their use

Selenium	µg/l	5 0	Tox.	20	40	Tox
Silver, total	µg/l	1 0	Tox	Formula	Formula	Tox

Silver, total

The CS shall not exceed: 1.0

The MS shall not exceed exp (1 720[ln(total hardness mg/l)]-7.2156)

The FAV shall not exceed exp.(1 720[ln(total hardness mg/l)]-6.520)

Provided that the MS and FAV shall be no less than 1.0 µg/l

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Silver standards in µg/l for three hardness values

Hardness (mg/l)		50	100	200
Standard	CS	1.0	1 0	1 0
	MS	1.0	2 0	6 7
	FAV	1 2	4.1	13

Temperature 5°F above natural in streams and 3°F above natural in lakes, based on monthly average of the maximum daily temperature, except in no case shall it exceed the daily average temperature of 86°F

1,1,2,2-Tetrachloroethane (c)	µg/l	1 5	HH	1127*	2253*	Tox
Tetrachloroethylene	µg/l	3.8	HH	428*	857*	Tox.

(c)						
Thallium	µg/l	0.28	HH	64	128	Tox
Toluene	µg/l	253	Tox	1352	2703	Tox.
Toxaphene (c)	ng/l	1.3	HH	730*	1500*	Tox
1,1,1	µg/l	329	Tox	2957	5913	Tox.
-Trichloroethane						
1,1,2	µg/l	25	HH	6988*	13,976*	Tox
-Trichloroethylene						
(c)						
2,4,6	µg/l	2.0	HH	102	203	Tox.
-Trichlorophenol						
Turbidity value	NTU	25	NA	None	None	NA
Vinyl chloride (c)	µg/l	0.18	HH	None*	None*	NA
Xylene, total m,p,o	µg/l	166	Tox.	1407	2814	Tox
Zinc, total	µg/l	Formula	Tox	Formula	Formula	Tox.

Zinc, total

The CS shall not exceed $\exp.(0.8473[\ln(\text{total hardness mg/l})] + 0.7615)$

The MS shall not exceed $\exp.(0.8473[\ln(\text{total hardness mg/l})] + 0.8604)$

The FAV shall not exceed $\exp.(0.8473[\ln(\text{total hardness mg/l})] + 1.5536)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Zinc standards in µg/l for three hardness values:

Hardness (mg/l)		50	100	200
Standard	CS	59	106	191
	MS	65	117	211
	FAV	130	234	421

Subp. 4 **Class 2B waters.** The quality of Class 2B surface waters shall be such as to permit the propagation and maintenance of a healthy community of cool or warm water sport or commercial fish and associated aquatic life, and their habitats. These waters shall be suitable for aquatic recreation of all kinds, including bathing, for which the waters may be usable. This class of surface water is not protected as a source of drinking water. The applicable standards are given below, with substances considered carcinogenic followed by a (c). The basis columns to the right of the chronic standards and to the right of the acute standards, indicate whether the chronic and acute standards, respectively, are based on the protection of the aquatic community from adverse toxic effects (Tox.), or the protection of human consumers of sport-caught fish (HH). "NA" means not applicable. Subpart 7, item E, should be referenced for FAV and MS values and "none" noted with an asterisk (*).

Substance or Characteristic (c) = carcinogen	Class 2B Chronic Standard			Class 2B Acute Standards		
	Units	CS	Basis	MS	FAV	Basis
Acenaphthene	µg/l	20	HH	56	112	Tox
Acrylonitrile (c)	µg/l	0.89	HH	1140*	2281*	Tox.
Alachlor	µg/l	59	Tox	800	1600	Tox

Aluminum, total	µg/l	125	Tox.	1072	2145	Tox.
Ammonia un-ionized as N	µg/l	40	Tox.	None	None	NA

The percent un-ionized ammonia can be calculated for any temperature and pH as described in subpart 2.

Anthracene	µg/l	0 035	Tox.	0.32	0.63	Tox
Antimony	µg/l	31	Tox.	90	180	Tox
Arsenic, total	µg/l	53	HH	360	720	Tox
Atrazine	µg/l	10	Tox	323	645	Tox

Benzene	µg/l	114	Tox.	4487	8974	Tox
Bromoform	µg/l	466	HH	2900	5800	Tox

Cadmium, total	µg/l	Formula	Tox	Formula	Formula	Tox
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Cadmium, total

The CS shall not exceed $\exp(0.7852[\ln(\text{total hardness mg/l})]-3.490)$

The MS shall not exceed $\exp(1.128[\ln(\text{total hardness mg/l})]-1.685)$

The FAV shall not exceed $\exp(1.128[\ln(\text{total hardness mg/l})]-0.9919)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Cadmium standards in µg/l for three hardness values

Hardness (mg/l)		50	100	200
Standard	CS	0.66	1.1	2.0
	MS	15	33	73
	FAV	31	67	146

Carbon tetra- chloride (c)	µg/l	5.9	HH	1750*	3500*	Tox
Chlordane (c)	ng/l	0.29	HH	1200*	2400*	Tox
Chloride	mg/l	230	Tox.	860	1720	Tox.
Chlorine, total residual	µg/l	11	Tox.	19	38	Tox.

Chlorine standard applies to conditions of continuous exposure, where continuous exposure refers to chlorinated effluents that are discharged for more than a total of two hours in any 24-hour period

Chlorobenzene (Monochlorobenzene)	µg/l	20	HH	423	846	Tox
Chloroform	µg/l	155	Tox.	1392	2784	Tox
Chlorpyrifos	µg/l	0.041	Tox.	0.083	0.17	Tox
Chromium +3, total	µg/l	Formula	Tox	Formula	Formula	Tox.

Chromium +3, total

The CS shall not exceed $\exp(0.819[\ln(\text{total hardness mg/l})] + 1.561)$

The MS shall not exceed $\exp(0.819[\ln(\text{total hardness mg/l})] + 3.688)$

The FAV shall not exceed $\exp(0.819[\ln(\text{total hardness mg/l})] + 4.380)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Chromium +3 standards in µg/l for three hardness values:

Hardness (mg/l)		50	100	200		
Standard	CS	117	207	365		
	MS	984	1737	3064		
	FAV	1966	3469	6120		
Chromium +6, total	µg/l	11	Tox	16	32	Tox
Cobalt	µg/l	5.0	Tox.	436	872	Tox
Copper, total	µg/l	Formula	Tox.	Formula	Formula	Tox.

Copper, total

The CS shall not exceed $\exp(0.6200[\ln(\text{total hardness mg/l})]-0.570)$

The MS shall not exceed $\exp(0.9422[\ln(\text{total hardness mg/l})]-1.464)$

The FAV shall not exceed $\exp(0.9422[\ln(\text{total hardness mg/l})]-0.7703)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Copper standards in µg/l for three hardness values

Hardness (mg/l)		50	100	200		
Standard:	CS	6.4	9.8	15		
	MS	9.2	18	34		
	FAV	18	35	68		
Cyanide, free	µg/l	5.2	Tox	22	45	Tox.
DDT (c)	ng/l	1.7	HH	550*	1100*	Tox
1,2-Dichloroethane (c)	µg/l	1.90	HH	45,050*	90,100*	Tox
Dieldrin (c)	ng/l	0.026	HH	1300*	2500*	Tox.
Di-2-ethylhexyl phthalate (c)	µg/l	2.1	HH	None*	None*	NA
Di-n-octyl phthalate	µg/l	30	Tox	825	1650	Tox.
Dissolved oxygen	mg/l	5.0 as a daily minimum				

This dissolved oxygen standard may be modified on a site-specific basis according to subpart 8, except that no site-specific standard shall be less than 5 mg/l as a daily average and 4 mg/l as a daily minimum. Compliance with this standard is required 50 percent of the days at which the flow of the receiving water is equal to the lowest weekly flow with a once in ten-year recurrence interval (7Q10). This standard applies to all Class 2B waters except for those portions of the Mississippi River from the outlet of the metro wastewater treatment works in Saint Paul (River Mile 835) to Lock and Dam No. 2 at Hastings (River Mile 815). For this reach of the Mississippi River the standard is not less than 5 mg/l as a daily average from April 1 through November 30, and not less than 4 mg/l at other times.

Endosulfan	µg/l	0.031	HH	0.28	0.56	Tox
Endrin	µg/l	0.016	HH	0.090	0.18	Tox
Ethylbenzene	µg/l	68	Tox.	1859	3717	Tox

Fecal coliform organisms Not to exceed 200 organisms per 100 milliliters as a geometric mean of not less than five samples in any calendar month, nor shall more than ten percent of all samples taken during any calendar month individually exceed 2,000 organisms per 100 milliliters. The standard applies only between April 1 and October 31.

Fluoranthene	µg/l	1.9	Tox.	3.5	6.9	Tox
Heptachlor (c)	ng/l	0.39	HH	260*	520*	Tox
Heptachlor epoxide (c)	ng/l	0.48	HH	270*	530*	Tox.
Hexachlorobenzene (c)	ng/l	0.24	HH	None*	None*	Tox
Lead, total	µg/l	Formula	Tox	Formula	Formula	Tox

Lead, total

The CS shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-4.705)$

The MS shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-1.460)$

The FAV shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-0.7643)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Lead standards in µg/l for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	1.3	3.2	7.7		
	MS	34	82	197		
	FAV	68	164	396		
Lindane (c) (Hexachlorocyclohexane, gamma-)	µg/l	0.036	HH	4.4*	8.8*	Tox.
Mercury, total	µg/l	0.0069	HH	2.4*	4.9*	Tox.
Methylene chloride (c) (Dichloromethane)	µg/l	1940	HH	13,875	27,749	Tox
Naphthalene	µg/l	.81	Tox.	409	818	Tox
Nickel, total	µg/l	Formula	Tox	Formula	Formula	Tox

Nickel, total

The CS shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})]+1.1645)$

The MS shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})]+3.3612)$

The FAV shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})]+4.0543)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Nickel standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	88	158	283		
	MS	789	1418	2549		
	FAV	1578	2836	5098		
Oil	μg/l	500	NA	5000	10,000	NA
Parathion	μg/l	0.013	Tox.	0.07	0.13	Tox.
Pentachloro-phenol	μg/l	Formula	Tox. /HH	Formula	Formula	Tox.

For waters with pH values greater than 6.95, the CS shall not exceed the human health-based standard of 5.5 $\mu\text{g/l}$. For waters with pH values less than 6.96, the CS shall not exceed: $\exp(1.005[\text{pH}]-5.290)$

The MS shall not exceed: $\exp(1.005[\text{pH}]-4.830)$

The FAV shall not exceed: $\exp(1.005[\text{pH}]-4.1373)$

Pentachlorophenol standards in $\mu\text{g/l}$ for three pH values.

pH (su)		7.0	7.5	8.0		
Standard	CS	5.5	5.5	5.5		
	MS	9.1	15	25		
	FAV	18	30	50		
pH (su)		Not less than 6.5 nor greater than 9.0				
Phenanthrene	µg/l	3.6	Tox.	32	64	Tox.
Phenol	µg/l	123	Tox.	2214	4428	Tox
Polychlorinated biphenyls, total (c)	ng/l	0.029	HH	1000*	2000*	Tox

Radioactive materials Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as permitted by the appropriate authority having control over their use

Selenium	$\mu\text{g/l}$	5.0	Tox.	20	40	Tox.
Silver, total	$\mu\text{g/l}$	1.0	Tox.	Formula	Formula	Tox.

Silver, total

The CS shall not exceed 1.0

The MS shall not exceed $\exp(1.720[\ln(\text{total hardness mg/l})]-7.2156)$

The FAV shall not exceed $\exp(1.720[\ln(\text{total hardness mg/l})]-6.520)$

Provided that the MS and FAV shall be not less than 1.0 $\mu\text{g/l}$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Silver standards in $\mu\text{g/l}$ for three hardness values

Hardness.(mg/l)		50	100	200		
Standard.	CS	1.0	1.0	1.0		
	MS	1.0	2.0	6.7		
	FAV	1.2	4.1	13		
Temperature	5°F above natural in streams and 3°F above natural in lakes, based on monthly average of the maximum daily temperature, except in no case shall it exceed the daily average temperature of 86°F					
1,1,2,2-Tetrachloroethane (c)	µg/l	13	HH	1127	2253	Tox.
Tetrachloroethylene (c)	µg/l	8.9	HH	428	857	Tox.
Thallium	µg/l	0.56	HH	64	128	Tox.
Toluene	µg/l	253	Tox.	1352	2703	Tox.
Toxaphene (c)	ng/l	1.3	HH	730*	1500*	Tox.
1,1,1-Trichloroethane	µg/l	329	Tox.	2957	5913	Tox.
1,1,2-Trichloroethylene (c)	µg/l	120	HH	6988	13,976	Tox.
2,4,6-Trichlorophenol	µg/l	2.0	HH	102	203	Tox.
Turbidity value	NTU	25	NA	None	None	NA
Vinyl chloride (c)	µg/l	9.2	HH	None*	None*	NA
Xylene, total m,p,o	µg/l	166	Tox.	1407	2814	Tox.
Zinc, total	µg/l	Formula	Tox.	Formula	Formula	Tox.
Zinc, total						
The CS shall not exceed: $\exp.(0.8473[\ln(\text{total hardness mg/l})]+0.7615)$						
The MS shall not exceed: $\exp.(0.8473[\ln(\text{total hardness mg/l})]+0.8604)$						
The FAV shall not exceed: $\exp.(0.8473[\ln(\text{total hardness mg/l})]+1.5536)$						
For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard						
Zinc standards in µg/l for three hardness values:						

Hardness (mg/l)		50	100	200		
Standard	CS	59	106	191		
	MS	65	117	211		
	FAV	130	234	421		

Subp. 5 **Class 2C waters.** The quality of Class 2C surface waters shall be such as to permit the propagation and maintenance of a healthy community of indigenous fish and associated aquatic life, and their habitats. These waters shall be suitable for boating and other forms of aquatic recreation for which the waters may be usable. The standards for Class 2B waters listed in subpart 4 shall apply to these waters except as listed below.

Substance or Characteristic

Dissolved oxygen 5 mg/l as a daily minimum This dissolved oxygen standard may be modified on a site-specific basis according to subpart 8, except that no site-specific standard shall be less than 5 mg/l as a daily average and 4 mg/l as a daily minimum. Compliance with this standard is required 50 percent of the days at which the flow of the receiving water is equal to the lowest weekly flow with a once in ten-year recurrence interval (7Q10)

This dissolved oxygen standard applies to all Class 2C waters except for those portions of the Mississippi River from the outlet of the metro wastewater treatment works in Saint Paul (River Mile 835) to Lock and Dam No. 2 at Hastings (River Mile 815) and except for the reach of the Minnesota River from the outlet of the Blue Lake wastewater treatment works (River Mile 21) to the mouth at Fort Snelling. For this reach of the Mississippi River the standard is not less than 5 mg/l as a daily average from April 1 through November 30, and not less than 4 mg/l at other times For the specified reach of the Minnesota River the standard shall be not less than 5 mg/l as a daily average year-round.

Temperature

5°F above natural in streams and 3°F above natural in lakes, based on monthly average of the maximum daily temperature, except in no case shall it exceed the daily average temperature of 90°F.

[For text of subp 6, see M.R.]

Subp 7 **Additional standards.** The following additional standards and requirements apply to all Class 2 waters

[For text of items A to D, see M.R.]

E For carcinogenic or highly bioaccumulative chemicals with BCFs greater than 5,000 or log Kow values greater than 5.19, the human health-based CS may be two or more orders of magnitude smaller than the acute toxicity-based MS If the commissioner finds that a very large MS and FAV, relative to the CS for such pollutants is not protective of the public health, the MS and FAV shall be reduced according to the following guidelines.

If the ratio of the MS to the CS is greater than 100, the CS times 100 should be substituted for the applicable MS, and the CS times 200 should be substituted for the applicable FAV Any effluent limitation derived using the procedures of this item shall only be required after the discharger has been given notice of the specific proposed effluent limitations and an opportunity to request a hearing as provided in part 7000.1800 The relevant MS and FAV values, or if there is no MS or FAV, the word "none," are marked by an asterisk (*) in subparts 2 to 4 and part 7050.0220

[For text of subp 8, see M.R.]

Subp 9 **Conversion factors for dissolved metal standards.**

Metal	Chronic standard	Maximum standard and Final Acute Value
Cadmium*	0.909	0.946
Chromium III	0.860	0.316
Chromium VI	0.962	0.982
Copper	0.960	0.960
Lead*	0.791	0.791
Mercury	1.0	0.850
Nickel	0.997	0.998
Silver	0.850	0.850
Zinc	0.986	0.978

*Conversion factors for cadmium and lead are hardness dependent. The values shown in the table are for a total hardness of 100 mg/l (as CaCO₃). The

hardness dependent conversion factors for cadmium are calculated using the following formulas:

Chronic standard $1.101672 - [(\ln \text{ total hardness}) (0.041838)]$

Maximum standard and final acute value $1.136672 - [(\ln \text{ total hardness}) (0.041838)]$

The hardness dependent conversion factors for lead are calculated using the following formula:

Chronic and maximum standards and final acute value. $1.46203 - [(\ln \text{ total hardness}) (0.145712)]$

Statutory Authority: *MS s 115 03; 115 44*

History: *24 SR.1105*

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

[For text of subpart 1, see MR.]

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 or Characteristic	Class 4A Standard
Bicarbonates (HCO_3)	5 milliequivalents per liter
Boron (B)	0.5 milligram per liter
pH value.	6.0 - 8.5
Specific conductance	1,000 micromhos per centimeter at 25°C
Total dissolved salts	700 milligrams per liter
Sodium (Na)	60% of total cations as milliequivalents per liter
Sulfates (SO_4)	10 milligrams per liter, 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.

[For text of subps 3 and 4, see MR.]

Statutory Authority: *MS s 115 03, 115 44*

History: *24 SR 1105*

7050.0227 SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 7 WATERS OF THE STATE; LIMITED RESOURCE VALUE WATERS.

[For text of subpart 1, see MR.]

Subp. 2 **Class 7 waters; limited resource value waters.** The quality of Class 7 waters of the state shall be such as to protect aesthetic qualities, secondary body

contact use, and groundwater for use as a potable water supply. Standards of substances or characteristics given below shall not be exceeded in the waters

Substance or Characteristic	Class 7 Standard
Fecal coliform organisms	Not to exceed 1,000 organisms per 100 milliliters in any calendar month as determined by a geometric mean of a minimum of five samples, nor shall more than ten percent of all samples taken during any calendar month individually exceed 2,000 organisms per 100 milliliters. The standard applies only between May 1 and October 31.
pH value	Not less than 6.0 nor greater than 9.0
Dissolved oxygen	At concentrations which will avoid odors or putrid conditions in the receiving water or at concentrations at not less than 1 mg/l (daily average) provided that measurable concentrations are present at all times.
Toxic pollutants	Toxic pollutants shall not be allowed in such quantities or concentrations that will impair the specified uses

Statutory Authority: *MS s 115.03, 115.44*

History: *24 SR 1105*

7050.0420 TROUT WATERS.

Trout lakes identified in part 6264.0050, subpart 2, as amended through September 14, 1999, are classified as trout waters and are listed under part 7050.0470. Trout streams and their tributaries within the sections specified that are identified in part 6264.0050, subpart 4, as amended through September 14, 1999, are classified as trout waters. Trout streams are listed in part 7050.0470. Other lakes that are classified as trout waters are listed in part 7050.0470. All waters listed in part 7050.0470 as Class 1B, 2A, and 3B are also classified as Class 3C, 4A, 4B, 5, and 6 waters.

Statutory Authority: *MS s 115.03, 115.44*

History: *24 SR 1105*

7050.0470 CLASSIFICATIONS FOR WATERS IN MAJOR SURFACE WATER DRAINAGE BASINS.

Subpart 1 **Lake Superior Basin.** The water use classifications for the listed waters in the Lake Superior Basin are as identified in items A, B, and D:

A Streams

[For text of subitems (1) to (11), see MR.]

