CHAPTER 7050
MINNESOTA POLLUTION CONTROL AGENCY
WATER QUALITY DIVISION
WATERS OF THE STATE

7050.0110 SCOPE.

Parts 7050 0130 to 7050 0227 apply to all waters of the state, both surface and underground, and include general provisions applicable to the maintenance of water quality and aquatic habitats; definitions of water use classes; standards for dischargers of sewage, industrial, and other wastes; and standards of quality and purity for specific water use classes This chapter shall apply to point source and nonpoint source discharges and to physical alterations of wetlands Other water quality rules of general or specific application that include any more stringent water quality or effluent standards or prohibitions are preserved.

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

History: *18 SR 2195*

7050.0130 DEFINITIONS.

A The terms "waters of the state," "sewage," "industrial wastes," and "other wastes," as well as any other terms for which definitions are given in the pollution control statutes, as used herein have the meanings ascribed to them in Minnesota Statutes, sections 115 01 and 115 41, with the exception that disposal systems or treatment works operated under permit or certificate of compliance of the agency shall not be construed to be "waters of the state "

B "Commissioner" means the commissioner of the Minnesota Pollution Control Agency or the commissioner's designee

C "Nonpoint source" means a land management or land use activity that contributes or may contribute to ground and surface water pollution as a result of runoff, seepage, or

percolation and that is not defined as a point source under Minnesota Statutes, section 115 01, subdivision 11.

D "Physical alteration" means the dredging, filling, draining, or permanent inundating of a wetland. Restoring a degraded wetland by reestablishing its hydrology is not a physical alteration

E "Surface waters" means waters of the state excluding groundwater as defined in Minnesota Statutes, section 115.01, subdivision 6

F "Wetlands" are those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions Wetlands generally include swamps, marshes, bogs, and similar areas Constructed wetlands designed for wastewater treatment are not waters of the state Wetlands must have the following attributes

(1) a predominance of hydric soils;

(2) inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition, and

(3) under normal circumstances support a prevalence of such vegetation

G Other terms and abbreviations used herein which are not specifically defined in applicable federal or state law shall be construed in conformance with the context, and in relation to the applicable section of the statutes pertaining to the matter at hand, and current professional usage

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

History: *18 SR 2195*

7050.0150 DETERMINATION OF WATER QUALITY CONDITION AND COMPLIANCE.

The intent of the state is to protect and maintain surface waters in a condition which allows for the maintenance of all existing beneficial uses The condition of a surface water body is determined by its physical, chemical, and biological qualities.

The biological quality of any given surface water body shall be assessed by comparison to the biological integrity of a reference condition or conditions which best represents the most natural condition for that surface water body type within a geographic region The biological quality shall be determined by reliable measures of indicative communities of fauna and flora

In making tests or analyses of the waters of the state, sewage, industrial wastes, or other wastes to determine compliance with the standards and water quality condition, samples shall be collected in a manner and place, and of such type, number, and frequency as may be considered necessary by the agency from the viewpoint of adequately reflecting the condition of the waters, the composition of the effluents, and the effects of the pollutants upon the specified uses Reasonable allowance will be made for dilution of the effluents, which are in compliance with part 7050 0211 or 7050 0212, as applicable, following discharge into waters of the state The agency by allowing dilution may consider the effect on all uses of the waters of the state into which the effluents are discharged The extent of dilution allowed regarding any specific discharge shall not violate the applicable water quality standards The samples shall be preserved and analyzed according to procedures in Code of Federal Regulations, title 40, part 136. The agency may accept or may develop other methods, procedures, guidelines, or criteria for measuring, analyzing, and collecting samples

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

History: *18 SR 2195*

7050.0170 NATURAL WATER QUALITY.

The waters of the state may, in a natural condition, have water quality characteristics or chemical concentrations approaching or exceeding the water quality standards Natural conditions exist where there is no discernible impact from point or nonpoint source pollutants attributable to human activity or from a physical alteration of wetlands Natural back-

ground levels are defined by water quality monitoring. Where water quality monitoring data are not available, background levels can be predicted based on data from a watershed with similar characteristics

Where natural background levels do not exceed applicable standards, the addition of pollutants from human activity and resulting point or nonpoint source discharges shall be limited such that, in total, the natural background levels and the additions from human activity shall not exceed the standards When reasonable justification exists to preserve the higher natural quality of a water resource, the commissioner may use the natural background levels that are lower than the applicable site–specific standards to control the addition of the same pollutants from human activity. The reasonable justification must meet the requirements under parts 7050.0180 and 7050 0185

Where background levels exceed applicable standards, the background levels may be used as the standards for controlling the addition of the same pollutants from point or nonpoint source discharges in place of the standards.

In the adoption of standards for individual waters of the state, the agency will be guided by the standards herein but may make reasonable modifications of the same on the basis of evidence brought forth at a public hearing if it is shown to be desirable and in the public interest to do so in order to encourage the best use of the waters of the state or the lands bordering such waters.

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

History: *18 SR 2195*

7050.0180 NONDEGRADATION FOR OUTSTANDING RESOURCE VALUE WATERS.

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

Subp. 4 **DNR designated scientific and natural areas.** Department of Natural Resources designated scientific and natural areas include but are not limited to

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

K. Black Lake Bog, Pine County,

L Pembina Trail Preserve, Polk County, and

M. Falls Creek, Washington County.

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

Subp. 6b **Calcareous fens.** The following calcareous fens are designated outstanding resource value waters.

A. Becker County· Spring Creek WMA NHR fen, 34 (T 142, R 42, S 13);

B Carver County Seminary fen, 75 (T 116, R 23, S 35),

C Clay County

(1) Barnesville Moraine fen, 44 (T 137, R.44, S.18),

(2) Barnesville WMA fen, 10 (T 137, R 45, S 1),

(3) Barnesville WMA fen, 43 (T 137, R 44, S 18),

(4) Felton Prairie fen, 28 (T 142, R 46, S 36),

(5) Felton Prairie fen, 36 (T 141, R 46, S.13);

(6) Felton Prairie fen, 48 (T 142, R 45, S 31),

(7) Felton Prairie fen, 53 (T 141, R 46, S.24),

(8) Haugtvedt WPA North Unit fen, 54 (T 137, R 44, S 28, 29), and

(9) Spring Prairie fen, 37 (T.140, R 46, S 11);

D. Clearwater County Clearbrook fen, 61 (T.149, R.37, S 17);

E Dakota County.

(1) Black Dog Preserve fen, 63 (T 27, R.24, S 34),

(2) Fort Snelling State Park fen, 25 (T 27, R 23, S 4); and

(3) Nicols Meadow fen, 24 (T 27, R 23, S.18),

F Goodhue County.

(1) Holden 1 West fen, 3 (T.110, R.18, S.1);

(2) Perched Valley Wetlands fen, 2 (T.112, R 13, S 8); and

(3) Red Wing fen, 72 (T 113, R.15, S.21),

G Houston County. Houston fen, 62 (T 104, R.6, S 26);

H Jackson County

(1) Heron Lake fen, 45 (T.103, R.36, S.29); and

(2) Thompson Prairie fen, 20 (T.103, R 35, S.7);

I. Le Sueur County·

(1) Ottawa Bluff fen, 56 (T.110, R.26, S 3);

(2) Ottawa WMA fen, 7 (T.110, R 26, S.11); and

(3) Ottawa WMA fen, 60 (T.110, R.26, S 14);

J. Lincoln County Hole–in–the–Mountain Prairie fen, 6, Pipestone (T.108, R.46, S 1; T 109, R.45, S.31),

K Mahnomen County Waubun WMA fen, 11 (T 143, R 42, S.25),

L Marshall County

(1) Tamarac River fen, 71 (T 157, R.46, S 2),

(2) Viking fen, 68 (T.155, R.45, S.18);

(3) Viking fen, 70 (T.155, R.45, S.20); and

(4) Viking Strip fen, 69 (T.154, R.45, S.4),

M Martin County· Perch Creek WMA fen, 33 (T 104, R.30, S.7);

N Murray County Lost Timber Prairie fen, 13 (T.105, R.43, S 2),

O Nicollet County:

(1) Fort Ridgely fen, 21 (T.111, R.32, S 6); and

(2) Le Sueur fen, 32 (T 111, R 26, S 16),

P Nobles County Westside fen, 59 (T.102, R.43, S.11);

Q Norman County

(1) Agassiz–Olson WMA fen, 17 (T 146, R.45, S 22);

(2) Faith Prairie fen, 15 (T.144, R 43, S.26),

(3) Faith Prairie fen, 16 (T.144, R.43, S.35),

(4) Faith Prairie fen, 27 (T.144, R.43, S.25); and

(5) Green Meadow fen, 14 (T 145, R 45, S.35, 36);

R. Olmsted County

(1) High Forest fen, 12 (T.105, R 14, S 14, 15); and

(2) Nelson WMA fen, 5 (T 105, R.15, S 16);

S. Pennington County:

(1) Sanders East fen, 65 (T 153, R.44, S 7);

(2) Sanders East fen, 74 (T 153, R.44, S 7), and

(3) Sanders fen, 64 (T.153, R 44, S.18, 19);

T Pipestone County:

(1) Burke WMA fen, 57 (T.106, R.44, S.28); and

(2) Hole–in–the–Mountain Prairie fen, 6 (see Lincoln County, item J),

U. Polk County

(1) Chicog Prairie fen, 39 (T.148, R 45, S 28);

(2) Chicog Prairie fen, 40 (T 148, R.45, S 33);

(3) Chicog Prairie fen, 41 (T 148, R.45, S 20, 29);

(4) Chicog Prairie fen, 42 (T 148, R.45, S.33),

(5) Kittleson Creek Mire fen, 55 (T.147, R.44, S.6, 7);

(6) Tympanuchus Prairie fen, 26 (T 149, R 45, S 17), and

(7) Tympanuchus Prairie fen, 38 (T 149, R 45, S 16),

V Pope County·

(1) Blue Mounds fen, 1 (T 124, R 39, S 14, 15),

(2) Lake Johanna fen, 4 (T 123, R 36, S 29), and

(3) Ordway Prairie fen, 35 (T 123, R 36, S 30);

W. Redwood County.

(1) Swedes Forest fen, 8 (T 114, R.37, S.19, 20), and

(2) Swedes Forest fen, 9 (T 114, R 37, S.22, 27);

X Rice County

(1) Cannon River Wilderness Area fen, 18 (T 111, R 20, S.34); and

(2) Cannon River Wilderness Area fen, 73 (T 111, R.20, S 22),

Y Scott County

(1) Savage fen, 22 (T 115, R 21, S 17);

(2) Savage fen, 66 (T 115, R.21, S.16), and

(3) Savage fen, 67 (T 115, R 21, S 17),

Z Wilkin County

(1) Anna Gronseth Prairie fen, 47 (T.134, R 45, S 15);

(2) Anna Gronseth Prairie fen, 49 (T 134, R 45, S 10),

(3) Anna Gronseth Prairie fen, 52 (T 134, R 45, S 4);

(4) Rothsay Prairie fen, 46 (T.136, R 45, S.33),

(5) Rothsay Prairie fen, 50 (T 135, R 45, S 15, 16), and

(6) Rothsay Prairie fen, 51 (T 135, R 45, S 9),

AA Winona County Wiscoy fen, 58 (T.105, R 7, S.15); and

BB Yellow Medicine County.

(1) Sioux Nation WMA NHR fen, 29 (T 114, R 46, S 17), and

(2) Yellow Medicine fen, 30 (T.115, R 46, S 18)

[For text of subps 7 to 10, see M.R.]

Statutory Authority: *MS s 115.03, 115.44*

History: *18 SR 2195*

7050.0185 NONDEGRADATION FOR ALL WATERS.

Subpart 1 **Policy.** The potential capacity of the water to assimilate additional wastes and the beneficial uses inherent in water resources are valuable public resources It is the policy of the state of Minnesota to protect all waters from significant degradation from point and nonpomt sources and wetland alterations, and to maintain existing water uses, aquatic and wetland habitats, and the level of water quality necessary to protect these uses.

Subp 2. **Definitions.** For the purpose of this part, the following terms have the meanings given them:

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

F. "Toxic pollutant" means a pollutant listed as toxic under section 307(a)(1) of the Clean Water Act, United States Code, title 33, section 1317(a)(1), or as defined by Minnesota Statutes, section 115 01, subdivision 20.

[For text of item G, see M R.]

[For text of subp 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 of nonsignificant dischargers, and other matters as shall be brought to the agency's attention.

[For text of subps 5 to 8, see M R]

Subp 9 **Physical alterations of wetlands.** The permit or certification applicant shall comply with part 7050 0186 if there is a proposed physical alteration that has the potential for a significant adverse impact to a designated use of a wetland and that is associated with a project that requires a National Pollutant Discharge Elimination System (NPDES) permit, a 401 certification under parts 7001 1400 to 7001 1470, or a state disposal system permit

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

History: *18 SR 2195*

7050.0186 WETLAND MITIGATION.

Subpart 1 **Policy.** It is the policy of the state to protect wetlands from significant adverse impacts on wetland designated uses Wetland mitigation maintains nondegradation of wetland designated uses

Subp 2 **Wetland mitigation principles.** The wetland mitigative sequence incorporates the following principles in descending order of priority

A avoid the impact altogether by not taking a certain action or parts of an action,

B minimize the impact by limiting the degree or magnitude of the action and its implementation, and by taking affirmative actions to rectify the impact and reduce or eliminate the impact over time, and

C mitigate the unavoidable impact to the designated uses of a wetland by compensation Compensatory mitigation shall be accomplished in the following descending order of priority of replacement

(1) restoration of a previously diminished wetland, and

(2) creation of a wetland

Subp 3 **Determination of wetland dependency.** A project is wetland dependent if wetland designated uses are essential to fulfill the basic purpose of the project. A wetland dependent project is exempt from subpart 4, but will follow the remainder of the mitigation sequence Where the proposed project is not wetland dependent, the wetland mitigation sequence in subpart 2 must be followed.

Subp 4 **Impact avoidance.** No person may cause or allow a physical alteration which has the potential for a significant adverse impact on one or more designated uses of a wetland, unless there is not a prudent and feasible alternative that would avoid impacts to the designated uses of the wetland

A. Prudent and feasible alternatives that do not involve wetlands are presumed to be available unless clearly demonstrated otherwise by the permit or certification applicant.

B If no prudent and feasible alternative is available for avoidance, potential significant adverse impacts to the designated uses of the wetland shall be minimized in compliance with subpart 5.

Subp 5 **Impact minimization.**

A The permit or certification applicant shall implement actions to minimize potential significant adverse impacts of the physical alteration

B In evaluating the applicant's actions to minimize impacts, the agency shall consider·

(1) the spatial requirements of the project,

(2) the location of existing structural or natural features that may dictate the placement or configuration of the project,

(3) the purpose of the project and how the purpose relates to placement, configuration, or density;

(4) the sensitivity of the site design to the natural features of the site, including topography, hydrology, and existing vegetation,

(5) the designated uses and spatial distribution of the wetlands on the site;

(6) individual and cumulative impacts, and

(7) the applicable minimization activities identified in Code of Federal Regulations, title 40, section 230, subpart H, as amended.

C If the potential for significant adverse impacts on designated uses remains after all actions to minimize the impacts have been incorporated into the proposed project, unavoidable impacts shall be compensated for in compliance with subpart 6

Subp 6 **Impact compensation.** The permit or certification applicant shall provide compensatory mitigation for unavoidable impacts on the designated uses of the wetland in accordance with this subpart

A Compensatory mitigation must be sufficient to ensure replacement of the diminished or lost designated uses of the wetland that was physically altered

B Compensatory mitigation shall be accomplished in the following descending order of priority of replacement

(1) restoration of a previously diminished wetland, and

(2) creation of a wetland

C. If compensatory mitigation is accomplished by restoration or creation, the replacement wetland shall be of the same type and in the same watershed as the impacted wetland, to the extent prudent and feasible.

D Compensatory mitigation shall be completed before or concurrent with the actual physical alteration of the wetland affected by the proposed project to the extent prudent and feasible.

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

History: *18 SR 2195*

7050.0200 WATER USE CLASSIFICATIONS FOR WATERS OF THE STATE.

Subpart 1 **Introduction.** Based on considerations of best usage in the interest of the public and in conformance with the requirements of the applicable statutes, the waters of the state shall be grouped into one or more of the classes in subparts 2 to 8

Subp 2. **Class 1 waters, domestic consumption.** Domestic consumption includes all waters of the state which are or may be used as a source of supply for drinking, culinary or food processing use or other domestic purposes, and for which quality control is or may be necessary to protect the public health, safety, or welfare

Subp 3 **Class 2 waters, aquatic life and recreation.** Aquatic life and recreation includes all waters of the state which do or may support fish, other aquatic life, bathing, boating, or other recreational purposes, and where quality control is or may be necessary to protect aquatic or terrestrial life or their habitats, or the public health, safety, or welfare

Subp. 4 **Class 3 waters, industrial consumption.** Industrial consumption includes all waters of the state which are or may be used as a source of supply for industrial process or cooling water, or any other industrial or commercial purposes, and for which quality control is or may be necessary to protect the public health, safety, or welfare

Subp. 5 **Class 4 waters, agriculture and wildlife.** Agriculture and wildlife includes all waters of the state which are or may be used for any agriculture purposes, including stock watering and irrigation, or by waterfowl or other wildlife, and for which quality control is or may be necessary to protect terrestrial life and its habitat or the public health, safety, or welfare

Subp 6 **Class 5 waters, aesthetic enjoyment and navigation.** Aesthetic enjoyment and navigation includes all waters of the state which are or may be used for any form of water transportation or navigation, or fire prevention, and for which quality control is or may be necessary to protect the public health, safety, or welfare

Subp 7 **Class 6 waters, other uses.** Other uses includes all waters of the state which are or may serve the above listed uses or any other beneficial uses not listed herein, including without limitation any such uses in this or any other state, province, or nation of any waters flowing through or originating in this state, and for which quality control is or may be necessary for the above declared purposes, or to conform with the requirements of the legally constituted state or national agencies having jurisdiction over such waters, or any other considerations the agency may deem proper

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, in cooperation and agreement with the Department of Natural Resources with respect to determination of fisheries values and potential, shall be used to determine the extent to which the waters of the state demonstrate·

A the existing and potential faunal and floral communities are severely limited by natural conditions as exhibited by poor water quality characteristics, lack of habitat, or lack of water, or

B the quality of the resource has been significantly altered by human activity and the effect is essentially irreversible; and

C. there are limited recreational opportunities (such as fishing, swimming, wading, or boating) in and on the water resource

The conditions in items A and C or B and C must be established by the use attainability analysis before the waters can be classified as limited resource value waters.

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

History: *18 SR 2195*

7050.0210 GENERAL STANDARDS FOR DISCHARGERS TO WATERS OF THE STATE.

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

Subp 9 **Water quality based effluent limitations.** Notwithstanding parts 7050 0213 and 7050 0214, the agency may require a specific discharger to meet effluent limitations for specific pollutants or whole effluent toxicity which are necessary to maintain the water quality of the receiving water at the standards of quality and purity established by this chapter Any effluent limitation determined to be necessary under this section shall only be required of a discharger after the discharger has been given notice of the specific effluent limitations and an opportunity for public hearing provided that compliance with the requirements of chapter 7001 regarding notice of National Pollutant Discharge Elimination System and State Disposal System permits shall satisfy the notice and opportunity for hearing requirements of this subpart

[For text of subps 10 to 13, see M R]

Subp. 13a. **Wetland pollution prohibited.** Wetland conditions shall be protected from chemical, physical, biological, or radiological changes to prevent significant adverse impacts to the following designated uses: maintaining biological diversity, preserving wildlife habitat, and providing recreational opportunities as specified in part 7050 0222, subpart 6, erosion control, groundwater recharge, low flow augmentation, stormwater retention, and stream sedimentation as specified in part 7050 0224, subpart 4, and aesthetic enjoyment as specified in part 7050.0225, subpart 2

[For text of subps 15 to 18, see M R.]

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

History: *18 SR 2195*

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**	1 milligram per liter
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

**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 arithmetic mean shall not exceed the stated value in any calendar month. 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

***Disinfection of wastewater effluents to reduce the levels of fecal coliform organisms to the stated value is required from March 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 mdustrial 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 2 **Exception for existing trickling filter facilities.** The exception for existing trickling filter facilities is

A The secondary treatment effluent limitations in subpart 1, for five–day carbonaceous biochemical oxygen demand and total suspended solids does not apply to municipal point source dischargers and other point source dischargers of sewage that meet all of the following conditions

[For text of subitems (1) and (2), see M R]

(3) The discharger has been incapable of consistently meeting the effluent limitations for five–day carbonaceous biochemical oxygen demand or total suspended solids contained in subpart 1

B For those municipal point source dischargers and other point source dischargers of sewage that meet the conditions of item A, the following effluent limitations for five–day carbonaceous biochemical oxygen demand and total suspended solids apply as the arithmetic mean of all samples collected during a calendar month

Five–day carbonaceous biochemical oxygen demand	40 milligrams per liter*
Total suspended solids	45 milligrams per liter**

*In any calendar week, the arithmetic mean for five–day carbonaceous biochemical oxygen demand shall not exceed 60 milligrams per liter

**The arithmetic mean for any calendar week shall not exceed 65 milligrams per liter for total suspended solids

C The other effluent limitations m subpart 1 apply to those municipal point source dischargers and other point source dischargers of sewage whose limitations for five–day carbonaceous biochemical oxygen demand and total suspended solids are established by this subpart.

Subp 3. **Exception for pond facilities.** The exception for pond facilities is.

A The secondary treatment effluent limitations in subpart 1 for total suspended solids does not apply to municipal point source dischargers and other point source dischargers of sewage that operate stabilization ponds or aerated ponds as the principal method of biologically treating the wastewater

[For text of item B, see M R]

C. The other effluent limitations in subpart 1 apply to those municipal point source dischargers and other point source dischargers of sewage whose limitations for total suspended solids are established by this subpart.

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

History: *18 SR 2195*

7050.0212 REQUIREMENTS FOR POINT SOURCE DISCHARGERS OF INDUSTRIAL OR OTHER WASTES.

[For text of subpart 1, see M R.]

Subp. 2 **Feedlot exemption.** The requirements of subpart 1, items B and C, do not apply to animal feedlots

Subp. 2a. **Dredge disposal exemption.** The requirements for total suspended solids and phosphorus under subparts 1, item B, and 4, do not apply to waters discharged from a dredge disposal facility and returned to the water body where the water was removed if

A best management practices and best practicable technology are established in a state disposal system permit for the facility; and

B. the designated uses as established under part 7050 0221 to 7050.0227 are maintained

[For text of subps 3 to 6, see M R]

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

History: *18 SR 2195*

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)

*The concentrations specified in part 7050.0211, subpart 1, or, if applicable, part 7050 0212 may be used m lieu thereof 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.

**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

This section 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.

Statutory Authority: *MS s 115.03; 115 44*

History: *18 SR 2195*

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)

*All effluent limitations specified in part 7050.0211, subpart 1, shall also be applicable to dischargers of sewage to Class 7 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.

Subp. 2. **Alternative secondary treatment effluent limitations.** The agency shall allow treatment works to be constructed and/or operated to produce effluents to limited resource value waters at levels up to those stated in part 7050.0211, provided that it is demonstrated that the water quality standards for limited resource value waters will be maintained during all periods of discharge from the treatment facilities

[For text of subp 3, see M.R.]

Subp. 4 **Public waters designation unaffected.** The classification of surface waters as limited resource value waters pursuant to parts 7050 0200, subpart 8, and 7050 0400 to 7050.0470 shall not supersede, alter, or replace the classification and designation of such waters as public waters pursuant to Minnesota Statutes, chapter 103G

Statutory Authority: *MS s 115.03; 115 44*

History: *18 SR 2195*

7050.0215 REQUIREMENTS FOR ANIMAL FEEDLOTS.

Subpart 1. **Definitions.** For the purpose of this part, the following terms have the meanings given them·

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

D "Treatment works" has the meaning given in Minnesota Statutes, section 115 01, subdivision 21, and includes a vegetated filter or buffer strip located between an animal feedlot or a manure storage area and a receiving water.

Subp. 2. **Effluent limitations for a discharge.**

A. Any person discharging pollutants to surface waters of the state from an animal feedlot or manure storage area who is not regulated by federal requirements under part 7050.0212, subpart 1, shall comply with the following limitations after allowance for pollutant removal by a treatment works.

5–day biochemical oxygen demand	25 milligrams per liter (arithmetic mean of all samples taken during any calendar month)

If the discharge is directly to or affects a lake or reservoir, the person discharging the pollutants shall comply with the nutrient control requirements of part 7050.0211, subpart 1

B. The effluent limitations in item A are not applicable whenever rainfall events, either chronic or catastrophic, cause an overflow from an animal feedlot or manure storage area designed, constructed, and operated.

(1) to meet the effluent limitations in item A for rainfall events less than or equal to a 25–year, 24–hour rainfall event for that location; or

[For text of subitem (2), see M.R.]

Statutory Authority: *MS s 115 03; 115.44*

History: *18 SR 2195*

7050.0216 REQUIREMENTS FOR AQUACULTURE FACILITIES.

Subpart 1. **Definitions.** For the purposes of this part, the terms in items A to J have the meanings given them

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

E. "Concentrated aquatic animal production facility" means a hatchery, fish farm, or other facility that contains, grows, or holds aquatic animals as described in subitems (1) to (4)

[For text of subitems (1) and (2), see M.R]

(3) Case–by–case designation of concentrated aquatic animal production facilities. The commissioner may designate any warm, cool, or cold water aquatic animal production facility as a concentrated aquatic animal facility upon determining that it may cause a violation of an applicable state or federal water quality rule or regulation. In making this designation, the commissioner shall consider the following factors

(a) the location and quality of the receiving waters;

(b) the holding, feeding, and production capacities of the facility, and

(c) the quantity and nature of the pollutants reaching waters of the state

A permit application is not required from a concentrated aquatic animal production facility designated under this item until the commissioner has conducted an on–site inspection of the facility and has determined that the facility is required to be regulated under the permit program. A permit will be required under this subitem only after the facility has been given notice of the commissioner's determination and an opportunity to request a hearing as provided in part 7000 1800

[For text of subitem (4), see M R.]

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

[For text of subps 2 and 3, see M R]

Subp 4 **Additional requirements.** Except as expressly excluded in this part, the construction, operation, and maintenance of a concentrated aquatic animal production facility shall comply with the requirements of parts 7050.0110 to 7050 0214 and 7050.0217 to 7050 0227.

[For text of subp 5, see M R]

Subp. 6 **Special conditions.**

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

E Water treatment and chemical additives The discharge of water treatment and chemical additives shall comply with parts 7050 0218 and 7050 0221 to 7050.0227.