(12) Baptism River, West Branch, (T 57, R.7, S 7, 17, 18; 20; T 57, R 8, S 1, 2, 12; T 58, R.8, S 2, 3, 4, 9, 10, 11, 15, 16, 20, 21, 22, 28, 33, 34, 35, 36; T 59, R 8, S. 34, 35) 1B, 2A, 3B;

[For text of subitems (13) to (23), see M R]

(24) Blind Temperance Creek, (T.60, R 4W, S 19, 29, 30, 32, T 60, R.5W, S 24, 25, 36). 1B, 2A, 3B,

[For text of subitems (25) to (34), see M R]

(35) Cabin Creek, (T 59, R 6W, S.19, 20, T 59, R 7, S 24): 1B, 2A, 3B,

(36) Captain Jacobson Creek, (T.52, R.12, S.1, 2, 3, T 53, R.12, S.33, 34, 35) 1B, 2A, 3B,

(37) Carey Creek, (T.53, R.14, S.28, 33) 1B, 2A, 3B,

(38) Caribou Creek, (T 60, R.3W, S.2, 3, 10) 1B, 2A, 3B,

(39) Caribou River, (T.58, R.6, S 1, 2, 11, 13, 14, 15, 22, 23, 24, 25, 26, 36, T.59, R 5W, S.19, 20, 29, 30, 31, T.59, R 6, S 23, 24, 25, 26, 35, 36) 1B, 2A, 3B;

(40) Carlson Creek, (T.52, R.12, S 19, R 13, S 14, 15, 23, 24) 1B, 2A, 3B,

(41) Carlson Creek (Stony Brook), (T.62, R.4E, S 3, 4, 9, 10, T.63, R 4E, S.31, 32, 33, 34): 1B, 2A, 3B,

(42) Cascade River, (T 60, R 2W, S 1, T 61, R.1W, S.19, 20, 21, 30, 31, T 61, R.2W, S 1, 12, 13, 14, 24, 25, 26, 35, 36, T.62, R.2W, S.10, 11, 14, 15, 16, 22, 23, 24, 25, 36). 1B, 2A, 3B,

(43) *Cascade River, [11/5/84P] (T.62, R.2W, S.3) 1B, 2A, 3B,

(44) Castle Danger Creek (Campers), (T 54, R.9, S.30, 31, 32) 1B, 2A, 3B,

(45) Cedar Creek, (T.56, R 8, S 13, 14, 23, 24, 26) 1B, 2A, 3B;

(46) Cedar Creek, (T 59, R 5W, S.2, T.60, R 5W, S 14, 22, 23, 25, 26, 35, 36) 1B, 2A, 3B,

(47) Cemetery Creek, (T.51, R.17, S.4, 5, 9) 1B, 2A, 3B,

(48) Chellberg Creek, (T 51, R 16, S 7, T.51, R 17, S 1, 2, 3, 10, 12) 1B, 2A, 3B;

(49) Chester Creek, (T 50, R.14, S 7, 8, 9, 14, 15, 16, 23) 1B, 2A, 3B;

(50) Chester Creek, East Branch, (T 50, R.14, S 4, 5, 9, 15, 16). 1B, 2A, 3B,

(51) Chicken Creek, (T 52, R 16, S.5, 7, 8, 18, 19, T.52, R.17, S 13, 24, 25, T 53, R.16, S 32). 1B, 2A, 3B,

(52) Clear Creek, (T 46, R 17, S 9, 10, 11, 12, 16, 17, 20, 29) 1B, 2A, 3B,

(53) Clear Creek, (T.47, R 15, S 7, T 47, R.16, S 1, 2, 3, 4, 12, T 48, R.16, S 33) 1B, 2A, 3B,

(54) Cliff Creek, (T 61, R. 2E, S 3, 4, 5, 9, 10, T 62, R 2E, S 29, 30, 31, 32) 1B, 2A, 3B,

(55) Cloudy Spring Creek, (T 57, R.9, S 5, 6, 7, 18; T 57, R 10, S 12, 13, 24) 1B, 2A, 3B,

(56) Colville Creek, East, (T.61, R.3E, S 5; T 62, R.2E, S.25, T 62, R.3E, S 30, 31, 32): 1B, 2A, 3B,

(57) Coolidge Creek, (T 55, R.14, S 19, 29, 30, T 55, R 15, S.25, 26, 35, 36) 1B, 2A, 3B,

(58) Cranberry Creek, (T.58, R.13) 2C,

(59) Cross River, (T.58, R.4W, S 6; T.58, R 5W, S.1, T.59, R.4W, S 31, T 59, R 5W, S 4, 5, 8, 9, 15, 16, 21, 22, 23, 25, 26, 35, 36, T 60, R.5W, S.30, 31, 32, T 60, R 6, S 13, 24, 25, 36). 1B, 2A, 3B,

(60) Crow Creek, (T 53, R.10, S 1, 2; T 54, R.10, S 15, 22, 23, 26, 35) 1B, 2A, 3B,

(61) Crown Creek, (T 57, R 8, S.2, 3, 4, 5, 9, 10, 11, T.58, R.8, S 5, 6, 7, 18, 19, 20, 29, 30, 31, 32, 33, T.58, R 9, S.1, 12, 13, 14, 24, 36, T.59, R 8, S 32): 1B, 2A, 3B;

[For text of subitems (62) to (80), see M R]

- (81) Fox Farm Creek, (T 62, R 1E, S 19, 30). 1B, 2A, 3B;
- (82) French River, (T 51, R 12, S 7, 17, 18; T 51, R 13, S 1, 2, 3, 12; T 52, R 13, S 8, 9, 16, 17, 20, 21, 23, 26, 27, 28, 29, 34, 35). 1B, 2A, 3B,
- (83) Fry Creek, (T.62, R.2W, S 25, T 62, 1W, S 29, 30, 31). 1B, 2A, 3B,

[For text of subitems (84) to (92), see M R]

- (93) Hockamin Creek, (T.57, R.7, S 17, 18, 19; T 57, R 8, S 13, 16, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 32, 33). 1B, 2A, 3B;

[For text of subitems (94) to (106), see M R]

- (107) Jonvick Creek, (T.60, R 2W, S.7, 19, T.60, R.3W, S.12, 13, 14, 24) 1B, 2A, 3B,.
- (108) Junco Creek, (T 62, R 1W, S 1, 2, 9, 10, 11, 12, 13, 14, 15, 16, 21, 28, T 62, R.1E, S 6, 7; T.63, R 1E, S.20, 29, 30, 31, T 63, R.1W, S.24, 25, 35). 1B, 2A, 3B,

[For text of subitems (109) to (111), see M.R]

- (112) Kimball Creek, (T.61, R.2E, S.3, 4, 10; T 62, R 2E, S.7, 16, 17, 18, 19, 20, 21, 28, 29, 33, 34): 1B, 2A, 3B,
- (113) Kingsbury Creek, (T 49, R.15, S 4, 9, 10, 11, 13, 14; T 50, R 15, S.33, 34): 1B, 2A, 3B;
- (114) Kinney Creek, (T 57, R.10, S 15, 21, 22, 28, 33): 1B, 2A, 3B;
- (115) Knife River, (T.52, R 11, S 4, 5, 8, 9, 17, 18, 19, 31, T 53, R.11, S 4, 5, 7, 8, 17, 18, 20, 29, 32, 33, T 54, R 11, S 20, 29, 30, 32; T 52, R.12, S 24, 25, 36) 1B, 2A, 3B,
- (116) Knife River, Little, (T 52, R.12, S 16, 17, 21, 22, 23, 26, 27, 28, 35, 36). 1B, 2A, 3B,
- (117) Knife River, Little, East Branch, (T.53, R.11, S.17, 20, 21, 22, 27, 33, 34). 1B, 2A, 3B;
- (118) Knife River, Little, West Branch, (T.52, R.11, S.5, 6; T.53, R.11, S 31, T.53, R 12, S 13, 14, 23, 24, 25, 26, 36). 1B, 2A, 3B,
- (119) Knife River, West Branch, (T 52, R 11, S.5, 6, 8, T 52, R.12, S.1, T 53, R.12, S 2, 3, 10, 15, 16, 22, 23, 27, 28, 34, 35, 36; T.54, R.12, S 35, 36) 1B, 2A, 3B,
- (120) Koski Creek, (T 61, R.4W, S.5, 8, T 62, R.4W, S.31, 32): 1B, 2A, 3B,
- (121) Lavi Creek, (T 52, R.15, S 21, 28). 1B, 2A, 3B,
- (122) Leppanen Creek (Leskinen Creek), (T 57, R.7, S 15, 21, 22, 28) 1B, 2A, 3B,

- (123) Lester River, (T 50, R.13, S.4, 5, 8, T.51, R 13, S 5, 6, 7, 8, 16, 17, 18, 19, 20, 21, 28; 32, 33, T.51, R 14, S 1, 2, 10, 11, 12, 13, 15, 16, 24; T 52, R 13, S 31, 32, T.52, R 14, S.21, 22, 23, 27, 28, 34, 35) 1B, 2A, 3B,

- (124) Lindstrom Creek, (T 56, R.7, S.4; T 57, R 7, S 19, 30, 31, 32, 33; T.57, R.8, S 25): 1B, 2A, 3B;

- (125) Lullaby Creek, (T 63, R.1E, S 4, 5, 8, 9) 1B, 2A, 3B,

- (126) Manganika Creek, Virginia, (T 58, R 17, S 19, T 58, R 18, S.24) 7,

- (127) Manitou River, (T.57, R 6, S.3, 4, 10, 11, T.58, R 6, S 4, 5, 6, 7, 8, 16, 17, 18, 20, 21, 28, 29, 32, 33, 34): 1B, 2A, 3B,

- (128) Manitou River, Little, (T 57, R.6, S 2, T 58, R 6, S.34, 35): 1B, 2A, 3B,

- (129) Manitou River, North Branch, (T.58, R.6, S 6, T 58, R.7, S.1, 2, T.59, R 6, S 31; T.59, R.7, S.15, 16, 18, 19, 20, 21, 22, 25, 26, 27, 28, 33, 34, 35, 36, T 59, R.8, S 1, 2, 12, 13, 24, 25, 26) 1B, 2A, 3B,

- (130) Manitou River, South Branch, (T 58, R.6, S.6, T 58, R.7, S 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 17, 18; T.58, R.8, S.1; T.59, R 7, S.29, 30, 31, 32, 33) 1B, 2A, 3B,

- (131) Marais River, Little, (T 57, R.6, S.5, 8, 16, 17, 21): 1B, 2A, 3B,
- (132) Mark Creek, (T.61, R 2W, S.1, 2, 3, 4, 5, 6, 9) 1B, 2A, 3B,
- (133) Marshall Creek, (T 52, R.15, S.10, 15): 1B, 2A, 3B,
- (134) Martin Creek, (T 58, R 6, S 2, 3, 11) 1B, 2A, 3B;
- (135) McCarthy Creek, (T.53, R 11, S.18, T.53, R.12, S.12, 13). 1B, 2A, 3B;
- (136) Midway River, (T.49, R 15, S.5, 6, T.49, R 16, S 1, 12, 13, 14, 15, 21, 22, T.50, R 15, S.7, 8, 14, 15, 16, 17, 20, 21, 22, 23, 28, 29, 32, 33). 1B, 2A, 3B,
- (137) Mile Post Forty-Three Creek, (T.56, R.8, S 2, 3, 9, 10, 11, 13, 14, 15) 1B, 2A, 3B,
- (138) Miller Creek, (T 49, R 14, S.4, T 50, R 14, S 6, 18, 19, 29, 30, 32, 33; T.50, R.15, S.12, 13, T.51, R.14, S.31, 32) 1B, 2A, 3B;
- (139) Mink Creek, (T 54, R.9, S 4, 5, 9, T.55, R.9, S 30, 31, 32, T 55, R 10, S 25, 26, 36) 1B, 2A, 3B;
- (140) Mission Creek, (T.48, R.15, S 5, 6, T 49, R.15, S.31, T 49, R.16, S 25, 26, 36) 1B, 2A, 3B,
- (141) Mississippi Creek, (T 61, R 2W, S'1, 2, 3, T 61, R.3W, S 1, T.62, R 2W, S 31, 32, 33, 34, 35, 36, T.62, R.3W, S 24, 25, 35, 36) 1B, 2A, 3B,
- (142) Mississippi Creek, Little, (T 62, R 2W, S 20, 21, 26, 29, 32, 33, 34, 35) 1B, 2A, 3B,
- (143) Mistletoe Creek, (T 60, R 3W, S 3, 4, T.61, R 2W, S 7, 18, 19, T 61, R 3W, S 11, 13, 14, 15, 23, 24, 25, 26, 34, 35) 1B, 2A, 3B,
- (144) Monker Creek, (T.61, R 1E, S 6, 7, T 62, R.1E, S 31, T.62, R.1W, S 36) 1B, 2A, 3B,
- (145) Mons Creek, (T.62, R 3E, S.4, T.63, R 3E, S 28, 29, 33) 1B, 2A, 3B,
- (146) Moose Creek, (T.59, R.6, S.31, 32, 33, 34) 1B, 2A, 3B,
- (147) Mud Creek, (T 47, R.15, S.18; T 47, R 16, S.5, 6, 8, 9, 10, 11, 13, 14, 15, 16) 1B, 2A, 3B,
- (148) Mud Creek, (T 54, R 12, S.20, 21, 22, 29, 30): 1B, 2A, 3B,
- (149) Mud Creek, (T.62, R.1E, S 8, 9, 16, 17, 21, 22). 1B, 2A, 3B,
- (150) Mud Creek, Little, (T.57, R.11, S.11, 12, 14, 22, 23) 1B, 2A, 3B;
- (151) Murmur Creek, (T 61, R.2W, S 15, 20, 21, 22, 29, 30): 1B, 2A, 3B;
- (152) Murphy Creek, (T 56, R.11, S.4, 5, 8, 17, 18, 19, T.57, R.10, S 4, 7, 8, 9, 18; T 57, R 11, S 13, 21, 22, 23, 24, 26, 27, 28, 33, 34): 1B, 2A, 3B,
- (153) Myhr Creek, (T.62, R 3E, S 23, 24, 26). 1B, 2A, 3B;
- (154) Nemadji Creek, (T 46, R.17, S 7, 8, 9, 18, T.46, R.18, S.13, 14, 15; 16, 22) 1B, 2A, 3B,
- (155) Nemadji River, North Fork, (T.46, R.17, S.1, 2, 3, 8, 9, 10, 17, 18, 19, 31, 32, 33; T 46, R 18, S 24, 25, 36; T 47, R 15, S.19, 30; T 47, R.16, S.23, 24, 25, 26, 27, 28, 29, 31, 32, T.47, R 17, S 35, 36) 1B, 2A, 3B,
- (156) Nemadji River, South Fork, (T.46, R 16, S.4, 5, 6, 7; T 46, R.17, S 1, 11, 12, T.47, R 15, S 30; T 47, R 16, S.25, 33, 34, 35, 36): 1B, 2A, 3B,
- (157) Nestor, (T 61, R.1W, S 4, 5, 6; T 61, R.2W, S.1, T 62, R 1W, S.31, 32, 33): 1B, 2A, 3B,
- (158) Net River, (T 45, R 16, S.6, T.45, R 17, S 1, T.46, R 16, S 3, 4, 8, 9, 17, 20, 21, 29, 31, 32, 33, T.47, R.16, S.34): 1B, 2A, 3B,
- (159) Net River, Little, (T 46, R 16, S.3, 10, 15, 22, 26, 27, 34). 1B, 2A, 3B,
- (160) Nicadool Creek (Nicado Creek), (T.56, R.7; S 7; T.56, R.8, S 1, 12; T.57, R.8, S.27, 35, 36): 1B, 2A, 3B,

- (161) Nine Mile Creek, (T 58, R.6, S.3, 4, 9, 16, 17; T 59, R.6, S 27, 28, 33, 34) 1B, 2A, 3B,
- (162) Oliver Creek (Silver), (T.57, R.7, S 5, 6, T 57, R 8, S.1, T 58, R 7, S 31, 32) 1B, 2A, 3B,
- (163) Onion Creek, (T 59, R 4W, S 1, 2, 3, 4, 12, T 60, R 4W, S 24, 25, 26, 35, 36) 1B, 2A, 3B,
- (164) Otter Creek, Big, (T.48, R 16, S.7; T 48, R.17, S 3, 4, 10, 11, 12, T 49, R 17, S.19, 20, 26, 27, 28, 29, 30, 32, 33, 34, 35, T 49, R 18, S.25, 26). 1B, 2A, 3B;
- (165) Otter Creek, Little, (T 48, R 17, S.7, 10, 15, 16, 17, 18, T 48, R.18, S.11, 12, 13, 14). 1B, 2A, 3B,
- (166) Palisade Creek, (T 56, R.7, S 16, 17, 18, 19, 20, 21, 22; T.56, R.8, S 24) 1B, 2A, 3B;
- (167) Pancake Creek, (T.54, R 22, S 20, 28, 29, 32, 33) 1B, 2A, 3B,
- (168) Pancake Creek, (T 60, R 4W, S 17, 18, T 60, R.5W, S.11, 13, 14) 1B, 2A, 3B,
- (169) Pecore Creek, (T 61, R.4W, S 19, 20, 21) 1B, 2A, 3B,
- (170) Peters Creek, (T.54, R 22, S 22, 23, 27, 28) 1B, 2A, 3B,
- (171) Pigeon River (South of Fowl Lake to Pigeon Bay of Lake Superior) 1B, 2Bd; 3A,
- (172) Pike Lake Creek, (T 61, R.2W, S 10, 11, 15): 1B, 2A, 3B,
- (173) Pine Mountain Creek, (T 63, R.1E, S 23, 26, 27, 28, 33). 1B, 2A, 3B,
- (174) Pine River (White Pine River), (T 50, R.16, S.4, 8, 9, 15, 16, 17, 18, 19, 20, 21, 29, 30, 32, T 50, R.17, S.23, 24, 26) 1B, 2A, 3B,
- (175) Plouff Creek, (T.61, R 4W, S.17, 18, T 61, R.5W, S 2, 3, 11, 13, 14, 15, 23, T.62, R.5W, S.26, 34, 35) 1B, 2A, 3B,
- (176) *Plouff Creek [11/5/84P] (T 62, R 5W, S 23) 1B, 2A, 3B,
- (177) Poplar River, (T.60, R 3W, S.3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 19, 20, 21, 28, 33, T 61, R 3W, S.30, 31, T.61, R 4W, S.10, 13, 14, 15, 22, 23, 25, 26, 36) 1B, 2A, 3B;
- (178) Portage Brook, (T.64, R 3E, S 24, 25, 26, 27, 28, 29, 32, 33, 34, T.64, R 4E, S.19, 20) 1B, 2A, 3B,
- (179) Railroad Creek, (T.50, R.17, S 1, 11, 12, 14): 1B, 2A, 3B,
- (180) Red River, (T 48, R.15, S 30, T.48, R 16, S 25; 26) 1B, 2A, 3B,
- (181) Red Rock Creek, (T 63, R 5E, S 21, 22, 26, 27, 28, 35) 1B, 2A, 3B,
- (182) Reservation River, (T 62, R.5E, S.6, T 63, R.4E, S.23, 25, 26, 36, T 63, R 5E, S 16, 17, 18, 19, 20, 21, 29, 30, 31). 1B, 2A, 3B,
- (183) Rock Creek, (T 47, R.16, S.7, 17, 18, 20, 21, 22, 23, 24, T 47, R 17, S.12) 1B, 2A, 3B,
- (184) Rock Cut Creek, (T 58, R.6, S.18, 19, 20, T 58, R 7, S.13): 1B, 2A, 3B,
- (185) Rocky Run Creek, (T 49, R.15, S.6, T 50, R.15, S.30, 31; T.50, R 16, S 11, 12, 13, 24, 25) 1B, 2A, 3B,
- (186) Rollins Creek, (T 59, R 3W, S 6, T 60, R 3W, S 29, 30, 31, T 60, R 4W, S.36) 1B, 2A, 3B,
- (187) Rosebush Creek (Fall River), (T.61, R 1W, S 13, 23, 24, 25, T 61, R.1E, S 18): 1B, 2A, 3B,
- (188) Ross Creek, (T.52, R 13, S 1, 2, 3, 4, 5, T 53, R 13, S 33) 1B, 2A, 3B,
- (189) Ryan Creek, (T 55, R 14, S 14, 15, 22) 1B, 2A, 3B,
- (190) St Louis River, [WR] (T 58, R.12, S 21, 22, 27, 28, 31, 32, 33, T.58, R 13, S 36) 2B, 3B,

- (191) Sargent Creek, (T.48, R 15, S.4, 5, 9, 10; T 49, R.15, S.28, 29, 32):
1B, 2A, 3B,
- (192) Sawbill Creek, (T 62, R 4W, S 7, 18, 19, 20, 28, 29, 30, T.62, R.5W,
S 25) 1B, 2A, 3B,
- (193) Sawmill Creek, (T.57, R.6, S 18, T 57, R.7, S 12, 13, 22, 23, 24, 26,
27, 34) 1B, 2A, 3B,
- (194) Scanlon Creek, (T 49, R.16, S 30, T 49, R.17, S.25) 1B, 2A, 3B;
- (195) Schmidt Creek, (T.51, R.12, S.17) 1B, 2A, 3B,
- (196) Schoolhouse Creek, (T 58, R.7, S.35, 36): 1B, 2A, 3B,
- (197) Section 16 Creek, (T.58, R 5W, S 16) 1B, 2A, 3B,
- (198) Section 36 Creek, (T.46, R.16, S.1, 2, 11, 12, 13, T 47, R 16, S 36).
1B, 2A, 3B,
- (199) Silver Creek, (T 48, R 16, S 15; 16, 17, 21, 28, 29) 1B, 2A, 3B;
- (200) Silver Creek, (T 53, R.10, S.6, 7, 16, 17, 18, 21, T 53, R 11, S.1,
T.54, R 10, S.18, 19, 30; T.54, R.11, S 11, 12, 13, 25, 36). 1B, 2A, 3B,
- (201) Silver Creek, Big, (T.46, R 17, S 14; 23, 24, 25, 36) 1B, 2A, 3B,
- (202) Silver Creek, East Branch, (T.53, R 10, S 5, 8, 9, 16, 21) 1B, 2A,
3B,
- (203) Sixmile Creek, (T.60, R.4W, S 13, 14, 15, 22, 23, 27, 28, 33) 1B, 2A,
3B,
- (204) Skunk Creek, (T 54, R.9, S 4, 9, 16, 17, 20; T 55, R 9, S 19, 29, 30,
32, 33, T 55, R 10, S.13, 14, 24) 1B, 2A, 3B,
- (205) Skunk Creek, (T 46, R 17, S.4, 5, 6, T.47, R 17, S.31, 33, 34, 35, 36,
T 47, R 18, S 36) 1B, 2A, 3B,
- (206) Spider Creek, (T.52, R.18, S.19, 20, 21, 22, 27, 28, 29, 30, T.52,
R.19, S 9, 10, 13, 14, 15, 24) 1B, 2A, 3B,
- (207) Split Rock River, (T 54, R 8, S 6, 7, T 54, R 9, S.1, 2, 12; T 55, R 9,
S.26, 28, 34, 35, 36): 1B, 2A, 3B,
- (208) Split Rock River, East Branch, (T.55, R 9, S.4, 5, 6, 9, 10, 14, 15;
22, 23, 24, 25, 26, T.56, R 9, S 30, 31, 32, T.56, R 10, S 1, 11, 12, 13, 14, 24, 25) 1B, 2A,
3B,
- (209) Split Rock River, West Branch, (T 55, R 9, S 6, 7, 8; 16, 17, 21, 22,
26, 27, 28, T.55, R 10, S 1, T.56, R 10, S.22, 26, 27, 33, 34, 35, 36). 1B, 2A, 3B,
- (210) Spring Creek, (T.46, R 17, S 3, 4, 5, 6): 1B, 2A, 3B,
- (211) Spring Creek, (T 54, R 12, S 1, 2) 1B, 2A, 3B,
- (212) Squaw Creek, (T 49, R 17, S 9, 16, 17, 18, 19, 20, 21) 1B, 2A, 3B,
- (213) Stanley Creek, (T 52, R.11, S 18, 19, T.52, R 12, S 4, 5, 8, 9, 10, 11,
12, 13) 1B, 2A, 3B,
- (214) State Line Creek, (T 46, R 15, S 6, 7, 18, 19, 30, 31, T.46, R.16,
S 12, 13, 24, 25, 36, T 47, R.15, S.30, 31): 1B, 2A, 3B,
- (215) Stewart Creek, (T.49, R 15, S 21, 22, 26, 27) 1B, 2A, 3B;
- (216) Stewart River, (T 53, R 10, S 18, 19, 20, 29, T.53, R.11, S 2, 3, 10,
11, 13, 14, 15, T.54, R.11, S.3, 4, 10, 15, 22, 26, 27, 34, 35): 1B, 2A, 3B,
- (217) Stewart River, (T 55, R.11, S.7, T.55, R 12, S.12, 13) 1B, 2A, 3B,
- (218) Stewart River, Little, (T 53, R 10, S.19, 20, 29; T.53, R.11, S 9, 15,
16, 22, 23, 24) 1B, 2A, 3B,
- (219) Stickle Creek, (T.63, R.1W, S.1, 2, 11, 12, 14): 1B, 2A, 3B,
- (220) Stone Creek, (T 61, R 2E, S 2, 3, T.62, R 2E, S.21, 22, 27, 34, 35):
1B, 2A, 3B,
- (221) Stoney Creek (Rock), (T 55, R.9, S 30, T 55, R 10, S.20, 23, 24, 25,
27): 1B, 2A, 3B,
- (222) Stony Brook, (T 46, R.17, S.10, 11, 15, 16, 21) 1B, 2A, 3B,

- (223) Stony Creek, Little, (T 63, R.2E, S.4, 5, 9, T 64, R 2E, S.31, 32, 33)
1B, 2A, 3B,
- (224) Stream Number 30, (T.54, R 8, S 5, 6, T 55, R 8, S 19, 30, 31) 1B,
2A, 3B,
- (225) Stumble Creek, (T.59, R.5W, S 16, 21, 22, 26, 27, 28) 1B, 2A, 3B,
- (226) Stump River, (T 64, R 4E, S 18, T 64, R 3E, S.8, 9, 13, 14, 15, 16,
17, 21, 22, 23, 24), 1B, 2A, 3B,
- (227) Sucker River, (T.51, R.12, S 3, 4, 10, T.52, R 12, S.18, 19, 29, 30, 31,
32, 33, T 52, R 13, S 1, 12, 13, 24, 25, T 53, R.12, S 19, 20, 30, 31, T.53, R 13, S 24, 25,
36) 1B, 2A, 3B,
- (228) Sucker River, Little, (T 51, R 12, S 2, 3) 1B, 2A, 3B,
- (229) Sugar Loaf Creek, (T 58, R 5W, S 17, 19, 20, 29) 1B, 2A, 3B,
- (230) Sullivan Creek, (T.56, R 11, S.1, 2, 10, 11, 15; T 57, R 10, S.19, 30,
T.57, R.11, S.24, 25, 36) 1B, 2A, 3B,
- (231) Sundling Creek, (T 61, R.1W, S 10, 11, 14, 15, 16, 17, 18, T 61,
R 2W, S 13) 1B, 2A, 3B,
- (232) Swamp River, (T 63, R.3E, S 25, 26, 36, T 63, R.4E, S 20, 29, 30,
T 64, R 4E, S 21, 27, 28) 1B, 2A, 3B,
- (233) Swamper Creek, (T 64, R 1E, S 20, 29, 32) 1B, 2A, 3B,
- (234) Swan Creek, East, (T.56, R.20, S 3, 4, 5, 10, 11): 1B, 2A, 3B,
- (235) Swan Creek, Little, (T 56, R 19, S 17, 19, 20, 30, T.56, R 20, S 25,
26, 35): 1B, 2A, 3B,
- (236) Swan River, East, (T 55, R.19, S 18, 19, 30, 31, T.55, R 20, S 1, 2,
12, 13, T 56, R 20, S.2, 3, 11, 14, 23, 26, 27, 35, T.57, R 20, S 28, 33, 34) 1B, 2A, 3B,
- (237) Swan River, West, (T 55, R 20, 21): 2C,
- (238) Swanson Creek, (T 61, R 4W, S 6, 7, 8, T 61, R 5W, S 1) 1B, 2A,
3B,
- (239) Tait River, (T 60, R 3W, S.4; T.61, R 3W, S 28, 33) 1B, 2A, 3B,
- (240) Talmadge Creek, (T 51, R 12, S 19; T.51, R.13, S 9, 10, 13, 14, 15,
24) 1B, 2A, 3B,
- (241) Temperance River, (T 59, R.4W, S.5, 6, 7, 8, 18, 19, 30, 31, 32,
T 60, R.4W, S 5, 6, 7, 8, 17, 20, 28, 29, 32, 33, T 61, R.4W, S.4, 8, 9, 16, 17, 19, 20, 30,
31) 1B, 2A, 3B,
- (242) Temperance River (excluding trout waters), (T 59, 60, 61, 62,
R.4W): 1B, 2Bd, 3B,
- (243) Thirty-nine Creek, Big, (T 56, R.8, S.19, 30, 31, T.56, R 9, S 1, 2, 3,
11, 12, 13, 14, 15, 22, 23, 24, 25, T 57, R 9, S 22, 26, 27, 35, 36) 1B, 2A, 3B,
- (244) Thirty-nine Creek, Little, (T 56, R 8, S 6, 7, 8, 17, 18, 19, 20, 29, 30,
T 56, R.9, S 1, 12): 1B, 2A, 3B,
- (245) Thompson Creek, (T 62, R 1W, S.17, 19, 20, T 62, R 2W, S.24) 1B,
2A, 3B,
- (246) Tikkanen Creek, (T.57, R.7, S 5, 6, 8, 16, 17) 1B, 2A, 3B,
- (247) Timber Creek, (T 62, R 1E, S.1, T.63, R 1E, 2W, S 25, 36, T 63,
R 2E, S 31) 1B, 2A, 3B,
- (248) Tischer Creek (Congdon Creek/Hartley), (T.50, R.14, S 2, 3, 4, 10,
11, 13, 14, T.51, R 14, S 29, 33, 34): 1B, 2A, 3B,
- (249) Torgenson Creek, (T 61, R 4W, S 30, T.61, R 5W, S 24, 25) 1B,
2A, 3B,
- (250) Tower Creek, (T 55, R 14, S 8, 9, 17, 18, 19, T 55, R.15, S 24, 25,
26): 1B, 2A, 3B,
- (251) Tower Creek, (T 57, R 7, S 9). 1B, 2A, 3B,

- (252) Trappers Creek, (T.56, R.11, S.2, 3, 9, 10, 16, 17, 19, 20, T.57, R 11, S 35) 1B, 2A, 3B,
- (253) Trout Brook, (T 54, R 22, S 1): 1B, 2A, 3B,
- (254) Twin Points Creek, (T.54, R 9, S 10, 11, 13, 14) 1B, 2A, 3B,
- (255) Two Island River, (T 58, R 5W, S 2, 3, 4, 11, T 59, R 5W, S.7, 8, 17, 18, 20, 21, 27, 28, 29, 31, 32, 33, 34, T 59, R 6, S 11, 12) 1B, 2A, 3B,
- (256) Ugstad Creek, (T 51, R 15, S 21, 22, 26, 27, 28) 1B, 2A, 3B,
- (257) Unnamed (Deer) Creek, (T 47, R 16, S 19, 29, 30, T.47, R 17, S.13, 14, 24) 1B, 2A, 3B,
- (258) Unnamed Creek, (T 47, R.17, S.28, 29, 33, 34, 35) 1B, 2A, 3B,
- (259) Unnamed Creek, (T 47, R 17, S.31, 32, 33, 34) 1B, 2A, 3B,
- (260) Unnamed Creek, (T 55, R 8, S 20, 21, 29, 32, 33): 1B, 2A, 3B,
- (261) Unnamed Creek, Meadowlands, (T 53, R 19, S.22, 23) 7;
- (262) Unnamed Creek, (S-17-6), (T 53, R.11, S 30, 31, 32; T.53, R.12, S 25) 1B, 2A, 3B,
- (263) Unnamed Creek, (S-17-9), (T.53, R 11, S 5, T 54, R.11, S 20, 29, 30, 32) 1B, 2A, 3B,
- (264) Unnamed Ditch, Gilbert, (T.58, R 17, S 23, 24, 25, 36) 7;
- (265) Us-kab-wan-ka (Rush), (T.52, R 16, S.2, 11, 14, 23, T 53, R 15, S.5, 6, T 53, R 16, S 1, 11, 12, 14, 15, 22, 23, 27, 34, 35, T 54, R.15, S 23, 24, 26, 27, 32, 33, 34) 1B, 2A, 3B,
- (266) Wanless Creek, (T 60, R 6, S 27, 33, 34, 35, 36) 1B, 2A, 3B,
- (267) Whyte Creek, (T 57, R 10, S 1, 2, 11, 14, 23, 26, 27, 34) 1B, 2A, 3B;
- (268) Woods Creek, (T.61, R 1E, S 1, 12, 13, T 62, R.1E, S 35, 36) 1B, 2A, 3B,
- (269) Wyman Creek, (T 58, R.14, S.3, 4, T.59, R.14, S 11, 13, 14, 23, 24, 26, 27, 34, 35) 1B, 2A, 3B, and
- (270) *All other streams in the Boundary Waters Canoe Area Wilderness [11/5/84P]: 1B, 2Bd, 3B

B. Lakes

[For text of subitems (1) to (36), see MR.]

- (37) Divide (Towhey) Lake, (T 59, R.7W, S 7, 8) 1B, 2A, 3B,
- (38) Duke Lake, (T.63, R 1E, S 30) 1B, 2A, 3B,
- (39) *Duncan Lake, [11/5/84P] (T 65, R 1) 1B, 2A, 3B,
- (40) *Dunn Lake, [11/5/84P] (T 65, R 1, 2) 1B, 2A, 3B,
- (41) East Lake, (T 59, R.6W, S 1, 2). 1B, 2A, 3B,
- (42) *Echo Lake, [3/7/88R] (T 59, R.6): 1B, 2A, 3B,
- (43) Echo Lake, (T.59, R 6W, S 14, 15, 22, 23) 1B, 2A, 3B,
- (44) Elbow Lake, Little, (T 57, R.18W, S.9, 10, 16). 1B, 2A, 3B,
- (45) Embarrass Mine Pit (Lake Mine), (T 58, R 15W, S 5, 6). 1B, 2A, 3B,
- (46) Esther Lake, (T.63, R 3E, S.6, T 64, R 3E, S 31) 1B, 2A, 3B,
- (47) *Fan Lake, [11/5/84P] (T 65, R.2E): 1B, 2Bd, 3A,
- (48) Feather Lake, (T 61, R 5W, S 35) 1B, 2A, 3B,

[For text of subitems (49) to (61), see MR.]

- (62) Jim Lake (Jerry Lake), (T 64, R 1E) 1B, 2A, 3B,
- (63) Judson Mme Pit, (T 58, R 19W, S 20, 29) 1B, 2A, 3B;
- (64) Junco Lake, (T.62, R 1W, S 11, 12, 13). 1B, 2A, 3B,
- (65) *Kemo Lake, [3/7/88R] (T.63, R 1) 1B, 2A, 3B,
- (66) Kimball Lake, (T.62, R 2E, S.7, 8, 17) 1B, 2A, 3B,
- (67) Leo Lake, (T 64, R 1W, S 4, 5) 1B, 2A, 3B,

- (68) Lieung (Lieuna) Lake, [WR] (T 53, R 13, S 3, 4, 9, 10) 2B, 3B,
- (69) *Lily Lakes, [11/5/84P] (T 65, R 2E) 1B, 2Bd, 3A,
- (70) Lima Lake, (T 64, R 1W, S 35) 1B, 2A, 3B,
- (71) *Lizzie Lake, [11/5/84P] (T 64, R 1W, S 7, 18) 1B, 2A, 3B,
- (72) Loane (Sand) Lake, (T 54, R 12W, S 16, 17) 1B, 2A, 3B,
- (73) Loft Lake, (T 64, R 3E, S 21) 1B, 2A, 3B,
- (74) Long Lake, [WR] (T 57, R 12, S 4, 5, T 58, R 12, S 32, 33) 2B, 3B,
- (75) Margaret Lake, (T 64, R 3E, S 27, 28, 33, 34) 1B, 2A, 3B;
- (76) Marsh Lake, [WR] (T 62, R 4W, S 22, 23, 27, 28) 2B, 3B;
- (77) McFarland Lake, (T 64, R 3E) 1B, 2A, 3B,
- (78) Mink Lake, (T 62, R 2E, S 8) 1B, 2A, 3B,
- (79) Mirror Lake, (T 52, R 14W, S 19, 30) 1B, 2A, 3B,
- (80) *Misquah Lake, [11/5/84P] (T 64, R 1) 1B, 2A, 3B,
- (81) Missabe Mountain Mine Pit Lake, (T 58, R 17, S 8) 1C, 2Bd, 3B;
- (82) Moore Lake, [WR] (T 62, R 4W, S 23, 24) 2B, 3B,
- (83) Moosehorn Lake, (T 63, R 3E, S 36, T 63, R 4E, S 31) 1B, 2A, 3B,
- (84) *Moose Lake, [11/5/84P] (T 65, R 2E, 3E) 1B, 2A, 3A;
- (85) Morton Mine Pit Lake, (T 57, R 21, S 10, 11, 14) 1C, 2Bd, 3B;
- (86) *Moss Lake, [3/7/88R] (T 65, R 1) 1B, 2A, 3B,
- (87) *Mountain Lake, [11/5/84P] (T 65, R 1E, 2E) 1B, 2A, 3B,
- (88) Muckwa Lake, (T 63, R 1E, S 21, 28) 1B, 2A, 3B,
- (89) *Mulligan Lake, [11/5/84P] (T 63, R 3W, S 1, 12) 1B, 2A, 3B,
- (90) Musquash Lake, (T 63, R 1E, S 20, 28, 29) 1B, 2A, 3B,
- (91) Normanna Lake, (T 52, R 13W, S 7, 8) 1B, 2A, 3B,
- (92) Northern Light Lake, [WR] (T 63, R 2E, S 29, 30, 31, 32, 33, T 63, R 1E, S 25) 2B, 3B;
- (93) Olson Lake, (T 62, R 1W, S 9, 16) 1B, 2A, 3B;
- (94) *Onega Lake (Omega Lake), [11/5/84P] (T 64, R 2, 3) 1B, 2A, 3B,
- (95) *Otto Lake, Lower, [11/5/84P] (T 64, R 2) 1B, 2A, 3B,
- (96) Pancore (Lost) Lake, (T 61, R 4W, S 22, 27) 1B, 2A, 3B,
- (97) Papoose Lake, [WR] (T 55, R 12, S 9) 2B, 3B,
- (98) *Partridge Lake, [11/5/84P] (T 65, R 1) 1B, 2A, 3B;
- (99) *Pemmican Lake, [11/5/84P] (T 65, R 2E, S 22) 1B, 2A, 3B;
- (100) *Pike Lake, West, [11/5/84P] (T 65, R 2E) 1B, 2A, 3B,
- (101) Pine Lake, (T 63, R 1W, S 35, 36) 1B, 2A, 3B,
- (102) *Pine Lake, [11/5/84P] (T 64, 65, R 1E, 2E, 3E) 1B, 2A, 3B,
- (103) Pme Mountain Lake, (T 63, R 1E, S 26, 27, 34, 35) 1B, 2A, 3B,
- (104) Poplar Lake, (T 64N, R 1, 2W) 1C, 2Bd, 3B,
- (105) *Ram Lake, [11/5/84P] (T 63, R 1W, S 9, 10) 1B, 2A, 3B,
- (106) Rice Lake, [WR] (T 61 R 3W, S 7, T 61, R 4W, S 2, 11, 12) 2B, 3B,
- (107) *Rose Lake, [11/5/84P] (T 65, R 1) 1B, 2A, 3B,
- (108) Round Island Lake, [WR] (T 59, R 8, S 12) 2B, 3B,
- (109) Round Lake, [WR] (T 58, R 12, S 25, 26) 2B, 3B,
- (110) St. James Mine Pit, (T 58, R 15W, S 3, 4) 1B, 2A, 3B,
- (111) Saint Mary's Lake, (T 57, R 17, S 9, 16, 17) 1C, 2Bd, 3B,
- (112) *Sawbill Lake, [11/5/84P] (T 62, 63, R 4) 1B, 2Bd, 3B,
- (113) Section 8 Lake, (T 59, R 7W, S 8) 1B, 2A, 3B,
- (114) Seven Beaver Lake, [WR] (T 58, R 11, 12) 2B, 3A,
- (115) Shady, North, Lake, (T 64, R 2E, S 21, 22) 1B, 2A, 3B,

- (116) Shoe Lake, (T.64, 2E, S.30): 1B, 2A, 3B;
- (117) Sled Lake, (T 63, R 1W, S.3) 1B, 2A, 3B,
- (118) *Sock Lake, [11/5/84P] (T 65, R.2W, S.26) 1B, 2A, 3B,
- (119) Sonju Lake, (T.58, R 7W, S 27, 28) 1B, 2A, 3B,
- (120) *South Lake, [11/5/84P] (T 65, R.1, 2). 1B, 2A, 3B,
- (121) Spring Hole Lake, (T 55, R.14W, S 14) 1B, 2A, 3B,
- (122) Squaw Lake, (T 63, R 3E, S 6, T.64, R.3E, S 31) 1B, 2A, 3B,
- (123) *State Lake, [11/5/84P] (T 63, 64, R 2). 1B, 2A, 3B,
- (124) Steer Lake, (T 60, R.6W, S 32) 1B, 2A, 3B,
- (125) Stone Lake, [WR] (T.55, R 17, S.6, T.55, R 18, S 1; T.56, R 17, S 31, T 56, R 18, S 36) 2B, 3B,
- (126) Stone Lake (Skibo Lake), [WR] (T 58, R 12, S 17, 19, 20) 2B, 3B;
- (127) Stone Lake (Murphy Lake), [WR] (T.56, R 12, S 13, 24) 2B, 3B,
- (128) *Superior, Lake, excluding the portions identified in subitem (130) [11/5/84R] (T.49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, R.14W-7E) 1B, 2A, 3A,
- (129) *Superior, Lake, [3/9/98P] (those portions of Lake Superior north of latitude 47 degrees, 57 minutes, 13 seconds, east of Hat Point, south of the Minnesota-Ontario boundary, and west of the Minnesota-Michigan boundary) 1B, 2A, 3A,
- (130) Swamp River (Reservoir), [WR] (T 63, R 4E, S.4, T 64, R 4E, S 33) 2B, 3B,
- (131) *Swan Lake, [11/5/84P] (T 63, R.2). 1B, 2A, 3B,
- (132) Talus Lake, (T 63, R 1W, S 26, 27) 1B, 2A, 3B,
- (133) Thompson Lake, (T 62, R 1W, S 19, 20, 29, 30) 1B, 2A, 3B,
- (134) Thrasher Lake, (T 63, R 1W, S 31): 1B, 2A, 3B,
- (135) Thrush Lake, (T 63, R 1W, S 31) 1B, 2A, 3B,
- (136) *Topper Lake, [11/5/84P] (T 65, R.2W, S 27) 1B, 2A, 3B,
- (137) Trip Lake, (T.65, R 3W, S 32) 1B, 2A, 3B,

[For text of subitems (138) to (153), see MR]

[For text of items C and D, see MR]

Subp. 2 Lake of the Woods Basin. The water use classifications for the listed waters in Lake of the Woods Basin are as identified in items A, B, and D.