Statutory Authority: *MS s 14 06, 115.03, 115.44, 116 07*

History: *18 SR 2195; 19 SR 1310*

7050.0217 OBJECTIVES FOR PROTECTION OF SURFACE WATERS FROM TOXIC POLLUTANTS.

Subpart 1. **Purpose and applicability.** The purpose of parts 7050 0217 and 7050.0218 are to establish methods for developing site–specific water quality criteria for toxic pollutants in the absence of numerical standards listed in parts 7050 0221 to 7050 0227. The site–specific numerical criteria established by these methods protect Class 1 surface waters for public and private domestic consumption and Class 2 waters for the propagation and maintenance of fish and aquatic life, the consumption of fish and edible aquatic life by humans, and the consumption of aquatic organisms by wildlife These criteria also protect the uses assigned to Class 7, limited resource value, waters as described in parts 7050.0221 to 7050 0227

Subp 2 **Objectives.** Protection of the aquatic community from the toxic effects of pollutants means the protection of no less than 95 percent of all the species in any aquatic community Greater protection may be applied to a community if economically, recreationally, or ecologically important species are very sensitive

Protection of human consumers of fish, other edible aquatic organisms, and water for drinking from surface waters means that exposure from noncarcinogenic chemicals shall be

below levels expected to produce known adverse effects; and the incremental cancer risk from exposure to carcinogenic chemicals, singly or in mixtures, shall not exceed one in 100,000. The combined risk from mixtures of carcinogens will be determined as described in part 7050.0222, subpart 7, item D.

Protection of wildlife that eat aquatic organisms means the protection of the most sensitive wildlife species or populations. Greater protection may be applied if the exposed animals include endangered or threatened wildlife species listed in chapter 6134, or in the Code of Federal Regulations, title 50, part 17, under the Endangered Species Act of 1973, United States Code, title 16, sections 1531 to 1543.

Statutory Authority: *MS s 115.03, 115.44*

History: *18 SR 2195*

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

Subpart 1. **Purpose.** The numerical water quality standards for toxic pollutants in parts 7050.0221 to 7050.0227 do not address all pollutants which may be discharged to surface waters and cause toxic effects. Therefore, methods are established in this part to address on a site-by-site and case-by-case basis the discharge into surface waters of toxic pollutants not listed in parts 7050.0221 to 7050.0227.

The agency may also adopt new standards according to Minnesota Statutes, chapter 14, to replace those listed in parts 7050.0221 to 7050.0227 that are more stringent or less stringent if new scientific evidence shows that a change in the standard is justified.

Subp. 2. **Site-specific criteria for pollutants not listed in parts 7050.0221 to 7050.0227.** Site-specific criteria for toxic pollutants not listed in parts 7050.0221 to 7050.0227 shall be derived by the commissioner using the procedures in this part.

A. A site-specific criterion so derived is specific to the point source being addressed. Any effluent limitation derived from a site-specific criterion under this subpart 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.

[For text of item B, see M.R.]

Subp. 3. **Definitions.** For the purposes of parts 7050.0217 to 7050.0227, the following terms have the meanings given them.

[For text of item A, see M.R.]

B. "Acute toxicity" means a stimulus severe enough to rapidly induce a response. In toxicity tests, a response is normally observed in 96 hours or less. Acute effects are often measured in terms of mortality or other debilitating effects, represented as LC50s or EC50s, and expressed as concentrations of mass per unit volume, percent effluent, or toxic units.

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

H. "Chronic criterion" or "CC" means the highest water concentration of a toxicant or effluent to which organisms can be exposed indefinitely without causing chronic toxicity.

I. "Chronic standard" or "CS" means the highest water concentration of a toxicant to which organisms can be exposed indefinitely without causing chronic toxicity. Chronic standards are listed in part 7050.0222.

[For text of items J to T, see M.R.]

U. "Maximum standard" or "MS" 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. Maximum standards are listed in part 7050.0222.

[For text of items V to Y, see M.R.]

Z. "Percent effluent" means the representation of acute or chronic toxicity of an effluent as a percent of whole effluent mixed in dilution water, where acute toxicity is expressed by LC50s or EC50s and chronic toxicity is expressed by NOAELs.

AA. "Reference dose" or "RfD" means an estimate of a daily exposure to the human population, including sensitive subpopulations, that is likely to be without appreciable

risk or deleterious effects over a lifetime The RfD is expressed in units of daily dose and was formerly known as the acceptable daily intake.

BB "Species mean acute value" or "SMAV" means the geometric mean of all the available and acceptable acute values for a species

CC. "Standard" means a number or numbers established for a pollutant or water quality characteristic to protect a specified beneficial use as listed in parts 7050 0221 to 7050 0227 The standard for a toxic pollutant includes the CS, MS, and FAV Some pollutants do not have an MS or an FAV due to insufficient data For these pollutants, the CS alone is the standard

DD "Toxic pollutant" has the meaning given it in part 7050 0185, subpart 2, item F

EE "Toxic unit" means a measure of acute or chronic toxicity in an effluent. One acute toxic unit (TUa) is the reciprocal of the effluent concentration that causes 50 percent effect or mortality to organisms for acute exposures (100/LC50), one chronic toxic unit (TUc) is the reciprocal of the effluent concentration that causes no observable adverse effect level on test organisms for chronic exposures (100/NOAEL)

FF "USEPA" means the United States Environmental Protection Agency

GG "Water quality characteristic" means a characteristic of natural waters, such as total hardness or pH Some water quality characteristics can affect the toxicity of pollutants to aquatic organisms

HH "Whole effluent toxicity test" means the aggregate toxic effect of an effluent measured directly by a toxicity test Effects on tested organisms are measured and expressed as toxic units or percent effluent for both acute and chronic whole effluent toxicity tests

Subp 4 **Adoption of USEPA national criteria.** The USEPA establishes aquatic life criteria under section 304(a)(1) of the Clean Water Act, United States Code, title 33, section 1314 The USEPA criteria, subject to modification as described in this subpart, are applicable to Class 2 waters of the state The USEPA has described the national methods for developing aquatic life criteria in "Guidelines for deriving national numerical water quality criteria for the protection of aquatic organisms and their uses," available through the National Technical Information Service, Springfield, VA

USEPA criteria that vary with an ambient water quality characteristic such as total hardness or pH will be established for specific waters or reaches using data available to the commissioner Central values such as the means or medians for the characteristic will be used unless there is evidence to support using different values Values for water quality characteristics can be estimated for specific waters or reaches that have no data by using data from a nearby watershed with similar chemical properties

[For text of items A and B, see M R]

C If the commissioner finds that the information that supports a USEPA criterion is no longer current or complete for reasons including, but not limited to, changes to the relationship between a water quality characteristic and toxicity, the ACR, the weight given to toxicity data for a commercially or recreationally important species, the RfD, the ql*, or the BAF; then the commissioner shall evaluate all available information and modify the criterion according to the information and with the objectives in part 7050 0217 Any effluent limitation determined to be necessary based on criteria derived under this item shall only be required after the discharger has been given notice to the specific proposed effluent limitations and an opportunity to request a hearing as provided in part 7000.1800

[For text of subps 5 to 9, see M R]

Subp 10. **Applicable criteria.** The criterion for a pollutant includes the CC, the MC, and the FAV. The criteria for toxic pollutants for surface waters are the lowest of the applicable criteria derived under this part

[For text of items A and B, see M R.]

C In the site–specific application of criteria developed in this subpart to establish an effluent limitation for National Pollutant Discharge Elimination System and State Dis-

posal System permits or to establish the degree of remedial action cleanup activities, the provisions of part 7050 0222, subpart 7, items B to E shall apply

Statutory Authority: *MS s 14 06, 115.03, 115 44, 116.07*

History: *18 SR 2195; 19 SR 1310*

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

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

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

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

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

Subp. 2. **Explanation of tables.** Class 1 standards listed in the tables in subparts 3 to 6 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

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2A CHRONIC	2A MAXIMUM	2A FAV	1B DRINKING WATER	3A/3B INDUST. CONSUMPT	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
MISCELLANEOUS									
Ammonia, un-ionized as N	ug/l	16	none	none					
Asbestos, >10 um (c)	fibers/l				7 0e+06				
Bicarbonates (HCO3)	meq/l						5		
Chloride	mg/l	230	860	1720	250(S)	50/100			
Chlorine, total residual	ug/l	6	19	38					
Color	Pt-Co	30	none	none	15(S)				
Cyanide, free	ug/l	5.2	22	45	200				
Dissolved oxygen	mg/l	7 as a daily minimum							
Fecal coliform organisms		See note No. 1 below							
Fluoride	mg/l				4				
Fluoride	mg/l				2(S)				
Foaming agents	ug/l				500(S)				
Hardness, Ca+Mg as CaCO3	mg/l					50/250			
Hydrogen sulfide	mg/l								0.02
Nitrate, as N	mg/l				10				
Nitrite, as N	mg/l				1				
Nitrate + Nitrite, as N	mg/l				10				
Odor	TON				3(S)				
Oil	ug/l	500	5000	10000					
pH	low	6.5	none	none	6.5(S)	6.5/6.0	6.0	6.0	6.0
	high	8.5	none	none	8.5(S)	8.5/9.0	8.5	9.0	9.0
Radioactive materials		See note No. 2 below							
Salinity, total	mg/l							1000	
Sodium	meq/l						60% of total cations		

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2A CHRONIC	2A MAXIMUM	2A FAV	1B DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
MISCELLANEOUS continued									
Sulfate	mg/l				250(S)				
Sulfates, wild rice present	mg/l						10		
Specific conductance	umhos/cm						1000		
Temperature	F	no material increase							
Total dissolved salts	mg/l						700		
Total dissolved solids	mg/l				500(S)				
Turbidity	NTUs	10	none	none	1-5				
METALS AND ELEMENTS									
Aluminum	ug/l	87	748	1496	50-200(S)				
Antimony	ug/l	5.5	90	180	6				
Arsenic	ug/l	2.0	360	720	50				
Barium	ug/l				2000				
Beryllium	ug/l				4.0				
Boron	ug/l						500		
Cadmium	ug/l	See note No. 3 below			5				
Chromium, +3	ug/l	See note No. 4 below							
Chromium, +6	ug/l	11	16	32					
Chromium, total	ug/l				100				
Cobalt	ug/l	2.8	436	872					
Copper	ug/l	See note No. 5 below			1000(S)				
Iron	ug/l				300(S)				
Lead	ug/l	See note No. 6 below							
Manganese	ug/l				50(S)				
Mercury	ug/l	0.0069	2.4*	4.9*	2				
Nickel	ug/l	See note No. 7 below			100				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2A CHRONIC	2A MAXIMUM	2A FAV	1B DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
METALS AND ELEMENTS continued									
Selenium	ug/l	5.0	20	40	50				
Silver	ug/l	0.12	see note No. 8 below		100(S)				
Thallium	ug/l	0.28	64	128	2				
Zinc	ug/l	See note No. 9 below			5000(S)				
ORGANICS									
Acenaphthene	ug/l	12	41	81					
Acrylonitrile (c)	ug/l	0.38	1140*	2281*					
Alachlor (c)	ug/l	3.8	800*	1600*	2				
Aldicarb	ug/l				3				
Aldicarb sulfone	ug/l				2				
Aldicarb sulfoxide	ug/l				4				
Anthracene	ug/l	0.029	0.78	1.6					
Atrazine (c)	ug/l	3.4	323	645	3				
Benzene (c)	ug/l	9.7	4487*	8974*	5				
Benzo(a)pyrene	ug/l				0.2				
Bromoform	ug/l	33	2900	5800					
Carbofuran	ug/l				40				
Carbon tetrachloride (c)	ug/l	1.9	1750*	3500*	5				
Chlordane (c)	ug/l	0.000073	1.2*	2.4*	2				
Chlorobenzene (Monochlorobenzene)	ug/l	10	423	846	100				
Chloroform (c)	ug/l	49	2235	4471					
Chlorpyrifos	ug/l	0.041	0.083	0.17					
Dalapon	ug/l				200				
DDT (c)	ug/l	0.00011	0.55*	1.1*					
1,2-Dibromo-3-chloropropane (c)	ug/l				0.2				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2A CHRONIC	2A MAXIMUM	2A FAV	1B DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
ORGANICS continued									
Dichlorobenzene (ortho)	ug/l				600				
1,4-Dichlorobenzene (para) (c)	ug/l				75				
1,2-Dichloroethane (c)	ug/l	3.5	45050*	90100*	5				
1,1-Dichloroethylene	ug/l				7				
1,2-Dichloroethylene (cis)	ug/l				70				
1,2-Dichloroethylene (trans)	ug/l				100				
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/l				70				
1,2-Dichloropropane (c)	ug/l				5				
Dieldrin (c)	ug/l	6.5e-06	1.3*	2.5*					
Di-2-ethylhexyl adipate	ug/l				400				
Di-2-ethylhexyl phthalate (c)	ug/l	1.9	none	none	6				
Di-n-Octyl phthalate	ug/l	30	825	1650					
Dinoseb	ug/l				7				
Diquat	ug/l				20				
Endosulfan	ug/l	0.0076	0.084	0.17					
Endothall	ug/l				100				
Endrin	ug/l	0.0039	0.090	0.18	2				
Ethylbenzene (c)	ug/l	68	1859	3717	700				
Ethylene dibromide	ug/l				0.05				
Fluoranthene	ug/l	7.1	199	398					
Glyphosate	ug/l				700				
Heptachlor (c)	ug/l	0.00010	0.26*	0.52*	0.4				
Heptachlor epoxide (c)	ug/l	0.00012	0.27*	0.53*	0.2				
Hexachlorobenzene (c)	ug/l	0.000061	none	none	1				
Hexachlorocyclopentadiene	ug/l				50				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2A CHRONIC	2A MAXIMUM	2A FAV	1B DRINKING WATER	3A/3B INDUST. CONSUMPT	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
ORGANICS continued									
Lindane (c) (Hexachlorocyclohexane, gamma-)	ug/l	0.0087	1.0*	2.0*	0.2				
Methoxychlor	ug/l				40				
Methylene chloride (c) (Dichloromethane)	ug/l	45	9600*	19200*	5				
Oxamyl (Vydate)	ug/l				200				
Naphthalene	ug/l	81	409	818					
Parathion	ug/l	0.013	0.07	0.13					
Pentachlorophenol	ug/l	0.93	See note No. 10 below		1				
Phenanthrene	ug/l	2.1	29	58					
Phenol	ug/l	123	2214	4428					
Picloram	ug/l				500				
Polychlorinated biphenyls (c) (PCBs, total)	ug/l	0.000014	1.0*	2.0*	0.5				
Simazine	ug/l				4				
Styrene (c)	ug/l				100				
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD-dioxin)	pg/l				30				
1,1,2,2-Tetrachloroethane (c)	ug/l	1.1	1127*	2253*					
Tetrachloroethylene (c)	ug/l	3.8	428*	857*	5				
Toluene	ug/l	253	1352	2703	1000				
Toxaphene (c)	ug/l	0.00031	0.73*	1.5*	3				
2,4,5-TP (Silvex)	ug/l				50				
1,2,4-Trichlorobenzene	ug/l				70				
1,1,1-Trichloroethane	ug/l	263	2628	5256	200				
1,1,2-Trichloroethane	ug/l				5				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2A CHRONIC	2A MAXIMUM	2A FAV	1B DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
ORGANICS continued									
1,1,2-Trichloroethylene (c)	ug/l	25	6988*	13976*	5				
2,4,6-Trichlorophenol	ug/l	2.0	102	203					
Trihalomethanes, total (c) (Bromodichloromethane) (Bromoform) (Chlorodibromomethane) (Chloroform)	ug/l				100				
Vinyl chloride (c)	ug/l	0.17	none	none	2				
Xylenes, total	ug/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 March 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; 7050.0224, subparts 2, 3 and 4.

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	EXAMPLE STANDARDS AT TH OF:				
	50	100	200	300	400
Note No. 3, CADMIUM					
CS = exp.(0.7852[ln (TH mg/l)]-3.49)	0.66	1.1	2.0	2.7	3.4
MS = exp.(1.128[ln (TH mg/l)]-3.828)	1.8	3.9	8.6	14	19
FAV = exp.(1.128[ln (TH mg/l)]-3.1349)	3.6	7.8	17	27	37

Water quality standards applicable to use Classes 1B, 2A, 3A or 3B,

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	
	50
Note No. 4, CHROMIUM +3	
CS = exp.(0.819[ln (TH mg/l)]+1.561)	117
MS = exp.(0.819[ln (TH mg/l)]+3.688)	984
FAV = exp.(0.819[ln (TH mg/l)]+4.380)	1966
Note No. 5, COPPER	
CS = exp.(0.62[ln (TH mg/l)]-0.57)	6.4
MS = exp.(0.9422[ln (TH mg/l)]-1.464)	9.2
FAV = exp.(0.9422[ln (TH mg/l)]-0.7703)	18
Note No. 6, LEAD	
CS = exp.(1.273[ln (TH mg/l)]-4.705)	1.3
MS = exp.(1.273[ln (TH mg/l)]-1.460)	34
FAV = exp.(1.273[ln (TH mg/l)]-0.7643)	68
Note No. 7, NICKEL	
CS = exp.(0.846[ln (TH mg/l)]+1.1645)	88
Not to exceed 297 ug/l	
MS = exp.(0.846[ln (TH mg/l)]+3.3612)	789
FAV = exp.(0.846[ln (TH mg/l)]+4.0543)	1578
Note No. 8, SILVER	
MS = exp.(1.72[ln (TH mg/l)]-7.2156)	0.61
FAV = exp.(1.72[ln (TH mg/l)]-6.52)	1.2
Note No. 9, ZINC	
CS = exp.(0.8473[ln (TH mg/l)]+0.7615)	59
MS = exp.(0.8473[ln (TH mg/l)]+0.8604)	65
FAV = exp.(0.8473[ln (TH mg/l)]+1.5536)	130
STANDARD THAT VARIES WITH pH	
	6.5
Note No. 10, PENTACHLOROPHENOL	
MS = exp.(1.005(pH)-4.830)	5.5
FAV = exp.(1.005(pH)-4.1373)	11

4A and 4B, and 5 continued.

EXAMPLE STANDARDS AT TH OF:			
100	200	300	400
207	365	509	644
1737	3064	4270	5405
3469	6120	8530	10797
9.8	15	19	23
18	34	50	65
35	68	100	131
3.2	7.7	13	19
82	197	331	477
164	396	663	956
158	283	297	297
1418	2549	3592	4582
2836	5098	7185	9164
2.0	6.7	13	22
4.1	13	27	44
106	191	269	343
117	211	297	379
234	421	594	758

EXAMPLE STANDARDS AT pH OF:			
7.0	7.5	8.0	8.5
9.1	15	25	41
18	30	50	82

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2Bd CHRONIC	2Bd MAXIMUM	2Bd FAV	1B/1C DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
MISCELLANEOUS									
Ammonia, un-ionized as N	ug/l	40	none	none					
Asbestos, >10 um (c)	fibers/l				7.0e+06				
Bicarbonates (HCO3)	meq/l						5		
Chloride	mg/l	230	860	1720	250(S)	50/100			
Chlorine, total residual	ug/l	6	19	38					
Color	Pt-Co				15(S)				
Cyanide, free	ug/l	5.2	22	45	200				
Dissolved oxygen	mg/l	5 as a daily minimum							
Fecal coliform organisms		See note No. 1 below							
Fluoride	mg/l				4				
Fluoride	mg/l				2(S)				
Foaming agents	ug/l				500(S)				
Hardness, Ca+Mg as CaCO3	mg/l					50/250			
Hydrogen sulfide	mg/l								0.02
Nitrate, as N	mg/l				10				
Nitrite, as N	mg/l				1				
Nitrate + Nitrite, as N	mg/l				10				
Odor	TON				3(S)				
Oil	ug/l	500	5000	10000					
pH	low	6.5	none	none	6.5(S)	6.5/6.0	6.0	6.0	6.0
	high	9.0	none	none	8.5(S)	8.5/9.0	8.5	9.0	9.0
Radioactive materials		See note No. 2 below							
Salinity, total	mg/l							1000	
Sodium	meq/l						60% of total cations		

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2Bd CHRONIC	2Bd MAXIMUM	2Bd FAV	1B/1C DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
MISCELLANEOUS continued									
Sulfate	mg/l				250(S)				
Sulfates, wild rice present	mg/l						10		
Specific conductance	umhos/cm						1000		
Temperature	F	See note No. 3 below							
Total dissolved salts	mg/l						700		
Total dissolved solids	mg/l				500(S)				
Turbidity	NTUs	25	none	none	1-5/25				
METALS AND ELEMENTS									
Aluminum	ug/l	125	1072	2145	50-200(S)				
Antimony	ug/l	5.5	90	180	6				
Arsenic	ug/l	2.0	360	720	50				
Barium	ug/l				2000				
Beryllium	ug/l				4.0				
Boron	ug/l						500		
Cadmium	ug/l	See note No. 4 below			5				
Chromium, +3	ug/l	See note No. 5 below							
Chromium, +6	ug/l	11	16	32					
Chromium, total	ug/l				100				
Cobalt	ug/l	2.8	436	872					
Copper	ug/l	See note No. 6 below			1000(S)				
Iron	ug/l				300(S)				
Lead	ug/l	See note No. 7 below							
Manganese	ug/l				50(S)				
Mercury	ug/l	0.0069	2.4*	4.9*	2				
Nickel	ug/l	See note No. 8 below			100				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2Bd CHRONIC	2Bd MAXIMUM	2Bd FAV	1B/1C DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
METALS AND ELEMENTS continued									
Selenium	ug/l	5.0	20	40	50				
Silver	ug/l	1.0	See note No. 9 below		100(S)				
Thallium	ug/l	0.28	64	128	2				
Zinc	ug/l	See note No. 10 below			5000(S)				
ORGANICS									
Acenaphthene	ug/l	12	41	81					
Acrylonitrile (c)	ug/l	0.38	1140*	2281*					
Alachlor (c)	ug/l	4.2	800*	1600*	2				
Aldicarb	ug/l				3				
Aldicarb sulfone	ug/l				2				
Aldicarb sulfoxide	ug/l				4				
Anthracene	ug/l	0.029	0.78	1.6					
Atrazine (c)	ug/l	3.4	323	645	3				
Benzene (c)	ug/l	11	4487*	8974*	5				
Benzo(a)pyrene	ug/l				0.2				
Bromoform	ug/l	41	2900	5800					
Carbofuran	ug/l				40				
Carbon tetrachloride (c)	ug/l	1.9	1750*	3500*	5				
Chlordane (c)	ug/l	0.00029	1.2*	2.4*	2				
Chlorobenzene (Monochlorobenzene)	ug/l	10	423	846	100				
Chloroform (c)	ug/l	55	2235	4471					
Chlorpyrifos	ug/l	0.041	0.083	0.17					
Dalapon	ug/l				200				
DDT (c)	ug/l	0.0017	0.55*	1.1*					
1,2-Dibromo-3-chloropropane (c)	ug/l				0.2				

Water quality standards applicable to use Classes 1B or 1C, 2Bd, 3A

SUBSTANCE OR CHARACTERISTIC	UNITS	2Bd CHRONIC	2Bd MAXIMUM
ORGANICS continued			
Dichlorobenzene (ortho)	ug/l		
1,4-Dichlorobenzene (para) (c)	ug/l		
1,2-Dichloroethane (c)	ug/l	3.8	45050*
1,1-Dichloroethylene	ug/l		
1,2-Dichloroethylene (cis)	ug/l		
1,2-Dichloroethylene (trans)	ug/l		
2,4-Dichlorophenoxyacetic acid (2,4-D)	ug/l		
1,2-Dichloropropane (c)	ug/l		
Dieldrin (c)	ug/l	0.000026	1.3*
Di-2-ethylhexyl adipate	ug/l		
Di-2-ethylhexyl phthalate (c)	ug/l	1.9	none
Di-n-Octyl phthalate	ug/l	30	825
Dinoseb	ug/l		
Diquat	ug/l		
Endosulfan	ug/l	0.029	0.28
Endothall	ug/l		
Endrin	ug/l	0.016	0.090
Ethylbenzene (c)	ug/l	68	1859
Ethylene dibromide	ug/l		
Fluoranthene	ug/l	20	199
Glyphosate	ug/l		
Heptachlor (c)	ug/l	0.00039	0.26*
Heptachlor epoxide (c)	ug/l	0.00048	0.27*
Hexachlorobenzene (c)	ug/l	0.00024	none
Hexachlorocyclopentadiene	ug/l		

or 3B, 4A and 4B, and 5 continued.

STANDARDS FOR USE CLASSES					
2Bd FAV	1B/1C DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGA- TION	4B LIVESTOCK	5 AESTHETIC
	600				
	75				
90100*	5				
	7				
	70				
	100				
	70				
	5				
2.5*					
	400				
none	6				
1650					
	7				
	20				
0.56					
	100				
0.18	2				
3717	700				
	0.05				
398					
	700				
0.52*	0.4				
0.53*	0.2				
none	1				
	50				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2Bd CHRONIC	2Bd MAXIMUM	2Bd FAV	1B/1C DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
ORGANICS continued									
Lindane (c) (Hexachlorocyclohexane, gamma-)	ug/l	0.032	4.4*	8.8*	0.2				
Methoxychlor	ug/l				40				
Methylene chloride (c) (Dichloromethane)	ug/l	46	9600*	19200*	5				
Oxamyl (Vydate)	ug/l				200				
Naphthalene	ug/l	81	409	818					
Parathion	ug/l	0.013	0.07	0.13					
Pentachlorophenol	ug/l	1.9	See note No. 11 below		1				
Phenanthrene	ug/l	2.1	29	58					
Phenol	ug/l	123	2214	4428					
Picloram	ug/l				500				
Polychlorinated biphenyls (c) (PCBs, total)	ug/l	0.000029	1.0*	2.0*	0.5				
Simazine	ug/l				4				
Styrene (c)	ug/l				100				
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD-dioxin)	pg/l				30				
1,1,2,2-Tetrachloroethane (c)	ug/l	1.5	1127*	2253*					
Tetrachloroethylene (c)	ug/l	3.8	428*	857*	5				
Toluene	ug/l	253	1352	2703	1000				
Toxaphene (c)	ug/l	0.0013	0.73*	1.5*	3				
2,4,5-TP (Silvex)	ug/l				50				
1,2,4-Trichlorobenzene	ug/l				70				
1,1,1-Trichloroethane	ug/l	263	2628	5256	200				
1,1,2-Trichloroethane	ug/l				5				

Water quality standards applicable to use Classes 1B or 1C, 2Bd, 3A or 3B, 4A and 4B, and 5 continued

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES							
		2Bd CHRONIC	2Bd MAXIMUM	2Bd FAV	1B/1C DRINKING WATER	3A/3B INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
ORGANICS continued									
1,1,2-Trichloroethylene (c)	ug/l	25	6988*	13976*	5				
2,4,6-Trichlorophenol	ug/l	2.0	102	203					
Trihalomethanes, total (c)	ug/l				100				
(Bromodichloromethane)									
(Bromoform)									
(Chlorodibromomethane)									
(Chloroform)									
Vinyl chloride (c)	ug/l	0.18	none	none	2				
Xylenes, total	ug/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 2000 organisms per 100 milliliters. The standard applies only between March 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; 7050.0224, subparts 2, 3, and 4.