A. Streams.

[For text of subitems (1) to (16), see MR]

- (17) Hill Creek, (T 60, R.8, S.19, 30, T.60, R 9, S.24, 25). 1B, 2A, 3B,
- (18) Indian Sioux River, Little, (T.65, R 15) 1B, 2Bd, 3B,
- (19) Inga Creek, (T.60, R.9, S 2, 3, T 61, R 9, S 14, 22, 23, 27, 34, 35) 1B, 2A, 3B,
- (20) *Inga Creek [11/5/84P] (T 61, R 9, S 11, 12): 1B, 2A, 3B;
- (21) Isabella River, Little, (T.59, R 8, S 3, 4, 5, 6, 9, 10, 15, 16, 22, T 60, R 8, S.31, 32, T 60, R 9, S.5, 6, 8, 9, 10, 15, 16, 22, 25, 26, 27, 36, T 61, R.9, S 9, 16, 17, 20, 21, 22, 29, 32) 1B, 2A, 3B,
- (22) *Isabella River, Little, [11/5/84P] (T 61, R.9, S.3, 4, 9, 10, T.62, R 9, S 34),
- (23) Island River, (T.61, R 7, 8). 1B, 2Bd, 3B;
- (24) Jack Pme Creek, (T 60, R 8, S 5, 6, 7, 8, 18; T.61, R.8, S.19, 20, 29, 30, 31, 32): 1B, 2A, 3B,
- (25) Johnson Creek, (T 60, R.18, S.6, 7, 8, 17, 20) 1B, 2A, 3B;
- (26) Kawishwi River, (Source to Fall Lake) 1B, 2Bd, 3B;

- (27) Kinmount Creek, (T 67, R.20, S 19, T 67, R.21, S.13, 14, 15, 20, 21, 22, 23, 24) 1B, 2A, 3B,
- (28) Longstorff Creek, (T 62, R 12, S 6, 7; T 63, R 12, S.31). 1B, 2A, 3B,
- (29) Lost River, (T 65, R 19, S.6, T 65, R 20, S 1, 2, 3, 4, 5, 6, 7, 8, 12, T.65, R.21, S.1, T 66, R 20, S 20, 25, 27, 29, 31, 32, 33, 34, 35, 36) 1B, 2A, 3B,
- (30) Mary Ann Creek, (T.58, R 10, S.16, 21) 1B, 2A, 3B,
- (31) Mike Kelly Creek, (T 60, R 11, S.14, 15, 23). 1B, 2A, 3B;
- (32) Mitawan Creek, (T.60, R.9, S 1, 12; T.61, R.8, S 18, 19, 31, T.61, R.9, S 13, 24, 25, 36) 1B, 2A, 3B,
- (33) *Mitawan Creek, [11/5/84P] (T 61, R 8, S 5, 6, 7, T 61, R 9, S.1, 2, 12; T.62, R.9, S 35) 1B, 2A, 3B;
- (34) Moose River, (T 68, R.18, 19) 1B, 2Bd, 3B;
- (35) Moose River, (T 65, R 14) 1B, 2Bd, 3B,
- (36) Nine Mile Creek, (T.66, R 19, S 4, T.67, R 19, S 7, 8, 18, 19, 20, 21, 27, 28, 29, 33; T.67, R 20, S 12, 13, 14, 23) 1B, 2A, 3B,
- (37) Nip Creek, (T 59, R.11, S 3, 4, T 60, R 11, S 21, 22, 27, 28, 34) 1B, 2A, 3B,
- (38) Nira Creek, (T.61, R.11, S 22, 23, 27). 1B, 2A, 3B,
- (39) Pitt Creek, (T 159, R 32, S 4, 9, 16, T.160, R 32, S 21, 28, 33) 1B, 2A, 3B,
- (40) Portage Creek, (T 65, R 21) 2C,
- (41) Portage River, (T 65, 66, R 14) 1B, 2Bd, 3B,
- (42) Rainy River, (Outlet of Rainy Lake to Dam in International Falls) 1B, 2Bd, 3A,
- (43) Rainy River, (Dam in International Falls to Railroad Bridge in Baudette) 1C, 2Bd, 3A,
- (44) Rainy River, (Railroad Bridge in Baudette to Lake of the Woods): 2B, 3A,
- (45) Sand Creek, (T 60, R 21, S 3, 4, 5, 10, 11, 14, T 61, R.20, S 19, T 61, R.21, S 3, 10, 11, 14, 15, 23, 24, 25, 26, 27, 33, 34, 35, T 62, R 21, S 34). 1B, 2A, 3B,
- (46) Scott Creek, (T 59, R.7, S.4; T.60, R.7, S 9, 10, 15, 16, 21, 22, 27, 33, 34, 35) 1B, 2A, 3B,
- (47) Section 30 Creek, (T.63, R.11, S.30, T 63, R.12, S 24, 25) 1B, 2A, 3B,
- (48) Sea Gull River, (T 66N, R.4W, S 30, 31) 1C, 2Bd, 3B;
- (49) Shine Brook, (T.62, R 25, S.11; 14, 15, 16) 1B, 2A, 3B,
- (50) Snake Creek, (T.60, R.10, S.1, T 61, R 9, S 19, 30, 31; T 61, R 10, S.24, 25, 36) 1B, 2A, 3B,
- (51) Snake River, (T.60, R.10, S.3, T.61, R 9, S 18, 19, T 61, R.10, S.23, 24, 26, 27, 34) 1B, 2A, 3B,
- (52) *Snake River, [11/5/84P], (T 61, R.9, S 7, T.61, R.10, S 12) 1B, 2A, 3B,
- (53) Sphagnum Creek, (T 60, R.9, S 4; T 61, R 9, S.28, 29, 33) 1B, 2A, 3B,
- (54) Stoney Brook, (T 60, R 22, S.3, 4; T 61, R 22, S.13, 24, 25, 35, 36, T 61, R 21, S 7, 18) 1B, 2A, 3B,
- (55) Tomlinson Creek, (T 60, R.7, S 18, 19, 31, T 60, R.8, S.24, 25, 36) 1B, 2A, 3B;
- (56) Tomato Creek, (T 161, R 34, S 3, 9, 10, T 162, R 34, S 35). 1B, 2A, 3B,
- (57) Trout Brook, (T 66; R 26, S 19, 30, T 66, R.27, S 24, 25). 1B, 2A, 3B;

- (58) Two Rivers, East, (T 61, R 14, S 7, 8, T 61, R 15, S 1, 2, 3, 4, 12, T 62, R 14, S 29, 30, 31, 32, T 62, R.15, S.32, 33, 34, 35, 36): 1B, 2A, 3B,
- (59) Two Rivers, West, (T 61, R 15, S 6, 7, 8, 9, 14, 15, 16, 17): 1B, 2A, 3B,
- (60) Unnamed Creek, (T.65, R 19, S.4, 5, T.66, R.19, S.33) 1B, 2A, 3B,
- (61) Valley River, (T.62, R.23, S.1, 2, 3, 4, 10, 11, 12, 13, 14, 24, T 63, R 22, S 6, 7, 8, 9, 16, 17, 18, 19, 20, 21, 28, 29, 30, T 63, R 23, S 24, 25, 26, 35) 1B, 2A, 3B;
- (62) Venning Creek, (T.60, R.23, S.1, 2, 11, 12, 13, 14, T.61, R.23, S 35) 1B, 2A, 3B,
- (63) Victor Creek, (T.60, R.9, S 12, 13): 1B, 2A, 3B,
- (64) Weiss Creek, (T 59, R.9, S 2, 3, 11, T 60, R 9, S 27, 34) 1B, 2A, 3B,
- (65) Wenho Creek, (T 58, R 10, S 17, 20, 21, 27, 28, 34): 1B, 2A, 3B,
- (66) Zippel Creek, West Branch, (T 162, R 33, 34): 2C;
- (67) *All other streams in the Boundary Waters Canoe Area Wilderness [11/5/84P] 1B, 2Bd, 3B, and
- (68) *All other streams in the Voyageurs National Park [11/5/84P] 2B, 3B

B. Lakes

[For text of subitems (1) to (13), see M.R.]

- (14) Beaver Hut Lake, (T.61, R 10W, S 30, 31; T 61, R.11, S 25, 36): 1B, 2A, 3B;
- (15) Beetle Lake, (T 60, R.9W, S 7) 1B, 2A, 3B,
- (16) Big Lake, (T 64, 65, R 13) 1C, 2Bd, 3B,
- (17) *Bingshick Lake, [11/5/84P] (T.65, R 4, 5). 1B, 2A, 3B;
- (18) *Brandt Lake, [11/5/84P] (T.65, R.4). 1B, 2A, 3B,
- (19) *Burntside Lake, [3/7/88R] (T.63, 64, R 12, 13, 14): 1B, 2A, 3B,
- (20) Camp Four (Wessman) Lake, (T.59, R.19W, S 4) 1B, 2A, 3B,
- (21) *Camp Lake, [11/5/84P] (T 64, R 11). 1B, 2Bd, 3B,
- (22) *Caribou Lake, [3/7/88R] (T 58, R.26) 1B, 2A, 3B,
- (23) *Cash Lake, [11/5/84P] (T.64, R 3): 1B, 2A, 3B,
- (24) Cedar Lake, (T.63, R 11, 12) 1C, 2Bd, 3B,
- (25) Chant Lake, (T.63, R.13W, S 10) 1B, 2A, 3B,
- (26) *Cherokee Lake, [11/5/84P] (T.63, 64, R 4) 1B, 2A, 3B;
- (27) *Cherry Lake, [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
- (28) *Conchu Lake, [11/5/84P] (T 63, R.10W, S.21, 22). 1B, 2A, 3B,
- (29) *Crab Lake, [11/5/84P] (T.63, R 13, 14): 1B, 2A, 3B,
- (30) Crab Lake, (T 65, R.2, 3) 1B, 2A, 3B,
- (31) Crane Lake, (T 67, 68, R.16, 17) 1B, 2A, 3A;
- (32) *Crooked Lake, [11/5/84P] (T 64, R 5) 1B, 2A, 3B,
- (33) *Crooked Lake, [11/5/84P] (T 66, R 11, 12) 1B, 2A, 3B,
- (34) *Cruiser Lake (Trout Lake), [11/5/84P] (T.69, 70, R 19). 1B, 2A, 3B;
- (35) Cub Lake, (T 61, R 14W, S 2) 1B, 2A, 3B;
- (36) Dan Lake, (T 63, R.10W, S 17): 1B, 2A, 3B,
- (37) Deepwater Lake, (T.59, R.20W, S 2): 1B, 2A, 3B;
- (38) Dry Lake, (T 63, R.12W, S.9) 1B, 2A, 3B,
- (39) Dry Lake, Little, (T 63, R.12W, S 9): 1B, 2A, 3B,
- (40) *Eddy Lake, [11/5/84P] (T.65, R 6) 1B, 2A, 3B,
- (41) Eikela Lake, (T.60, R 10W, S 22) 1B, 2A, 3B,
- (42) Ennis Lake, (T 64, R 9W, S 33) 1B, 2A, 3B,

- (43) Erskine Lake, (T 61, R.24W, S 2, 3) 1B, 2A, 3B,
 (44) *Ester Lake (Gnig Lake), [11/5/84P] (T 65, 66, R 6) 1B, 2A, 3B,
 (45) *Eugene Lake, [11/5/84P] (T 67, R.15) 1B, 2A, 3B;
 (46) *Explorer Lake (South Three Lake), [11/5/84P] (T 64, R.7, 8): 1B,
 2A, 3B,
 (47) Extortion Lake, (T.65, R 3W, S 31, 32) 1B, 2A, 3B,
 (48) Fall Lake, (T.63, 64, R.11, 12) 1B, 2Bd, 3B,
 (49) Farm Lake, (T 62, 63, R 11). 1C, 2Bd, 3B,
 (50) *Fat Lake, [11/5/84P] (T 67, R 15). 1B, 2A, 3B,
 (51) *Fay Lake, [11/5/84P] (T 65; R 5) 1B, 2A, 3B;
 (52) *Fern Lake, [11/5/84P] (T 64, R.5) 1B, 2A, 3B,
 (53) *Fern Lake, West; [11/5/84P] (T 64, R 5) 1B, 2A, 3B,
 (54) *Finger Lake; [11/5/84P] (T.67, R.14) 1B, 2A, 3B;
 (55) *Fishdance Lake, [11/5/84P] (T 63; R 7) 1B, 2A, 3B,
 (56) *Found Lake, [11/5/84P] (T 64, R 9W, S.10, 15). 1B, 2A, 3B;
 (57) *Fraser Lake, [11/5/84P] (T 64, R.7): 1B, 2A, 3B,
 (58) *French Lake, [11/5/84P] (T 64, 65, R.5). 1B, 2A, 3B,
 (59) *Frost Lake, [11/5/84P] (T 64, R.4): 1B, 2A, 3B,
 (60) *Gabimichigami Lake, [11/5/84P] (T 64, 65, R.5, 6) 1B, 2A, 3B;
 (61) *Ge-Be-On-Equat Lake, [11/5/84P] (T 67, R 14). 1B, 2A, 3B,
 (62) *Gijikiki Lake (Cedar Lake), [11/5/84P] (T 65, 66, R 6): 1B, 2A, 3B,
 (63) *Gillis Lake, [11/5/84P] (T.64, 65, R 5) 1B, 2A, 3B,
 (64) Glacier Pond No. 1, (T.63, R 10W, S 11) 1B, 2A, 3B,
 (65) Glacier Pond No. 2, (T.63, R.10W, S 11) 1B, 2A, 3B,
 (66) *Gordon Lake, [11/5/84P] (T 64, R.4): 1B, 2A, 3B,
 (67) *Gun Lake, [11/5/84P] (T 67, 68, R 15) 1B, 2A, 3B,
 (68) *Gunflint Lake, [3/7/88R] (T.65, R 2, 3, 4). 1B, 2A, 3B,
 (69) Gunflint Lake, Little, (T.65, R 2) 1B, 2Bd, 3B,
 (70) Gypsy Lake, (T.60, R 10W, S 6, 7): 1B, 2A, 3B,
 (71) Hanson Lake, (T 64, R.13W, S 36) 1B, 2A, 3B;
 (72) *Hanson Lake, [11/5/84P] (T 65, 66, R.6). 1B, 2A, 3B,
 (73) High Lake, (T 63, R 12W, S 3, 4, 5, T.64, R 12W, S 33, 34) 1B, 2A,
 3B,
 (74) Hogback (Twin) Lake; (T 60, R.6W, S 31) 1B, 2A, 3B,
 (75) *Holt Lake, [11/5/84P] (T.65, R.6) 1B, 2A, 3B,
 (76) *Howard Lake, [11/5/84P] (T 65, R 5) 1B, 2A, 3B,
 (77) *Hustler Lake, [11/5/84P] (T 66, 67, R 14) 1B, 2A, 3B;
 (78) *Ima Lake (Slate Lake), [11/5/84P] (T 64, R.7, 8) 1B, 2A, 3B,
 (79) Indian Lake, (T 60, R 8W, S.35) 1B, 2A, 3B,
 (80) *Jacob (Lous) Lake, [11/5/84P] (T 64, R 12W, S 11, 12): 1B, 2A, 3B,
 (81) James (Jammer) Lake, (T.60, R.18W, S 27) 1B, 2A, 3B,
 (82) *Jap Lake, [11/5/84P] (T.65, R 4W, S 19, T.65, R 5W; S 24) 1B, 2A,
 3B;
 (83) Jasper Lake, (T 63, 64, R.9, 10) 1C, 2Bd, 3B;
 (84) *Jasper Lake, [11/5/84P] (T.65, R 5) 1B, 2A, 3B;
 (85) *Johnson Lake, [3/7/88R] (T 67, 68, R 17, 18) 1B, 2A, 3B,
 (86) Jouppi Lake, (T 59, R 8W, S 14, 22, 23) 1B, 2A, 3B,
 (87) Judd Lake, (T.63, R.9W, S.4, 5, T.64, R 9W, S 32, 33): 1B, 2A, 3B,
 (88) *Kabetogama Lake, [11/5/84P] (T.69, 70, R 20, 21, 22) 1B, 2Bd, 3A,

- (89) *Karl Lake, [11/5/84P] (T 64, R.3, 4). 1B, 2A, 3B;
- (90) *Kek Lake, Little, [11/5/84P] (T 65, R.6, 7) 1B, 2A, 3B;
- (91) *Kekekabic Lake, [11/5/84P] (T 64, 65; R 6, 7) 1B, 2A, 3B,
- (92) *Knife Lake, [11/5/84P] (T.65, R.7, 8) 1B, 2A, 3B,
- (93) *Lake of the Clouds Lake (Dutton Lake), [11/5/84P] (T 65, R.6): 1B,
2A, 3B,
- (94) Lake of the Woods, (T.161, 162, 163, 164, 165, 166, 167, 168, R 30,
31, 32, 33, 34, 35, 36) 1B, 2Bd, 3A,
- (95) Lake Vermilion, (T.61, 62, 63, R 14, 15, 16, 17, 18): 1C, 2Bd, 3B,
- (96) *Larson Lake, [3/7/88R] (T 61; R.24W, S 16, 21). 1B, 2A, 3B;
- (97) Little Long Lake, (T 63, R 12): 1C, 2Bd, 3B,
- (98) *Long Island Lake, [11/5/84P] (T.64, R 3, 4): 1B, 2A, 3B,
- (99) *Loon Lake, [3/7/88R] (T 65, R.3) 1B, 2A, 3B,
- (100) *Loon Lake, [11/5/84P] (T 66, 67, R.15) 1B, 2A, 3B,
- (101) *Lunar Lake (Moon Lake), [11/5/84P] (T 65, R.6) 1B, 2A, 3B;
- (102) *Lynx Lake, [11/5/84P] (T 66, R 14, 15). 1B, 2A, 3B,
- (103) *Magnetic Lake, [3/7/88R] (T 65, R.3, 4): 1B, 2A, 3B;
- (104) *Makwa Lake (Bear Lake), [11/5/84P] (T.64, R.6): 1B, 2A, 3B,
- (105) *Marble Lake, [11/5/84P] (T.64, R.6) 1B, 2A, 3B;
- (106) *Mavis Lake, [11/5/84P] (T 64, R.4W, S.4): 1B, 2A, 3B,
- (107) *Mayhew Lake, [3/7/88R] (T.65, R.2) 1B, 2A, 3B,
- (108) *Meditation Lake, [11/5/84P] (T.65, R 4W, S.7, 8) 1B, 2A, 3B;
- (109) *Mesaba Lake, [11/5/84P] (T.63, R.5): 1B, 2A, 3B;
- (110) Miner's Mme Pit, (T.63, R.12W, S.26, 27, 28) 1B, 2A, 3B;
- (111) *Missing Link Lake, [11/5/84P] (T 64; R.4W, S.4). 1B, 2A, 3B:
- (112) *Missionary Lake (East Three Lake), [11/5/84P] (T 64, R.7, 8). 1B,
2A, 3B;
- (113) *Moose Lake, [11/5/84P] (T 64, R 9, 10) 1B, 2Bd, 3B;
- (114) *Mora Lake, [11/5/84P] (T.64, R 5) 1B, 2A, 3B,
- (115) *Mukooda Lake, [11/5/84P] (T 68, R 17) 1B, 2A, 3B;
- (116) *Namakan Lake, [11/5/84P] (T 69, R 17, 18, 19) 1B, 2Bd, 3A,
- (117) *Neglige Lake, [11/5/84P] (T 64, R 8W, S.1, 2, 11, 12) 1B, 2A, 3B,
- (118) Nickel (Nichols) Lake, (T 59, R 25W, S 12) 1B, 2A, 3B,
- (119) Norberg Lake, (T.61, R 14W, S 1). 1B, 2A, 3B,
- (120) *North Lake; [3/7/88R] (T.65, R.2) 1B, 2A, 3B;
- (121) North Lake, Little, (T.65; R 2) 1B, 2Bd, 3B,
- (122) Norway Lake, (T 61, R 10W, S 3): 1B, 2A, 3B,
- (123) *Ogishkemuncie Lake, [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
- (124) *Ojibway Lake (Upper Twin), [3/7/88R] (T 63, R 9, 10). 1B, 2A,
3B,
- (125) *Owl Lake, [11/5/84P] (T 64, R.5) 1B, 2A, 3B,
- (126) *Oyster Lake, [11/5/84P] (T.66, R.14): 1B, 2A, 3B;
- (127) Peanut Lake, (T 60, R 10W, S.5): 1B, 2A, 3B,
- (128) Pelican Lake, (T 64, 65, R 19, 20, 21). 1C, 2Bd, 3B,
- (129) *Peter Lake, [11/5/84P] (T 64, 65, R.5). 1B, 2A, 3B,
- (130) Pickerel Lake, (T 60, R.21W, S.17) 1B, 2A, 3B,
- (131) Portage Lake, (T.64, R. 2W, S 3, 4, 5; T.65, R.2W, S.33) 1B, 2A,
3B,
- (132) *Portage Lake, [11/5/84P] (T.65, R.8) 1B, 2A, 3B,