Note No. 3, TEMPERATURE

5 Degrees F above natural in streams and 3 degrees F 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 F.

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	EXAMPLE STANDARDS AT TH OF:				
	50	100	200	300	400
Note No. 4, CADMIUM					
CS = exp.(0.7852[ln (TH mg/l)]-3.49)	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

Water quality standards applicable to use Classes 1B or 1C, 2Bd, 3A

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)

	50
Note No. 5, CHROMIUM +3	
CS = exp.(0.819[ln (TH mg/l)]+1.561)	117
MS = exp.(0.819[ln (TH mg/l)]+3.688)	984
FAV = exp.(0.819[ln (TH mg/l)]+4 380)	1966
Note No. 6, COPPER	
CS = exp.(0.62[ln (TH mg/l)]-0 57)	6.4
MS = exp.(0.9422[ln (TH mg/l)]-1.464)	9.2
FAV = exp.(0.9422[ln (TH mg/l)]-0.7703)	18
Note No. 7, LEAD	
CS = exp.(1.273[ln (TH mg/l)]-4.705)	1.3
MS = exp.(1.273[ln (TH mg/l)]-1.460)	34
FAV = exp.(1.273[ln (TH mg/l)]-0.7643)	68
Note No. 8, NICKEL	
CS = exp.(0.846[ln (TH mg/l)]+1.1645)	88
not to exceed 297 ug/l	
MS = exp.(0.846[ln (TH mg/l)]+3.3612)	789
FAV = exp.(0.846[ln (TH mg/l)]+4.0543)	1578
Note No. 9, SILVER	
MS = exp.(1.72[ln (TH mg/l)]-7.2156)	1.0
FAV = exp.(1.72[ln (TH mg/l)]-6.52)	1.2
The MS and FAV shall be no less than 1.0 ug/l	
Note No. 10, ZINC	
CS = exp.(0.8473[ln (TH mg/l)]+0.7615)	59
MS = exp.(0.8473[ln (TH mg/l)]+0.8604)	65
FAV = exp.(0.8473[ln (TH mg/l)]+1.5536)	130

STANDARD THAT VARIES WITH pH

	6.5
Note No. 11, PENTACHLOROPHENOL	
MS = exp.(1.005(pH)-4.830)	5.5
FAV = exp.(1.005(pH)-4.1373)	11

or 3B, 4A and 4B, and 5 continued.

EXAMPLE STANDARDS AT TH OF:			
100	200	300	400
207	365	509	644
1737	3064	4270	5405
3469	6120	8530	10797
9.8	15	19	23
18	34	50	65
35	68	100	131
3.2	7.7	13	19
82	197	331	477
164	396	663	956
158	283	297	297
1418	2549	3592	4582
2836	5098	7185	9164
2.0	6.7	13	22
4.1	13	27	44
106	191	269	343
117	211	297	379
234	421	594	758

EXAMPLE STANDARDS AT pH OF·			
7.0	7.5	8 0	8.5
9 1	15	25	41
18	30	50	82

Subp. 5. 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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES						
		2B,C&D CHRONIC	2B,C&D MAXIMUM	2B,C&D FAV	3A/3B/3C INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
MISCELLANEOUS								
Ammonia, un-ionized as N	ug/l	40	none	none				
Bicarbonates (HCO3)	meq/l					5		
Chloride	mg/l	230	860	1720	50/100/250			
Chlorine, total residual	ug/l	6	19	38				
Cyanide, free	ug/l	5.2	22	45				
Dissolved oxygen	mg/l	5 as a daily minimum, see note No. 2 below						
Fecal coliform organisms		See note No. 3 below						
Hardness, Ca+Mg as CaCO3	mg/l				50/250/500			
Hydrogen sulfide	mg/l							0.02
Oil	ug/l	500	5000	10000				
pH	low	6.5, see note No. 4 below			6.5/6.0/6.0	6.0	6.0	6.0
	high	9.0, see note No. 4 below			8.5/9.0/9.0	8.5	9.0	9.0
Radioactive materials		See note No. 5 below						
Salinity, total	mg/l						1000	
Sodium	meq/l					60% of total cations		
Sulfates, wild rice present	mg/l					10		
Specific conductance	umhos/cm					1000		
Temperature	F	See note No. 6 below						
Total dissolved salts	mg/l					700		
Turbidity	NTUs	25	none	none				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES						
		2B,C&D CHRONIC	2B,C&D MAXIMUM	2B,C&D FAV	3A/3B/3C INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
METALS AND ELEMENTS								
Aluminum	ug/l	125	1072	2145				
Antimony	ug/l	31	90	180				
Arsenic	ug/l	53	360	720				
Boron	ug/l					500		
Cadmium	ug/l	See note No. 7 below						
Chromium, +3	ug/l	See note No. 8 below						
Chromium, +6	ug/l	11	16	32				
Cobalt	ug/l	5.0	436	872				
Copper	ug/l	See note No. 9 below						
Lead	ug/l	See note No. 10 below						
Mercury	ug/l	0.0069	2.4*	4.9*				
Nickel	ug/l	See note No. 11 below						
Selenium	ug/l	5.0	20	40				
Silver	ug/l	1.0	See note No. 12 below					
Thallium	ug/l	0.56	64	128				
Zinc	ug/l	See note No. 13 below						

Water quality standards applicable to use Classes 2B, 2C or
See note No. 1 below

SUBSTANCE OR CHARACTERISTIC	UNITS	2B,C&D CHRONIC
ORGANICS		
Acenaphthene	ug/l	12
Acrylonitrile (c)	ug/l	0.89
Alachlor	ug/l	59
Anthracene	ug/l	0.029
Atrazine	ug/l	10
Benzene	ug/l	114
Bromoform	ug/l	466
Carbon tetrachloride (c)	ug/l	5.9
Chlordane (c)	ug/l	0.00029
Chlorobenzene (Monochlorobenzene)	ug/l	10
Chloroform	ug/l	224
Chlorpyrifos	ug/l	0.041
DDT (c)	ug/l	0.0017
1,2-Dichloroethane (c)	ug/l	190
Dieldrin (c)	ug/l	0.000026
Di-2-ethylhexyl phthalate (c)	ug/l	2.1
Di-n-Octyl phthalate	ug/l	30
Endosulfan	ug/l	0.031
Endrin	ug/l	0.016
Ethylbenzene (c)	ug/l	68
Fluoranthene	ug/l	20

2D; 3A, 3B, 3C or 3D; 4A and 4B or 4C; and 5 continued.

STANDARDS FOR USE CLASSES					
2B,C&D MAXIMUM	2B,C&D FAV	3A/3B/3C INDUST. CONSUMPT.	4A IRRIGA- TION	4B LIVESTOCK	5 AESTHETIC
41	81				
1140*	2281*				
800	1600				
0.78	1.6				
323	645				
4487	8974				
2900	5800				
1750*	3500*				
1.2*	2.4*				
423	846				
2235	4471				
0.083	0.17				
0.55*	1.1*				
45050*	90100*				
1.3*	2.5*				
none	none				
825	1650				
0.28	0.56				
0.090	0 18				
1859	3717				
199	398				

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES						
		2B,C&D CHRONIC	2B,C&D MAXIMUM	2B,C&D FAV	3A/3B/3C INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
ORGANICS continued								
Heptachlor (c)	ug/l	0.00039	0.26*	0.52*				
Heptachlor epoxide (c)	ug/l	0.00048	0.27*	0.53*				
Hexachlorobenzene (c)	ug/l	0.00024	none	none				
Lindane (c) (Hexachlorocyclohexane, gamma-)	ug/l	0.036	4.4*	8.8*				
Methylene chloride (Dichloromethane)	ug/l	1561	9600	19200				
Naphthalene	ug/l	81	409	818				
Parathion	ug/l	0.013	0.07	0.13				
Pentachlorophenol	ug/l	See note No. 14 below						
Phenanthrene	ug/l	2.1	29	58				
Phenol	ug/l	123	2214	4428				
Polychlorinated biphenyls (c) (PCBs, total)	ug/l	0.000029	1.0*	2.0*				
1,1,2,2-Tetrachloroethane (c)	ug/l	13	1127	2253				
Tetrachloroethylene (c)	ug/l	8.9	428	857				
Toluene	ug/l	253	1352	2703				
Toxaphene (c)	ug/l	0.0013	0.73*	1.5*				
1,1,1-Trichloroethane	ug/l	263	2628	5256				
1,1,2-Trichloroethylene (c)	ug/l	120	6988	13976				
2,4,6-Trichlorophenol	ug/l	2.0	102	203				
Vinyl chloride (c)	ug/l	9.2	none	none				
Xylenes, total	ug/l	166	1407	2814				

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

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 7050.0224, subparts 4 and 5 for site specific Dissolved Oxygen standards.
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 2000 organisms per 100 milliliters. The standard applies only between March 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: 5 Degrees F above natural in streams and 3 degrees F above natural in lakes, based on monthly average of maximun daily temperature, except in no case shall it exceed the daily average temperature of 86 degrees F.
Class 2C standard: 5 Degrees F above natural in streams and 3 degrees F above natural in lakes, based on monthly average of maximun daily temperature, except in no case shall it exceed the daily average temperature of 90 degrees F.
Class 2D standard: Maintain background

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	EXAMPLE STANDARDS AT TH OF:				
	50	100	200	300	400
Note No. 7, CADMIUM					
CS = exp.(0.7852[ln (TH mg/l)]-3.49)	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. 8, CHROMIUM +3					
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

Water quality standards applicable to use Classes 2B, 2C or 2D; 3A,

STANDARDS THAT VARY WITH TOTAL HARDNESS (TH)	
	50
Note No. 9, COPPER	
CS = exp.(0 62[ln (TH mg/l)]-0.57)	6.4
MS = exp.(0 9422[ln (TH mg/l)]-1.464)	9.2
FAV = exp.(0.9422[ln (TH mg/l)]-0.7703)	18
Note No. 10, LEAD	
CS = exp (1.273[ln (TH mg/l)]-4.705)	1.3
MS = exp (1.273[ln (TH mg/l)]-1 460)	34
FAV = exp.(1.273[ln (TH mg/l)]-0.7643)	68
Note No. 11, NICKEL	
CS = exp.(0.846[ln (TH mg/l)]+1.1645)	88
MS = exp.(0.846[ln (TH mg/l)]+3.3612)	789
FAV = exp.(0.846[ln (TH mg/l)]+4.0543)	1578
Note No. 12, SILVER	
MS = exp.(1.72[ln (TH mg/l)]-7.2156)	1.0
FAV = exp.(1.72[ln (TH mg/l)]-6.52)	1.2
The MS and FAV shall be no less than 1.0 ug/l	
Note No. 13, ZINC	
CS = exp.(0.8473[ln (TH mg/l)]+0 7615)	59
MS = exp.(0.8473[ln (TH mg/l)]+0.8604)	65
FAV = exp.(0.8473[ln (TH mg/l)]+1.5536)	130
STANDARD THAT VARIES WITH pH	
	6.5
Note No. 14, PENTACHLOROPHENOL	
CS = exp.(1.005(pH)-5.290)	3.5
not to exceed 5.5 ug/l	
MS = exp.(1.005(pH)-4.830)	5.5
FAV = exp.(1.005(pH)-4.1373)	11

3B, 3C or 3D; 4A and 4B or 4C; and 5 continued.

EXAMPLE STANDARDS AT TH OF:			
100	200	300	400
9.8	15	19	23
18	34	50	65
35	68	100	131
3.2	7.7	13	19
82	197	331	477
164	396	663	956
158	283	399	509
1418	2549	3592	4582
2836	5098	7185	9164
2.0	6.7	13	22
4.1	13	27	44
106	191	269	343
117	211	297	379
234	421	594	758

EXAMPLE STANDARDS AT pH OF:			
7.0	7.5	8.0	8.5
5.5	5.5	5.5	5.5
9.1	15	25	41
18	30	50	82

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

SUBSTANCE OR CHARACTERISTIC	UNITS	STANDARDS FOR USE CLASSES				
		7 LIMITED RESOURCE	3C INDUST. CONSUMPT.	4A IRRIGATION	4B LIVESTOCK	5 AESTHETIC
Bicarbonates (HCO3)	meq/l			5		
Boron	ug/l			500		
Chloride	mg/l	230	250			
Dissolved oxygen		See note # 1 below				
Fecal coliform organisms		See note # 2 below				
Hardness, Ca+Mg as CaCO3	mg/l		500			
Hydrogen sulfide	mg/l					0.02
pH	low	6.0	6.0	6.0	6.0	6.0
	high	9.0	9.0	8.5	9.0	9.0
Radioactive materials		See note # 3 below				
Salinity, total	mg/l				1000	
Sodium	meq/l			60% of total cations		
Specific conductance	umhos/cm			1000		
Sulfates, wild rice present	mg/l			10		
Total dissolved salts	mg/l			700		
Toxic Pollutants		See note # 4 below				

Note # 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 # 2, FECAL COLIFORM ORGANISMS

Not to exceed 1000 organisms per 100 milliliters in any calendar month as determined by the logarithmic mean of a minimum of five samples, 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 May 1 and October 31.

Note # 3, RADIOACTIVE MATERIALS

See parts 7050.0224, subparts 2, 3 and 4.

Note # 4, TOXIC POLLUTANTS

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

Statutory Authority: *MS s 115.03, 115.44*

History: *18 SR 2195*

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

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 domestic consumption designated public uses and benefits If the standards in this part are exceeded in waters of the state that have the Class 1 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses

Subp 2 **Class 1A waters; domestic consumption.** The quality of Class 1A waters of the state shall be such that without treatment of any kind the raw waters will meet in all respects 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 section 141 61 and 141 62, as amended through July 17, 1992 These Environmental Protection Agency standards are adopted and incorporated by reference These standards will ordinarily be restricted to underground waters with a high degree of natural protection

Subp 3 **Class 1B waters.** The quality of Class 1B waters of the state shall be such that with approved disinfection, such as simple chlorination or its equivalent, 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 These Environmental Protection Agency standards, as modified in this part, are adopted and incorporated by reference. These standards will ordinarily be restricted to surface and underground waters with a moderately high degree of natural protection and apply to these waters m the untreated state

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 mg/l 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

Subp 5 **Class 1D waters.** The quality of Class 1D waters of the state shall be such that after treatment consisting of coagulation, sedimentation, filtration, storage, and chlorination, plus additional pre, post, or intermediate stages of treatment, 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 standards for the substances identified below shall apply These Environmental Protection Agency standards, as modified m this part, are adopted and incorporated by reference These standards will ordinarily be restricted to surface waters, and groundwaters m 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 not be exceeded in the raw waters before treatment

Substance or Characteristic	Class 1D Standard
Arsenic (As)	0 05 milligram per liter
Barium (Ba)	1 milligram per liter
Cadmium (Cd)	0 01 milligram per liter
Chromium (Hexavalent, Cr)	0 05 milligram per liter
Cyanide (CN)	0 2 milligram per liter
Fluoride (F)	1 5 milligrams per liter
Lead (Pb)	0 05 milligram per liter
Selenium (Se)	0 01 milligram per liter
Silver (Ag)	0.05 milligram per liter
Radioactive material	Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as prescribed by the appropriate authority having control over their use

Subp 6 **Additional standards.** In addition to the standards in subparts 2 to 5, no sewage, industrial waste, or other wastes from point or nonpoint sources, treated or untreated, shall be discharged into or permitted by any person to gain access to any waters of the state classified for domestic consumption so as to cause any material undesirable increase in the taste, hardness, temperature, chronic toxicity, corrosiveness, or nutrient content, or in any other manner to impair the natural quality or value of the waters for use as a source of drinking water

Statutory Authority: *MS s 115 03, 115.44*

History: *18 SR 2195*

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

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 and having human health–based standards followed by a (c) Subpart 7, item E, should be referenced for FAV and MS values noted with an asterisk (*)

Substance or Characteristic (c) = carcinogen	Class 2A Standard CS	MS	FAV
Acenaphthene µg/l	12	41	81
Acrylomtrile (c) µg/l	0.38	1140*	2281*
Alachlor (c) µg/l	3.8	800*	1600*
Aluminum, total µg/l	87	748	1496
Ammonia un–ionized as N µg/l	16	none	none

The percent un–iomzed 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 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

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

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

	Class 2A Standards continued		
	CS	MS	FAV
Anthracene µg/l	0.029	0.78	1.6
Antimony µg/l	5.5	90	180
Arsenic, total µg/l	2.0	360	720
Atrazine (c) µg/l	3.4	323	645
Benzene (c) µg/l	9.7	4487*	8974*
Bromoform µg/l	33	2900	5800
Cadmium, total µg/l			
The CS shall not exceed.	exp.(0.7852[ln(total hardness mg/l)]-3.49)		
The MS shall not exceed	exp.(1.128[ln(total hardness mg/l)]-3.828)		
The FAV shall not exceed.	exp.(1.128[ln(total hardness mg/l)]-3.1349)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard.

Cadmium standards in µg/l at various hardness values

Hardness mg/l			
50	0.66	1.8	3.6
100	1.1	3.9	7.8
200	2.0	8.6	17.1

	Class 2A Standards continued		
	CS	MS	FAV
Carbon tetrachloride (c) µg/l	1.9	1750*	3500*
Chlordane (c) µg/l	0.000073	1.2*	2.4*
Chloride mg/l	230	860	1720
Chlorine, total residual µg/l	6	19	38

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

	Class 2A Standards continued		
	CS	MS	FAV
Chlorobenzene µg/l (Monochlorobenzene)	10	423	846
Chloroform (c) µg/l	49	2235	4471

Chlorpyrifos µg/l	0 041	0 083	0 17
Chromium +3, total µg/l			
The CS shall not exceed	exp (0 819[ln(total hardness mg/l)]+1 561)		
The MS shall not exceed	exp.(0.819[ln(total hardness mg/l)]+3 688)		
The FAV shall not exceed.	exp (0 819[ln(total hardness mg/l)]+4 380)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used m the calculation of the standard

Chromium +3 standards in µg/l at various hardness values

Hardness mg/l			
50	117	984	1966
100	207	1737	3469
200	365	3064	6120

Class 2A Standards continued

	CS	MS	FAV
Chromium +6, total µg/l	11	16	32
Cobalt µg/l	2.8	436	872
Color value Pt –Co units	30	none	none
Copper, total µg/l			
The CS shall not exceed	exp (0 62[ln(total hardness mg/l)]–0 57).		
The MS shall not exceed	exp (0 9422[ln(total hardness mg/l)]–1 464)		
The FAV shall not exceed:	exp (0.9422[ln(total hardness mg/l)]–0 7703).		

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard.

Copper standards in µg/l at various hardness values

Hardness mg/l			
50	6.4	9.2	18
100	9 8	18	35
200	15	34	68

Class 2A Standards continued

	CS	MS	FAV
Cyanide, free µg/l	5 2	22	45
Dissolved oxygen mg/l	7 as a daily minimum	none	none

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)

	Class 2A Standards continued CS	MS	FAV
DDT (c) µg/l	0 00011	0 55*	1 1*
1,2–Dichloroethane (c) µg/l	3 5	45050*	90100*
Dieldrin (c) µg/l	0 0000065	1 3*	2 5*
Di–2–Ethylhexyl phthalate (c) µg/l	1 9	none	none
Di–n–Octyl phthalate µg/l	30	825	1650
Endosulfan µg/l	0 0076	0 084	0 17
Endrin µg/l	0 0039	0 090	0 18
Ethylbenzene µg/l	68	1859	3717
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 March 1 and October 31

	Class 2A Standards continued CS	MS	FAV
Fluoranthene µg/l	7 1	199	398
Heptachlor (c) µg/l	0 00010	0.26*	0 52*
Heptachlor epoxide (c) µg/l	0 00012	0 27*	0 53*
Hexachlorobenzene (c) µg/l	0.000061	none	none
Lead, total µg/l			
The CS shall not exceed.	exp (1 273[ln(total hardness mg/l)]–4 705)		
The MS shall not exceed.	exp (1.273[ln(total hardness mg/l)]–1 460)		
The FAV shall not exceed	exp (1 273[ln(total hardness mg/l)]–0 7643)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Lead standard in µg/l at various hardness values

Hardness mg/l			
50	1 3	34	68
100	3 2	82	164
200	7 7	197	396

	Class 2A Standards continued CS	MS	FAV
Lindane (c) µg/l (Hexachlorocyclohexane, gamma–)	0 0087	1 0*	2 0*
Mercury, total µg/l	0 0069	2 4*	4 9*
Methylene chloride (c) µg/l (Dichloro–methane)	45	9600*	19200*
Naphthalene µg/l	81	409	818

Nickel, total µg/l

The CS shall not exceed the human health–based criterion of 297 µg/l For waters with total hardness values less than 212 mg/l, the CS shall not exceed.	exp (0 846[ln(total hardness mg/l)]+1 1645).
The MS shall not exceed	exp.(0 846[ln(total hardness mg/l)]+3 3612)
The FAV shall not exceed	exp (0 846[ln(total hardness mg/l)]+4 0543)

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Nickel standards in µg/l at various hardness values

Hardness mg/l			
50	88	789	1578
100	158	1418	2836
200	283	2549	5098

	Class 2A Standards continued CS	MS	FAV
Oil µg/l	500	5000	10000
Parathion µg/l	0 013	0.07	0 13
Pentachlorophenol µg/l			
The CS shall not exceed.	0.93		
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 at various pH values

pH			
7 0	0 93	9.1	18
7.5	0 93	15	30
8.0	0 93	25	50

pH value not less than 6 5 nor greater than 8.5

	Class 2A Standards continued CS	MS	FAV
Phenanthrene µg/l	2 1	29	58
Phenol µg/l	123	2214	4428
Polychlorinated biphenyls, total (c) µg/l	0.000014	1 0*	2 0*
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

	Class 2A Standards continued CS	MS	FAV
Selenium, total µg/l	5 0	20	40
Silver, total µg/l			
The CS shall not exceed.	0.12.		
The MS shall not exceed.	exp.(1 72[ln(total hardness mg/l)]–7.2156) and		
The FAV shall not exceed.	exp.(1 72[ln(total hardness mg/l)]–6.52) 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 in the calculation of the standard.

Silver standards in µg/l at various hardness values

Hardness mg/l			
50	n/a	0.61	1 2
100	n/a	2.0	4 1
200	n/a	6 7	13

Temperature

No material increase

	Class 2A Standards continued CS	MS	FAV
1,1,2,2–Tetrachloroethane (c) µg/l	1.1	1127*	2253*
Tetrachloroethylene (c) µg/l	3 8	428*	857*
Thallium µg/l	0 28	64	128
Toluene µg/l	253	1352	2703
Toxaphene (c) µg/l	0 00031	0 73*	1 5*
1,1,1–Trichloroethane µg/l	263	2628	5256
1,1,2–Trichloroethylene (c) µg/l	25	6988*	13976*
2,4,6–Trichlorophenol µg/l	2.0	102	203
Turbidity value NTUs	10	none	none
Vinyl chloride (c) µg/l	0.17	none	none
Xylene, total m, p, and o µg/l	166	1407	2814
Zinc, total µg/l			
The CS shall not exceed	exp (0 8473[ln(total hardness mg/l)]+0.7615)		
The MS shall not exceed:	exp (0 8473[ln(total hardness mg/l)]+0 8604)		
The FAV shall not exceed	exp (0 8473[ln(total hardness mg/l)]+1.5536)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Zinc standards in µg/l at various hardness values

Hardness mg/l			
50	59	65	130
100	106	117	234
200	191	211	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 standards for waters listed in subpart 2 shall apply to these waters except as listed below, with substances considered carcinogenic and having human health–based standards followed by a (c) Part 7050 0222, subpart 7, item E, should be referenced for FAV and MS values noted with an asterisk (*)

Substance or Characteristic (c) = carcinogen	Class 2Bd Standard CS	MS	FAV
Alachlor (c) µg/l	4 2	800*	1600*
Aluminum, total µg/l	125	1072	2145
Ammonia un–ionized as N µg/l	40	none	none

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

	Class 2Bd Standards continued CS	MS	FAV
Benzene (c) µg/l	11	4487*	8974*
Bromoform µg/l	41	2900	5800
Cadmium, total µg/l			
The CS shall not exceed	exp (0 7852[ln(total hardness mg/l)]–3 49)		
The MS shall not exceed	exp (1 128[ln(total hardness mg/l)]–1.685)		
The FAV shall not exceed.	exp (1 128[ln(total hardness mg/l)]–0 9919)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Cadmium standards in µg/l at various hardness values

Hardness mg/l			
50	0.66	15	31
100	1 1	33	67
200	2 0	73	146

	Class 2Bd Standards continued CS	MS	FAV
Chlordane (c) µg/l	0 00029	1 2*	2 4*
Chloroform (c) µg/l	55	2235	4471
Color value	none	none	none
Dissolved oxygen mg/l	5 as a daily minimum	none	none

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)

	Class 2Bd Standards continued CS	MS	FAV
DDT (c) µg/l	0 0017	0 55*	1 1*
1,2–Dichloroethane (c) µg/l	3 8	45050*	90100*
Dieldrin (c) µg/l	0 000026	1 3*	2.5*
Endosulfan µg/l	0.029	0 28	0 56
Endrin µg/l	0 016	0.090	0 18
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 March 1 and October 31

	Class 2Bd Standards continued CS	MS	FAV
Fluoranthene µg/l	20	199	398
Heptachlor (c) µg/l	0 00039	0 26*	0 52*
Heptachlor epoxide (c) µg/l	0 00048	0 27*	0 53*
Hexachlorobenzene (c) µg/l	0.00024	none	none
Lindane (c) µg/l (Hexachlorocyclohexane gamma–)	0 032	4.4*	8 8*
Methylene chloride (c) µg/l (Dichloromethane)	46	9600*	19200*
pH value Not less than 6 5 nor greater than 9 0			
Pentachlorophenol µg/l			
The CS shall not exceed:	1 9 µg/l		
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 at various pH values

pH			
7 0	1.9	9 1	18
7 5	1 9	15	30
8 0	1 9	25	50

	Class 2Bd Standards continued CS	MS	FAV
Polychlorinated biphenyls, total (c) µg/l	0 000029	1.0*	2 0*
Silver, total µg/l			
The CS shall not exceed	1 0.		
The MS shall not exceed	exp (1 72[ln(total hardness mg/l)]–7 2156) and		

The FAV shall not exceed	exp (1 72[ln(total hardness mg/l)]–6 52) 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 in the calculation of the standard

Silver standards in µg/l at various hardness values

Hardness mg/l			
50	n/a	1 0	1.2
100	n/a	2.0	4.1
200	n/a	6.7	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

	Class 2Bd Standards continued		
	CS	MS	FAV
1,1,2,2–Tetrachloro–ethane (c) µg/l	1 5	1127*	2253*
Toxaphene (c) µg/l	0.0013	0.73*	1 5*
Turbidity value NTUs	25	none	none
Vmyl chloride (c) µg/l	0.18	none	none

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 and having human health–based standards followed by a (c). Part 7050 0222, subpart 7, item E, should be referenced for FAV and MS values noted with an asterisk (*)

Substance or Characteristic (c) = carcinogen	Class 2B Standard CS	MS	FAV
Acenaphthene µg/l	12	41	81
Acrylomtrile (c) µg/l	0 89	1140*	2281*
Alachlor µg/l	59	800	1600
Aluminum, total µg/l	125	1072	2145
Ammonia un–ionized as N µg/l	40	none	none

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

	Class 2B Standards continued		
	CS	MS	FAV
Anthracene µg/l	0 029	0.78	1 6
Antimony µg/l	31	90	180
Arsenic, total µg/l	53	360	720
Atrazine (c) µg/l	10	323	645
Benzene µg/l	114	4487	8974
Bromoform µg/l	466	2900	5800

Cadmium, total µg/l

The CS shall not exceed	exp (0.7852[ln(total hardness mg/l)]–3 49).
The MS shall not exceed	exp (1 128[ln(total hardness mg/l)]–1 685)
The FAV shall not exceed	exp.(1 128[ln(total hardness mg/l)]–0.9919)

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Cadmium standards in µg/l at various hardness values

Hardness mg/l			
50	0 66	15	31
100	1 1	33	67
200	2 0	73	146

	Class 2B Standards continued CS	MS	FAV
Carbon tetra–chloride (c) µg/l	5.9	1750*	3500*
Chlordane (c) µg/l	0 00029	1 2*	2 4*
Chloride mg/l	230	860	1720
Chlorine, total residual µg/l	6	19	38

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

	Class 2B Standards continued CS	MS	FAV
Chlorobenzene µg/l (Monochlorobenzene)	10	423	846
Chloroform µg/l	224	2235	4471
Chlorpyrifos µg/l	0.041	0 083	0 17

Chromium +3, total µg/l

The CS shall not exceed	exp (0 819[ln(total hardness mg/l)]+1 561)
The MS shall not exceed	exp.(0 819[ln(total hardness mg/l)]+3.688).
The FAV shall not exceed	exp.(0.819[ln(total hardness mg/l)]+4 38)

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Chromium +3 standards in µg/l at various hardness values

Hardness mg/l			
50	117	984	1966
100	207	1737	3469
200	365	3064	6120

	Class 2B Standards continued		
	CS	MS	FAV
Chromium +6, total µg/l	11	16	32
Cobalt µg/l	5	436	872
Copper, total µg/l			
The CS shall not exceed	exp (0 62[ln(total hardness mg/l)]–0 57)		
The MS shall not exceed	exp (0 9422[ln(total hardness mg/l)]–1 464)		
The FAV shall not exceed	exp (0 9422[ln(total hardness mg/l)]–0 7703)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Copper standards in µg/l at various hardness values

Hardness mg/l			
50	6 4	9.2	18
100	9 8	18	35
200	15	34	68

	Class 2B Standards continued		
	CS	MS	FAV
Cyanide, free µg/l	5 2	22	45
Dissolved oxygen mg/l	5 as a daily minimum	none	none

This standard applies to all Class 2 waters except for the reach 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 five milligrams per liter as a daily average from April 1 through November 30, and not less than four milligrams per liter at other times.

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).

	Class 2B Standards continued		
	CS	MS	FAV
DDT (c) µg/l	0.0017	0 55*	1 1*
1,2–Dichloroethane (c) µg/l	190	45050*	90100*
Dieldrin (c) µg/l	0.000026	1 3*	2 5*
Di–2–Ethylhexyl phthalate (c) µg/l	2 1	none	none
Di–n–Octyl phthalate µg/l	30	825	1650
Endosulfan µg/l	0.031	0 28	0 56
Endrin µg/l	0 016	0 090	0.18
Ethylbenzene µg/l	68	1859	3717
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 March 1 and October 31

	Class 2B Standards continued CS	MS	FAV
Fluoranthene µg/l	20	199	398
Heptachlor (c) µg/l	0 00039	0 26*	0.52*
Heptachlor epoxide (c) µg/l	0 00048	0 27*	0 53*
Hexachlorobenzene (c) µg/l	0 00024	none	none
Lead, total µg/l			
The CS shall not exceed.	exp (1 273[ln(total hardness mg/l)]–4 705)		
The MS shall not exceed	exp (1 273[ln(total hardness mg/l)]–1 460)		
The FAV shall not exceed·	exp (1 273[ln(total hardness mg/l)]–0 7643)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used m the calculation of the standard.

Lead standards in µg/l at various hardness values

Hardness mg/l			
50	1 3	34	68
100	3 2	82	164
200	7.7	197	396

	Class 2B Standards continued CS	MS	FAV
Lindane (c) µg/l (Hexachlorocyclohexane gamma–)	0 036	4 4*	8 8*
Mercury, total µg/l	0 0069	2 4*	4 9*
Methylene chloride µg/l (Dichloromethane)	1561	9600	19200
Naphthalene µg/l	81	409	818
Nickel, total µg/l			
The CS shall not exceed	exp (0 846[ln(total hardness mg/l)]+1 1645)		
The MS shall not exceed.	exp (0 846[ln(total hardness mg/l)]+3.3612)		
The FAV shall not exceed	exp (0 846[ln(total hardness mg/l)]+4 0543)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used m the calculation of the standard.

Nickel standards in µg/l at various hardness values

Hardness mg/l			
50	88	789	1578
100	158	1418	2836
200	283	2549	5098

	Class 2B Standards continued CS	MS	FAV
Oil µg/l	500	5000	10000
Parathion µg/l	0 013	0 07	0 13

Pentachlorophenol µg/l

For waters with pH values greater than 6 95, the CS shall not exceed the human health–based criterion of 5 5 µg/l For waters with pH values less than 6 96,
The CS shall not exceed exp (1 005[pH]–5 290)
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 at various pH values

pH			
7 0	5 5	9 1	18
7 5	5 5	15	30
8 0	5 5	25	50

pH value
not less than 6 5
nor greater than 9 0

Class 2B Standards continued

	CS	MS	FAV
Phenanthrene µg/l	2 1	29	58
Phenol µg/l	123	2214	4428
Polychlorinated biphenyls, total (c) µg/l	0 000029	1 0*	2 0*
Radioactive materials			

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

Class 2B Standards continued

	CS	MS	FAV
Selenium, total µg/l	5 0	20	40
Silver, total µg/l			
The CS shall not exceed	1 0		
The MS shall not exceed	exp.(1 72[ln(total hardness mg/l)]–7.2156) and		
The FAV shall not exceed	exp (1 72[ln(total hardness mg/l)]–6 52) 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 in the calculation of the standard.

Silver standards in µg/l at various hardness values

Hardness mg/l			
50	n/a	1 0	1 2
100	n/a	2 0	4 1
200	n/a	6.7	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

	Class 2B Standards continued		
	CS	MS	FAV
1,1,2,2–Tetrachloroethane (c) µg/l	13	1127	2253
Tetrachloroethylene (c) µg/l	8.9	428	857
Thallium µg/l	0 56	64	128
Toluene µg/l	253	1352	2703
Toxaphene (c) µg/l	0 0013	0 73*	1 5*
1,1,1–Trichloroethane µg/l	263	2628	5256
1,1,2–Trichloroethylene (c) µg/l	120	6988	13976
2,4,6–Trichlorophenol µg/l	2.0	102	203
Turbidity value NTUs	25	none	none
Vinyl chloride (c) µg/l	9 2	none	none
Xylene, total m, p, and o µg/l	166	1407	2814
Zinc, total µg/l			
The CS shall not exceed·	exp.(0.8473[ln(total hardness mg/l)]+0 7615)		
The MS shall not exceed	exp (0.8473[ln(total hardness mg/l)]+0 8604)		
The FAV shall not exceed:	exp.(0.8473[ln(total hardness mg/l)]+1 5536)		

For hardness values greater than 400 mg/l, 400 mg/l shall be used in the calculation of the standard

Zinc standards in µg/l at various hardness values

Hardness mg/l			
50	59	65	130
100	106	117	234
200	191	211	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	Class 2C Standard		
	CS	MS	FAV
Dissolved oxygen mg/l	5 as a daily minimum	none	none

This standard applies to all Class 2 waters except for the reach 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 Mis-

sissippi River the standard is not less than five milligrams per liter as a daily average from April 1 through November 30, and not less than four milligrams per liter at other times For the specified reach of the Minnesota River the standard shall be not less than five milligrams per liter as a daily average year–round

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)

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

Subp 6 **Class 2D waters.** The quality of Class 2D wetlands shall be such as to permit the propagation and maintenance of a healthy community of aquatic and terrestrial species indigenous to wetlands, and their habitats Wetlands also add to the biological diversity of the landscape These waters shall be suitable for boating and other forms of aquatic recreation for which the wetland may be usable The standards for Class 2B waters listed under subpart 4 shall apply to these waters except as listed below

Substance or Characteristic	Class 2D Standard
Dissolved oxygen	If background is less than 5 0 mg/l as a daily minimum, maintain background*
pH	Maintain background
Temperature	Maintain background

*"Maintain background" means the concentration of the water quality substance or characteristic shall not deviate from the range of natural background concentrations or conditions such that there is a potential significant adverse impact to the designated uses

Activities in wetlands which involve the normal farm practices of planting with annually seeded crops or the utilization of a crop rotation seeding of pasture grasses or legumes, including the recommended applications of fertilizer and pesticides, are excluded from the standards in this subpart and the wetland standards in parts 7050 0224, subpart 4, 7050.0225, subpart 2, and 7050 0227 All other activities in these wetlands must meet water quality standards

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

A For all classes of aquatic life and recreation waters, the aquatic habitat, which includes the waters of the state and stream bed, shall not be degraded in any material manner, there shall be no material increase in undesirable slime growths or aquatic plants, including algae, nor shall there be any significant increase in harmful pesticide or other residues in the waters, sediments, and aquatic flora and fauna, the normal fishery and lower aquatic biota upon which it is dependent and the use thereof shall not be seriously impaired or endangered, the species composition shall not be altered materially, and the propagation or migration of the fish and other biota normally present shall not be prevented or hindered by the discharge of any sewage, industrial waste, or other wastes to the waters

No sewage, industrial waste, or other wastes from point or nonpoint sources shall be discharged into any of the waters of this category so as to cause any material change in any other substances or characteristics which may impair the quality of the waters of the state or the aquatic biota of any of the classes in subparts 2 to 6 or in any manner render them unsuitable or objectionable for fishing, fish culture, or recreational uses. Additional selective limits or changes in the discharge bases may be imposed on the basis of local needs

B To prevent acutely toxic conditions, concentrations of toxic pollutants from point or nonpoint sources must not exceed the FAV as a one–day average at the point of dis-

charge or in the surface water consistent with parts 7050.0210, subpart 5, 7050 0211, subpart 1; 7050 0212, subpart 6, and 7050 0214, subpart 1

If a discharge is composed of a mixture of more than one chemical, and the chemicals have the same mode of toxic action, the commissioner has the option to apply an additive model to determine the toxicity of the mixture using the following formula

$$\frac{C1}{FAV1} + \frac{C2}{FAV2} + \ldots + \frac{Cn}{FAVn}$$

equals a value of one or more, an acutely toxic condition is indicated

where: C1 . . . Cn is the concentration of the first to the nth toxicant
FAV1 . . . FAVn is the FAV for the first to the nth toxicant

C. To prevent chronically toxic conditions, concentrations of toxic pollutants must not exceed the applicable CS or MS in surface waters outside allowable mixing zones as described in part 7050 0210, subpart 5 The CS and MS will be averaged over the following durations. the MS will be a one–day average, the CS, based on toxicity to aquatic life, will be a four–day average, and the CS, based on human health or wildlife toxicity, will be a 30–day average

D. Concentrations of carcinogenic chemicals from point or nonpoint sources, singly or in mixtures, should not exceed a risk level of one chance in 100,000 in surface waters Carcinogenic chemicals will be considered additive in their effect according to the following formula unless an alternative model is supported by available scientific evidence The additive formula applies to chemicals that have a human health–based standard calculated with a cancer potency factor

$$\frac{C1}{CC1} + \frac{C2}{CC2} + \ldots + \frac{Cn}{CCn}$$

equals a value of one or more, a risk level greater than 10^{-5} is indicated

where C1 . . . Cn is the concentration of the first to the nth carcinogen.
CC1 . . . CCn is the drinking water plus fish consumption criterion (dfCC) or fish consumption criterion (fCC) for the first to nth carcinogenic chemical

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

Subp 8 **Site–specific modifications of standards.** The standards in subparts 2 to 6 are subject to review and modification as applied to a specific surface water reach or segment in the course of development of a permit effluent limitation or the evaluation of a remedial action cleanup activity If site–specific information is available that shows that a site–specific modification is more appropriate than the statewide standard for a particular water or reach to be protected by the permit or cleanup activity, the site–specific information will be applied

The information supporting a site–specific modification can be provided by the commissioner, or by any person outside the agency The commissioner shall evaluate all data in

support of a modified standard and determine whether a change in the standard for a specific water or reach is justified

Any effluent limitation determined to be necessary based on a modified standard shall only be required after the discharger has been given notice to the specific proposed effluent limitations and an opportunity to request a hearing as provided in part 7000.1800.

Statutory Authority: *MS s 14 06, 115 03, 115 44, 116.07*

History: *18 SR 2195, 19 SR 1310*

7050.0223 SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 3 WATERS OF THE STATE; INDUSTRIAL CONSUMPTION.

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 industrial consumption designated public uses and benefits If the standards m this part are exceeded in waters of the state that have the Class 3 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses.

Subp 2. **Class 3A waters; industrial consumption.** The quality of Class 3A waters of the state shall be such as to permit their use without chemical treatment, except softening for groundwater, for most industrial purposes, except food processing and related uses, for which a high quality of water is required The quality shall be generally comparable to Class 1B waters for domestic consumption, except for the following·

Substance or Characteristic	Class 3A Standard
Chlorides (Cl)	50 milligrams per liter
Hardness, Ca + Mg as $CaCO_3$	50 milligrams per liter
pH value	6 5 – 8.5

Subp 3 **Class 3B waters.** The quality of Class 3B waters of the state shall be such as to permit their use for general industrial purposes, except for food processing, with only a moderate degree of treatment The quality shall be generally comparable to Class 1D waters of the state used for domestic consumption, except the following

Substance or Characteristic	Class 3B Standard
Chlorides (Cl)	100 milligrams per liter
Hardness, Ca + Mg as $CaCO_3$	250 milligrams per liter
pH value	6 0 – 9.0

Subp 4. **Class 3C waters.** The quality of Class 3C waters of the state shall be such as to permit their use for industrial cooling and materials transport without a high degree of treatment being necessary to avoid severe fouling, corrosion, scaling, or other unsatisfactory conditions. The following shall not be exceeded in the waters of the state:

Substance or Characteristic	Class 3C Standard
Chlorides (Cl)	250 milligrams per liter
Hardness, Ca + Mg as $CaCO_3$	500 milligrams per liter
pH value	6 0 – 9 0

Subp 5 **Class 3D waters.** The quality of Class 3D wetlands shall be such as to permit their use for general industrial purposes, except for food processing, with only a moderate degree of treatment The following standards apply

Substance or Characteristic	Class 3D Standard
Chlorides (Cl)	Maintain background
Hardness, Ca + Mg as $CaCO_3$	Maintain background
pH	Maintain background

For the purposes of this subpart, "maintain background" means the concentration of the water quality substance or characteristic shall not deviate from the range of natural back-

ground concentrations or conditions such that there is a potential significant adverse impact to the designated uses.

Subp 6. **Additional standards.** Additional selective limits may be imposed for any specific waters of the state as needed.

In addition to the standards in subparts 2 to 5, no sewage, industrial waste, or other wastes from point or nonpomt sources, treated or untreated, shall be discharged into or permitted by any person to gain access to any waters of the state classified for industrial purposes so as to cause any material impairment of their use as a source of industrial water supply.

Statutory Authority: *MS s 115 03, 115.44*

History: *18 SR 2195*

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

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 agriculture and wildlife designated public uses and benefits If the standards in this part are exceeded in waters of the state that have the Class 4 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses

Subp 2. **Class 4 waters; agriculture and wildlife.** 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
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

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

Substance or Characteristic	Class 4B Standard
pH value	6 0 – 9 0
Total salinity	1,000 milligrams per liter

Radioactive materials	Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as prescribed by the appropriate authority having control over their use
Toxic substances	None at levels harmful either directly or indirectly

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

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

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

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

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

History: *18 SR 2195*

7050.0225 SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 5 WATERS OF THE STATE; AESTHETIC ENJOYMENT AND NAVIGATION.

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 aesthetic enjoyment and navigation designated public uses and benefits If the standards in this part are exceeded in waters of the state that have the Class 5 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses

Subp 2 **Class 5 waters; aesthetic enjoyment and navigation.** The quality of Class 5 waters of the state shall be such as to be suitable for aesthetic enjoyment of scenery, to avoid any interference with navigation or damaging effects on property The following standards shall not be exceeded in the waters of the state

Substance or Characteristic	Class 5 Standard
For nonwetlands	
pH value	6.0 – 9 0
Hydrogen sulfide as S	0 02 milligram per liter
For wetlands	
pH value	Maintain background
Hydrogen sulfide as S	Maintain background

For the purposes of this subpart, "maintain background" means the concentration of the water quality substance or characteristic shall not deviate from the range of natural back-

ground concentrations or conditions such that there is a potential significant adverse impact to the designated uses.

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

Statutory Authority: *MS s 115.03, 115 44*

History: *18 SR 2195*

7050.0226 SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 6 WATERS OF THE STATE; OTHER USES.

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 other designated public uses and benefits If the standards in this part are exceeded in waters of the state that have the Class 6 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses

Subp 2 **Class 6 waters; other uses.** The uses to be protected in Class 6 waters may be under other jurisdictions and in other areas to which the waters of the state are tributary, and may include any or all of the uses listed in parts 7050 0221 to 7050 0225, plus any other possible beneficial uses. The agency therefore reserves the right to impose any standards necessary for the protection of this class, consistent with legal limitations

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

History: *18 SR 2195*

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

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 have limited resource value designated public uses and benefits If the standards in this part are exceeded in waters of the state that have the Class 7 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses

Subp 2 **Class 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 the logarithmic 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: *18 SR 2195*

7050.0410 LISTED WATERS.

Those waters of the state, except wetlands, that are specifically listed in part 7050 0470 are, in addition to any classifications listed in part 7050.0470, also classified as Class 3C, 4A, 4B, 5, and 6 waters Wetlands that are specifically listed in part 7050 0470 are, in addition to any classifications listed in part 7050 0470, also classified as Class 3D, 4C, 5, and 6 waters

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

History: *18 SR 2195*

7050.0420 TROUT WATERS.

Trout lakes identified in part 6262 0400, subpart 2, as amended through July 19, 1993, 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 6262.0400, subpart 4, as amended through July 19, 1993, 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 trout waters are classified as Class 1B, 2A, 3B, 3C, 4A, 4B, 5, and 6 waters

Statutory Authority: *MS s 115 03, 115.44*

History: *18 SR 2195*

7050.0425 UNLISTED WETLANDS.

Those waters of the state that are wetlands as defined by part 7050.0130, item F, and that are not listed in part 7050 0470 are classified as Class 2D, 3D, 4C, 5, and 6 waters

Statutory Authority: *MS s 115.03, 115 44*

History: *18 SR 2195*

7050.0430 UNLISTED WATERS.

All surface waters of the state that are not listed in part 7050.0470 and that are not wetlands as defined under part 7050 0130, item F, are hereby classified as Class 2B, 3B, 4A, 4B, 5, and 6 waters

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

History: *18 SR 2195*

7050.0460 WATERS SPECIFICALLY CLASSIFIED.

The waters of the state listed in part 7050 0470 are classified as specified. The specific stretch of watercourse or the location of a waterbody is described by township, range, and section, abbreviated as T , R., S , respectively. Any community listed in part 7050 0470 is the community nearest the water classified, and is included solely to assist in identifying the water

Outstanding resource value waters are listed in part 7050.0470 and are denoted by an asterisk (*) preceding the name of the water resource Following the name is the effective date the water resource was designated as an outstanding resource value water and a letter code that corresponds to the applicable discharge restrictions in part 7050 0180, subpart 3 or 6 The letter code P corresponds to the prohibited discharges provision in part 7050 0180, subpart 3 The letter code R corresponds to the restricted discharges provision in part 7050 0180, subpart 6.

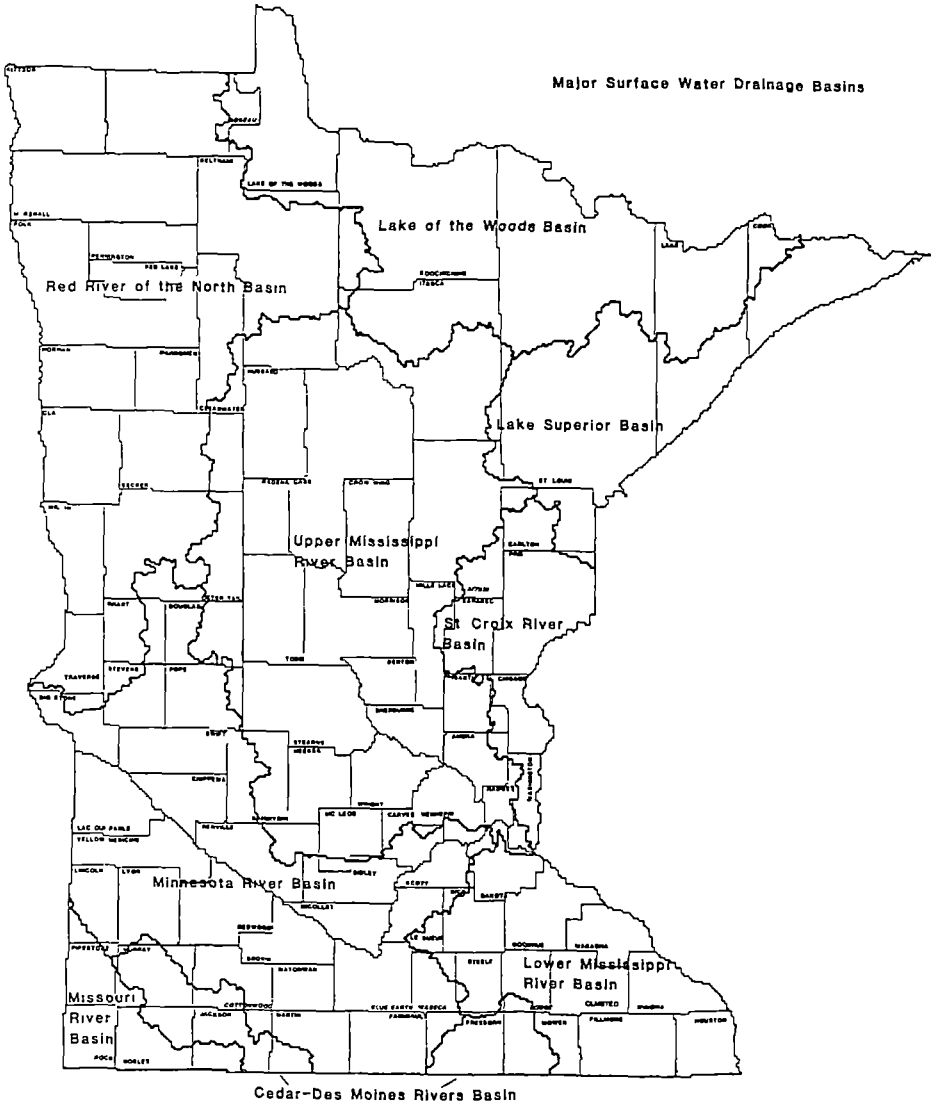
Waters listed in part 7050.0470 that are classified as Class 2Bd are Class 2B waters also classified for domestic consumption purposes Applicable standards for Class 2Bd waters are listed in part 7050 0222, subpart 3.

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

History: *18 SR 2195*

7050.0465 [Repealed, 18 SR 2195]

7050.0466 MAP: MAJOR SURFACE WATER DRAINAGE BASINS.



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

History: *18 SR 2195*

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.