- (133) Portage Lake, Little, (T 64, R 2W, S.3) 1B, 2A, 3B,
 (134) *Powell Lake, [11/5/84P] (T 64, 65, R.5) 1B, 2A, 3B,
 (135) *Rabbit Lake, [11/5/84P] (T 66, R 6). 1B, 2A, 3B,
 (136) *Rainy Lake, [11/5/84P] (T 70, 71, R 18, 19, 20, 21, 22, 23) 1B,
 2Bd, 3A,
 (137) *Raven Lake (Lynx Lake), [11/5/84P] (T 64, R 6) 1B, 2A, 3B,
 (138) *Red Rock Lake, [11/5/84P] (T 65, 66, R.5): 1B, 2A, 3B,
 (139) Regenbogan Lake, (T 64, R.12W, S.18) 1B, 2A, 3B,
 (140) *Rog Lake, [11/5/84P] (T.65, R.5W, S 16, 17) 1B, 2A, 3B,
 (141) *Ruby Lake, Big, [11/5/84P] (T 66, R.14): 1B, 2A, 3B,
 (142) *Saganaga Lake, [11/5/84P] (T 66, 67, R 4, 5). 1B, 2A, 3B;
 (143) *Saganaga Lake, Little, [11/5/84P] (T 64, R.5, 6) 1B, 2A, 3B,
 (144) *Sand Point Lake, [11/5/84P] (T.68, 69, R.16, 17). 1B, 2A, 3A,
 (145) Scarp (Cliff) Lake, (T 60, R 6W, S.31, 32) 1B, 2A, 3B;
 (146) *Sea Gull Lake, [11/5/84P] (T.65, 66, R 4, 5) 1B, 2A, 3B,
 (147) *Sema Lake (Coon Lake), [11/5/84P] (T.65, R 7) 1B, 2A, 3B,
 (148) Shoo-fly Lake, (T 59, R 8W; S 1, T.60, R 8W, S 36) 1B, 2A, 3B,
 (149) *Skull Lake, [11/5/84P] (T.64, R.9W, S 14) 1B, 2A, 3B,
 (150) *Snowbank Lake, [11/5/84P] (T 63, 64, R 8, 9) 1B, 2A, 3B,
 (151) *Spoon Lake (Fames Lake), [11/5/84P] (T 65, R 7) 1B, 2A, 3B,
 (152) *Spring Lake, [3/7/88R] (T.68; R.18). 1B, 2A, 3B,
 (153) Steamhaul Lake, (T 60, R 9W, S 32) 1B, 2A, 3B,
 (154) *Strup Lake, [11/5/84P] (T 64, R 7) 1B, 2A, 3B,
 (155) *Sumpet Lake, [11/5/84P] (T 61, R 7) 1B, 2Bd, 3B,
 (156) Surber Lake, (T.65, R.2W, S 34) 1B, 2A, 3B,
 (157) *Takumich Lake, [11/5/84P] (T 67, 68, R.14) 1B, 2A, 3B,
 (158) *Tarry Lake, [11/5/84P] (T 64, R 5): 1B, 2A, 3B,
 (159) *Thomas Lake, [11/5/84P] (T.63, 64, R 7) 1B, 2A, 3B;
 (160) *Thumb Lake, [11/5/84P] (T.67, R.14) 1B, 2A, 3B,
 (161) Tofte Lake, (T 63, R.10W, S 2, 3, 10, 11, T.64, R 10W, S.35) 1B,
 2A, 3B,
 (162) *Topaz Lake (Star Lake), [11/5/84P] (T 65, R.6) 1B, 2A, 3B,
 (163) *Town Lake, [11/5/84P] (T 63, 64, R 3, 4) 1B, 2A, 3B,
 (164) Trappers Lake, (T.60, R.8W, S 27, 34): 1B, 2A, 3B,
 (165) Trip Lake, (T 65, R 3W, S.32): 1B, 2A, 3B;
 (166) *Trout Lake, Big, [11/5/84P] (T 63, 64, R.15, 16) 1B, 2A, 3B,
 (167) *Trout Lake, Little (Pocket Lake), [11/5/84P] (T 68, R 17) 1B, 2A,
 3B,
 (168) *Trygg (Twigg) Lake, [11/5/84P] (T.68, R 14W, S 31, T 68, R.15W,
 S.36) 1B, 2A, 3B;
 (169) *Tucker Lake, [11/5/84P] (T 64, R 3) 1B, 2Bd, 3B,
 (170) *Tuscarora Lake, [11/5/84P] (T 64, R.4, 5) 1B, 2A, 3B,
 (171) *Vera Lake, [11/5/84P] (T 64, R 8). 1B, 2A, 3B,
 (172) *Virgin Lake, [11/5/84P] (T.64, R.5): 1B, 2A, 3B,
 (173) *Wme Lake, [11/5/84P] (T 63, R 5) 1B, 2A, 3B,
 (174) *Wismi Lake, [11/5/84P] (T 64, R 7). 1B, 2A, 3B,
 (175) Woods, Lake of the (see Lake of the Woods),
 (176) Unnamed (Pear) Lake, (T.60, R.11W, S 4) 1B, 2A, 3B,
 (177) Unnamed Swamp, Winton, (T 63, R.11; S.19; T 63, R 12, S 24) 7,

(178) White Iron Lake, (T 62, 63, R 11, 12) 1C, 2Bd, 3B,

(179) *All other lakes in the Boundary Waters Canoe Area Wilderness
[11/5/84P] 1B, 2Bd, 3B,

(180) *All wetlands in the Boundary Waters Canoe Area Wilderness
[11/5/84P] 2D,

(181) *All other lakes in the Voyageurs National Park [11/5/84P]: 2B, 3B;
and

(182) *All other wetlands in the Voyageurs National Park [11/5/84P] 2D.

[For text of items C and D, see M.R.]

Subp 3 **Red River of the North Basin.** The water use classifications for the listed waters in the Red River of the North Basin are as identified in items A, B, C, and D.

A Streams:

[For text of subitems (1) to (10), see M.R.]

(11) County Ditch No 6A-2, Rothsay, (T 135, R.45, S 21, 28, 33) 7 (see subitem (68)),

[For text of subitems (12) to (18), see M.R.]

(19) Felton Creek, (T 141, R 44, S 7, 8, 17, T.141, R 45, S 7, 8, 12, 13, 14, 15, 16, 17, 18, 22, T 141, R 46, S 12, 13, 14) 1B, 2A, 3B,

[For text of subitems (20) to (59), see M.R.]

(60) Toad River, (T 138, R 38, S 6, 7, 18, 19, 30, T 139, R 38, S 30, 31; T.139, R 39, S 25, 36, T 138, R 39, S 25, 36) 1B, 2A, 3B,

[For text of subitems (61) to (67), see M.R.]

(68) Unnamed Creek, Rothsay, (T.135, R 45, S.21, 22, 23, 25, 26) 7 (see subitem (11)),

[For text of subitems (69) to (82), see M.R.]

[For text of items B to D, see M.R.]

Subp 4 **Upper Mississippi River Basin.** The water use classifications for the listed waters in the Upper Mississippi River Basin are as identified in items A, B, and D.

A Streams:

[For text of subitems (1) to (22), see M.R.]

(23) Branch No 3, Lateral 2, East Bethel, (T.33, R.23, S.29, 32) 7,

(24) Briggs Creek, (T.35, R.29, S 2, 11, 12, 14, 15, 22) 1B, 2A, 3B,

(25) Buckman Creek (excluding Class 7 segment), (T.39, 40, R.30, 31)
2C,

(26) Buckman Creek, Buckman, Buckman Coop Cry, (T 39, R.30, S 4, 5, 6, 9, T.39, R.31, S.1, 2, 10, 11; T 40, R 30, S.31; T.40, R 31, S 36): 7,

(27) Bungo Creek, (T 137, R.30, S.6, T 137, R 31, S 1, 11, 12, 14, 21, 22, 23, T 138, R.30, S.31) 1B, 2A, 3B,

(28) Bungoshine Creek, (T 145, R.32, S.28, 29, 30, T 145, R 33, S 25, 26, 34, 35) 1B, 2A, 3B,

(29) Bunker Hill Brook, (T.38, R 30, S.6, T.38, R 31, S.1, 2, 10, 11) 1B,
2A, 3B;

(30) Camp Creek, (T.43, R 28, S 4, 5) 1B, 2A, 3B,

(31) Camp Ripley Brook, (T.132, R.29, S 18, 19, T 132, R.30, S 13, 24):
1B, 2A, 3B,

(32) Cat Creek, (T 137, R.35, S 4, 9, 10, 11, 12, 13) 1B, 2A, 3B,

(33) Cat River (excluding trout waters), (T.136, 137, R.33, 34, 35). 2C,

(34) Cedar Lake Creek, (T 138, R.31, S 14, 23, 26, 27, 28). 1B, 2A, 3B,

(35) Chase Brook, (T 38, 39, R 27): 2C,

(36) Clearwater Creek, (T.56, 57, R.24, 25) 2C,

(37) Cold Creek, (T 145, R.33, S.19) 1B, 2A, 3B,

- (38) Cold Spring Creek, (T 123, R 30, S 14, 15) 1B, 2A, 3B,
- (39) Coon Creek, (T 43, R 29, 30) 2C,
- (40) Corey Brook, (T 135, R.30, S 9, 15, 16, 21, 22, 27) 1B, 2A, 3B,
- (41) County Ditch No 15 (Bear Creek), Bertha, (T.132, R.35, S 2, T 133, R.34, S 7; T 133, R 35, S 12, 13, 24, 25, 26, 35) 7,
- (42) County Ditch No. 17, St. Cloud, (T.124, R 29, S 13, 24, 25) 7,
- (43) County Ditch No. 23, Garfield, (T 129, R 38, S.26, 27): 7;
- (44) County Ditch No 23A, Willmar, (T.119, R.34, S 29, 30, T.119, R.35, S 23, 25, 26) 7,
- (45) County Ditch No 28, Ham Lake, (T 32, R.23; S 4, 5, 6, T.33, R.23, S.29, 32): 7,
- (46) County Ditch No 42, McGregor, (T 47, R.23, S 6, T.47, R 24, S 1, T 48, R 23, S.29, 31, 32) 7,
- (47) County Ditch No. 63, Near Hutchinson, West Lynn Coop Cry , (T 116, R 30, S.19, 20, 21, 28, 33). 7,
- (48) County Ditch No 132, Lakeside, Lakeside Coop Cry , (T.116, R.31, S 16, 21) 7,
- (49) Crane Creek (excluding Class 7 segment), (T.116, 117, R.26, 27) 2C;
- (50) Crane Creek, Winsted, (T 117, R 27, S.14, 20, 21, 22, 23, 24, 25) 7,
- (51) *Crow River, North Fork, [11/5/84R] (From the Lake Koroms outlet to the Meeker - Wright County line) 2B, 3B,
- (52) Cullen Brook, (T 136, R.28, S 18, 19, 30, T.136, R 29, S 13): 1B, 2A, 3B,
- (53) Dabill Brook, (T 137, R 31, S 1, 2, 9, 10, 11, 16, T 138, R.31, S 36): 1B, 2A, 3B,
- (54) Dagget Brook, (T.43, R 29, 30): 2C,
- (55) Duel Creek, (T 129, R 32, S.20) 1B, 2A, 3B,
- (56) Eagle Creek, (T 120, R 29): 2C,
- (57) Elk River, Little, (T 130, 131, R.30, 31) 2C,
- (58) Elk River, South Branch, Little, (T.130, R.30, 31, 32) 2C;
- (59) Estes Brook, (T 36, 37, 38, R.27, 28) 2C,
- (60) Everton Creek, (T.149, R.30) 2C,
- (61) Fairhaven Creek, (T 121, R 28, S 5, T.122, R 28, S.29, 31, 32) 1B, 2A, 3B,
- (62) Farley Creek, (T.147, R.28) 2C,
- (63) Farnham Creek, (T 135, R 32, S.5, 6, 7; T 136, R 32, S 2, 3, 9, 10, 16, 19, 20, 21, 29, 31, 32): 1B, 2A, 3B,
- (64) Fawn Creek, (T.134, R 33, S 22, 27, 33, 34) 1B, 2A, 3B,
- (65) Finn Creek, (T 135, R 37, S.27, 34): 1B, 2A, 3B,
- (66) Fish Creek, (T 28, R.22). 2C,
- (67) Fletcher Creek, (T.42, R 31): 2C,
- (68) Foley Brook, (T.141, R.25). 2C,
- (69) Frederick Creek, (T.119, R.25) 2C,
- (70) Frontenac Creek, (T 145, R 34) 2C,
- (71) Hanson Brook, (T 40, R.27) 2C,
- (72) Hanson Brook (Three-Mile), (T 122, R 28, S.21, 22, 25, 26, 27, 36) 1B, 2A, 3B,
- (73) Hasty Brook, (T 49, R.19, S 18, T 49, R 20, S.4, 5, 9, 10, 13, 14, 15, 23, T.50, R 20, S.28, 29, 32, 33) 1B, 2A, 3B;
- (74) Hay Creek, (T 43, 44, R 30; 31) 2C;
- (75) Hay Creek, (T 134, R 33, S 7, 8, 9, 10, 11, 17, 18) 1B, 2A, 3B,

- (76) Hay Creek, (T 135, R 31, S 8, 9, 17) 1B, 2A, 3B,
- (77) Hazel Creek, (T 127, R.29, 30): 2C,
- (78) Hellcamp Creek, (T.140, R 33, S 19, T.140, R.34, S 24). 1B, 2A, 3B,
- (79) Hennepin Creek, (T 144, R.35, S 3, 10, 15, 16, 21, T 145, R.35, S.34):
1B, 2A, 3B,
- (80) Hennepin Creek (excluding trout waters), (T 144, 145, 146, R 34,
35): 2C,
- (81) Hoblin Creek, (T.137, R 30, S 17, 18, 19): 1B, 2A, 3B,
- (82) Indian Creek, (T 141, 142, R 36, 37) 2C,
- (83) Irish Creek, (T 129, R.31) 2C;
- (84) Iron Creek, (T 135, R 32) 2C,
- (85) Jewett Creek, (T 119, 120, R.30, 31). 2C,
- (86) Johnson Creek, (T 137, R 28) 2C,
- (87) Judicial Ditch No 1, Lakeside, Lakeside Coop Cry, (T 116, R 31,
S.28, 33): 7;
- (88) Judicial Ditch No. 15, Buffalo Lake, Iowa Pork Industries, Hector,
(T 115, R.31, S 15, 16, 20, 21, 29, 30, T 115, R.32, S.22, 25, 26, 27, 28, 32, 33). 7,
- (89) Kabekona River, (T 143, R.32, S.6, 7, 18, 19, T 143, R 33, S 2, 3, 4, 9,
11, 12, 24, T 144, R 33, S 29, 30, 32, 33, T.144, R.34, S 24, 25, 36) 1B, 2A, 3B,
- (90) Kawishwashi Creek, (T 142, R.32, S 12) 1B, 2A, 3B,
- (91) Kettle Creek, (T 138, R.35, 36, 37) 2C,
- (92) Kinzer Creek, (T 123, R.30, S.27, 34) 1B, 2A, 3B,
- (93) Kitchi Creek, (T.146, 147, R 29, 30) 2C,
- (94) Kitten Creek, (T 137, R 34, 35) 2C,
- (95) Larson Creek, (T 128, R 32, S 6) 1B, 2A, 3B,
- (96) LaSalle Creek (excluding trout waters), (T.143, 144, R 35): 2C,
- (97) LaSalle Creek, (T 143, R 35, S 6, T 144, R 35, S 19, 30, 31) 1B, 2A,
3B,
- (98) LaSalle River, (T.144, 145, R.35) 2C;
- (99) Laura Brook, (T 141, R 26) 2C,
- (100) Libby Brook, (T 50, R.23, S 5, 6, T 50, R.24, S.1, 2): 1B, 2A, 3B,
- (101) Long Brook, Lower South, (T 44, R.30, S 12, 13): 1B, 2A, 3B,
- (102) Long Brook, Upper South, (T 44, R 29, S.6, 7) 1B, 2A, 3B,
- (103) Long Lake Creek, (T 46, R 25, S 10, 15) 1B, 2A, 3B,
- (104) Luxemburg Creek, (T 123, R.28, S 16, 17, 18, 19, 20, 21, 22, 30) 1B,
2A, 3B,
- (105) Matuska's Creek, (T.54, R 26, S 35, 36) 1B, 2A, 3B;
- (106) Meadow Creek, (T 128, R.30): 2C,
- (107) Meyers Creek, (T.122, R.28, S.4, T 123, R 28, S 22, 27, 33, 34). 1B,
2A, 3B,
- (108) Michaud Brook, (T 140, R 25, S 7, 17, 18). 1B, 2A, 3B;
- (109) Mike Drew Brook, (T 38, 39, R.26, 27) 2C,
- (110) Mink Creek, Big, (T 41, 42, R 30, 31) 2C,
- (111) Mink Creek, Little, (T 41, 42, R.29, 30, 31) 2C,
- (112) *Mississippi River, [11/5/84R] (From Lake Itasca to Fort Ripley)
2B, 3B,
- (113) *Mississippi River, [11/5/84R] (From Fort Ripley to the southerly
boundary of Morrison County) 1C, 2Bd, 3B,
- (114) Mississippi River, (From the southerly boundary of Morrison
County to County State Aid Highway 7 bridge in Saint Cloud) 1C, 2Bd, 3B;

- (115) *Mississippi River, [11/5/84R] (County State Aid Highway 7 bridge in Saint Cloud to the northwestern city limits of Anoka). 1C, 2Bd, 3B;
- (116) Mississippi River, (From the northwestern city limits of Anoka to the Upper Lock and Dam at Saint Anthony Falls in Minneapolis): 1C, 2Bd, 3B,
- (117) Mississippi River, (Outlet of Metro Wastewater Treatment Works in Saint Paul to river mile 830, Rock Island RR Bridge): 2C, 3B,
- (118) Morrison Brook, (T.52, R.26, S 4, 9, 10, 14, 15, T.53, R.26, S 7, 8, 18, 19, 29, 30, 32, 33): 1B, 2A, 3B,
- (119) Muckey Creek, (T.139, R.33, S 1, 2, 10, 11, 12) 1B, 2A, 3B,
- (120) Necktie River (T 145, R.32, S.6, 7, 8, 9, 16, T 145, R.33, S.1): 1B, 2A, 3B;
- (121) Nelson Hay Creek, (T 130, R.31, S.1, 2) 1B, 2A, 3B,
- (122) Northby Creek, (T 140, R 27) 2C,
- (123) Norway Brook, (T 139, R 30) 2C,
- (124) O'Brien Creek, (T 56, 57, R.22) 2C;
- (125) O'Neill Brook, (T.38, R 26): 2C,
- (126) Oak Ridge Creek (Oak Creek), (T 133, 134, R.36) 2C,
- (127) Olson Brook, (T.136, R 30, S.12, 13, 14). 1B, 2A, 3B;
- (128) Peterson Creek, (T 134, R 30, S.29, 33) 1B, 2A, 3B,
- (129) Pickerel Creek, (T 56, R.22, S 7, 18, T.56, R 23, S 13) 1B, 2A, 3B,
- (130) Pigeon River, (T.147, R 27) 2C,
- (131) Pike Creek (excluding Class 7 segment), (T 129, R 30): 2C;
- (132) Pike Creek, Flensburg, (T 129, R.30, S 17, 18, 19, 20) 7,
- (133) Pillager Creek, (T 133, R.30) 2C,
- (134) Pioneer Creek, (T.118, R 24) 2C;
- (135) Pokegama Creek, (T 54, R.26, S 26, 27, 28) 1B, 2A, 3B;
- (136) Pokegama Creek, Little, (T 54, R 26, S 26, 27, 34, 35) 1B, 2A, 3B;
- (137) Pokety (Pickedee Creek), (T 144, R.32, S.29, 30; T.144, R 33, S.24, 25): 1B, 2A, 3B,
- (138) Poplar Brook, (T.135, R.32, S.5, 6, T 136, R.32, S 22, 27, 28, 32, 33). 1B, 2A, 3B,
- (139) Prairie Brook, (T 36, R.27): 2C;
- (140) Rat Creek, (T 144, 145, R.34). 2C;
- (141) Rice Creek, (T 30, 31, 32, R.22, 23, 24): 1C, 2Bd, 3B;
- (142) Rice Creek, (T 35, R 29) 2C,
- (143) Robinson Hill Creek, (T 123, R.28, S 4, 9, 10, 15, T 124, R.28, S 31, 32, 33): 1B, 2A, 3B;
- (144) Rock Creek, Little (Benton), (T 38, R.31, S.3, 4, 10, 15, 21, 22, 28, T.39, R.30, S 17, 18, 20, 21, 22, T 39, R 31, S.13, 14, 22, 23, 26, 27, 33, 34): 1B, 2A, 3B;
- (145) Rogers Brook, (T 134, R 30, S 29, 32) 1B, 2A, 3B,
- (146) Rosholt Creek, (T.55, R.23, S 22, 23, 24): 1B, 2A, 3B;
- (147) Round Creek, (T.43, R.31, S.14, 15) 1B, 2A, 3B,
- (148) Round Prairie Creek, (T 127, R 33, S.4, T 128, R 33, S.20, 29, 32, 33): 1B, 2A, 3B;
- (149) *Rum River, [11/5/84P] (From the Ogechie Lake spillway to the northernmost confluence with Lake Onamia): 2B, 3B,
- (150) *Rum River, [11/5/84R] (From the State Highway 27 bridge in Onamia to Madison and Rice Streets in Anoka). 2B, 3B;
- (151) Sand Creek, (T.45, R.30; S.2, 3, 11, 13, 14, T.46, R.30, S.34) 1B, 2A, 3B,
- (152) Sand Creek, (T.55, R.23, S 15, 22, 27, 28, 29, 32, 33): 1B, 2A, 3B,

- (153) Sauk Creek, Little, (T.127, R 34, S 1, T 128, R 34, S.36) 1B, 2A, 3B,
- (154) Schoolcraft Creek, (T 142, R.34, S.5, 7, 8, 17) 1B, 2A, 3B,
- (155) Seven Mile Creek, (T 133, 134, R 30, 31): 2C,
- (156) Sisseebakwet Creek, (T.54, R 26, S 19, 29, 30): 1B, 2A, 3B,
- (157) Six Mile Brook, (T 143, 144, R 26, 27) 2C,
- (158) Skimmerhorn Creek, (T 149, R 30) 2C,
- (159) Skunk Creek, (T.144, R.34): 2C,
- (160) Skunk River (Co Dt. No 37) (Co Dt No. 29), Brooten, (T.123, R 35, S 4, 5, 9, T.123, R.35, S 9, 10, 11, 12, T.123, R 34, S 3, 4, 5, 6, 7, 8). 7;
- (161) Smart's Creek, (T 126, R 28, S 17, 18, 20): 1B, 2A, 3B,
- (162) Smith Creek, (T 53, R.26, S 1, 9, 10, 11, 12, 13, 14, 15, T.54, R.26, S 35, 36) 1B, 2A, 3B;
- (163) Smith Creek, Unnamed Tributary, (T 53, R.26, S 11, 12) 1B, 2A, 3B,
- (164) Smith Creek, Unnamed Tributary, (T 54, R 26, S.35, 36): 1B, 2A, 3B,
- (165) Snake River, (T 33, R 28, S 1, T 34, R 28, S 2, 11, 14, 23, 26, 35, 36, T.35, R.28, S 20, 28, 29, 33, 34, 35) 1B, 2A, 3B,
- (166) Snowball Creek, (T 56, R 23) 2C;
- (167) Split Hand Creek, (T.53, R.24). 2C,
- (168) Sprmg Brook, (T 121, R.28, S 7, T 121, R.29, S.12) 1B, 2A, 3B,
- (169) Sprmg Brook, (T 138, R 28, S 27, 34): 1B, 2A, 3B,
- (170) Spring Brook, (T 139, R.26, S 3, 10, 11, 14): 1B, 2A, 3B,
- (171) Spring Brook, Lower, (T 57, R.25, S.6, T 58, R.25, S.31) 1B, 2A, 3B;
- (172) Spring Creek, (T.55, R.23, S 25, 26, 27) 1B, 2A, 3B,
- (173) Spruce Creek (Douglas), (T 131, R 36, S.28, 29, 31, 32, 33, 34) 1B, 2A, 3B,
- (174) Spruce Creek (Otter Tail), (T 130, R 36, S.3, 4, 9, 10) 1B, 2A, 3B;
- (175) Stag Brook, (T 121, 122, R 30, 31) 2C,
- (176) Stall Creek, (T.143, R 33, S.12, 13, 14) 1B, 2A, 3B;
- (177) Stanchfield Branch, Lower Braham, (T 37, R 23, S 3, 10, 15, 22) 7;
- (178) Stocking Creek, (T 138, R.35) 2C,
- (179) Stoney Brook, (T 135, R 29, S.5, 8, 9, T 136, R 29, S.30, 31, 32, T 136, R.30, S 20, 21, 22, 25, 26, 27, 29, 30; T 136, R.31, S 24, 25, 26): 1B, 2A, 3B;
- (180) Stony Brook (Stoney Brook), Foley, (T 36, R.29, S.2, 9, 10, 11, 16, T.37, R.29, S 35, 36) 7;
- (181) Stony Creek, (T 140, R.28): 2C,
- (182) Stony Pomt Brook, (T 147, R 28) 2C,
- (183) Straight Creek, Upper, (T.140, R 36, S 6; T 141, R.36, S 30, 31, T 141, R 37, S.24, 25) 1B, 2A, 3B,
- (184) Straight Lake Creek, (T 140, R.36, S 6, T 140, R.37, S 1, 2) 1B, 2A, 3B,
- (185) Straight River, (T 139, R 34, S 7, T 139, R 35, S 4, 5, 6, 9, 10, 11, 12, T 139, R 36, S.1, T.140, R 36, S.28, 29, 33, 34, 35, 36). 1B, 2A, 3B,
- (186) Sucker Brook (Gould Creek), (T 144, R.36, S 27, 28, 29, 30, 32, 33): 1B, 2A, 3B,
- (187) Sucker Creek; (T.118, R.30, S.4, 5, 6, 7): 1B, 2A, 3B;
- (188) Sucker Creek (Gould Creek) (excluding trout waters), (T 143, R.36) 2C,

- (189) Swamp Creek, Big, (T 137, 138, 139, R.32, 33) 2C,
- (190) Swamp Creek, Little, (T 136, 137, R.33) 2C;
- (191) Swan Creek, (T.134, 135, R.32) 2C,
- (192) Swan Creek, Little, (T 135, R.32) 2C,
- (193) Swift River, (T 142, R.27) 2C,
- (194) Taylor Creek, (T 128, R 31) 2C,
- (195) Ted Brook Creek, (T 130, R 31) 2C,
- (196) Thiel Creek (Teal), (T 121, R 28, S.5, 6, 8): 1B, 2A, 3B,
- (197) Tibbits Brook, (T.33, 34, R.26, 27) 2C,
- (198) Tibbetts Creek (Tibbetts Brook), (T 39, 40, R.27, 28) 2C,
- (199) Trout Brook, St. Paul, (T 29, R.22, S 18, 19) 7,
- (200) Tower Creek, (T.135, R 32, 33). 2C,
- (201) Two Rivers, South Branch, Albany, (T.125, R.31, S 21, 22, 23) 7,
- (202) Two Rivers Springs, (T 51, R.23, S 19; T.51, R 24, S 24, 25, 26) 1B,
2A, 3B;
- (203) Union Creek, (T 134, R.35, S.4, 5, 7, 8, 18, 19, 30, 31, T 135, R 35,
S 27, 28, 33, 34): 1B, 2A, 3B;
- (204) Unnamed Creek, (T 137, R 31, S 4, 5). 1B, 2A, 3B;
- (205) Unnamed Creek, (T 139, R 26, S 3, 10) 1B, 2A, 3B;
- (206) Unnamed Creek, Calumet, (T 56, R 23, S 21) 7,
- (207) Unnamed Creek, Hiller Mobile Home Court, (T 119, R 26, S.22,
26, 27, 35): 7;
- (208) Unnamed Creek, Rogers, (T 120, R.23, S 15, 16, 22, 23). 7,
- (209) Unnamed Creek, Grove City, (T 120, R 32, S 34, 35, 36) 7,
- (210) Unnamed Creek, Albertville, (T 121, R 23, S 30, T 121, R 24, S 25,
36). 7,
- (211) Unnamed Creek, Eden Valley, Ruhland Feeds, (T.121, R.31, S.2,
T.122, R.31, S 35) 7,
- (212) Unnamed Creek, Lake Henry, (T 123, R 33, S.11, 14) 7,
- (213) Unnamed Creek, Miliona, (T 129, R 36, S.6, T 130, R.36, S 30, 31).
7,
- (214) Unnamed Ditch, Braham, (T 37, R.23, S 2, 3): 7,
- (215) Unnamed Ditch, Ramey, Ramey Farmers Coop Cry, (T 38, R.28,
S 4, 5, T.39, R.28, S 29, 30, 32; T.39, R.29, S 25, 26, 27, 28) 7,
- (216) Unnamed Ditch, McGregor, (T 48; R.23, S 31, 32) 7,
- (217) Unnamed Ditch, Nashwauk, (T.56, R 22, S 4, 5, T 57, R 22, S 32).
7,
- (218) Unnamed Ditch, Tacomte, (T 56, R 24, S 22). 7,
- (219) Unnamed Ditch, Glencoe, Green Giant, (T 115, R 28, S 21, 22, 27,
28) 7,
- (220) Unnamed Ditch, Glencoe, Green Giant, (T 115, R.28, S 14, 23) 7;
- (221) Unnamed Ditch, Winsted, Green Giant, (T.117, R.27, S 10, 11) 7;
- (222) Unnamed Ditch, Hiller Mobile Home Court, (T 119, R 26, S 34,
35) 7,
- (223) Unnamed Ditch, Kandiyohi, (T.119, R 34, S 10, 15, 21, 22, 28, 29,
32). 7,
- (224) Unnamed Ditch, Rogers, (T 120, R 23, S 15): 7,
- (225) Unnamed Ditch, Belgrade, (T 123, R.34, S 19, 30). 7,
- (226) Unnamed Ditch, Flensburg, (T 129, R 30, S 30, T 129, R 31, S 25)
7,

- 7;
- (227) Unnamed Ditch, Miliona, (T.130, R.36, S 30, T 130, R.37, S 25, 36).
- (228) Unnamed Stream, Winsted, (T 117, R.27, S.11, 12): 7,
- (229) Unnamed Stream, Flensburg, (T 129, R.30, S 19, 30): 7;
- (230) Vandell Brook, (T 37, 38, R 26): 2C,
- (231) Van Sickle Brook, (T 138, R.26, S.14, 15, 23, 24) 1B, 2A, 3B,
- (232) Wallingford Brook, (T 139, R.33, S 1, 2, 11, T 140, R.33, S.25, 36)
- 1B, 2A, 3B;
- (233) Warba Creek, (T 54, R.23, S 13, 14, 15, 21, 22, 23, 24) 1B, 2A, 3B,
- (234) Welcome Creek, (T 56, 57, R.22). 2C,
- (235) Whitley's Creek, (T 45, R.30, S.16, 17, 20, 21) 1B, 2A, 3B,
- (236) Whitney Brook, (T 39, R.26, 27) 2C,
- (237) Willow Creek, (T 133, R.38, S.2, 11, T.134, R 38, S 26, 35): 1B, 2A,
- 3B,
- (238) Willow Creek, (T 121, R.29, S.10, 11, 14, 23) 1B, 2A, 3B,
- (239) Willow River, North Fork, (T.142, R 25) 2C,
- (240) Willow River, South Fork, (T 142, R 25): 2C,
- (241) Wilson Creek, (T.137, R.30) 2C, and
- (242) Wolf Creek, (T 42, R 30) 2C
- B Lakes
- [For text of subitems (1) to (21), see M.R.]*
- (22) Loon (Townline) Lake, (T 50, R.22W, S.7; T 50, R 23W, S.12, 13):
- 1B, 2A, 3B;
- (23) Lucky Lake, (T 57, R.26W, S.14) 1B, 2A, 3B,
- (24) Mallen Mine Pit, (T 46, R.29W, S 17) 1B, 2A, 3B;
- (25) Manuel (South Yawkey) Mine Pit, (T.46, R 29W, S 1): 1B, 2A, 3B,
- (26) Margaret Lake, (T 139, R.26W, S.16): 1B, 2A, 3B,
- (27) Marion Lake, (T.139, R 26W, S 16, 17): 1B, 2A, 3B,
- (28) Martin (Huntington, Feigh) Mine Pit, (T.46, R 29W, S.9, 10, 16). 1B,
- 2A, 3B;
- (29) Moonshine Lake, Little (Moonshine), (T.58, R 25W, S.28, 33). 1B,
- 2A, 3B,
- (30) Newman (Putnam) Lake, (T 145, R.34W, S 10, 11) 1B, 2A, 3B,
- (31) Otter Lake, (T.30, 31, R.22) 1C, 2Bd, 3B;
- (32) Pennington (Mahnomen, Alstead, Arco) Mine Pit, (T 46, R 29W,
- S.3, 9, 10, 11): 1B, 2A, 3B,
- (33) Perch Lake, (T 139, R 31W, S 33) 1B, 2A, 3B,
- (34) Pleasant Lake, (T 30, R.22, 23) 1C, 2Bd, 3B,
- (35) Pleasant Lake, (T 137, R.27W, S.19) 1B, 2A, 3B,
- (36) *Pokegama Lake, [3/7/88R] (T.54, 55, R 25, 26). 1B, 2A, 3B,
- (37) Portsmouth Mine Pit, (T 46, R.29W, S 1, 2, 11). 1B, 2A, 3B,
- (38) *Roosevelt Lake, [3/7/88R] (T.138, 139, R.26): 1B, 2A, 3B,
- (39) Sagamore Mine Pit, (T 46, R.29W, S 19; T 46, R 30W, S 24): 1B, 2A,
- 3B,
- (40) Section 6 Mine Pit, (T 46, R.29W, S 6) 1B, 2A, 3B,
- (41) Snoshoe Mine Pit, (T.46, R.29W, S.17, 18): 1B, 2A, 3B,
- (42) Snowshoe (Little Andrus) Lake, (T 139, R 26W, S 29, 30): 1B, 2A,
- 3B,
- (43) Strawberry Lake, (T.137, R.28W, S.27, 34): 1B, 2A, 3B,
- (44) Sucker Lake, (T.30, R 22): 1C, 2Bd, 3B,

- (45) Taylor Lake, (T 52, R 25W, S.16): 1B, 2A, 3B,
- (46) Teepee Lake, (T 141, R 29W, S 30, T 141, R.30W, S 25) 1B, 2A, 3B,
- (47) Tioga Mine Pit, (T 55, R 26W, S 26): 1B, 2A, 3B,
- (48) Trout Lake, (T.55, 56, R.24). 1B, 2A, 3B,
- (49) *Trout Lake, Big, [3/7/88R] (T 57, 58, R 25) 1B, 2A, 3B,
- (50) *Trout Lake, Big, [3/7/88R] (T 137, 138, R 27, 28): 1B, 2A, 3B,
- (51) *Trout Lake, Little, [3/7/88R] (T.57, R.25): 1B, 2A, 3B,
- (52) Unnamed Swamp, Flensburg, (T 129, R 31, S.25) 7,
- (53) Unnamed Slough, Miliona, (T 130, R 37, S 26, 35, 36) 7,
- (54) Unnamed Swamp, Staples, (T 133, R.33, S 1) 7,
- (55) Unnamed Swamp, Taconite, (T.56, R.24, S.22) 7,
- (56) Vadnais Lake, (T 30, R 22): 1C, 2Bd, 3B,
- (57) Wabana Lake, (T.57, R.25) 1B, 2A, 3B,
- (58) Watab Lake, Big, (T.124, R.30) 1B, 2A, 3B,
- (59) Wilkinson Lake, (T 30, R 22), 1C, 2Bd, 3B,
- (60) Willard Lake, (T 139, R 30W, S 15). 1B, 2A, 3B, and
- (61) Yawkey (North Yawkey) Mine Pit, (T.46, R.29W, S.1) 1B, 2A, 3B

[For text of items C and D, see M.R.]

Subp 5 Minnesota River Basin: The water use classifications for the listed waters in the Minnesota River Basin are as identified in items A, B, C, and D

A Streams

[For text of subitems (1) to (32), see M.R.]

- (33) County Ditch No 9 (see Hazel Creek),
- (34) County Ditch No 12 (County Ditch No 45), Waseca, (T 107, R 23, S.22, 23): 7,
- (35) County Ditch No 12 (Rice Creek), Belview, (T.113, R 36, S.7, 8, 18, 19, T 113, R 37, S 15, 21, 22, 23, 24) 7,
- (36) County Ditch No 14, Tyler, (T 109, R 43, S 18, T 109, R.44, S 2, 3, 11, 13, 14, T.110, R 44, S 33, 34) 7;
- (37) County Ditch No 22, Montgomery, Green Giant Company, (T 111, R.23, S 4, 9, 10, T 112, R.23, S.33) 7,
- (38) County Ditch No 27, Madison, (T.117, R.43, S.3, 4, 5, 6; T.117, R.44, S 1; T 118, R.43, S.34, T 118, R.44, S 35, 36) 7,
- (39) County Ditch No 28, Marietta, (T 118, R 46, S 22, 23, 26) 7;
- (40) County Ditch No 38, Storden, (T.107, R.37, S 28, 29) 7;
- (41) County Ditch No 40A, Lafayette, (T 111, R.29, S 8, 14, 15, 16, 17, 23, 24) 7,
- (42) County Ditch No 42, Winthrop, (T 112, R 29, S.6, 7) 7;
- (43) County Ditch No 44, Bricelyn, Owatonna Canning Company, (T 101, R 25, S 7, 8, 16; 17, T 101, R.26, S 1, 12; T 102, R.26, S 36) 7;
- (44) County Ditch No. 45, Renville, (T.114, R.36, S 5, 6, 7, 18; T 114, R 37, S.13; T 115, R 36, S 7, 18, 19, 29, 30, 32) 7,
- (45) County Ditch No. 46, Willmar, (T.119, R.35, S 19, 20, 29): 7,
- (46) County Ditch No 51, Le Center, (T 110, R 24, S.5, 6, T 111, R 24, S.31, 32; T 111, R.25, S 26, 35, 36): 7,
- (47) County Ditch No. 54, Montgomery, (T.112, R.23, S 26, 33, 34, 35) 7,
- (48) County Ditch No. 55, see Rush River, North Branch,
- (49) County Ditch No 60 (Chippewa River), Millerville, Millerville Coop Cry., (T.130, R 39, S 14, 22, 23, 27, 28, 32, 33) 7,
- (50) County Ditch No 61, Kerhoven, (T 120, R 37, S 21, 22): 7;

- (51) County Ditch No 63, Hanska, (T.108, R.30, S 11, 12, 14, 17, 18, 19, 20, 21, 22, 23, 27, 28) 7,
- (52) County Ditch No 66, Bird Island, (T 115, R 34, S 15, 16, 17, 18, 22, 23). 7,
- (53) County Ditch No. 87, Wells, (T.103, R 24, S.6, T.104, R 24, S.31, T 104, R.25, S.36) 7,
- (54) County Ditch No 104, Sacred Heart, (T 114, R.38, S 1, 2, T.115, R 37, S.7, 18; T.115, R 38, S 13, 24, 25, 35, 36) 7,
- (55) County Ditch No 109, Morgan, (T 111, R.34, S.4, 5, 8, 17, T 112, R 34, S.22, 23, 27, 28, 33). 7,
- (56) Crow Creek, (T 112, R 35): 2C;
- (57) Dry Creek, (T.108, 109, R 36) 2C,
- (58) Dry Weather Creek, (T.117, 118, R 39, 40, 41): 2C,
- (59) Dry Wood Creek, (T 122, R 42, 43). 2C,
- (60) Eagle Creek, East Branch, (T 115, R 21, S 18) 1B, 2A, 3B;
- (61) Eagle Creek, Main Branch, (T 115, R 21, S 7, 18; T 115, R 22, S 13) 1B, 2A, 3B,
- (62) Echo Creek, (T 114, R 37) 2C,
- (63) Eight Mile Creek, (T.111, 112, 113, R.31) 2C,
- (64) Elm Creek, North Fork, (T 104, R.34) 2C;
- (65) Elm Creek, South Fork, (T.103, R.34) 2C;
- (66) Emily Creek, (T 118, 119, R.43): 2C;
- (67) Fish Creek, (T 123, 124, R 47, 48): 2C;
- (68) Five Mile Creek, (T 120, R 44) 2C,
- (69) Florida Creek, (South Dakota border to mouth). 2C, 3B;
- (70) Foster Creek (excluding Class 7 segment), (T.102, 103, R.24) 2C,
- (71) Foster Creek, Alden, (T 103, R.23, S.31, T 103, R 24, S.25, 36): 7,
- (72) Hassel Creek, (T 122, 123, R.38, 39). 2C,
- (73) Hawk Creek (County Ditch No 10), Willmar/Pennock, (T 118, R 36, S.2, 3, 8, 10, 15, 16, 17, 18, 19, T.118, R.37, S 5, 6, 7, 8, 9, 14, 15, 16, 18, 19, 23, 24, 30, 31, T 119, R.35, S 19; T.119, R 36, S.24, 25, 26, 35) 7,
- (74) Hazel Creek (County Ditch No 9), (T 115, R.39, 40, 41, 42). 2C,
- (75) High Island Ditch, Arlington, (T 113, R 27, S 16, 17, 21, 22, 27) 7,
- (76) Hindeman Creek, (T 111, R 32, S 19, 20, T.111, R.33, S.24) 1B, 2A, 3B,
- (77) Iosco Creek, (T.108, R 23). 2C;
- (78) John's Creek, (T 110, R.32, S 1; T.111, R.31, S 31; T.111, R.32, S.36) 1B, 2A, 3B,
- (79) Judicial Ditch No 1, Delavan, (T 104, R.27, S 23, 25, 26, 36): 7,
- (80) Judicial Ditch No 1A, Lafayette, (T 111, R 27, S.5, 6, 7; T.111, R 28, S 10, 11, 12, 15, 16, 17, 18, 19; T 111, R.29, S 24) 7,
- (81) Judicial Ditch No. 5, Murdock, (T 120, R.38, S 4, 5, 6, 9, 10, 11, T 120, R.39, S.1, 4, 9, 10, 11, 12) 7,
- (82) Judicial Ditch No 6, Hanska, (T 107, R.30, S.4, T.108, R 30, S.28, 33): 7,
- (83) Judicial Ditch No 10, (see Wood Lake Creek);
- (84) Judicial Ditch No 10, Hanska, (T 108, R 30, S.1; T.109, R.30, S 35, 36) 7,
- (85) Judicial Ditch No. 12, Tyler, (T 109, R 43, S 9, 15, 16, 17, 18): 7,
- (86) Judicial Ditch No 29, Arco, (T 111, R 44, S 21, 28, 33). 7,