(1) Ahlenius Creek, (T 53, R 14, S 9, 10) 1B, 2A, 3B,

(2) Amenda Creek, (T 59, R 5W). 2C,

(3) Amity Creek, (T 50, R 13, S 5, 6; T 50, R 14, S 1, T 51, R 13, S 31, 32, T 51, R 14, S 26, 27, 28, 35, 36) 1B, 2A, 3B,

(4) Amity Creek, East Branch (T 51, R 13, S 30, 31, T 51, R 14, S 13, 14, 15, 22, 24, 25, 36) 1B, 2A, 3B,

(5) Anderson Creek, (T 46, R 17, S 14, 15, 22, 26, 27) 1B, 2A, 3B,

(6) Anderson Creek, (T 49, R 15, S 16, 17, 18, T 49, R.16, S 12, 13) 1B, 2A, 3B,

(7) Artichoke Creek, (T 52, R 17, S 7, 17, 18) 1B, 2A, 3B,

(8) Assinika Creek, (T 63, R 1E, S 1, T 63, R 2E, S 7, 8, 16, 17, 21; T 64, R 1E, S 36, T 64, R 2E, S 31)· 1B, 2A, 3B,

(9) Bally Creek, (T 61, R 1W, S 3, 4, 5, 6, 7, 8, 9, 10, 11, T 61, R 2W, S 12) 1B, 2A, 3B,

(10) Baptism River, East Branch, (T 57, R 6, S 6, T 57, R 7, S.1, 2, 3, 9, 10, 11, 12, 16, 17, 20, T.58, R.6, S 30, 31, T 58, R 7, S 13, 17, 19, 20, 21, 22, 23, 24, 25, 26, 29, 30, 36, T 58, R 8, S 22, 23, 24, 25, 26) 1B, 2A, 3B,

(11) Baptism River, Main Branch, (T 56, R 7, S 3, 4, 5, 9, 10, 14, 15, T 57, R 7, S 20, 27, 28, 29, 33, 34) 1B, 2A, 3B,

(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 27, 34, 35) 1B, 2A, 3B,

(13) Barber Creek (East Swan River) (Chisholm Creek) Chisholm, (T 58, R 20, S 21, 22, 26, 27, 34, 35) 7,

(14) Barker Creek, (T 60, R 3W, S 5, 6, 7, 8, T 60, R 4W, S 2, 3, 9, 10, 11, 12, T 61, R 4W, S.34, 35) 1B, 2A, 3B,

(15) Barrs Creek, (T 53, R 13, S 20, 27, 28, 29) 1B, 2A, 3B,

(16) Bear Trap Creek, (T 51, R 16, S 30, T 51, R 17, S 16, 21, 22, 23, 25, 26, 27, 28) 1B, 2A, 3B,

(17) Beaver Dam Creek, (T 63, R 3E, S 2, 3, 4, 5, T 64, R 3E, S 32, 33, 34, 35) 1B, 2A, 3B,

(18) Beaver River, (T 55, R 8, S.2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 16, 17; T 55, R.9, S 1, 2; T 56, R 8, S 31, T 56, R 9, S 4, 5, 6, 8, 9, 16, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 32, 33, 34, 35, 36; T 57, R 9, S 28, 32, 33) 1B, 2A, 3B,

(19) Beaver River, East Branch, (T.55, R 8, S 2; T 56, R 8, S 4, 5, 6, 8, 9, 15, 16, 21, 22, 25, 26, 27, 35, 36, T 57, R 8, S 7, 18, 19, 30, 31, 32, T 57, R 9, S 2, 3, 11, 12, 13, 14, 15, 23, 24, 25, 26, 36) 1B, 2A, 3B,

(20) Beaver River, West Branch, (T 55, R 8, S 7, 17, 18, T 55, R 9, S 2, 3, 4, 10, 11, 12, 13, 14) 1B, 2A, 3B,

(21) Berry Creek (Breda), (T 55, R 12, S 6, 7, T 55, R 13, S 12, 13, T 56, R 11, S.6, T.56, R 12, S 1, 11, 12, 14, 15, 16, 21, 28, 29, 31, 32, T 57, R 11, S 10, 15, 16, 21, 28, 29, 31, 32). 1B, 2A, 3B,

(22) Blackhoof River, (T 47, R 16, S 29, 30; T 47, R 17, S 6, 7, 9, 10, 14, 15, 16, 17, 18, 19, 20, 22, 25, 26, 27, 28, T 48, R 17, S 30, 31) 1B, 2A, 3B,

(23) Blesner Creek, (T 58, R 6, S 20, 29, 30, 31)· 1B, 2A, 3B,

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

(25) Bluff Creek, (T 63, R 1W, S 13, 23, 24, 25) 1B, 2A, 3B,

(26) Boulder Creek, (T 53, 54, R.14) 2C,

(27) Bruce Creek, (T 53, R.22, S 6, 7, T 53, R 23, S 25, 26, T 54, R 22, S 18, 19, 30, 31, T 54, R 23, S 25, 26)· 1B, 2A, 3B;

(28) Brule River, (T.62, R.2E, S.1, 2; T.62, R.3E, S 4, 5, 6, 9, 10, 15, 16, 22, 27, 34; T.63, R 2E, S 21, 22, 23, 25, 26, 27, 28, 33, 35, 36, T 63, R 3E, S 30, 31, 32)· 1B, 2A, 3B,

(29) Brule River (excluding trout waters), (T.62, 63, 64, R 1W, 1E, 2E, 3E) 1B, 2Bd, 3B,

(30) Brule River, Little, (T 62, R.3E, S 19, 20, 29, 32, 33) 1B, 2A, 3B,

(31) Budd Creek, (T 55, R 9, S 7, 17, 18, 20, 21)· 1B, 2A, 3B;

(32) Buhl Creek, Buhl, (T 58, R.19, S.20, 29). 7;

(33) *Burnt Creek, [11/5/84P] (T 62, R 4W, S 8, 9) 1B, 2A, 3B,

(34) Burnt Creek, (T 62, R.4W, S 16, 17, 20) 1B, 2A, 3B;

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

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

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

(38) 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;

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

(40) 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,

(41) Cascade River, (T 60, R 2W, S.1, T.61, R 1W, S 19, 20, 21, 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,

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

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

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

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

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

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

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

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

(50) 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,

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

(52) 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,

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

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

(55) 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,

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

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

(58) Cross River, (T 60, R 6, S 13, 24, 25) 1B, 2A, 3B;

(59) Cross River (Lake), (T.58, R 5W, S 1, 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): 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 31,32) 1B, 2A, 3B,

(62) Crystal Creek, (T 48, R 16, S.6, T 48, R.17, S.1) 1B, 2A, 3B,

(63) Cutface Creek (Good Harbor Creek), (T 61, R 1W, S 27, 28, 29, 34) 1B, 2A, 3B;

(64) Dago Creek, (T 54, R 9, S.18, 19, T 54, R.10, S 2, 11, 12, 13, T 55, R 10, S 27, 34, 35)· 1B, 2A, 3B,

(65) Deer Creek, (T 47, R 16, S 19, 20, 28, 29, 30, T 47, R 17, S 11, 12, 13, 24) 1B, 2A, 3B,

(66) Deer Yard Creek (Spruce Creek), (T 60, R 2W, S.4, 5, 6, 7, 8, 9, 10, 15, 16, 17, T 61, R 2W, S 32) 1B, 2A, 3B,

(67) Devil Track River, (T 61, R 1E, S 1, 2, 3, 10, 11, 12, 13, T 62, R 1E, S 26, 31, 32, 33, 34, 35, 36)· 1B, 2A, 3B,

(68) Devil Track River, Little, (T 61, R 1E, S 4, 5, 6, 7, 8, 9, 10, T 61, R 1W, S 1, 2, 11, 12). 1B, 2A, 3B,

(69) Dragon Creek, (T 57, R 6, S 8, 9, 16, 17, 21) 1B, 2A, 3B,

(70) Durfee Creek, (T 61, R 2E, S 5, 6, 8, T 62, R.1E, S 25, 36, T 62, R 2E, S 31) 1B, 2A, 3B,

(71) Dutchess Slough Creek, (T.50, R 17, S 4, 9, 10, 13, 14, 15, 24) 1B, 2A, 3B,

(72) Egge Creek, (T 57, R 7, S 2, 3, 4, 11) 1B, 2A, 3B;

(73) Elbow Creek, (T.62, R 1E, S 3, 4, 9, 10, 15, 22, 27, 34; T 63, R 1E, S 33, 34)· 1B, 2A, 3B,

(74) Elbow Creek, Eveleth, (T 57, R 17, S 6, T 57, R 18, S 1) 7,

(75) Elm Creek, (T 49, R.16, S.1, 2, T 50, R 16, S 35) 1B, 2A, 3B,

(76) Encampment River, (T 53, R 10, S 3, 10, 11, T 54, R 10, S 8, 16, 17, 21, 27, 28, 34) 1B, 2A, 3B,

(77) Farquhar Creek, (T 62, R 4E, S 2, 11, T 63, R 4E, S 34, 35) 1B, 2A, 3B,

(78) *Fiddle Creek, [11/5/84P] (T 64, R 1W, S 34) 1B, 2A, 3B,

(79) Fiddle Creek, (T.63, R.1W, S.2, 3, 10, 15, T 64, R 1W, S 35) 1B, 2A, 3B,

(80) Flute Reed River, (T 62, R 3E, S 1, 2, 3, 10, 11, 12, 13, 14, 15, T 62, R.4E, S 17, 18, 19, 20, T.63, R 3E, S 26, 34, 35, 36): 1B, 2A, 3B;

(81) Fourmile Creek, (T 60, R 5W, S.17, 18, 19, T 60, R 6, S 24) 1B, 2A, 3B,

(82) Fox Farm Creek, (T.62, R 1E, S 19, 30) 1B, 2A, 3B,

(83) 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,

(84) Gauthier Creek, (T 62, R 3E, S.16, 20, 21, 22, 27) 1B, 2A, 3B,

(85) Gill Creek, (T 48, R 16, S 2) 1B, 2A, 3B,

(86) Gooseberry River, (T 54, R 9, S 18, 19, 20, 21, 22, 27, T 54, R 10, S 4, 5, 6, 8, 9, 10, 11, 12, 13, T 55, R 10, S 4, 9, 16, 17, 20, 29, 30, 31, 32, T 56, R 10, S.33) 1B, 2A, 3B;

(87) Gooseberry River, Little, (T 54, R,10, S 6, T 54, R 11, S 1, T 55, R 10, S 31, T 55, R 11, S 34, 35, 36): 1B, 2A, 3B;

(88) Grand Portage Creek, (T 63, R 5E, S.1, T.63, R 6E, S 4, 5, 6, T 64,; R.6E, S.31, 32, 33) 1B, 2A, 3B,

(89) Greenwood River, (T 63, R 2E, S 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, T 63, R 3E, S 6, T 64, R 2E, S.34, T 64, R.3E, S.31). 1B, 2A, 3B,

(90) Hay Creek, (T.49, R 16, S 3, 4, 9, 10, 15; T.50, R 16, S 20, 21, 28, 29, 32, 33) 1B, 2A, 3B;

(91) Heartbreak Creek, (T 59, R.4W, S 18, 19, T 59, R 5W, S.2, 11, 12, 13, T 60, R 5W, S 27, 28, 33, 34, 35) 1B, 2A, 3B;

(92) Hellwig Creek, (T 52, R.17, S 3, 10, 14, 15, 23, 26, T 53, R 16, S 16, 18, 19, 20, 30, T 53, R 17, S 13, 14, 23, 24, 25, 26, 34, 35) 1B, 2A, 3B,

(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, 34) 1B, 2A, 3B,

(94) Hollow Rock Creek, (T.63, R 5E, S 9, 10, 11, 14, 15, 16, 23, 24, 25) 1B, 2A, 3B;

(95) Honeymoon Creek (Spring Creek), (T 61, R 4W, S 28, 31, 32, 33) 1B, 2A, 3B,

(96) Hornby Junction Creek, (T 55, R 13, S 5,6, 7, T 56, R 13, S 28, 32, 33) 1B, 2A, 3B,

(97) Horn Creek, (T 62, R 4W) 1B, 2Bd, 3B,

(98) Houghtaling Creek, (T.59, R 6, S 2, 3, 4, 5, 6, T 60, R.6, S 25, 32, 33, 35, 36) 1B, 2A, 3B,

(99) Humphrey Creek, (T 54, R 14, S 23, 26, 27, 33, 34) 1B, 2A, 3B,

(100) Hunter Creek, (T 46, R 18, S.2, 11, 12, 13, T 47, R 18, S 34, 35) 1B, 2A, 3B,

(101) Indian Camp Creek, (T 60, R 2W, S 3, 10, 11, T 61, R2W, S 34). 1B, 2A, 3B,

(102) Indian Creek, (T 55, R 12, S 3; T 56, R 12, S.14, 22, 23, 27, 34): 1B, 2A, 3B,

(103) Irish Creek, (T 63, R 3E, S 8, 9, 10, 13, 14, 15, 23, 24, 25, 26, T 63, R 4E, S 17, 18, 19) 1B, 2A, 3B,

(104) Joe Martin Creek, (T 50, R 18, S 3, 4, 5, 7, 8; T 50, R 19, S 12) 1B, 2A, 3B,

(105) Johnson Creek, (T 50, R 17, S 3, 10, 11, 14, T 51, R 17, S.34) 1B, 2A, 3B,

(106) Johnson Creek, (T 55, R 12, S 35, 36) 1B, 2A, 3B,

(107) Jonvick Creek, (T 60, R 2W, S 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)· 1B, 2A, 3B,

(109) Kadunce Creek, (T 61, R 2E, S 2, T 62, R 2E, S 9, 10, 12, 13, 14, 15, 16, 22, 23, 24, 26, 35) 1B, 2A, 3B,

(110) Keene Creek, (T 49, R 14, S 18, T 49, R 15, S 1, 12, 13, T 50, R 15, S 24, 25, 36) 1B, 2A, 3B,

(111) Kehtel Creek, (T 51, R 15, S 8, 17, 18, 19, 20). 1B, 2A, 3B,

(112) Kennedy Creek, (T 57, R.7, S 35, 36) 1B, 2A, 3B,

(113) 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,

(114) Kingsbury Creek, (T.49, R 15, S 4, 9, 10, 11, 13, 14; T 50, R.15, S.33, 34) 1B, 2A, 3B,

(115) Kinney Creek, (T 57, R 10, S.15, 21, 22, 28, 33) 1B, 2A, 3B,

(116) Kinney Creek, (T 58, R 19, S.11) 1B, 2A, 3B,

(117) 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;

(118) Knife River, Little, (T 52, R 12, S 16, 17, 21, 22, 23, 26, 27, 28, 35, 36)· 1B, 2A, 3B,

(119) Knife River, Little, East Branch, (T.53, R 11, S 17, 20, 21, 22, 27, 33, 34) 1B, 2A, 3B,

(120) 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,

(121) 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,

(122) Koski Creek, (T 61, R 4W, S 5, 8, T 62, R.4W, S 31, 32) 1B, 2A, 3B,

(123) Last Creek, (T 58, R.5W, S 16, 17)· 1B, 2A, 3B,

(124) Lavi Creek, (T 52, R.15, S 21, 28) 1B, 2A, 3B,

(125) Leppanen Creek, (T 57, R 7, S 15, 21, 22, 28) 1B, 2A, 3B,

(126) 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,

(127) 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,

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

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

(130) 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,

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

(132) 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, 23, 24, 25, 26) 1B, 2A, 3B,

(133) 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, 2, T 59, R 7, S 29, 30, 31, 32, 33): 1B, 2A, 3B,

(134) Marais River, Little, (T.57, R 6, S 5, 8, 16, 17, 21) 1B, 2A, 3B,

(135) Mark Creek, (T 61, R 2W, S.1, 2, 3, 4, 5, 6, 9) 1B, 2A, 3B,

(136) Marshall Creek, (T 52, R 15, S 10, 15) 1B, 2A, 3B,

(137) Martin Creek, (T.58, R 6, S 2, 3, 11) 1B, 2A, 3B,

(138) McCarthy Creek, (T 53, R 11, S 18, T 53, R 12, S 12, 13) 1B, 2A, 3B,

(139) 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,

(140) Mile Post Forty–Three Creek, (T 56, R 8, S 2, 3, 9, 10, 11, 13, 14, 15) 1B, 2A, 3B,

(141) 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,

(142) 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,

(143) 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;

(144) 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,

(145) Mississippi Creek, Little, (T 62, R 2W, S 20, 21, 26, 29, 32, 33, 34, 35)· 1B, 2A, 3B,

(146) 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,

(147) Monker Creek, (T 61, R 1E, S 6, 7, T.62, R 1E, S 31, T 62, R 1W, S 36) 1B, 2A, 3B;

(148) Mons Creek, (T 62, R 3E, S 4, T 63, R.3E, S 28, 29, 33) 1B, 2A, 3B,

(149) Moose Creek, (T 59, R 6, S 31, 32, 33, 34) 1B, 2A, 3B;

(150) 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,

(151) Mud Creek, (T 54, R.12, S.20, 21, 22, 29, 30). 1B, 2A, 3B;

(152) Mud Creek, (T 62, R 1E, S 8, 9, 16, 17, 21, 22). 1B, 2A, 3B,

(153) Mud Creek, Little, (T.57, R 11, S.11, 12, 14, 22, 23) 1B, 2A, 3B,

(154) Murmur Creek, (T 61, R 2W, S.15, 20, 21, 22, 29, 30) 1B, 2A, 3B,

(155) 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 11, 12, 13, 14, 21, 22, 23, 24, 26, 27, 28, 33, 34) 1B, 2A, 3B,

(156) Myhr Creek, (T 62, R 3E, S 23, 24, 26) 1B, 2A, 3B,

(157) Nemadji Creek, (T 46, R.17, S.7, 8, 9, 18, T 46, R 18, S 13, 14, 15, 16, 22)· 1B, 2A, 3B,

(158) 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,

(159) 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,

(160) 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,

(161) 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,

(162) Net River, Little, (T 46, R 16, S.3, 10, 15, 22, 26, 27, 34) 1B, 2A, 3B;

(163) Nicadoo Creek, (T 56, R.7, S 7, T.56, R 8, S.1, 12; T 57, R 8, S 25, 35, 36) 1B, 2A, 3B,

(164) 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;

(165) 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,

(166) 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,

(167) 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;

(168) 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;

(169) Palisade Creek, (T 56, R 7, S 16, 17, 18, 19, 20, 21, 22, T 56, R.8, S 24) 1B, 2A, 3B;

(170) Pancake Creek, (T 54, R 22, S.20, 28, 29, 32, 33) 1B, 2A, 3B;

(171) Pancake Creek, (T 60, R 4W, S 17, 18, T 60, R 5W, S.11, 13, 14) 1B, 2A, 3B,

(172) Pecore Creek, (T.61, R 4W, S.19, 20, 21)· 1B, 2A, 3B,

(173) Peters Creek, (T 54, R.22, S.22, 23, 27, 28). 1B, 2A, 3B,

(174) Pigeon River (South of Fowl Lake to Pigeon Bay of Lake Superior) 1B, 2Bd, 3A;

(175) Pike Lake Creek, (T 61, R 2W, S.10, 11, 15) 1B, 2A, 3B,

(176) Pine Mountain Creek, (T.63, R 1E, S 23, 26, 27, 28, 33) 1B, 2A, 3B,

(177) 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,

(178) 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,

(179) *Plouff Creek [11/5/84P] (T 62, R.5W, S 23). 1B, 2A, 3B,

(180) 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,

(181) 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,

(182) Railroad Creek, (T 50, R 17, S 1, 11, 12, 14)· 1B, 2A, 3B,

(183) Red River, (T 48, R.15, S 30; T 48, R 16, S 25, 26). 1B, 2A, 3B,

(184) Red Rock Creek, (T 63, R.5E, S 21, 22, 26, 27, 28, 35). 1B, 2A, 3B,

(185) 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,

(186) Rock Creek, (T 47, R 16, S 7, 17, 18, 20, 21, 22, 23, 24; T 47, R 17, S.12) 1B, 2A, 3B;

(187) Rock Cut Creek, (T 58, R 6, S.18, 19, 20, T 58, R.7, S 13) 1B, 2A, 3B,

(188) 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,

(189) 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;

(190) Rosebush Creek (Fall River), (T 61, R 1W, S 13, 23, 24, 25; T 61, R 1E, S 18) 1B, 2A, 3B,

(191) Ross Creek, (T 52, R 13, S 1, 2, 3, 4, 5, T 53, R 13, S 33)· 1B, 2A, 3B,

(192) Ryan Creek, (T 55, R 14, S 14, 15, 22) 1B, 2A, 3B,

(193) Sargent Creek, (T 48, R 15, S.4, 5, 9, 10, T 49, R 15, S 28, 29, 32) 1B, 2A, 3B;

(194) Sawbill Creek, (T 62, R 4W, S 7, 18, 19, 20, 28, 29, 30; T.62, R 5W, S.25) 1B, 2A, 3B,

(195) Sawmill Creek, (T 57, R.6, S 18, T 57, R.7, S 1, 12, 13, 22, 23, 24, 26, 27, 34) 1B, 2A, 3B,

(196) Scanlon Creek, (T 49, R 16, S 30, T.49, R 17, S 25) 1B, 2A, 3B,

(197) Schmidt Creek, (T 51, R 12, S 17): 1B, 2A, 3B,

(198) Schoolhouse Creek, (T 58, R 7, S 35, 36) 1B, 2A, 3B;

(199) Section 15 Creek, (T 58, R 5W, S 9, 10, 15) 1B, 2A, 3B,

(200) Section 16 Creek, (T 58, R 5W, S 16) 1B, 2A, 3B;

(201) Section 29 Creek, (T 58, R.5W, S.29, 30)· 1B, 2A, 3B,

(202) Section 36 Creek, (T 46, R 16, S 1, 2, 11, 12, 13, T 47, R 16, S 36)· 1B, 2A, 3B,

(203) Silver Creek, (T 48, R 16, S 15, 16, 17, 21, 28, 29)· 1B, 2A, 3B;

(204) 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,

(205) Silver Creek, Big, (T 46, R.17, S 14, 23, 24, 25, 36)· 1B, 2A, 3B,

(206) Silver Creek, East Branch, (T 53, R 10, S 5, 8, 9, 16, 21) 1B, 2A, 3B,

(207) Sixmile Creek, (T 60, R 4W, S.13, 14, 15, 22, 23, 27, 28, 33) 1B, 2A, 3B;

(208) 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,

(209) 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,

(210) 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,

(211) 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,

(212) 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, 23, 24, 25). 1B, 2A, 3B,

(213) 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,

(214) Spring Creek, (T 46, R 17, S 3, 4, 5, 6) 1B, 2A, 3B;

(215) Spring Creek, (T 54, R 12, S 1, 2)· 1B, 2A, 3B,

(216) Squaw Creek, (T 49, R.17, S 9, 16, 17, 18, 19, 20, 21) 1B, 2A, 3B,

(217) 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,

(218) 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,

(219) Stewart Creek, (T 49, R.15, S 21, 22, 26, 27) 1B, 2A, 3B,

(220) 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;

(221) Stewart River, (T 55, R 11, S 7, T 55, R 12, S 12, 13) 1B, 2A, 3B,

(222) 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,

(223) Stickle Creek, (T 63, R 1W, S 1, 2, 11, 12, 14) 1B, 2A, 3B,

(224) Stone Creek, (T 61, R 2E, S 2, 3, T 62, R 2E, S 21, 22, 27, 34, 35) 1B, 2A, 3B,

(225) Stoney Creek (Rock), (T 55, R 9, S 30, T 55, R 10, S 20, 23, 24, 25, 27) 1B, 2A, 3B,

(226) Stony Brook, (T 46, R 17, S 10, 11, 15, 16, 21) 1B, 2A, 3B,

(227) Stony Creek, Little, (T 63, R 2E, S 4, 5, 9, T 64, R 2E, S 31, 32, 33) 1B, 2A, 3B,

(228) Stream Number 30, (T 54, R 8, S 5, 6, T 55, R 8, S 19, 30, 31) 1B, 2A, 3B,

(229) Stumble Creek, (T 59, R 5W, S 16, 21, 22, 26, 27, 28) 1B, 2A, 3B,

(230) 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,

(231) Sucker River, Little, (T 51, R 12, S 2, 3)· 1B, 2A, 3B,

(232) Sugar Loaf Creek, (T 58, R 5W, S 17, 19, 20, 29) 1B, 2A, 3B,

(233) 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,

(234) Sundling Creek, (T 61, R 1W, S 10, 11, 14, 15, 16, 17, 18, T 61, R 2W, S 13) 1B, 2A, 3B,

(235) 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,

(236) Swamper Creek, (T 64, R 1E, S 20, 29, 32) 1B, 2A, 3B,

(237) Swan Creek, East, (T 56, R 20, S 3, 4, 5, 10, 11). 1B, 2A, 3B,

(238) Swan Creek, Little, (T 56, R 19, S 17, 19, 20, 30, T 56, R 20, S 25, 26, 35) 1B, 2A, 3B,

(239) 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,

(240) Swan River, West, (T 55, R 20, 21)· 2C,

(241) Swanson Creek, (T 61, R 4W, S 6, 7, 8, T 61, R 5W, S 1) 1B, 2A, 3B;

(242) Tait River, (T 60, R.3W, S 4, T 61, R 3W, S 28, 33) 1B, 2A, 3B,

(243) Talmadge Creek, (T 51, R 12, S 19, T 51, R 13, S 9, 10, 13, 14, 15, 24) 1B, 2A, 3B,

(244) 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,

(245) Temperance River (excluding trout waters), (T 59, 60, 61, 62, R 4W)· 1B, 2Bd, 3B,

(246) Thirty–nine Creek, Big, (T 56, R 8, S 19, 30, 31, T 56, R 9, S 1, 2, 3, 9, 11, 12, 13, 14, 15, 22, 23, 24, 25, T.57, R 9, S 22, 26, 27, 35, 36). 1B, 2A, 3B,

(247) 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,

(248) Thompson Creek, (T 62, R 1W, S 17, 19, 20, T 62, R 2W, S 24) 1B, 2A, 3B,

(249) Tikkanen Creek, (T 57, R.7, S 5, 6, 8, 16, 17) 1B, 2A, 3B,

(250) 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,

(251) 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,

(252) Torgenson Creek, (T 61, R 4W, S 30, T 61, R 5W, S 24, 25) 1B, 2A, 3B,

(253) Tower Creek, (T 55, R.14, S 8, 9, 17, 18, 19, T 55, R 15, S 24, 25, 26) 1B, 2A, 3B,

(254) Tower Creek, (T 57, R 7, S.9) 1B, 2A, 3B,

(255) Trappers Creek, (T 56, R 11, S 2, 3, 9, 10, 16, 17, 19, 20, T 57, R.11, S 35). 1B, 2A, 3B,

(256) Trout Brook, (T 54, R 22, S.1) 1B, 2A, 3B,

(257) Twin Points Creek, (T 54, R 9, S 10, 11, 13, 14) 1B, 2A, 3B,

(258) 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,

(259) Ugstad Creek, (T 51, R 15, S 21, 22, 26, 27, 28) 1B, 2A, 3B,

(260) Unnamed Creek, (T.46, R 16, S 19, 29, 30, T 47, R 17, S.13, 14, 21)· 1B, 2A, 3B,

(261) Unnamed Creek, (T 47, R 17, S 28, 29, 33, 34, 35)· 1B, 2A, 3B,

(262) Unnamed Creek, (T 47, R 17, S 31, 32, 33, 34) 1B, 2A, 3B,

(263) Unnamed Creek, (T 55, R 8, S 20, 21, 29, 32, 33) 1B, 2A, 3B,

(264) Unnamed Creek, Meadowlands, (T 53, R 19, S 22, 23) 7,

(265) Unnamed Ditch, Gilbert, (T 58, R 17, S 23, 24, 25, 36) 7,

(266) 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,

(267) Wanless Creek, (T 60, R.6, S 27, 33, 34, 35, 36) 1B, 2A, 3B,

(268) Whyte Creek, (T 57, R 10, S 1, 2, 11, 14, 23, 26, 27, 34) 1B, 2A, 3B,

(269) Woods Creek, (T 61, R 1E, S 1, 12, 13; T 62, R 1E, S 35, 36) 1B, 2A, 3B;

(270) 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

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

B Lakes

(1) *Alder Lake, [11/5/84P] (T 64, R 1E) 1B, 2A, 3B,

(2) *Alton Lake, [11/5/84P] (T 62, 63, R 4, 5)· 1B, 2A, 3B,

(3) Bath Lake, (T 62, R 1W, S 5, 6, T 63, R 1W, S 31, 32) 1B, 2A, 3B,

(4) Bean Lake (Lower Twin), (T 56, R 8W, S 25, 26) 1B, 2A, 3B,

(5) Bear Lake (Upper Twin), (T 56, R 8W, S 25) 1B, 2A, 3B,

(6) Bearskin Lake, East, (T 64, R 1E, 1W) 1B, 2A, 3B,

(7) *Bearskin Lake, West, [3/7/88R] (T 64, 65, R 1) 1B, 2A, 3B,

(8) *Bench Lake, [11/5/84P] (T 64, 2E, S 6) 1B, 2A, 3B,

(9) Benson Lake, (T 58, R 6W, S 29, 32) 1B, 2A, 3B,

(10) *Birch Lake, [3/7/88R] (T 65, R 1, 2) 1B, 2A, 3B,

(11) *Black Lake, [3/7/88P] (T.45, R.15) 1B, 2Bd, 3B,

(12) Bogus Lake, (T 62, R 2E, S 12)· 1B, 2A, 3B,

(13) Bone Lake, (T 61, R.6W, S 13, 14) 1B, 2A, 3B,

(14) Boys Lake, (T 62, R 2E, S 5, 8) 1B, 2A, 3B,

(15) Briar Lake, (T 53, R 13W, S 14, 15, 23) 1B, 2A, 3B,

(16) *Brule Lake, [11/5/84P] (T 63, R 2, 3) 1B, 2A, 3B,

(17) Canton Mine Pit Lake, (T 58, R 16, S 2, 3)· 1C, 2Bd, 3B,

(18) Carrot Lake, (T 64, R 2E, S 17) 1B, 2A, 3B;

(19) Cedar Lake, (T.58, R 15W, S 20) 1B, 2A, 3B;

(20) Chester Lake, (T 64, R 3E, S 32, 33) 1B, 2A, 3B,

(21) Clear Lake, (T 52, R 15W, S 23)· 1B, 2A, 3B,

(22) *Clearwater Lake (Emby Lake), [11/5/84P] (T 65, R 1E) 1B, 2A, 3B,

(23) Colby Lake, (T 58, R 14) 1B, 2Bd, 3B,
(24) *Cone Lake, North, [11/5/84P] (T.63, 64, R 3) 1B, 2A, 3B;
(25) Corona Lake, (T 48, R 19W, S 11, 12). 1B, 2A, 3B,
(26) Corsica Mine Pit Lake, (T 58, R 16, S 18): 1C, 2Bd, 3B,
(27) *Crystal Lake, [11/5/84P] (T 64, R 1E, 2E) 1B, 2A, 3B;
(28) *Daniels Lake, [11/5/84P] (T 65, R.1E, 1W): 1B, 2A, 3B,
(29) *Davis Lake, [11/5/84P] (T 64, R 3) 1B, 2A, 3B,
(30) Devilfish Lake, (T.64, R.3E): 1B, 2A, 3B,
(31) Dislocation Lake, (T 63, R 1W, S.3) 1B, 2A, 3B,
(32) Divide (Towhey) Lake, (T 59, R 7W, S.7, 8) 1B, 2A, 3B;
(33) Duke Lake, (T 63, R 1E, S 30) 1B, 2A, 3B,
(34) *Duncan Lake, [11/5/84P] (T 65, R 1) 1B, 2A, 3B,
(35) *Dunn Lake, [11/5/84P] (T 65, R 1, 2) 1B, 2A, 3B;
(36) Dyers Lake, (T 58, R 5W, S 4, 5, 8, 9) 1B, 2A, 3B,
(37) *Echo Lake, [3/7/88R] (T 59, R 6) 1B, 2A, 3B;
(38) Echo Lake, (T 59, R.6W, S 14, 15, 22, 23): 1B, 2A, 3B;
(39) Elbow Lake, Little, (T 57, R.18W, S 9, 10, 16). 1B, 2A, 3B,
(40) Embarrass Mine Pit (Lake Mine), (T 58, R 15W, S.5, 6): 1B, 2A, 3B,
(41) Esther Lake, (T 63, R.3E, S 6, T.64, R.3E, S 31) 1B, 2A, 3B,
(42) *Fan Lake, [11/5/84P] (T.65, R 2E) 1B, 2Bd, 3A;
(43) Flour Lake, (T 64, R 1E, 1W) 1B, 2A, 3B,
(44) Forsyth Mine Pit, (T 58, R 19W, S 11)· 1B, 2A, 3B,
(45) Fowl Lake, North, (T 64, 65, R.3E): 1B, 2Bd, 3A,
(46) Fowl Lake, South, (T 64, 65, R 3E) 1B, 2Bd, 3A;
(47) Fraser Mine Pit Lake, (T 58, R 20, S 23): 1C, 2Bd, 3B, until the city of Chisholm no longer uses Fraser Mine Pit Lake as a water supply source for its public water system, and then the classification is identified in part 7050 0430,
(48) *Gadwall Lake, [11/5/84P] (T.64, R 2E, S 3) 1B, 2A, 3B,
(49) *Gaskin Lake, [11/5/84P] (T 64, R 2) 1B, 2A, 3B,
(50) *Gogebic Lake, [11/5/84P] (T 65, R 2E, S 30, 31)· 1B, 2A, 3B,
(51) Goldeneye (Duck) Lake, (T 59, R 6W, S 15) 1B, 2A, 3B;
(52) *Greenwood Lake, [3/7/88R] (T 64, R 2E) 1B, 2A, 3B,
(53) Hungry Jack Lake, (T 64, 65, R.1) 1B, 2A, 3B,
(54) *Jake (Jackel) Lake, [11/5/84P] (T 64, R 1W, S 28) 1B, 2A, 3B,
(55) Jim Lake (Jerry Lake), (T 64, R 1E) 1B, 2A, 3B,
(56) Judson Mine Pit, (T.58, R 19W, S 20, 29). 1B, 2A, 3B;
(57) Junco Lake, (T.62, R 1W, S 11, 12, 13): 1B, 2A, 3B,
(58) *Kemo Lake, [3/7/88R] (T.63, R 1): 1B, 2A, 3B;
(59) Kimball Lake, (T 62, R 2E, S 7, 8, 17) 1B, 2A, 3B,
(60) Leo Lake, (T 64, R 1W, S 4, 5) 1B, 2A, 3B,
(61) *Lily Lakes, [11/5/84P] (T 65, R 2E) 1B, 2Bd, 3A,
(62) Lima Lake, (T 64, R 1W, S 35). 1B, 2A, 3B,
(63) *Lizzie Lake, [11/5/84P] (T.64, R 1W, S 7, 18) 1B, 2A, 3B;
(64) Loaine (Sand) Lake, (T 54, R 12W, S 16, 17) 1B, 2A, 3B,
(65) Loft Lake, (T.64, R.3E, S 21). 1B, 2A, 3B,
(66) Lost Lake, (T 63, R 3E, S 32): 1B, 2A, 3B,
(67) Margaret Lake, (T 64, R 3E, S 27, 28, 33, 34) 1B, 2A, 3B,
(68) McFarland Lake, (T 64, R 3E). 1B, 2A, 3B,
(69) Mink Lake, (T 62, R.2E, S.8). 1B, 2A, 3B,
(70) *Misquah Lake, [11/5/84P] (T 64, R 1) 1B, 2A, 3B,

(71) Missabe Mountain Mine Pit Lake, (T 58, R 17, S 8) 1C, 2Bd, 3B,
(72) Moosehorn Lake, (T 63, R 3E, S 36; T 63, R 4E, S 31) 1B, 2A, 3B,
(73) *Moose Lake, [11/5/84P] (T 65, R 2E, 3E) 1B, 2A, 3A,
(74) *Morgan Lake, [11/5/84P] (T 64, R 1W, S 27, 28) 1B, 2A, 3B;
(75) Morton Mine Pit Lake, (T 57, R 21, S 10, 11, 14). 1C, 2Bd, 3B,
(76) *Moss Lake, [3/7/88R] (T 65, R 1)· 1B, 2A, 3B,
(77) *Mountain Lake, [11/5/84P] (T.65, R 1E, 2E). 1B, 2A, 3B,
(78) Muckwa Lake, (T 63, R 1E, S 21, 28)· 1B, 2A, 3B,
(79) *Mulligan Lake, [11/5/84P] (T 63, R 3W, S 1, 12) 1B, 2A, 3B,
(80) Musquash Lake, (T 63, R.1E, S 20, 28, 29). 1B, 2A, 3B,
(81) Normanna Lake, (T 52, R 13W, S 7, 8) 1B, 2A, 3B,
(82) Olson Lake, (T 62, R 1W, S 9, 16) 1B, 2A, 3B,
(83) *Onega Lake (Omega Lake), [11/5/84P] (T 64, R 2, 3)· 1B, 2A, 3B,
(84) *Otto Lake, Lower, [11/5/84P] (T 64, R 2) 1B, 2A, 3B,
(85) Pancore (Lost) Lake, (T 61, R.4W, S 22, 27) 1B, 2A, 3B;
(86) *Partridge Lake, [11/5/84P] (T 65, R 1) 1B, 2A, 3B,
(87) *Pemmican Lake, [11/5/84P] (T 65, R.2E, S 22). 1B, 2A, 3B,
(88) *Pike Lake, West, [11/5/84P] (T 65, R 2E). 1B, 2A, 3B,
(89) Pine Lake, (T 63, R 1W, S 35, 36)· 1B, 2A, 3B,
(90) *Pine Lake, [11/5/84P] (T 64, 65, R 1E, 2E, 3E) 1B, 2A, 3B,
(91) Pine Mountain Lake, (T 63, R 1E, S 26, 27, 34, 35) 1B, 2A, 3B,
(92) Poplar Lake, (T 64N, R 1, 2W) 1C, 2Bd, 3B,
(93) *Ram Lake, [11/5/84P] (T 63, R 1W, S 9, 10) 1B, 2A, 3B,
(94) *Rose Lake, [11/5/84P] (T 65, R 1). 1B, 2A, 3B,
(95) St. James Mine Pit, (T 58, R 15W, S 3, 4) 1B, 2A, 3B,
(96) Saint Mary's Lake, (T 57, R 17, S 9, 16, 17) 1C, 2Bd, 3B,
(97) *Sawbill Lake, [11/5/84P] (T 62, 63, R.4) 1B, 2Bd, 3B;
(98) Section 8 Lake, (T 59, R 7W, S.8) 1B, 2A, 3B,
(99) Seven Beaver Lake, (T 58, R 11, 12). 2B, 3A,
(100) Shady, North, Lake, (T 64, R.2E, S 21, 22): 1B, 2A, 3B,
(101) Shoe Lake, (T.64, 2E, S.30) 1B, 2A, 3B;
(102) Sled Lake, (T 63, R 1W, S 3): 1B, 2A, 3B,
(103) *Sock Lake, [11/5/84P] (T 65, R 2W, S 26) 1B, 2A, 3B,
(104) *South Lake, [11/5/84P] (T.65, R 1, 2)· 1B, 2A, 3B,
(105) Spring Hole Lake, (T.55, R 14W, S 14) 1B, 2A, 3B;
(106) Squaw Lake, (T 63, R 3E, S.6, T 64, R 3E, S 31) 1B, 2A, 3B,
(107) *State Lake, [11/5/84P] (T 63, 64, R 2) 1B, 2A, 3B,
(108) Steer Lake, (T 60, R 6W, S 32) 1B, 2A, 3B,
(109) *Superior, Lake, [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,
(110) *Swan Lake, [11/5/84P] (T 63, R 2) 1B, 2A, 3B;
(111) Talus Lake, (T 63, R 1W, S 26, 27) 1B, 2A, 3B,
(112) Thompson Lake, (T 62, R 1W, S.19, 20, 29, 30)· 1B, 2A, 3B,
(113) Thrasher Lake, (T 63, R.1W, S 31): 1B, 2A, 3B,
(114) Thrush Lake, (T.63, R.1W, S 31). 1B, 2A, 3B,
(115) *Topper Lake, [11/5/84P] (T.65, R 2W, S 27) 1B, 2A, 3B,
(116) *Trout Lake, [3/7/88R] (T 62, R 2E)· 1B, 2A, 3B,
(117) *Trout Lake, Little, [11/5/84P] (T 63, R 1)· 1B, 2A, 3B;
(118) Turnip Lake, (T 64, R 1E, S 24)· 1B, 2A, 3B,

(119) Twin Lake, (T 50, R 14W, S 28, 33) 1B, 2A, 3B;

(120) *Twin Lake, Upper (Bear Lake), [3/7/88R] (T 56, R 8) 1B, 2A, 3B;

(121) Unnamed Lake, (T 63, R 3E, S 20, 21, 28, 29) 1B, 2A, 3B,

(122) Unnamed Lake, (T 63, R 1W, S 31) 1B, 2A, 3B,

(123) *Vale Lake, [11/5/84P] (T 64, R 2E, S 3) 1B, 2A, 3B,

(124) *Vista Lake, [11/5/84P] (T 64, R 1) 1B, 2A, 3B,

(125) *Wamhigan Lake (Trap Lake), [11/5/84P] (T 63, 64, R 2, 3) 1B, 2A, 3B,

(126) *Wee Lake, [11/5/84P] (T 62, R 4W, S 13) 1B, 2A, 3B,

(127) *Wench Lake, [11/5/84P] (T 63, R.3W, S 7, 18) 1B, 2A, 3B,

(128) *Winchell Lake, [11/5/84P] (T 64, R 2, 3) 1B, 2A, 3B,

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

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

C Calcareous Fens None currently listed

D Scientific and Natural Areas. *Black Lake Bog [3/7/88P] Waters within the Black Lake Bog Scientific and Natural Area, Pine County, (T 45, R 15, S 18, 19, 30, T.45, R 16, S 13, 24, 25) 2B, 3B, except wetlands which are 2D

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

(1) Angora Creek, (T 61, R 18, S 9, 10, 15, 16, 21, 22). 1B, 2A, 3B,

(2) Arrowhead Creek, (T 60, R 8, S 3, 10, 11, 13, 14, 15, 22, 23, 26, 27, 28, 34, T 61, R 8, S 14, 15, 21, 22, 27, 28, 34) 1B, 2A, 3B,

(3) Ash River, (T 66, R 20, S 4, 5, 9, T 67, R 20, S 5, 6, 8, 16, 17, 18, 19, 20, 29, 30, 31, 32, T 67, R 21, S 36, T 68, R 20, S 13, 14, 20, 21, 22, 23, 24, 28, 29, 31, 33, T 68, R 19, S 17, 18, T 68, R 21, S 36) 1B, 2A, 3B,

(4) Beaver Creek, (T.62, 63, R 20) 2C,

(5) Beauty Creek, (T 67, R 21, S 23, 24, 25, 26) 1B, 2A, 3B,

(6) Blackduck River, (T 66, R.19, S 5, 6, 7, 8, 17, T.66, R 20, S 1, T 67, R 19, S 29, 31, 32, T 67, R 20, S 2, 3, 4, 10, 14, 15, 23, 24, 25, 26, 36, T 68, R 20, S 26, 27, 28, 33, 34) 1B, 2A, 3B,

(7) Camp Creek, (T 60, R 8, S 3, 4, 5, 7, 8, 9, 10, 16, 17, 20, 21, 29, T 61, R 8, S 33) 1B, 2A, 3B,

(8) Camp Creek, East, (T 60, R 9, S 7, 18, T 60, R 10, S 11, 12, 14) 1B, 2A, 3B,

(9) Dark River, (T 60, R 19, S 19, 20, 30; T.60, R 20, 10, 11, 12, 13, 24) 1B, 2A, 3B,

(10) Dinner Creek, (T 153, R 26, S 4, 9, 10, 12, 13, 14, 15, 23, 24, T 154, R 26, S 7, 18, 19, 29, 30, 32, 33, T 154, R 27, S 1, 12, T 155, R 26, S 30, 31, T 155, R 27, S 25, 35, 36) 1B, 2A, 3B,

(11) Fawn Creek, (T 66, R 20, S 1, 2, 3, 4, 12, T 67, R 20, S 15, 22, 23, 26, 34, 35) 1B, 2A, 3B,

(12) Gardner Brook, (T 63, 64, R 23) 2C,

(13) Grassy Creek, (T 61, R 13, S 6, T 61, R.14, S 1) 1B, 2A, 3B,

(14) Harrigan Creek, (T 62, R 23, S 10) 1B, 2A, 3B,

(15) Harris Lake Creek, (T 60, R 10, S.6, T 61, R 10, S 19, 30, 31) 1B, 2A, 3B,

(16) Hay Creek, (T 153, R 26, S 4, 8, 9, 17, 20) 1B, 2A, 3B,

(17) Hill Creek, (T 60, R 8, S 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, 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, 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 Creek, (T 61, R 8, S 14, 23, 24, 25, 26, 36) 1B, 2A, 3B,

(25) Jack Pine 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,

(26) Johnson Creek, (T 60, R 18, S 6, 7, 8, 17, 20) 1B, 2A, 3B,

(27) Kawishiwi River, (Source to Fall Lake) 1B, 2Bd, 3B,

(28) Kinmount Creek, (T 67, R 20, S 19, T 67, R 21, S 13, 14, 15, 20, 21, 22, 23, 24) 1B, 2A, 3B,

(29) Longstorff Creek, (T 62, R 12, S 6, 7, T 63, R 12, S 31) 1B, 2A, 3B,

(30) 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,

(31) Mary Ann Creek, (T 58, R 10, S 16, 21) 1B, 2A, 3B,

(32) McNiven Creek, (T 59, R 19, S 10, 16, 21, 28, 32, 33) 1B, 2A, 3B,

(33) Mike Kelly Creek, (T 60, R 11, S 14, 15, 23) 1B, 2A, 3B,

(34) 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,

(35) *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,

(36) Moose River, (T 68, R 18, 19) 1B, 2Bd, 3B,

(37) Moose River, (T 65, R 14). 1B, 2Bd, 3B,

(38) 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,

(39) Nip Creek, (T 59, R 11, S 3, 4, T 60, R 11, S 21, 22, 27, 28, 34). 1B, 2A, 3B,

(40) Nira Creek, (T 61, R 11, S 22, 23, 27) 1B, 2A, 3B;

(41) Pitt Creek, (T 159, R 32, S 4, 9, 16, T 160, R 32, S 21, 28, 33) 1B, 2A, 3B;

(42) Portage Creek, (T 65, R 21) 2C,

(43) Portage River, (T 65, 66, R 14) 1B, 2Bd, 3B,

(44) Rainy River, (Outlet of Rainy Lake to Dam in International Falls) 1B, 2Bd, 3A,

(45) Rainy River, (Dam in International Falls to Railroad Bridge in Baudette) 1C, 2Bd, 3A,

(46) Rainy River, (Railroad Bridge in Baudette to Lake of the Woods) 2B, 3A,

(47) 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;

(48) 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,

(49) Section 30 Creek, (T 63, R 11, S 30, T 63, R 12, S 24, 25) 1B, 2A, 3B,

(50) Sea Gull River, (T 66N, R 4W, S 30, 31) 1C, 2Bd, 3B;

(51) Shine Brook, (T 62, R 25, S 11, 14, 15, 16)· 1B, 2A, 3B,

(52) Snake Creek, (T 60, R 9, S 6, 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;

(53) Snake River, (T 60, R 10, S.3, 4, T 61, R 9, S 18, 19, T 61, R 10, S.23, 24, 26, 27, 33, 34) 1B, 2A, 3B,

(54) *Snake River, [11/5/84P] (T.61, R 9, S 7, T 61, R 10, S.12) 1B, 2A, 3B,

(55) Sphagnum Creek, (T.60, R.9, S 4, T 61, R 9, S 28, 29, 33) 1B, 2A, 3B;

(56) 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;

(57) Tomlinson Creek, (T 60, R 7, S.18, 19, 31, T 60, R.8, S.24, 25, 36) 1B, 2A, 3B,

(58) Tomato Creek, (T 161, R 34, S 3, 9, 10, T 162, R 34, S 35). 1B, 2A, 3B;

(59) Trout Brook, (T 66, R 26, S 19, 30, T 66, R 27, S.24, 25) 1B, 2A, 3B,

(60) 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,

(61) Two Rivers, West, (T 61, R 15, S 6, 7, 8, 9, 14, 15, 16, 17). 1B, 2A, 3B;

(62) Unnamed Creek, (T 65, R 19, S 4, 5; T 66, R.19, S 33) 1B, 2A, 3B,

(63) 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,

(64) Venning Creek, (T.60, R 23, S 1, 2, 11, 12, 13, 14, T 61, R 23, S.35) 1B, 2A, 3B,

(65) Victor Creek, (T 60, R 9, S 12, 13). 1B, 2A, 3B,

(66) Weiss Creek, (T.59, R 9, S.2, 3, 11, T.60, R 9, S 27, 34): 1B, 2A, 3B,

(67) Wenho Creek, (T 58, R.10, S 17, 20, 21, 27, 28, 34)· 1B, 2A, 3B;

(68) Zippel Creek, West Branch, (T 162, R 33, 34). 2C,

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

(70) *All other streams in the Voyageurs National Park [11/5/84P] 2B, 3B

B Lakes:

(1) *Adams Lake, [11/5/84P] (T 64, R.6) 1B, 2A, 3B,

(2) *Agamok Lake, [11/5/84P] (T.65, R 5, 6) 1B, 2A, 3B,

(3) *Ahmakose Lake, [11/5/84P] (T.64, R.7)· 1B, 2A, 3B;

(4) *Ahsub Lake, [11/5/84P] (T.64, R 8W, S 27, 28). 1B, 2A, 3B,

(5) *Alpine Lake, [11/5/84P] (T 65, R 5) 1B, 2A, 3B;

(6) *Alruss Lake, [11/5/84P] (T 64, R 11W, S 7, T 64, R 12W, S 12)· 1B, 2A, 3B;

(7) *Amoeber Lake, [11/5/84P] (T 65, R.6, 7) 1B, 2A, 3B,

(8) *Arkose Lake, [11/5/84P] (T 64, 65, R 7) 1B, 2A, 3B,

(9) *Ashdick Lake (Caribou Lake), [11/5/84P] (T.66, R 6). 1B, 2A, 3B;

(10) *Basswood Lake, [11/5/84P] (T 64, 65, R 9, 10): 1B, 2A, 3B,

(11) *Bat Lake, [11/5/84P] (T.64, 65, R 5). 1B, 2A, 3B,

(12) *Beartrack Lake, [11/5/84P] (T 67, R 15)· 1B, 2A, 3B,

(13) *Beaver Lake (Elbow Lake), [11/5/84P] (T 63, 64, R 6, 7). 1B, 2A, 3B;

(14) Beetle Lake, (T.60, R 9W, S 7). 1B, 2A, 3B;

(15) Big Lake, (T.64, 65, R.13)· 1C, 2Bd, 3B,

(16) *Bmgshick Lake, [11/5/84P] (T.65, R.4, 5) 1B, 2A, 3B,

(17) *Brandt Lake, [11/5/84P] (T 65, R 4) 1B, 2A, 3B;

(18) *Burntside Lake, [3/7/88R] (T 63, 64, R 12, 13, 14): 1B, 2A, 3B,

(19) Camp Four (Wessman) Lake, (T 59, R 19W, S 4) 1B, 2A, 3B,

(20) *Camp Lake, [11/5/84P] (T 64, R 11)· 1B, 2Bd, 3B,

(21) *Caribou Lake, [3/7/88R] (T 58, R.26). 1B, 2A, 3B,

(22) *Cash Lake, [11/5/84P] (T.64, R.3). 1B, 2A, 3B;

(23) Cedar Lake, (T.63, R 11, 12)· 1C, 2Bd, 3B,

(24) Chant Lake, (T 63, R 13W, S 10) 1B, 2A, 3B,

(25) *Cherokee Lake, [11/5/84P] (T 63, 64, R 4)· 1B, 2A, 3B;
(26) *Cherry Lake, [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
(27) *Conchu Lake, [11/5/84P] (T 63, R 10W, S.21, 22) 1B, 2A, 3B,
(28) *Crab Lake, [11/5/84P] (T 63, R.13, 14) 1B, 2A, 3B,
(29) Crab Lake, (T 65, R 2, 3)· 1B, 2A, 3B;
(30) Crane Lake, (T 67, 68, R.16, 17): 1B, 2A, 3A,
(31) *Crooked Lake, [11/5/84P] (T 64, R 5)· 1B, 2A, 3B,
(32) *Crooked Lake, [11/5/84P] (T 66, R 11, 12): 1B, 2A, 3B,
(33) *Cruiser Lake (Trout Lake), [11/5/84P] (T 69, 70, R.19): 1B, 2A, 3B,
(34) Cub Lake, (T 61, R 14W, S 2): 1B, 2A, 3B,
(35) Dan Lake, (T.63, R 10W, S 17). 1B, 2A, 3B,
(36) Deepwater Lake, (T 59, R.20W, S 2) 1B, 2A, 3B,
(37) Dry Lake, (T.63, R.12W, S 9). 1B, 2A, 3B;
(38) Dry Lake, Little, (T 63, R 12W, S 9): 1B, 2A, 3B,
(39) *Eddy Lake, [11/5/84P] (T 65, R 6): 1B, 2A, 3B,
(40) Eikela Lake, (T.60, R 10W, S 22)· 1B, 2A, 3B,
(41) Ennis Lake, (T 64, R 9W, S 33)· 1B, 2A, 3B,
(42) Erskine Lake, (T.61, R 24W, S 2, 3) 1B, 2A, 3B,
(43) *Ester Lake (Gnig Lake), [11/5/84P] (T 65, 66, R.6)· 1B, 2A, 3B,
(44) *Eugene Lake, [11/5/84P] (T 67, R 15)· 1B, 2A, 3B,
(45) *Explorer Lake (South Three Lake), [11/5/84P] (T 64, R 7, 8) 1B, 2A, 3B,
(46) Fall Lake, (T 63, 64, R 11, 12) 1B, 2Bd, 3B,
(47) Farm Lake, (T.62, 63, R.11) 1C, 2Bd, 3B,
(48) *Fat Lake, [11/5/84P] (T 67, R.15)· 1B, 2A, 3B;
(49) *Fay Lake, [11/5/84P] (T 65, R 5) 1B, 2A, 3B,
(50) *Fern Lake, [11/5/84P] (T.64, R.5) 1B, 2A, 3B;
(51) *Fern Lake, West, [11/5/84P] (T 64, R.5). 1B, 2A, 3B,
(52) *Finger Lake, [11/5/84P] (T 67, R 14) 1B, 2A, 3B;
(53) *Fishdance Lake, [11/5/84P] (T.63, R 7). 1B, 2A, 3B,
(54) *Found Lake, [11/5/84P] (T 64, R.9W, S 10, 15)· 1B, 2A, 3B,
(55) *Fraser Lake, [11/5/84P] (T 64, R.7): 1B, 2A, 3B;
(56) *French Lake, [11/5/84P] (T 64, 65, R 5). 1B, 2A, 3B,
(57) *Frost Lake, [11/5/84P] (T 64, R 4) 1B, 2A, 3B;
(58) *Gabimichigami Lake, [11/5/84P] (T 64, 65, R.5, 6): 1B, 2A, 3B,
(59) *Ge–Be–On–Equat Lake, [11/5/84P] (T 67, R 14) 1B, 2A, 3B;
(60) *Gijikiki Lake (Cedar Lake), [11/5/84P] (T 65, 66, R.6) 1B, 2A, 3B,
(61) *Gillis Lake, [11/5/84P] (T.64, 65, R.5). 1B, 2A, 3B,
(62) Glacier Pond No 1, (T 63, R. 10W, S.11). 1B, 2A, 3B,
(63) Glacier Pond No. 2, (T 63, R.10W, S 11)· 1B, 2A, 3B,
(64) *Gordon Lake, [11/5/84P] (T 64, R.4) 1B, 2A, 3B;
(65) *Gun Lake, [11/5/84P] (T 67, 68, R 15)· 1B, 2A, 3B,
(66) *Gunflint Lake, [3/7/88R] (T 65, R 2, 3, 4) 1B, 2A, 3B,
(67) Gunflmt Lake, Little, (T.65, R 2). 1B, 2Bd, 3B;
(68) Gypsy Lake, (T.60, R.10W, S 6, 7): 1B, 2A, 3B;
(69) Hanson Lake, (T.64, R.13W, S 36): 1B, 2A, 3B,
(70) *Hanson Lake, [11/5/84P] (T 65, 66, R.6) 1B, 2A, 3B;
(71) High Lake, (T 63, R 12W, S 3, 4, 5; T 64, R 12W, S 33, 34) 1B, 2A, 3B;
(72) Hogback (Twin) Lake, (T 60, R 6W, S 31) 1B, 2A, 3B,