- (87) Judicial Ditch No. 30, Sleepy Eye, Del Monte Corporation, (T 109, R.32, S 4, 5, 6, T 110, R 32, S 31) 7,
- (88) Judicial Ditch No 49 (Providence Creek), Amboy, (T 105, R 27, S 18, 19, T 105, R 28, S.13) 7,
- (89) Kennaley's Creek, (T 27, R 23, S 18) 1B, 2A, 3B;
- (90) Lac qui Parle River, (Lake Hendricks outlet to Minnesota River) 2C, 3B,
- (91) Lac qui Parle River, West Fork, (South Dakota border to mouth): 2C, 3B;
- (92) Lateral Ditch C of County Ditch No 55, Gaylord, (T.112, R.28, S 2, 3, T 113, R.28, S 32, 33, 34): 7;
- (93) Lazarus Creek, (South Dakota border to Canby Creek): 2C, 3B,
- (94) Le Sueur River, Little, (T 106, R.22) 2C,
- (95) Lone Tree Creek, Tracy, (T 109, R 39, S 2, 3, 4, 7, 8, 9, T 110, R.38, S.19, 20, 30, T 110, R.39, S.25, 34, 35, 36) 7,
- (96) Long Lake Creek, (T 132, R 41, S 9) 1B, 2A, 3B;
- (97) Middle Creek, (T.113, 114, R 36) 2C;
- (98) Mink Creek, (T 104, R 30, 31) 2C,
- (99) Minneopa Creek, Lake Crystal, (T.108, R 28, S 26, 27, 32, 33, 34). 7,
- (100) Minnesota River, (Big Stone Lake outlet to the Lac qui Parle dam) 1C, 2Bd, 3B,
- (101) *Minnesota River, [11/5/84R] (Lac qui Parle dam to Granite Falls) 1C, 2Bd, 3B;
- (102) *Minnesota River, [11/5/84R] (Granite Falls to Redwood County State Aid Highway 11 bridge) 2B, 3B,
- (103) Minnesota River, (River Mile 22 to mouth). 2C, 3B,
- (104) Minnesota River, Little, (South Dakota border crossing to Big Stone Lake) 2C, 3B;
- (105) Morgan Creek, (T 109, R.29, 30). 2C,
- (106) Mud Creek, (T 114, R 43, 44, 45). 2C,
- (107) Mud Creek, (T 123, R 36, S 28, 29) 1B, 2A, 3B;
- (108) Mud Creek, DeGraff/Murdock, (T 121, R 37, S 31, T 121, R 38, S.18, 19, 20, 28, 29, 33, 34, 35, 36, T 121, R 39, S 11, 12, 13) 7,
- (109) Muddy Creek (Mud Creek) (County Ditch No 2) (County Ditch No. 4), Chokio, (T 124, R.42, S 6, 7, 15, 16, 17, 18, 21, 22, 23, T 124, R 43, S 1, 4, 5, 6, 7, 8, T 124, R.44, S.1, 2, 3, 12, T 125, R.43, S.34, 35, 36) 7,
- (110) Palmer Creek, (T 116, 117, 118, R.39). 2C;
- (111) Paul's Creek, (T 110, R.26, S 14, 15) 1B, 2A, 3B,
- (112) Pelican Creek, (T.130, R 41, 42) 2C,
- (113) Pell Creek, Walnut Grove, (T.109, R.38, S 25, 26, 27, 28) 7,
- (114) Perch Creek, (T 104, 105, 106, R 29, 30) 2C,
- (115) Ramsey Creek, (T 112, R 36, S 1; T 113, R 36, S 35, 36): 1B, 2A, 3B,
- (116) Redwood River, (T.110, R 42, S 5, 8, 17, T 111, R.42, S.32) 1B, 2A, 3B,
- (117) Rice Creek, See County Ditch No 12,
- (118) Rush River, Middle Branch, Winthrop, (T.112, R 27, S 16, 19, 20, 21, 30, T 112, R 28, S 18, 19, 20, 21, 22, 25, 26, 27, T.112, R 29, S 7, 8, 9, 13, 14, 15, 16, 17, 18) 7,
- (119) Rush River, North Branch, (County Ditch No 55), Gaylord (T 112, R 27, S 7, 8, 17, T 112, R.28, S 1, 2, 12) 7,

- (120). Samt James Creek (excluding Class 7 segment), (T.105, 106, R 31, 32, 33) 2C,
- (121) Saint James Creek, Samt James, (T.106, R.31, S 5, 7, 8, 18, T 107, R 31, S 21, 22, 28, 32, 33). 7,
- (122) Seven Mile Creek, (T 109, R.27, S.2, 3, 4, 10, 11, 12) 1B, 2A, 3B,
- (123) Shakopee Creek, (T 119, 120, R.36, 37, 38, 39, 40) 2C,
- (124) Silver Creek, (T.108, R.23, 24) 2C;
- (125) Smith Creek, (T 113, R 35, 36): 2C,
- (126) South Creek, (T 102, 103, R 28, 29, 30): 2C, 3B,
- (127) Spring Branch Creek, (T 106, R 29, 30) 2C,
- (128) Spring Creek, (T 110, 111, R.32, 33, 34) 2C,
- (129) Spring Creek, (T.117, R.40). 2C;
- (130) Stony Run; (T.121, 122, R'45, 46) 2C,
- (131) Stony Run Creek, (T 116, R 40). 2C,
- (132) Three Mile Creek, (T 112, R 33) 2C,
- (133) Timms Creek, (T 114, 115, R 36) 2C,
- (134) Unnamed #1, (T.27, R 23, S 18; T 27, R.24, S 13) 1B, 2A, 3B,
- (135) Unnamed #4, (T 27, R 24, S 24) 1B, 2A, 3B,
- (136) Unnamed #7, (T 27, R 24, S 26) 1B, 2A, 3B,
- (137) Unnamed Creek, (T.108, R.28, S 1, 2) 1B, 2A, 3B,
- (138) Unnamed Creek, (T.108, R.28, S.5, T 109, R 28, S 32) 1B, 2A, 3B,
- (139) Unnamed Creek, (T.110, R 26, S 10, 11) 1B, 2A, 3B,
- (140) Unnamed Creek, (T.108, R.28, S.6, T.109, R.29, S.25, 36) 1B, 2A, 3B,
- (141) Unnamed Creek, Green Isle, (T 114, R.26, S 2, 3, 4, 8, 9, 17): 7,
- (142) Unnamed Creek, Lake Town Township, (T.115, R.24, S 3, 10, 11, T.116, R 24, S 27, 34) 7,
- (143) Unnamed Creek, Pennock, (T.118, R.37, S.2, 3, 4, 5, T 119, R.36, S 4, 5, 6, 7, 18, 19, T 119, R 37, S 24, 25, 26, 35). 7;
- (144) Unnamed Creek, Murdock, (T.120, R 38, S 1, 2, T.121, R 38, S 35): 7,
- (145) Unnamed Ditch, Burnsville Freeway Sanitary Landfill, (T 27, R 24, S 28, 33): 7,
- (146) Unnamed Ditch, Bricelyn, Owatonna Canning Company, (T.101, R.25, S 10): 7,
- (147) Unnamed Ditch, Alden, (T 102, R.23, S.4, 5, T.103, R.23, S.31, 32) 7,
- (148) Unnamed Ditch, Truman, (T.104, R 30, S 2, 11, T.105, R.30, S.25, 26, 35) 7,
- (149) Unnamed Ditch (County Ditch No 47), New Richland, (T 105, R 22, S.17, 18, 19, T 105, R.23, S.24) 7,
- (150) Unnamed Ditch, Lewisville, (T 105, R.30, S 3, T.106, R.30, S 14, 23, 26, 34, 35): 7;
- (151) Unnamed Ditch, Waldorf, (T 106, R 24, S.34) 7;
- (152) Unnamed Ditch (County Ditch No. 45), Waseca, (T.107, R.23, S.14, 23): 7,
- (153) Unnamed Ditch, Jeffers, (T 107, R.36, S 21) 7,
- (154) Unnamed Ditch, Storden, (T.107, R.37, S.19, 30) 7;
- (155) Unnamed Ditch, Eagle Lake, (T 108, R.25, S 18, 19, T 108, R.26, S.13): 7,
- (156) Unnamed Ditch, Walnut Grove, (T.109, R.38, S 28) 7,

- (157) Unnamed Ditch, Tracy, (T 109, R.39, S 18, T 109, R 40, S.13): 7,
 - (158) Unnamed Ditch, Wabasso, (T.110, R-36, S 3, T 111, R.36, S.18, 19, 20, 28, 29, 33, 34, T.111, R.37, S.13): 7;
 - (159) Unnamed Ditch, Lafayette, (T 111, R 29, S 6, 7, 8, T.111, R.30, S 12) 7;
 - (160) Unnamed Ditch, Wabasso, (T 111, R 37, S 13, 24): 7,
 - (161) Unnamed Ditch, Montgomery, (T 112, R.23, S.33) 7;
 - (162) Unnamed Ditch, Arlington, (T 113, R.27, S 21): 7;
 - (163) Unnamed Ditch, Near Fernando, Round Grove Coop Cry, (T 113, R 30, S 5, T 114, R.29, S 19, 20, 30, T.114, R.30, S 25, 26, 27, 28, 29, 32) 7;
 - (164) Unnamed Ditch, Green Isle, (T 114, R.26, S 19, T 114, R 27, S.11, 12, 13, 14, 24) 7;
 - (165) Unnamed Ditch, New Auburn, (T.114, R.28, S 20) 7,
 - (166) Unnamed Ditch, Porter, (T 114, R 44, S 21, 28): 7,
 - (167) Unnamed Ditch, Bongards, Bongards Creameries, (T.115, R.25, S 9, 16). 7,
 - (168) Unnamed Ditch, Clarkfield, (T.115, R.41, S.16) 7;
 - (169) Unnamed Ditch, Clarkfield, (T.115, R 41, S 16, 21): 7;
 - (170) Unnamed Ditch, Madison, (T.118, R.44, S 27, 28, 34, 35): 7,
 - (171) Unnamed Ditch, Pennock, (T 119, R.36, S.2, 3, 4, 9, 10): 7;
 - (172) Unnamed Ditch, DeGraff, (T 121, R 38, S.19, 29, 30) 7,
 - (173) Unnamed Ditch, Hancock, (T 122, R 40, S.6; T 122, R 41, S 1, 12, T.123, R 40, S 18, 19, 30, 31, T.123, R.41, S 11, 12) 7,
 - (174) Unnamed Ditch, Alberta, (T 124, R 43, S 3, 4): 7,
 - (175) Unnamed Ditch, Farwell, Farwell Coop Cry Assn, (T.126, R 39, S.6). 7,
 - (176) Unnamed Ditch, Lowry, (T 126, R.39, S 26, 35): 7;
 - (177) Unnamed Ditch, Brandon, (T.129, R 39, S.21, 22) 7,
 - (178) Unnamed Ditch, Evansville, (T 129, R 40, S 10, 11): 7;
 - (179) Unnamed Dry Run, Near Minneopa, Blue Earth - Nicollet Electric, (T 108, R 27, S 16): 7,
 - (180) Unnamed Dry Run, Mankato, Southview Heights Coop Association, (T 108, R.26, S 19, 30, T 108, R.27, S.24): 7,
 - (181) Unnamed Stream, Mankato, Midwest Electric Products, (T 109, R.26, S.20, 21, 28): 7,
 - (182) Unnamed Stream, Savage, (T 115, R 21, S 8, 9) 7;
 - (183) Unnamed Stream, Dawson, (T 117, R.43, S.22): 7;
 - (184) Wabasha Creek, (T 112, R 34) 2C,
 - (185) Whetstone River, (South Dakota border to mouth). 2C, 3B,
 - (186) Old Whetstone River Channel, Ortonville, Big Stone Canning Company, (T.121, R 46, S.16, 21): 7,
 - (187) Willow Creek, (T 104, 105, R 31, 32) 2C,
 - (188) Wood Lake Creek, (Judicial Ditch No 10), (T.113, 114, R.38, 39): 2C;
 - (189) Yellow Bank River, North Fork, (South Dakota border to mouth): 2C, 3B,
 - (190) Yellow Bank River, South Fork, (South Dakota border to mouth): 2C, 3B, and
 - (191) Yellow Medicine River, North Fork, (South Dakota border to mouth): 2C, 3B
- B Lakes

[For text of subitems (1) to (14), see M.R.]

(15) Unnamed Swamp (Skauby Lake), Storden, (T 107, R 37, S 30) 7,

[For text of subitems (16) to (18), see M.R.]

[For text of items C and D, see M.R.]

Subp. 6 **Saint Croix River Basin.** The water use for the listed waters in the Saint Croix River Basin are as identified in items A, B, and D

A. Streams

[For text of subitems (1) to (16), see M.R.]

(17) *Kettle River, [11/5/84R] (From the north Pine County line to the site of the former dam at Sandstone, at quarter section line between the NW 1/4 and SW 1/4, S.22, T 42, R.20) 2B, 3B,

(18) *Kettle River, [11/5/84P] (From the site of the former dam at Sandstone, at quarter section line between the NW 1/4 and SW 1/4, S 22, T 42, R.20 to its confluence with the Saint Croix River): 2B, 3B,

[For text of subitems (19) to (48), see M.R.]

[For text of items B to D, see M.R.]

Subp. 7. **Lower Mississippi River Basin.** The water use classifications for the listed waters in the Lower Mississippi River Basin are as identified in items A, B, and C

A. Streams:

[For text of subitems (1) to (3), see M.R.]

(4) Ballpark Creek, (T.102, R.4, S 19, 30, T.102, R.5, S.24) 1B, 2A, 3B,

(5) Bear Creek, (T 107, R.9, S.13, 14, 15, 16, 22): 1B, 2A, 3B,

(6) Bear Creek, North, Spring Grove (T.101, R.7, S.26, 27, 35) 7,

(7) Bear Creek (excluding trout waters), (T 107, R.9) 2C,

(8) Beaver Creek, (T 102, R 6, S 5, 18, 19, 29, 30, T.103, R 6, S.31, 32) 1B, 2A, 3B,

(9) Beaver Creek, East, (T.102, R 6, S 5, 6, 8, 17): 1B, 2A, 3B,

(10) Beaver Creek, West, (T 102, R.6, S.5, 6, 7, 18, 19, 30, T.102, R 7, S 12, 13, 24, 25, 26) 1B, 2A, 3B,

(11) Beaver Creek, (T.108, R 10, S.15, 16, 19, 20, 21, T.108, R.11, S.24) 1B, 2A, 3B,

(12) Bee Creek, (T 101, R.6, S 29, 32, 33). 1B, 2A, 3B,

(13) Big Springs Creek, (T 104, R.9, S.21, 22, 26, 27). 1B, 2A, 3B;

(14) Borson Spring, (T 105, R 8, R.29, 32, 33): 1B, 2A, 3B;

(15) Brush Valley Creek (excluding trout waters), (T 104, R 5): 2C;

(16) Brush Valley Creek, (T 104, R.5, S 23, 24, 26): 1B, 2A, 3B,

(17) Bullard Creek, (T 112, R 14, S 1, 2, 3, 10, T 113, R 14, S 36) 1B, 2A, 3B,

(18) Burns Valley Creek, East Branch, (T.106, R 7, S 3, 10, 15): 1B, 2A, 3B;

(19) Burns Valley Creek, West Branch, (T.106, R 7, S 3, 4, 9, 16, T 107, R 7, S 34): 1B, 2A, 3B,

(20) Burns Valley Creek, Main Branch, (T 106, R 7, S 2, T 107, R.7, S 35) 1B, 2A, 3B,

(21) Butterfield Creek, (T 103, R 4, S 6, 7, 8, 18) 1B, 2A, 3B,

(22) Camp Creek, (T 101, R 10, S 5, 8, 9, T 102, R.10, S.5, 8, 16, 17, 20, 29, 32) 1B, 2A, 3B,

(23) Camp Hayward Creek, (T.104, R.8, S.31, 32) 1B, 2A, 3B;

(24) Campbell Creek, (T.104, R.6, S. 5, 7, 8, 18): 1B, 2A, 3B;

(25) Campbell Creek, (T.105, R 6, S.21, 28, 29, 32) 1B, 2A, 3B,

- (26). *Cannon River, [11/5/84R] (From the northern city limits of Faribault to its confluence with the Mississippi River) 2B, 3B,
- (27). Cannon River, Little, (T.110, R 18, S 1, 10, 11, 12, 15, T 111, R.18, S.13, 24, 25, 36) 1B, 2A, 3B,
- (28) Carters Creek, Wykoff, (T 103, R 12, S.4, 9, 15, 16, 22) 7,
- (29) Cedar Valley Creek, (T 105, R.6, S 6, T 106, R 6, S.1, 11, 12, 14, 15, 21, 22, 28, 29, 31, 32) 1B, 2A, 3B,
- (30) Chub Creek, North Branch, (T 112, 113; R 19) 2C,
- (31) Clear Creek, (T.111, R 14, S 3, 10, 15). 1B, 2A, 3B,
- (32) Cold Creek (Cold Spring Brook) (excluding trout waters), (T 110, 111, R.14) 2C,
- (33) Cold Spring Brook, (T 110, R.13, S.30, 31, T 110, R 14, S 25, 36) 1B, 2A, 3B,
- (34) Coolridge Creek, (T 105, R 9, S 23, 26) 1B, 2A, 3B,
- (35) Corey Creek, (T.105, R.6, S 18, 19, T 105, R 7, S 24, 25, 26, 27, 34) 1B, 2A, 3B,
- (36) County Ditch No 15, Kilkenny, (T.110, R.23, S 22, 23): 7,
- (37) Crane Creek, (T 107, 108, R.20, 21, 22) 2C;
- (38) Crooked Creek, Main Branch, (T.102, R 4, S 18, 19, 20, 28, 29, 30, T 102, R.5, S 25, 26, 36) 1B, 2A, 3B,
- (39) Crooked Creek, North Fork, (T.102, R.5, S 17, 20, 21, 22, 23, 26) 1B, 2A, 3B,
- (40) Crooked Creek, South Fork, (T 102, R 5, S.26, 27, 28) 1B, 2A, 3B,
- (41) Crystal Creek, (T 102, R 11, S 35, 36). 1B, 2A, 3B,
- (42) Crystal Creek, (T 103, R.5, S 6, 7, 18, 19, T.103, R.6, S 1, 12) 1B, 2A, 3B,
- (43) Dakota Creek (excluding trout waters), (T 105, R 5): 2C,
- (44) Dakota Creek, (T 105, R.4, S 7, T.105, R 5; S.1, 2, 3, 11, 12): 1B, 2A, 3B,
- (45) Daley Creek, (T 103, R.7, S.4, 5, 8; T 104, R.7, S 33) 1B, 2A, 3B,
- (46) Diamond Creek, (T.103, R.8, S 18, 19, T 103, R 9, S.11, 13, 14, 24) 1B, 2A, 3B,
- (47) Dry Creek, (T 108, R 12, 13) 2C,
- (48) Duschee Creek, (T 102, R 10, S.1, T 103, R.10, S.23, 24, 25, 26, 36) 1B, 2A, 3B,
- (49) Dutch Creek, (T 112, R 20, 21) 2C,
- (50) Eitzen Creek, (T 101, R 5, S 22, 23) 1B, 2A, 3B,
- (51) Etna Creek, (T 102, R 13, S.25, 36): 1B, 2A, 3B,
- (52) Ferguson Creek, (T 105, R 8, S 18, T.105, R.9, S 12, 13). 1B, 2A, 3B,
- (53) Ferndale Creek, (T 104, R.7, S.29, 30, 31). 1B, 2A, 3B,
- (54) Forestville Creek, North Branch, (T 102, R.12, S 13, 14, 15) 1B, 2A, 3B,
- (55) Forestville Creek, South Branch, (T 102, R 12, S 24, 25) 1B, 2A, 3B,
- (56) Frego Creek, (T.101, R.9, S 14, 15, 22, 23): 1B, 2A, 3B,
- (57) Garvin Brook, (T 106, R 8, S.4, 5, 8, 17, T 107, R 8, S 10, 11, 14, 15, 23, 26, 27, 33, 34, 35): 1B, 2A, 3B,
- (58) Gilbert Creek, (T.111, R 12, S 6, T 111, R 13, S 1, 2, 3, 4, 10, 11, 12, T 112, R 12, S 31) 1B, 2A, 3B,
- (59) Gilmore Creek, (T 106, R 7, S.6, T 107, R 7, S 20, 29, 30, 31, 32) 1B, 2A, 3B,
- (60) Girl Scout Camp Creek, (T.103; R.7, S 29, 30) 1B, 2A, 3B,