(73) *Holt Lake, [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
(74) *Howard Lake, [11/5/84P] (T.65, R 5) 1B, 2A, 3B,
(75) *Hustler Lake, [11/5/84P] (T 66, 67, R 14) 1B, 2A, 3B,
(76) *Ima Lake (Slate Lake), [11/5/84P] (T 64, R 7, 8) 1B, 2A, 3B,
(77) *Jacob (Louis) Lake, [11/5/84P] (T 64, R 12W, S 11, 12) 1B, 2A, 3B,
(78) James (Jammer) Lake, (T 60, R 18W, S 27) 1B, 2A, 3B,
(79) *Jap Lake, [11/5/84P] (T 65, R 4W, S 19; T 65, R 5W, S 24) 1B, 2A, 3B,
(80) Jasper Lake, (T 63, 64, R 9, 10) 1C, 2Bd, 3B,
(81) *Jasper Lake, [11/5/84P] (T 65, R 5) 1B, 2A, 3B,
(82) *Johnson Lake, [3/7/88R] (T 67, 68, R 17, 18) 1B, 2A, 3B,
(83) Jouppi Lake, (T 59, R 8W, S 14, 22, 23) 1B, 2A, 3B,
(84) Judd Lake, (T 63, R 9W, S 4, 5, T 64, R 9W, S 32, 33) 1B, 2A, 3B,
(85) *Kabetogama Lake, [11/5/84P] (T 69, 70, R 20, 21, 22) 1B, 2Bd, 3A,
(86) *Karl Lake, [11/5/84P] (T 64, R 3, 4) 1B, 2A, 3B,
(87) *Kek Lake, Little, [11/5/84P] (T 65, R 6, 7)· 1B, 2A, 3B,
(88) *Kekekabic Lake, [11/5/84P] (T 64, 65, R 6, 7) 1B, 2A, 3B,
(89) *Knife Lake, [11/5/84P] (T 65, R 7, 8) 1B, 2A, 3B,
(90) *Lake of the Clouds Lake (Dutton Lake), [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
(91) Lake of the Woods, (T 161, 162, 163, 164, 165, 166, 167, 168, R 30, 31, 32, 33, 34, 35, 36) 1B, 2Bd, 3A;
(92) Lake Vermilion, (T 61, 62, 63, R 14, 15, 16, 17, 18) 1C, 2Bd, 3B,
(93) *Larson Lake, [3/7/88R] (T 61, R.24W, S 16, 21) 1B, 2A, 3B,
(94) Little Long Lake, (T 63, R 12) 1C, 2Bd, 3B,
(95) *Long Island Lake, [11/5/84P] (T 64, R 3, 4) 1B, 2A, 3B,
(96) *Loon Lake, [3/7/88R] (T 65, R 3) 1B, 2A, 3B,
(97) *Loon Lake, [11/5/84P] (T 66, 67, R 15)· 1B, 2A, 3B;
(98) *Lunar Lake (Moon Lake), [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
(99) *Lynx Lake, [11/5/84P] (T 66, R 14, 15) 1B, 2A, 3B,
(100) *Magnetic Lake, [3/7/88R] (T 65, R 3, 4) 1B, 2A, 3B,
(101) *Makwa Lake (Bear Lake), [11/5/84P] (T 64, R 6) 1B, 2A, 3B,
(102) *Marble Lake, [11/5/84P] (T 64, R 6) 1B, 2A, 3B,
(103) *Mavis Lake, [11/5/84P] (T 64, R.4W, S 4) 1B, 2A, 3B,
(104) *Mayhew Lake, [3/7/88R] (T 65, R 2). 1B, 2A, 3B,
(105) *Meditation Lake, [11/5/84P] (T 65, R 4W, S 7, 8) 1B, 2A, 3B,
(106) *Mesaba Lake, [11/5/84P] (T 63, R 5)· 1B, 2A, 3B,
(107) Miner's Mine Pit, (T.63, R 12W, S 26, 27, 28) 1B, 2A, 3B,
(108) *Missing Link Lake, [11/5/84P] (T 64, R 4W, S 4) 1B, 2A, 3B
(109) *Missionary Lake (East Three Lake), [11/5/84P] (T 64, R.7, 8) 1B, 2A, 3B,
(110) *Moose Lake, [11/5/84P] (T.64, R 9, 10) 1B, 2Bd, 3B,
(111) *Mora Lake, [11/5/84P] (T 64, R 5) 1B, 2A, 3B,
(112) *Mukooda Lake, [11/5/84P] (T 68, R 17) 1B, 2A, 3B,
(113) *Namakan Lake, [11/5/84P] (T 69, R 17, 18, 19) 1B, 2Bd, 3A,
(114) *Neglige Lake, [11/5/84P] (T 64, R 8W, S 1, 2, 11, 12) 1B, 2A, 3B,
(115) Nickel (Nichols) Lake, (T 59, R 25W, S 12) 1B, 2A, 3B,
(116) Norberg Lake, (T.61, R.14W, S 1) 1B, 2A, 3B,
(117) *North Lake, [3/7/88R] (T 65, R 2) 1B, 2A, 3B,
(118) North Lake, Little, (T 65, R 2) 1B, 2Bd, 3B,

(119) Norway Lake, (T 61, R 10W, S 3) 1B, 2A, 3B,
(120) *Ogıshkemuncıe Lake, [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
(121) *Ojıbway Lake (Upper Twın), [3/7/88R] (T 63, R 9, 10) 1B, 2A, 3B,
(122) *Owl Lake, [11/5/84P] (T 64, R 5) 1B, 2A, 3B,
(123) *Oyster Lake, [11/5/84P] (T 66, R 14) 1B, 2A, 3B,
(124) Peanut Lake, (T.60, R 10W, S 5) 1B, 2A, 3B,
(125) Pelıcan Lake, (T 64, 65, R 19, 20, 21) 1C, 2Bd, 3B,
(126) *Peter Lake, [11/5/84P] (T 64, 65, R 5) 1B, 2A, 3B,
(127) Pıckerel Lake, (T 60, R 21W, S 17) 1B, 2A, 3B,
(128) Portage Lake, (T 64, R 2W, S 3, 4, 5, T 65, R 2W, S 33) 1B, 2A, 3B,
(129) *Portage Lake, [11/5/84P] (T 65, R.8)· 1B, 2A, 3B,
(130) Portage Lake, Lıttle, (T 64, R 2W, S 3) 1B, 2A, 3B;
(131) *Powell Lake, [11/5/84P] (T 64, 65, R 5) 1B, 2A, 3B,
(132) *Rabbıt Lake, [11/5/84P] (T 66, R 6) 1B, 2A, 3B,
(133) *Raıny Lake, [11/5/84P] (T 70, 71, R.18, 19, 20, 21, 22, 23) 1B, 2Bd, 3A,
(134) *Raven Lake (Lynx Lake), [11/5/84P] (T.64, R 6) 1B, 2A, 3B,
(135) *Red Rock Lake, [11/5/84P] (T 65, 66, R 5)· 1B, 2A, 3B,
(136) Regenbogan Lake, (T 64, R 12W, S 18)· 1B, 2A, 3B,
(137) *Rog Lake, [11/5/84P] (T 65, R 5W, S 16, 17) 1B, 2A, 3B,
(138) *Ruby Lake, Bıg, [11/5/84P] (T 66, R 14) 1B, 2A, 3B,
(139) *Saganaga Lake, [11/5/84P] (T 66, 67, R 4, 5) 1B, 2A, 3B,
(140) *Saganaga Lake, Lıttle, [11/5/84P] (T 64, R 5, 6) 1B, 2A, 3B,
(141) *Sand Poınt Lake, [11/5/84P] (T 68, 69, R 16, 17)· 1B, 2A, 3A,
(142) Scarp (Clıff) Lake, (T 60, R 6W, S 31, 32) 1B, 2A, 3B,
(143) *Sea Gull Lake, [11/5/84P] (T 65, 66, R 4, 5) 1B, 2A, 3B,
(144) *Sema Lake (Coon Lake), [11/5/84P] (T 65, R 7)· 1B, 2A, 3B;
(145) Shoo–fly Lake, (T 59, R 8W, S 1, T 60, R 8W, S 36) 1B, 2A, 3B,
(146) *Skull Lake, [11/5/84P] (T 64, R 9W, S 14) 1B, 2A, 3B,
(147) *Snowbank Lake, [11/5/84P] (T 63, 64, R 8, 9) 1B, 2A, 3B,
(148) *Spoon Lake (Fames Lake), [11/5/84P] (T.65, R.7) 1B, 2A, 3B,
(149) *Sprıng Lake, [3/7/88R] (T 68, R 18) 1B, 2A, 3B,
(150) Steamhaul Lake, (T 60, R 9W, S 32). 1B, 2A, 3B,
(151) *Strup Lake, [11/5/84P] (T 64, R 7) 1B, 2A, 3B,
(152) *Sumpet Lake, [11/5/84P] (T 61, R 7) 1B, 2Bd, 3B,
(153) Surber Lake, (T 65, R 2W, S 34) 1B, 2A, 3B,
(154) *Takucmıch Lake, [11/5/84P] (T 67, 68, R 14) 1B, 2A, 3B,
(155) *Tarry Lake, [11/5/84P] (T 64, R 5). 1B, 2A, 3B;
(156) *Thomas Lake, [11/5/84P] (T.63, 64, R 7)· 1B, 2A, 3B,
(157) *Thumb Lake, [11/5/84P] (T 67, R 14) 1B, 2A, 3B,
(158) Tofte Lake, (T 63, R 10W, S 2, 3, 10, 11, T 64, R 10W, S.35) 1B, 2A, 3B;
(159) *Topaz Lake (Star Lake), [11/5/84P] (T 65, R 6) 1B, 2A, 3B,
(160) *Town Lake, [11/5/84P] (T.63, 64, R 3, 4). 1B, 2A, 3B,
(161) Trappers Lake, (T 60, R 8W, S 27, 34) 1B, 2A, 3B,
(162) *Trout Lake, Bıg, [11/5/84P] (T.63, 64, R 15, 16) 1B, 2A, 3B,
(163) *Trout Lake, Lıttle (Pocket Lake), [11/5/84P] (T 68, R 17) 1B, 2A, 3B,
(164) *Trygg (Twıgg) Lake, [11/5/84P] (T 68, R 14W, S 31, T 68, R 15W, S 36) 1B, 2A, 3B,
(165) *Tucker Lake, [11/5/84P] (T 64, R 3)· 1B, 2Bd, 3B,

(166) *Tuscarora Lake, [11/5/84P] (T 64, R 4, 5) 1B, 2A, 3B,

(167) *Vera Lake, [11/5/84P] (T 64, R.8) 1B, 2A, 3B,

(168) *Virgin Lake, [11/5/84P] (T 64, R 5) 1B, 2A, 3B,

(169) *Wine Lake, [11/5/84P] (T 63, R 5). 1B, 2A, 3B,

(170) *Wisini Lake, [11/5/84P] (T 64, R.7). 1B, 2A, 3B,

(171) Woods, Lake of the (see Lake of the Woods),

(172) Unnamed Swamp, Winton, (T 63, R 11, S 19, T 63, R 12, S 24). 7,

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

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

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

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

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

C Calcareous Fens· None currently listed

D Scientific and Natural Areas *Purvis Lake–Ober, [11/5/84P] Waters within the Purvis Lake–Ober Foundation Scientific and Natural Area, Saint Louis County, (T 62, R 13) 2B, 3B, except wetlands which are 2D

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

(1) Auganash Creek, (T 144, R 38, S 5, T 145, R 38, S 27, 28, 31, 32, 33)· 1B, 2A, 3B,

(2) Bad Boy Creek, (T 144, R 39, S 13, 14, 22, 23, 27, 28, 34). 1B, 2A, 3B,

(3) Badger Creek, (T.149, 150, 151, R.42, 43, 44) 2C,

(4) Barnums Creek (Burnham Creek), (T 148, 149, 150, R.44, 45, 46, 47, 48) 2C,

(5) Battle River, South Branch, (T 151, R 30, S.2, 3, 4, 11) 1B, 2A, 3B,

(6) Bemis Hill Creek, (T.161, R 37, S 17, 19, 20, 29, 30)· 1B, 2A, 3B,

(7) Bois de Sioux River, (Mud Lake outlet to Breckenridge) 2C,

(8) Brandberg Creek, (T 133, R 38, S 20, 21, 28, 29, 30). 1B, 2A, 3B,

(9) Buckboard Creek, (T 144, R 37, S 19, 30, 31, T 144, R 38, S 11, 12, 13, 24) 1B, 2A, 3B;

(10) Clearwater River, (T 148, R 35, S 5, 6, 8, 17, 20, 29, 31, 32, T 149, R.35, S.20, 29, 31, 32) 1B, 2A, 3B,

(11) County Ditch No. 6A–2, Rothsay, (T 135, R.45, S.21, 28, 33): 7,

(12) County Ditch No 32, Sabin, (T.138, R.48, S.13, 14, 15, 16, 17, 18)· 7,

(13) County Ditch No. 65, New York Mills, (T.135, R.37, S.18, T 135, R 38, S 13) 7;

(14) Dead Horse Creek, (T.138, R.38, S.3, 4, 7, 8, 9, 16). 1B, 2A, 3B;

(15) Deerhorn Creek, (T 136, R 44, 45, 46) 2C;

(16) Doran Slough, (T 131, 132, R 46, 47) 2C,

(17) Eighteen Mile Creek, (T 127, R 46, 47) 2C,

(18) Elbow Lake Creek, (T 142, R 38, S 6; T 143, R.38, S 31, 32): 1B, 2A, 3B,

(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.8, 9, 12, 13, 14, 15, 16). 1B, 2A, 3B,

(20) Five Mile Creek, (T 127, 128, R 45) 2C,

(21) Gentilly River, (T 149, 150, R.45) 2C,

(22) Hay Creek, (T 137, 138, R 44, 45, 46) 2C,

(23) Hay Creek, (T 161, 162, 163, R 37, 38, 39). 2C,

(24) Hill River, (T 148, 149, 150, R.39, 40, 41, 42) 2C;

(25) Holmstad Creek, (T 136, R.37, S.7, T 136, R 38, S 12, 13, 14) 1B, 2A, 3B,

(26) Hoover Creek, (T 152, 153, 154, R 29, 30) 2C,

(27) Joe River, (T 162, 163, 164, R 49, 50) 2C,

(28) Joe River, Little, (T 163, R 47, 48) 2C,

(29) Judicial Ditch No 13, Goodridge, (T.154, R 40, S 16, 17, 18) 7,

(30) Judicial Ditch No 18, Goodridge, (T 154, R 40, S 18, 19, 27, 28, 29, 30, T 154, R 41, S 13, 14, 15, 16, 17, 18, T 154, R 42, S 7, 8, 13, 14, 15, 16, T 154, R 43, S 9, 10, 11, 12, 16) 7,

(31) Lawndale Creek, (T 135, R 45, S 5, 6, T 135, R 46, S 1, 2) 1B, 2A, 3B,

(32) Lengby Creek, (T 147, R 39, S.33, 34) 1B, 2A, 3B,

(33) Long Branch Creek, (T 134, R 42, S 7): 1B, 2A, 3B,

(34) Lost River, (T 148, R 38, S 20, 21, 22, 27, 28) 1B, 2A, 3B,

(35) Maple Creek, (T 147, 148, R 44, 45, 46) 2C,

(36) Marsh Creek, (T 144, 145, 146, R 41, 42, 43) 2C,

(37) Meadow Creek, (T 151, R 30, S 6, T.151, R 31, S 1, 2) 1B, 2A, 3B,

(38) Mud Creek, (T 144, R.37, S 13, 14, 22, 23, 24) 1B, 2A, 3B,

(39) Mud River, (T 150, R 33, S 21, 28) 1B, 2A, 3B,

(40) Mustinka River, (T 127, 128, R 45, 46, 47): 2C;

(41) Mustinka River, West Branch, (T.125, 126, 127, 128, R.45, 46, 47) 2C,

(42) Nassett Creek, (T 148, R 38, S 20, 28, 29) 1B, 2A, 3B,

(43) O'Brien Creek, (T 149, R 32, S 2, T 150, R 32, S 23, 24, 26, 35) 1B, 2A, 3B,

(44) Otter Tail River, (Height of Land Lake to mouth) 1C, 2Bd, 3B,

(45) Rabbit River, (T 130, 131, R.45, 46, 47) 2C,

(46) Rabbit River, South Fork, (T 130, R 45, 46) 2C,

(47) Red Lake River, (Outlet of Lower Red Lake to mouth) 1C, 2Bd, 3B,

(48) Red River of the North, (Breckenridge to Canadian border) 1C, 2Bd, 3B,

(49) Roy Creek (Roy Lake Creek), (T.144, 145, R 39) 2C,

(50) Rush Lake Creek, (T 135, R 38, S 23, 26, 27, 28)· 1B, 2A, 3B,

(51) Schermerhorn Creek, (T 144, R 39, S 6, T.145, R 39, S 31, T 145, R 40, S 25, 26, 36) 1B, 2A, 3B,

(52) Spring Creek, (T 145, 146, R 45, 46, 47). 2C;

(53) Spring Creek, (T 142, R 41, 42) 2C;

(54) Spring Creek, (T 149, R 30, S 4, 5, 9, 10): 1B, 2A, 3B,

(55) Spring Lake Creek, (T 148, R.35, S 34, 35) 1B, 2A, 3B,

(56) Stony Creek, (T.137, R 45, 46) 2C,

(57) Sucker Creek, (T 138, R 40, S 18, T 138, R 41, S 13) 1B, 2A, 3B,

(58) Sucker Creek, (T 160, 161, R.39) 2C,

(59) Tamarac River (Source to Stephen), (T 157, 158, R 45, 46, 47, 48) 1C, 2Bd, 3B,

(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, 26) 1B, 2A, 3B,

(61) Twelve Mile Creek (excluding Class 7 segment), (T.126, 127, R 45) 2C,

(62) Twelve Mile Creek (County Ditch No 1), Donnelly, (T 126, R 43, S 16, 17, 18, 19, 21, 22, 25, 26, 27, T 126, R 44, S 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, T 126, R 45, S.25, 26, 27, 28, 36)· 7;

(63) Twelve Mile Creek, East Fork, (T 125, 126, R 44, 45) 2C,

(64) Twelve Mile Creek, West Fork, (T 125, 126, R 44, 45) 2C,
(65) Twin Lake Creek, (T 144, 145, R 40) 2C;
(66) Two Rivers, Middle Branch, (Source to Hallock) 1C, 2Bd, 3B;
(67) Two Rivers, South Branch, (T 161, R 41–49). 1C, 2Bd, 3B,
(68) Unnamed Creek, Rothsay, (T 135, R 45, S 21, 22, 23, 25, 26) 7,
(69) Unnamed Creek, Shevlin, (T.147, R 36, S 17, 18, T 147, R 37, S 11, 12, 13, 14) 7,
(70) Unnamed Ditch, Audubon, (T 139, R 42, S 4, 9) 7,
(71) Unnamed Ditch, Lake Park, (T 139, R.43, S 4, T 140, R 43, S.33) 7,
(72) Unnamed Ditch, Glyndon, (T 139, R 47, S 1, 2, 12, T 140, R 47, S 35) 7,
(73) Unnamed Ditch, Callaway, (T 140, R 41, S.6, T 140, R 42, S.1, 2, 10, 11) 7,
(74) Unnamed Ditch, Gary, (T 145, R 44, S 22, 27, 34) 7,
(75) Unnamed Ditch, Erskine, (T 149, R.42, S 34, 35) 7,
(76) Unnamed Ditch, Thief River Falls, (T 154, R 43, S 31, 32, 33)· 7,
(77) Unnamed Ditch, Warroad, (T 163, R.37, S 19, 20, 21, 22, 23, T 163, R 38, S 19, 20, 21, 22, 23, 24, 30, T.163, R 39, S 25, 31, 32, 33, 34, 35, 36) 7;
(78) Whiskey Creek, (T 137, R 44, 45, 46). 2C,
(79) Whiskey Creek, (T 133, 134, R 47, 48) 2C,
(80) White Earth River, (T 143, 144, R 40, 41, 42) 2C,
(81) Willow Creek, New York Mills, (T 135, R 38, S 13, 14, 15, 16, 17, 18) 7, and
(82) Wolverton Creek, (T 135, 136, 137, R 48) 2C

B Lakes

(1) Bass Lake, (T.135, R 42W, S 10, 11): 1B, 2A, 3B,
(2) Hanson Lake, (T 139, R 39W, S 6) 1B, 2A, 3B,
(3) Lake Bronson, (T 160, 161, R 46)· 1C, 2Bd, 3B;
(4) Twin Lake, East, (T 138, R 41)· 1B, 2A, 3B,
(5) Unnamed Slough, Vergas, (T 137, R 40, S 18, T 137, R 41, S.13, 24) 7, and
(6) Wapatus (Island) Lake, (T 144, R 38W, S 21, 28) 1B, 2A, 3B

C Calcareous Fens

(1) *Agassiz–Olson WMA fen, 17, Norman [4/18/94R] (T 146, R 45, S 22)· 2D,
(2) *Anna Gronseth Prairie fen, 47, Wilkin [4/18/94R] (T.134, R.45, S.15) 2D;
(3) *Anna Gronseth Prairie fen, 49, Wilkin [4/18/94R] (T 134, R 45, S 10) 2D,
(4) *Anna Gronseth Prairie fen, 52, Wilkin [4/18/94R] (T 134, R 45, S 4) 2D;
(5) *Barnesville Moraine fen, 44, Clay [4/18/94R] (T 137, R 44, S 18): 2D;
(6) *Barnesville WMA fen, 10, Clay [3/7/88R] (T 137, R.45, S 1) 2D,
(7) *Barnesville WMA fen, 43, Clay [4/18/94R] (T 137, R 44, S 18) 2D,
(8) *Chicog Prairie fen, 39, Polk [4/18/94R] (T 148, R 45, S 28) 2D,
(9) *Chicog Prairie fen, 40, Polk [3/7/88R] (T 148, R 45, S 33) 2D,
(10) *Chicog Prairie fen, 41, Polk [3/7/88R] (T.148, R 45, S 20, 29) 2D,
(11) *Chicog Prairie fen, 42, Polk [3/7/88R] (T.148, R.45, S 33) 2D,
(12) *Clearbrook fen, 61, Clearwater [3/7/88R] (T 149, R 37, S 17) 2D;
(13) *Faith Prairie fen, 15, Norman [4/18/94R] (T 144, R 43, S 26) 2D,
(14) *Faith Prairie fen, 16, Norman [4/18/94R] (T 144, R 43, S 35) 2D,

(15) *Faith Prairie fen, 27, Norman [3/7/88R] (T 144, R 43, S 25) 2D,
(16) *Felton Prairie fen, 28, Clay [3/7/88R] (T 142, R 46, S 36) 2D,
(17) *Felton Prairie fen, 36, Clay [3/7/88R] (T 141, R 46, S 13) 2D,
(18) *Felton Prairie fen, 48, Clay [4/18/94R] (T 142, R 45, S 31) 2D,
(19) *Felton Prairie fen, 53, Clay [4/18/94R] (T 141, R 46, S 24) 2D,
(20) *Green Meadow fen, 14, Norman [4/18/94R] (T 145, R 45, S 35, 36) 2D,
(21) *Haugtvedt WPA North Unit, 54, Clay [4/18/94R] (T 137, R 44, S 28, 29) 2D,
(22) *Kittleson Creek Mire fen, 55, Polk [4/18/94R] (T 147, R.44, S 6, 7) 2D,
(23) *Rothsay Prairie fen, 46, Wilkin [4/18/94R] (T 136, R 45, S 33) 2D,
(24) *Rothsay Prairie fen, 50, Wilkin [4/18/94R] (T.135, R 45, S 15, 16) 2D,
(25) *Rothsay Prairie fen, 51, Wilkin [4/18/94R] (T 135, R 45, S 9) 2D,
(26) *Sanders East fen, 65, Pennington [4/18/94R] (T 153, R 44, S 7) 2D,
(27) *Sanders East fen, 74, Pennington [4/18/94R] (T 153, R 44, S 7) 2D,
(28) *Sanders fen, 64, Pennington [4/18/94R] (T 153, R 44, S 18, 19) 2D,
(29) *Spring Creek WMA NHR fen, 34, Becker [3/7/88R] (T 142, R 42, S 13) 2D,
(30) *Spring Prairie fen, 37, Clay [3/7/88R] (T 140, R 46, S 11) 2D,
(31) *Tamarac River fen, 71, Marshall [4/18/94R] (T 157, R 46, S 2) 2D,
(32) *Tympanuchus Prairie fen, 26, Polk [3/7/88R] (T 149, R 45, S 17) 2D,
(33) *Tympanuchus Prairie fen, 38, Polk [3/7/88R] (T.149, R 45, S 16) 2D,
(34) *Viking fen, 68, Marshall [4/18/94R] (T 155, R 45, S 18) 2D,
(35) *Viking fen, 70, Marshall [4/18/94R] (T 155, R 45, S.20) 2D,
(36) *Viking Strip fen, 69, Marshall [4/18/94R] (T 154, R 45, S 4) 2D, and
(37) *Waubun WMA fen, 11, Mahnomen [3/7/88R] (T 143, R.42, S 25) 2D