- (61) Gorman Creek, (T.109, R 11, S 1, T.110, R 10, S.29, 30, 31, T 110, R.11, S.36): 1B, 2A, 3B,
- (62) Gribben Creek, (T.103, R.9, S 9, 16, 21, 27, 28): 1B, 2A, 3B,
- (63) Hamilton Creek, (T.103, R.13, NW 1/4 S 6; T 103, R.14, NE 1/4 S.1) 1B, 2A, 3B,
- (64) Hemmingway Creek, (T 105, R.9, S.26, 28, 33, 34, 35): 1B, 2A, 3B,
- (65) Hammond Creek, (T 109, R 13, S 28, 29): 1B, 2A, 3B,
- (66) Harkcom Creek, (T 108, R.16): 2C;
- (67) Hay Creek, (T 111, R.15, S.4, T.112, R.14; S.19; T.112, R.15, S.1, 12, 13, 23, 24, 26, 27, 33, 34; T.113, R 15, S 24, 25, 36): 1B; 2A, 3B;
- (68) Homer Creek, (T.106, R 6): 2C,
- (69) Indian Creek, East, (T 109, R 9, S.19; T.109, R 10, S.21, 22, 23, 24, 26, 27, 28, 29, 31, 32, T.109, R.11, S.36): 1B, 2A, 3B;
- (70) Indian Creek, West, (T.109, R 11, S 6, 7, 8, 16, 17, 21): 1B, 2A, 3B,
- (71) Indian Spring Creek (excluding trout waters), (T 103, R.5) 2C,
- (72) Indian Springs Creek (Dexter), (T.103, R.5, S 12, 13, 14, 15, 21, 22, 28): 1B, 2A, 3B;
- (73) Iowa River, Little, (T 101, 102, R.14): 2C,
- (74) Jordan Creek, Little, (T 104, R.12, S 21, 22, 26, 27, 28): 1B, 2A, 3B;
- (75) Judicial Ditch No. 1, Hayfield, (T 105, R.17, S.4, 5, T 106, R 17, S 31, 32; T 106, R 18, S.25, 26, 27, 36): 7;
- (76) Kedron Creek, (T.104, R 13, S 36) 1B, 2A, 3B,
- (77) King Creek, (T.111, R 11, 12): 2C,
- (78) Kinney Creek, (T.105, R 13, S.1, 12, 13; T 106, R 13, S.36) 1B, 2A, 3B;
- (79) Lanesboro Park Pond, (T 103, R.10, S 13): 1B, 2A, 3B,
- (80) LeRoy Trout Pond, (T 101, R.14, S.36): 1B, 2A, 3B,
- (81) Logan Creek, (T.107, R 11, S.3): 1B, 2A, 3B,
- (82) Long Creek (excluding trout waters), (T 108, 109, R.12) 2C,
- (83) Long Creek, (T.109, R.12, S.3, 10, 15, 22, 27, 28). 1B, 2A, 3B,
- (84) Lost Creek, (T.104, R.11, S 18, T.104, R.12, S 9) 1B, 2A, 3B,
- (85) Lynch Creek, (T 104, R 11, S 2, 11, 14) 1B, 2A, 3B;
- (86) MacKenzie Creek, (T 108, 109, R 21): 2C;
- (87) Mahoney Creek, (T.103, R.10) 2C,
- (88) Mahoods Creek, (T.103, R 12, S.20) 1B, 2A, 3B;
- (89) Maple Creek, (T.102, R.8, S 3, 4, T 103, R.8, S.27, 28, 33, 34). 1B, 2A, 3B;
- (90) Mazeppa Creek, (T 109, R 14, S 4, 5, 9, T.110, R.14, S 19, 29, 30, 32; T 110, R 15, S.24, 25) 1B, 2A, 3B;
- (91) Middle Creek, (T 109, R.11, S.18; T.109, R.12, S.2, 3, 11, 13, 14): 1B, 2A, 3B;
- (92) Mill Creek, (T 104, R 11, S 5, 6, T 105, R 11, S.31, T 105, R 12, S 14, 23, 25, 26, 36): 1B, 2A, 3B,
- (93) Miller Creek, (T.111, R 12, S 7, 8, 9, 18; T.111, R 13, S 13, 24). 1B, 2A, 3B,
- (94) Money Creek, (T 105, R.7, S.3, 4, 6, 7, 8; 9, 16, 17): 1B, 2A, 3B;
- (95) Mound Prairie Creek, (T.104, R.5). 2C,
- (96) Mud Creek, (T.108, 109, R.20, 21): 2C;
- (97) Nepstad Creek, (T 102, R.8, S.4, 5, 7, 8, 9; T.102, R.9, S.1, 2, 12). 1B, 2A, 3B;
- (98) Newburg Creek (M-9-10-10-1), (T.101, R 8, S 5, 8): 1B, 2A, 3B;

- (99) New York Hollow Creek, (T 101, R.5, S.25, 26) 1B, 2A, 3B,
- (100) Partridge Creek, (T 101, R 10, S 4, T 102, R 10, S.33) 1B, 2A, 3B,
- (101) Peterson Creek, (T 106, R 8, S.7, 8) 1B, 2A, 3B,
- (102) Pickwick Creek, (T 106, R 5, S 7, 18, T 106, R.6, S.13, 23, 24, 26, 34, 35) 1B, 2A, 3B,
- (103) Pickwick Creek, Little, (T 106, R.5, S 18, 19, 29, 30, 32, T 106, R 6, S.13) 1B, 2A, 3B,
- (104) Pine Creek (excluding Class 7 segment), (T 101, R.10) 2C, 3B,
- (105) Pine Creek, (T 105, R 5, S.18, 19, 20, 29, 30, 31, 32, T 105, R 6, S.13, 36) 1B, 2A, 3B,
- (106) Pine Creek, Harmony, (T 101, R.9, S.31, T.101, R.10, S 24, 25, 36): 7,
- (107) Pine Creek, South Fork, (T 105, R 5, S.19, T 105, R.6, S 24) 1B, 2A, 3B,
- (108) Pine Creek, (T 104, R 9, S 2, 3, 4, T 105, R.9, S.25, 26, 33, 34, 35, T 105, R 8, S 30, 31, 32, 33) 1B, 2A, 3B,
- (109) Pine Creek (excluding trout waters), (T 112, 113, R 17, 18): 2C,
- (110) Pine Creek, (T 112, R 17, S.5, 6, 8, 9, T 113, R.17, S 31; T 113, R 18, S.25, 26, 35, 36) 1B, 2A, 3B,
- (111) Pleasant Valley Creek (excluding trout waters), (T 106, 107, R.6, 7) 2C,
- (112) Pleasant Valley Creek, (T.106, R 6, S 7, 18, 19, T.106, R.7, S 1, 12, 13, 24, 25) 1B, 2A, 3B,
- (113) Plum Creek, (T 108, R.15) 2C,
- (114) Prairie Creek, (T 110, 111, 112, R 18, 19, 20) 2C,
- (115) Rice Creek, (T.103, R.11, S 3, 5, 7, 8, 9, T 104, R 11, S 14, 23, 33) 1B, 2A, 3B,
- (116) Riceford Creek, (T 101, R.7, S 6, 7, 18, 19; T 101, R 8, S.1, 12, 13, 24, T.102, R 7, S 29, 30, 31, 32) 1B, 2A, 3B,
- (117) Riceford Creek, Mabel, (T.101, R 8, S 24, 25, 26) 7,
- (118) Rollngstone Creek, (T.107, R 8, S 2, 3, 4, 5, 6, 7, 9, 10, 11, T.107, R 9, S 12, 13) 1B, 2A, 3B;
- (119) Rollngstone Creek, Middle Branch, (T.107, R 8, S 9, 16) 1B, 2A, 3B,
- (120) Root River, South Branch, (T 102, R.10, S.5, 6, T.102, R 11, S 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 18, T 102, R 12, S 13, 21, 22, 23, 24, 26, 27, T 103, R 9, S.7, 18, T 103, R.10, S 13, 14, 15, 16, 21, 22, 23, 24, 28, 29, 32, 33, T 103, R.11, S 36) 1B, 2A, 3B,
- (121) Root River, South Fork, (T 102, R 8, S 2, 3, 4, 8, 9, 10, 11, 17, 18, 19, T 102, R 9, S 24, 25, 26) 1B, 2A, 3B,
- (122) Rose Valley Creek, (T 105, R 5, S 22, 27, 34, 35) 1B, 2A, 3B,
- (123) Rupprecht Creek, (T 107, R.9, S.13, 24, 25, 26, 35) 1B, 2A, 3B,
- (124) Rush Creek, (T.104, R 8, S.2, 3, 4, 10, 11, 13, 14, T.105, R 8, S 6, 7, 18, 19, 20, 29, 32, 33, T.105, R 9, S 1, 2, 12, T 106, R.9, S.26, 34, 35, 36) 1B, 2A, 3B,
- (125) Salem Creek, (T 106, R.15, 16) 2C,
- (126) Schueler Creek, (T 104, R 8, S 1, 2, 3) 1B, 2A, 3B,
- (127) Second Creek, (T 111, R.12, S.15) 1B, 2A, 3B,
- (128) Shady Creek, (T 104, R 11, S 19, 30) 1B, 2A, 3B,
- (129) Shingle Creek, (T 109, 110, R.17) 2C;
- (130) Silver Creek (excluding trout waters), (T 104, 105, R.6) 2C,
- (131) Silver Creek, (T 104, R.6, S.1, 2, 11, 12, 14, T 105, R 6, S.34, 35) 1B, 2A, 3B,

- (132) Silver Spring Creek, (T 108, 109, R.13) 2C,
- (133) Snake Creek (excluding trout waters), (T 109, R 10) 2C,
- (134) Snake Creek, (T 109, R 10, S 10, 11, 14, 15, 16) 1B, 2A, 3B,
- (135) Speltz Creek, (T 107, R 8, S.5, 6, T 108, R.8, S 31; T.108, R.9, S 36):
1B, 2A, 3B,
- (136) Spring Brook, (T.111, R 20, S 2, 3, 4) 1B, 2A, 3B;
- (137) Spring Creek, (T 110, R 12, S 7, 17, 18, 20, 21, 27, 28, 29): 1B, 2A,
3B,
- (138) Spring Creek, (T.112, R 15, S.5, 6, 7, 18, T 113, R 15, S.29, 31, 32,
33, 34): 1B, 2A, 3B,
- (139) Spring Valley Creek, (T 103, R 12, S.8, 17, 18, 19, 20, 30, T 103,
R.13, S 23, 24, 25, 26, 27, 28, 29, 32, 33, 34) 1B, 2A, 3B,
- (140) Stockton Valley Creek, (T.106, R 8, S 2, 3, 10, 11, 14, 23, T.107,
R.8, S 34). 1B, 2A, 3B,
- (141) Storer Creek, (T.104, R.5, S.17, 18, 19, 30): 1B, 2A, 3B,
- (142) Straight Creek, (T 107, R 9, S.2, 11, 12) 1B, 2A, 3B;
- (143) Sugar Creek (Sugarloaf Creek), (T 111, 112, R.12, 13) 2C,
- (144) Sullivan Creek (excluding trout waters), (T 103, R.5) 2C,
- (145) Sullivan Creek, (T 103, R.5, S 12, 13, 14, 23, 24, 25, 26): 1B, 2A, 3B;
- (146) Swede Bottom Creek, (T.103, R.6, S.10) 1B, 2A, 3B,
- (147) Thompson Creek, (T 103, R.4, S.5, 6, 7, T 103, R.5, S 12, T 104,
R.4, S 32) 1B, 2A, 3B;
- (148) Torkelson Creek, (T 104, R 10, S.25, 36) 1B, 2A, 3B,
- (149) Trout Brook, (T 110, R 11, S 5, 8) 1B, 2A, 3B,
- (150) Trout Brook, (T.112, R.17, S.1, T.113, R.17, S.26, 27, 35, 36) 1B,
2A, 3B,
- (151) Trout Brook (Hay Creek Tributary), (T 113, R 15, S.35, 36) 1B,
2A, 3B,
- (152) Trout Brook (Mazeppa Creek), Goodhue, (T 110, R 15, S 3, 4,
T 111, R.15, S 28, 33, 34) 7,
- (153) Trout Creek, Little, (T 106, R 5, 6): 2C,
- (154) Trout Run Creek, (T 104, R.10, S.4, 5, 8, 9, 16, 17, 20, 21, T 105,
R.10, S 18, 19, 30, 31, 32) 1B, 2A, 3B,
- (155) Trout Run Creek, (Trout Creek) (excluding trout waters), (T 105,
R 10) 2C,
- (156) Trout Run-Whitewater Park, (T 107, R 10, S.29): 1B, 2A, 3B;
- (157) Trout Valley Creek, (T 108, R 9, S.5, 8, 17, 20; T 109, R 9, S 31).
1B, 2A, 3B,
- (158) Unnamed Creek, (T.101, R 4, S.21): 1B, 2A, 3B,
- (159) Unnamed Creek, Spring Grove, (T 101, R.7, S 14, 22, 23, 27) 7,
- (160) Unnamed Creek, (T 102, R.4, S.18, 19, 20, 29, 30) 1B, 2A, 3B,
- (161) Unnamed Creek, (T 103, R.7, S 31). 1B, 2A, 3B;
- (162) Unnamed Creek, Canton, (T 101, R.9; S 20) 7;
- (163) Unnamed Creek, Byron, (T 107, R 15, S 17, 20, 29) 7;
- (164) Unnamed Creek (Helbig), (T 110, R 11, S 28, 33) 1B, 2A, 3B,
- (165) Unnamed Creek (M-9-10-5-3), (T.101, R.7, S 6, T 101, R 8, S 1, 2)
1B, 2A, 3B,
- (166) Unnamed Creek (Whitewater Tributary), (T 108, R.10, S.35, 36)
1B, 2A, 3B,
- (167) Unnamed Creek, (T.105, R 7, S.19, 29, 30, T.105, R.8, S.24): 1B,
2A, 3B;

- 2A, 3B, (168) Unnamed Creek (Miller Valley), (T 106, R 5, S 21, 22, 27, 28) 1B,
- 2A, 3B, (169) Unnamed Creek (Deering Valley), (T 108, R.8, S 20, 28, 29). 1B,
- (170) Unnamed Creek (M-9-10-5-4), (T 101, R 8, S.12, 13): 1B, 2A, 3B,
- (171) Unnamed Creek (M-9-10-10-5), (T.102, R 8, S 32, 33): 1B, 2A, 3B,
- (172) Unnamed Creek (M-9-10-6), (T.103, R.8, S.36) 1B, 2A, 3B,
- (173) Unnamed Creek (T 104, R 8, S 19, 30). 1B, 2A, 3B,
- (174) Unnamed Creek, Plainview, (T 108, R.11, S 16, 17, 20, 21, 22, 27,
- 34) 7,
- (175) Unnamed Creek, West Concord, (T 108; R 17, S 17, 20, 21) 7,
- (176) Unnamed Creek, Hayfield, (T.105, R.17, S 3, 4) 7;
- (177) Unnamed Creek (Wells Creek Trib #9), (T.111, R.14, S.8, 17) 1B,
- 2A, 3B,
- (178) Unnamed Ditch, Claremont, (T 107, R 18, S 27, 34) 7,
- (179) Unnamed Ditch, Owatonna, (T.108, R.20, S 33). 7,
- (180) Unnamed Ditch, Lonsdale, (T 112, R 22, S 25, 35, 36) 7;
- (181) Unnamed Ditch, Hampton, (T 113, R 18, S 5, 6, T 114, R 18, S 31):
- 7,
- (182) Unnamed Dry Run, Altura, (T.107, R 9, S 7, 18) 7,
- (183) Unnamed Dry Run, Owatonna, Owatonna Canning Company,
- (T 107, R 20, S.6, T 107, R.21, S 1) 7,
- (184) Unnamed Dry Run, Owatonna, Owatonna Canning Company,
- (T 107, R 20, S.6, T 107, R.21, S 1): 7;
- (185) Unnamed Stream, Dodge Center, Owatonna Canning Company,
- (T 107, R 17, S 27, 34) 7,
- (186) Vermillion River, (T.113, R 20, S 1, 2, 3, 4, 9, T 114, R 19, S 31,
- T.114, R 20, S.33, 34, 35, 36) 1B, 2A, 3B,
- (187) Vesta Creek, (T 102, R 8, S 10, 11, 14, 15, 23): 1B, 2A; 3B,
- (188) Wapsipimcon River, (T 101, R 15) 2C, 3B,
- (189) Waterloo Creek, (T.101, R 6, 7) 1B, 2Bd, 3B;
- (190) Watson Creek, (T.103, R.10, S 19, 20, 21, 29, 30; T 103, R.11, S.22,
- 23, 24, 25, 26, 27, 28, 29, 30) 1B, 2A, 3B,
- (191) West Albany Creek, (T 110, R.12, S 28, 29, 30, T 110, R 13, S 23,
- 24, 25, 26) 1B, 2A, 3B,
- (192) Whitewater River, Main Branch, (T 107, R 10, S 2, 3, 9, 10, T 108,
- R 10, S 1, 2, 10, 11, 14, 15, 22, 23, 26, 27, 35) 1B, 2A, 3B,
- (193) Whitewater River, South Branch, (T 106, R.9, S 6, T 106, R.10, S 1,
- T 107, R 9, S 31, T 107, R 10, S 3, 10, 11, 13, 14, 24, 25, 36) 1B, 2A, 3B,
- (194) Whitewater River, Middle Branch, (T 106, R 11, S 2, 3, 10, T 107,
- R 10, S 9, 10, 16, 17, 19, 20, 30, T 107, R 11, S 24, 25, 26, 35) 1B, 2A, 3B,
- (195) Whitewater River, North Branch (Winona and Wabasha), (T 107,
- R 10, S.5, 6, 7, 8, 9, T 107, R.11, S 1, 2, 3, T 108, R 11, S.30, 31, 32, 33, 34) 1B, 2A, 3B,
- (196) Whitewater River, North Fork, Elgin, (T 108, R 12, S.25, 26, 27): 7,
- (197) Wildcat Creek (excluding trout waters), (T 103, R 4): 2C,
- (198) Wildcat Creek, (T 103, R 4, S.26, 27, 28, 29, 32, 33, 34, 35): 1B, 2A,
- 3B,
- (199) Willow Creek, (T 101, R.11, S 1, 12, T 102, R 11, S 1, 12, 13, 24, 25,
- 36) 1B, 2A, 3B,
- (200) Winnebago Creek, (T 101, R 4, S.28, 29, 30, T.101, R.5, S.7, 8, 14,
- 15, 16, 17, 22, 23, 24, 25, T 101, R 6, S 12). 1B, 2A, 3B; and

(201) Wisel Creek, (T 101, R 8, S.5, 6, 8, T 102, R 8, S.19, 20, 29, 30, 31, 32) 1B, 2A, 3B

[For text of items B to D, see M.R.]

Subp 8 **Cedar-Des Moines Rivers Basin.** The water use classifications for the listed waters in the Cedar-Des Moines Rivers Basin are as identified in items A, C, and D.

A Streams.

[For text of subitems (1) to (7), see M.R.]

- (8) County Ditch No 53 (see Soldier Creek);
- (9) Deer Creek, (T.101, R 19, 20). 2C, 3B,
- (10) Dobbins Creek, (T 103, R 16, 17) 2C;
- (11) Goose Creek, Twin Lakes, (T 101, R 20, S 31, T.101, R 21, S 16, 17, 18, 21, 22, 26, 27, 35, 36, T 101, R.22, S 12, 13) 7,
- (12) Heron Lake Outlet, (T 104, 105, R 37) 2C,
- (13) Jack Creek, Wilmont, (T 104, R.41, S.25, 26, 30, 31, 32, 33, 34, 35, 36) 7,
- (14) Lime Creek, (T 101, R.22, 23) 2C, 3B,
- (15) Murphy Creek, (T 103, R 18): 2C,
- (16) Okabena Creek (excluding Class 7 segment), (T 102, 103, R 37, 38, 40) 2C,
- (17) Okabena Creek, Worthington, Worthington Lagoons and Allied Mills, (T.102, R 38, S.6, 7; T 102, R.39, S 7, 8, 9, 10, 11, 12, 14, 15, 16, 18; T 102, R.40, S 13) 7,
- (18) Orchard Creek, (T 102, R 18, 19) 2C,
- (19) Roberts Creek, (T 103, 104, R.16, 17, 18) 2C,
- (20) Rose Creek, (T 102, 103, R 16, 17, 18) 2C,
- (21) Scheldorf Creek, (T.106, R.36, S 19, 30, 31, T 106, R.37, S 13, 24, 25): 1B, 2A, 3B,
- (22) Soldier Creek (Unnamed Stream and County Ditch No 53), (T.101, R 32, 33): 2C, 3B,
- (23) Turtle Creek, (T 103, R.18, 19, 20) 2C,
- (24) Unnamed Creek, Emmons, (T.101, R.22, S 31) 7;
- (25) Unnamed Creek, Brownsdale, (T 103, R 17, S 4, 9) 7,
- (26) Unnamed Creek, Blooming Prairie, (T 104, R 18, S.5, 8, 9, 16, T.105, R.18, S 31) 7;
- (27) Unnamed Creek, Blooming Prairie, (T 105, R 19, S 25): 7,
- (28) Unnamed Creek, Iona, (T 105, R 41, S 3, 4, 9, T 106, R 40, S.19, 29, 30, 32; T 106, R.41, S.24, 25, 26, 34, 35) 7,
- (29) Unnamed Ditch, Blooming Prairie, (T.105, R 19, S 25) 7;
- (30) Unnamed Stream (see Soldier Creek);
- (31) Wolf Creek, (T 103, R 16, 17, 18): 2C;
- (32) Woodbury Creek, (T 101, 102, R 18, 19) 2C; and
- (33) Woodson Creek, (T 102, R 18, S 14, 15) 1B, 2A, 3B

[For text of items B to D, see M.R.]

[For text of subp 9, see M.R.]

Statutory Authority: *MS s 115.03, 115 44*

History: *24 SR 1105, 24 SR 1133*