D Scientific and Natural Areas

(1) *Green Water Lake, [11/5/84P] Waters within the Green Water Lake Scientific and Natural Area, Becker County, (T 141, R 38, S 28, 33, 34) 2B, 3B, except wetlands which are 2D, and

(2) *Pembina Trail Preserve, [3/7/88P] Waters within the Pembina Trail Preserve Scientific and Natural Area, Polk County, (T 148, R 45, S 1, 2, T 149, R 44, S 18, 19, 30, 31, T 149, R 45, S 13, 24, 25, 36) 2B, 3B, except wetlands which are 2D

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

(1) Alcohol Creek, (T 143, 144, R 34) 2C,
(2) Arramba Creek, (T 40, R 30) 2C,
(3) Barbour Creek, (T 44, R 28, S 28) 1B, 2A, 3B,
(4) Basswood Creek, (T 141, 142, R 36) 2C,
(5) Battle Brook, (T 35, R 26, 27) 2C,
(6) Battle Creek, (T 120, R 30, 31) 2C,
(7) Bear Brook, (T 144, R 27) 2C,
(8) Bear Creek, (T 145, R 36) 2C,
(9) Beautiful Creek, (T 127, R 31) 2C,
(10) Beaver Creek, (T 136, 137, R.32, 33) 2C,
(11) Belle Creek, (T 117, 118, R 32) 2C,
(12) Black Bear Brook, (T 44, R 28, S 7, 8) 1B, 2A, 3B,
(13) Birch Brook, (T 141, R 25) 2C,
(14) Black Brook, (T 41, 42, R 26) 2C,

(15) Black Brook, (T 42, 43, R 30). 2C,

(16) Blackhoof Creek, (T.46, R 29, S 16) 1B, 2A, 3B;

(17) Blackwater Creek, (T 55, R 26) 2C,

(18) Blueberry River, (T 138, 139, R 35, 36) 2C,

(19) Bluff Creek, (T 135, 136, R.36, 37)· 2C;

(20) Bogus Brook (excluding Class 7 segment), (T 37, 38, R.26). 2C,

(21) Bogus Brook, Bock, (T 38, R 26, S 13, 14) 7,

(22) Borden Creek, (T 44, R 28, S.8, 9, 17, 20). 1B, 2A, 3B,

(23) Briggs Creek, (T 35, R 29, S 2, 11, 12, 14, 15, 22): 1B, 2A, 3B,

(24) Buckman Creek (excluding Class 7 segment), (T 39, 40, R 30, 31) 2C;

(25) 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;

(26) 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,

(27) Bungoshme Creek, (T.145, R 32, S 28, 29, 30, T 145, R 33, S 25, 26, 34, 35) 1B, 2A, 3B,

(28) Bunker Hill Brook, (T.38, R 30, S.6; T 38, R 31, S 1, 2, 10, 11) 1B, 2A, 3B;

(29) Camp Creek, (T 43, R.28, S.4, 5) 1B, 2A, 3B;

(30) Camp Ripley Brook, (T 132, R.30, S 13, 24) 1B, 2A, 3B,

(31) Cat Creek, (T 137, R.35, S.4, 9, 10, 11, 12, 13) 1B, 2A, 3B;

(32) Cat River (excluding trout waters), (T 136, 137, R 33, 34, 35). 2C,

(33) Cedar Lake Creek, (T.138, R.31, S 14, 23, 26, 27, 28) 1B, 2A, 3B;

(34) Chase Brook, (T 38, 39, R 27) 2C;

(35) Clearwater Creek, (T 56, 57, R.24, 25) 2C;

(36) Cold Creek, (T 145, R 33, S.19)· 1B, 2A, 3B,

(37) Cold Spring Creek, (T 123, R.30, S.14, 15) 1B, 2A, 3B,

(38) Coon Creek, (T 43, R 29, 30)· 2C,

(39) Corey Brook, (T 135, R 30, S 9, 15, 16, 21, 22, 27). 1B, 2A, 3B,

(40) 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,

(41) County Ditch No 23, Garfield, (T 129, R 38, S 26, 27)· 7;

(42) County Ditch No. 23A, Willmar, (T 119, R 34, S 29, 30; T 119, R 35, S 23, 25, 26) 7,

(43) 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;

(44) County Ditch No 63, Near Hutchinson, West Lynn Coop Cry , (T 116, R.30, S 19, 20, 21, 28, 33) 7,

(45) County Ditch No. 132, Lakeside, Lakeside Coop Cry., (T 116, R.31, S 16, 21) 7,

(46) Crane Creek (excluding Class 7 segment), (T 116, 117, R 26, 27) 2C;

(47) Crane Creek, Winsted, (T 117, R.27, S.14, 20, 21, 22, 23, 24, 25). 7,

(48) *Crow River, North Fork, [11/5/84R] (From the Lake Koroms outlet to the Meeker – Wright County line) 2B, 3B;

(49) Cullen Brook, (T 136, R 28, S.18, 19, 30, T 136, R 29, S 13) 1B, 2A, 3B,

(50) Dabill Brook, (T.137, R.31, S 1, 2, 9, 10, 11, 16, T 138, R.31, S 36): 1B, 2A, 3B,

(51) Dagget Brook, (T.43, R 29, 30) 2C;

(52) Duel Creek, (T 129, R 32, S 20) 1B, 2A, 3B,

(53) Eagle Creek, (T 120, R.29) 2C,

(54) Elk River, Little, (T 130, 131, R 30, 31) 2C,
(55) Elk River, South Branch, Little, (T 130, R 30, 31, 32). 2C,
(56) Estes Brook, (T 36, 37, 38, R.27, 28) 2C,
(57) Everton Creek, (T 149, R 30) 2C;
(58) Fairhaven Creek, (T 121, R 28, S.5; T.122, R 28, S 29, 31, 32) 1B, 2A, 3B,
(59) Farley Creek, (T 147, R 28) 2C,
(60) 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,
(61) Fawn Creek, (T.134, R 33, S 22, 27, 33, 34): 1B, 2A, 3B;
(62) Finn Creek, (T.135, R 37, S.27, 34) 1B, 2A, 3B,
(63) Fish Creek, (T 28, R 22): 2C,
(64) Fletcher Creek, (T 42, R 31) 2C,
(65) Foley Brook, (T 141, R 25) 2C,
(66) Frederick Creek, (T 119, R 25). 2C;
(67) Frontenac Creek, (T.145, R.34) 2C,
(68) Hanson Brook, (T 40, R 27). 2C,
(69) Hanson Brook (Three–Mile), (T 122, R 28, S.21, 22, 25, 26, 27, 36) 1B, 2A, 3B,
(70) 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,
(71) Hay Creek, (T 43, 44, R 30, 31) 2C,
(72) Hay Creek, (T 134, R 33, S 7, 8, 9, 10, 11, 17, 18) 1B, 2A, 3B,
(73) Hay Creek, (T 135, R 31, S 8, 9, 17). 1B, 2A, 3B,
(74) Hazel Creek, (T 127, R 29, 30) 2C,
(75) Hellcamp Creek, (T.140, R 33, S 19, T 140, R 34, S 24). 1B, 2A, 3B;
(76) Hennepin Creek, (T 144, R 35, S 3, 10, 15, 16, 21; T 145, R 35, S 34) 1B, 2A, 3B;
(77) Hennepin Creek (excluding trout waters), (T 144, 145, 146, R 34, 35). 2C,
(78) Hoblin Creek, (T 137, R 30, S 17, 18, 19) 1B, 2A, 3B;
(79) Indian Creek, (T 141, 142, R.36, 37). 2C;
(80) Irish Creek, (T.129, R 31) 2C,
(81) Iron Creek, (T.135, R 32) 2C,
(82) Jewett Creek, (T 119, 120, R 30, 31) 2C,
(83) Johnson Creek, (T 137, R.28). 2C,
(84) Judicial Ditch No 1, Lakeside, Lakeside Coop Cry., (T 116, R 31, S 28, 33) 7,
(85) 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,
(86) 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,
(87) Kawishiwash Creek, (T.142, R 32, S 12) 1B, 2A, 3B,
(88) Kettle Creek, (T.138, R 35, 36, 37)· 2C,
(89) Kinzer Creek, (T.123, R 30, S 27, 34). 1B, 2A, 3B,
(90) Kitchi Creek, (T 146, 147, R.29, 30)· 2C,
(91) Kitten Creek, (T 137, R 34, 35). 2C;
(92) Larson Creek, (T 128, R 32, S 6) 1B, 2A, 3B,
(93) LaSalle Creek (excluding trout waters), (T 143, 144, R 35) 2C,
(94) LaSalle Creek, (T 143, R 35, S 6, T 144, R 35, S 19, 30, 31) 1B, 2A, 3B,
(95) LaSalle River, (T.144, 145, R 35) 2C,

(96) Laura Brook, (T 141, R 26) 2C,
(97) Libby Brook, (T 50, R 23, S 5, 6, T 50, R 24, S 1, 2) 1B, 2A, 3B,
(98) Long Brook, Lower South, (T.44, R 30, S 12, 13) 1B, 2A, 3B,
(99) Long Brook, Upper South, (T 44, R 29, S.6, 7) 1B, 2A, 3B,
(100) Long Lake Creek, (T 46, R 25, S 10, 15)· 1B, 2A, 3B,
(101) Luxemburg Creek, (T 123, R 28, S 16, 17, 18, 19, 20, 21, 22, 30) 1B, 2A, 3B,
(102) Matuska's Creek, (T.54, R 26, S 35, 36) 1B, 2A, 3B,
(103) Meadow Creek, (T 128, R 30) 2C,
(104) Meyers Creek, (T 122, R 28, S 4, T.123, R 28, S 22, 27, 33, 34). 1B, 2A, 3B,
(105) Michaud Brook, (T 140, R 25, S 7, 17, 18)· 1B, 2A, 3B,
(106) Mike Drew Brook, (T 38, 39, R 26, 27) 2C,
(107) Mink Creek, Big, (T 41, 42, R 30, 31): 2C,
(108) Mink Creek, Little, (T 41, 42, R 29, 30, 31). 2C,
(109) *Mississippi River, [11/5/84R] (From Lake Itasca to Fort Ripley). 2B, 3B,
(110) *Mississippi River, [11/5/84R] (From Fort Ripley to the southerly boundary of Morrison County) 1C, 2Bd, 3B;
(111) Mississippi River, (From the southerly boundary of Morrison County to County State Aid Highway 7 bridge in Saint Cloud)· 1C, 2Bd, 3B,
(112) *Mississippi River, [11/5/84R] (County State Aid Highway 7 bridge in Saint Cloud to the northwestern city limits of Anoka) 1C, 2Bd, 3B,
(113) Mississippi River, (From the northwestern city limits of Anoka to the Upper Lock and Dam at Saint Anthony Falls in Minneapolis)· 1C, 2Bd, 3B,
(114) Mississippi River, (Outlet of Metro Wastewater Treatment Works in Saint Paul to river mile 830, Rock Island RR Bridge) 2C, 3B,
(115) 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,
(116) Muckey Creek, (T 139, R.33, S 1, 2, 10, 11, 12) 1B, 2A, 3B,
(117) Necktie River (T 145, R 32, S 6, 7, 8, 9, 16, T 145, R 33, S 1) 1B, 2A, 3B;
(118) Nelson Hay Creek, (T 130, R 31, S 1, 2) 1B, 2A, 3B,
(119) Northby Creek, (T 140, R 27) 2C,
(120) Norway Brook, (T 139, R 30) 2C,
(121) O'Brien Creek, (T 56, 57, R 22) 2C,
(122) O'Neill Brook, (T 38, R.26) 2C,
(123) Oak Ridge Creek (Oak Creek), (T 133, 134, R 36). 2C,
(124) Olson Brook, (T 136, R 30, S 12, 13, 14) 1B, 2A, 3B;
(125) Peterson Creek, (T 134, R.30, S 29, 33) 1B, 2A, 3B,
(126) Pickedee Creek, (T.144, R 32, S.29, 30, T 144, R 33, S 24, 25) 1B, 2A, 3B,
(127) Pickerel Creek, (T 56, R.22, S.7, 18; T.56, R.23, S.13) 1B, 2A, 3B,
(128) Pigeon River, (T 147, R 27) 2C,
(129) Pike Creek (excluding Class 7 segment), (T 129, R 30) 2C,
(130) Pike Creek, Flensburg, (T.129, R 30, S 17, 18, 19, 20): 7,
(131) Pillager Creek, (T.133, R 30). 2C;
(132) Pioneer Creek, (T 118, R.24). 2C,
(133) Pokegama Creek, (T.54, R.26, S.26, 27, 28). 1B, 2A, 3B;
(134) Pokegama Creek, Little, (T 54, R 26, S 26, 27, 34, 35)· 1B, 2A, 3B,
(135) Poplar Brook, (T 135, R 32, S 5, 6; T 136, R 32, S 22, 27, 28, 32, 33) 1B, 2A, 3B,

(136) Prairie Brook, (T.36, R 27) 2C,

(137) Rat Creek, (T 144, 145, R 34) 2C,

(138) Rice Creek, (T 30, 31, 32, R 22, 23, 24) 1C, 2Bd, 3B,

(139) Rice Creek, (T 35, R 29) 2C,

(140) Robinson Hill Creek, (T 123, R.28, S 4, 9, 10, 15, T 124, R 28, S 31, 32, 33). 1B, 2A, 3B,

(141) 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,

(142) Rogers Brook, (T.134, R 30, S 29, 32). 1B, 2A, 3B,

(143) Rosholt Creek, (T 55, R 23, S 22, 23, 24). 1B, 2A, 3B,

(144) Round Creek, (T 43, R 31, S 14, 15) 1B, 2A, 3B,

(145) Round Prairie Creek, (T 127, R 33, S 4, T 128, R 33, S 20, 29, 32, 33): 1B, 2A, 3B,

(146) *Rum River, [11/5/84P] (From the Ogechie Lake spillway to the northernmost confluence with Lake Onamia) 2B, 3B,

(147) *Rum River, [11/5/84R] (From the State Highway 27 bridge in Onamia to Madison and Rice Streets in Anoka) 2B, 3B,

(148) Sand Creek, (T 45, R 30, S 2, 3, 11, 13, 14, T 46, R 30, S 34) 1B, 2A, 3B,

(149) Sand Creek, (T 55, R 23, S 15, 22, 27, 28, 29, 32, 33) 1B, 2A, 3B,

(150) Sauk Creek, Little, (T 127, R 34, S.1, T.128, R 34, S 36) 1B, 2A, 3B,

(151) Schoolcraft Creek, (T 142, R 34, S 5, 7, 8, 17) 1B, 2A, 3B,

(152) Seven Mile Creek, (T 133, 134, R 30, 31): 2C,

(153) Shingobee River (Cass), (T 141, R 31, S 16, 17, 18, 19; T 141, R 32, S 24) 1B, 2A, 3B,

(154) Sisseebakwet Creek, (T 54, R 26, S 19, 29, 30) 1B, 2A, 3B;

(155) Six Mile Brook, (T 143, 144, R 26, 27) 2C,

(156) Skimmerhorn Creek, (T.149, R 30) 2C,

(157) Skunk Creek, (T 144, R 34): 2C;

(158) 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,

(159) Smart's Creek, (T 126, R 28, S 17, 18, 20). 1B, 2A, 3B,

(160) 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,

(161) Smith Creek, Unnamed Tributary, (T.53, R 26, S 11, 12) 1B, 2A, 3B,

(162) Smith Creek, Unnamed Tributary, (T 54, R.26, S 35, 36) 1B, 2A, 3B,

(163) 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,

(164) Snowball Creek, (T 56, R 23)· 2C,

(165) Split Hand Creek, (T 53, R 24) 2C,

(166) Spring Brook, (T 121, R.28, S.7; T 121, R 29, S 12)· 1B, 2A, 3B,

(167) Spring Brook, (T 138, R 28, S 27, 34)· 1B, 2A, 3B,

(168) Spring Brook, (T 139, R.26, S 3, 10, 11, 14) 1B, 2A, 3B,

(169) Spring Brook, Lower, (T.57, R 25, S 6, T 58, R.25, S 31) 1B, 2A, 3B,

(170) Spring Creek, (T 55, R 23, S 25, 26, 27). 1B, 2A, 3B,

(171) Spruce Creek (Douglas), (T.131, R 36, S 28, 29, 31, 32, 33, 34) 1B, 2A, 3B,

(172) Spruce Creek (Otter Tail), (T.130, R.36, S 3, 4, 9, 10)· 1B, 2A, 3B;

(173) Stag Brook, (T 121, 122, R.30, 31) 2C,

(174) Stall Creek, (T 143, R 33, S 12, 13, 14) 1B, 2A, 3B,

(175) Stanchfield Branch, Lower Braham, (T 37, R 23, S 3, 10, 15, 22) 7,

(176) Stocking Creek, (T 138, R 35) 2C,

(177) 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,

(178) Stony Brook (Stoney Brook), Foley, (T.36, R 29, S.2, 9, 10, 11, 16; T.37, R 29, S 35, 36)· 7,

(179) Stony Creek, (T 140, R.28) 2C,

(180) Stony Point Brook, (T.147, R.28) 2C,

(181) Straight Creek, Upper, (T 141, R.36, S 30, 31, T.141, R 37, S 24, 25) 1B, 2A, 3B;

(182) Straight Lake Creek, (T 140, R 36, S.6, T.140, R 37, S 1, 2) 1B, 2A, 3B;

(183) 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;

(184) Sucker Brook (Gould Creek), (T.144, R.36, S 27, 28, 29, 30, 32, 33) 1B, 2A, 3B,

(185) Sucker Creek, (T.118, R.30, S 4, 5, 6, 7) 1B, 2A, 3B;

(186) Sucker Creek (Gould Creek) (excluding trout waters), (T.143, R.36)· 2C;

(187) Swamp Creek, Big, (T.137, 138, 139, R 32, 33). 2C;

(188) Swamp Creek, Little, (T.136, 137, R 33) 2C,

(189) Swan Creek, (T 134, 135, R.32): 2C,

(190) Swan Creek, Little, (T.135, R.32) 2C;

(191) Swift River, (T.142, R 27) 2C;

(192) Taylor Creek, (T 128, R 31): 2C;

(193) Ted Brook Creek, (T 130, R.31)· 2C,

(194) Thiel Creek (Teal), (T.121, R 28, S 5, 6, 8) 1B, 2A, 3B,

(195) Tibbits Brook, (T 33, 34, R 26, 27): 2C;

(196) Tibbetts Creek (Tibbetts Brook), (T 39, 40, R.27, 28): 2C;

(197) Tower Creek, (T 135, R 32, 33): 2C;

(198) Two Rivers, South Branch, Albany, (T 125, R.31, S 21, 22, 23)· 7,

(199) Two Rivers Springs, (T 51, R 23, S 19, T 51, R.24, S 24, 25, 26) 1B, 2A, 3B;

(200) 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,

(201) Unnamed Creek, (T 137, R 31, S 4, 5) 1B, 2A, 3B;

(202) Unnamed Creek, (T 139, R 26, S 3, 10) 1B, 2A, 3B,

(203) Unnamed Creek, Calumet, (T 56, R.23, S 21). 7,

(204) Unnamed Creek, Hiller Mobile Home Court, (T 119, R.26, S 22, 26, 27, 35). 7,

(205) Unnamed Creek, Rogers, (T.120, R 23, S 15, 16, 22, 23) 7;

(206) Unnamed Creek, Grove City, (T.120, R 32, S 34, 35, 36): 7,

(207) Unnamed Creek, Albertville, (T 121, R.23, S 30; T 121, R.24, S 25, 36): 7,

(208) Unnamed Creek, Eden Valley, Ruhland Feeds, (T.121, R.31, S.2; T.122, R 31, S 35)· 7;

(209) Unnamed Creek, Lake Henry, (T 123, R 33, S 11, 14) 7,

(210) Unnamed Creek, Miltona, (T 129, R.36, S 6, T 130, R 36, S.30, 31)· 7;

(211) Unnamed Ditch, Braham, (T.37, R 23, S 2, 3)· 7;

(212) 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,

(213) Unnamed Ditch, McGregor, (T 48, R 23, S 31, 32) 7,

(214) Unnamed Ditch, Nashwauk, (T.56, R 22, S 4, 5, T 57, R 22, S 32) 7,
(215) Unnamed Ditch, Taconite, (T 56, R 24, S 22) 7,
(216) Unnamed Ditch, Glencoe, Green Giant, (T 115, R 28, S.21, 22, 27, 28) 7,
(217) Unnamed Ditch, Glencoe, Green Giant, (T 115, R 28, S 14, 23). 7,
(218) Unnamed Ditch, Wmsted, Green Giant, (T 117, R 27, S 10, 11)· 7;
(219) Unnamed Ditch, Hiller Mobile Home Court, (T 119, R.26, S.34, 35) 7,
(220) Unnamed Ditch, Kandiyohi, (T.119, R.34, S 10, 15, 21, 22, 28, 29, 32) 7,
(221) Unnamed Ditch, Rogers, (T.120, R 23, S 15)· 7,
(222) Unnamed Ditch, Belgrade, (T 123, R 34, S.19, 30) 7;
(223) Unnamed Ditch, Flensburg, (T 129, R 30, S.30, T 129, R.31, S 25) 7;
(224) Unnamed Ditch, Miltona, (T 130, R.36, S 30, T.130, R 37, S 25, 36): 7;
(225) Unnamed Stream, Wmsted, (T 117, R 27, S 11, 12) 7;
(226) Unnamed Stream, Flensburg, (T.129, R 30, S 19, 30) 7;
(227) Vandell Brook, (T 37, 38, R 26)· 2C,
(228) Van Sickle Brook, (T 138, R 26, S 14, 15, 23, 24) 1B, 2A, 3B;
(229) Vermillion Creek, Little, (T 143, R 25, S 22, 27) 1B, 2A, 3B,
(230) Wallingford Brook, (T 139, R 33, S 1, 2, 11, T 140, R 33, S 25, 36)· 1B, 2A, 3B,
(231) Warba Creek, (T 54, R 23, S.13, 14, 15, 21, 22, 23, 24) 1B, 2A, 3B,
(232) Welcome Creek, (T 56, 57, R.22). 2C,
(233) Whitley's Creek, (T.45, R 30, S.16, 17, 20, 21) 1B, 2A, 3B,
(234) Whitney Brook, (T 39, R 26, 27) 2C;
(235) Willow Creek, (T.133, R 38, S 2, 11, T 134, R 38, S 26, 35)· 1B, 2A, 3B;
(236) Willow Creek, (T 121, R 29, S 10, 11, 14, 23) 1B, 2A, 3B,
(237) Willow River, North Fork, (T 142, R 25) 2C,
(238) Willow River, South Fork, (T.142, R 25)· 2C,
(239) Wilson Creek, (T.137, R 30) 2C, and
(240) Wolf Creek, (T.42, R 30) 2C

B Lakes·

(1) Allen Lake, (T 138, R 26W, S 5) 1B, 2A, 3B,
(2) Bald Eagle Lake, (T.30, 31, R 21, 22) 1C, 2Bd, 3B;
(3) Bee Cee Lake, (T 58, R 25W, S 28, 33) 1B, 2A, 3B,
(4) Benedict Lake, (T.142, R.32) 1B, 2A, 3B,
(5) Benjamin Lake, (T 148, R 30W, S 7, 18, T.148, R 31W, S 13). 1B, 2A, 3B,
(6) Blacksmith Lake, (T.142, R.35W, S.13). 1B, 2A, 3B;
(7) *Blue Lake, [3/7/88R] (T 46, 47, R 27) 1B, 2A, 3B;
(8) *Blue Lake, [3/7/88R] (T 141, R 34) 1B, 2A, 3B,
(9) *Bluewater Lake, [3/7/88R] (T 57, R.25) 1B, 2A, 3B,
(10) Cenaiko Lake (Unnamed), (T.31, R 24W, S 26) 1B, 2A, 3B;
(11) Centerville Lake, (T.31, R 22) 1C, 2Bd, 3B;
(12) Charley Lake, (T.30, R.23) 1C, 2Bd, 3B;
(13) Crappie Lake, (T 143, R 33W, S 31) 1B, 2A, 3B,
(14) Deep Lake, (T 30, R 22) 1C, 2Bd, 3B,
(15) Diamond Lake, (T 141, R.30W, S.26, 27, 34) 1B, 2A, 3B,
(16) Hazel Lake, (T 141, R.29W, S.25) 1B, 2A, 3B,
(17) Hay Lake, Lower, (T 137, R 28, 29) 1B, 2A, 3B,

(18) *Kabekona Lake, [3/7/88R] (T 142, 143, R 32, 33) 1B, 2A, 3B;
(19) Kennedy Lake, (T 58, R 23) 1B, 2A, 3B,
(20) Kremer Lake, (T 58, R 26W, S 33, 34): 1B, 2A, 3B,
(21) LaSalle Lake, Lower, (T.145, R 35) 1B, 2A, 3B,
(22) Little Mud Lake, (T 121, R 30W, S 22, 23) 1B, 2A, 3B,
(23) Loon (Townline) Lake, (T 50, R 22W, S 7, T 50, R 23W, S 12, 13) 1B, 2A, 3B,
(24) Lucky Lake, (T 57, R 26W, S 14) 1B, 2A, 3B,
(25) Mallen Mine Pit, (T 46, R 29W, S 17) 1B, 2A, 3B,
(26) Manuel (South Yawkey) Mine Pit, (T 46, R.29W, S 1) 1B, 2A, 3B,
(27) Margaret Lake, (T.139, R 26W, S 16). 1B, 2A, 3B,
(28) Marion Lake, (T 139, R 26W, S.16, 17)· 1B, 2A, 3B;
(29) Martin (Huntington, Feigh) Mine Pit, (T 46, R.29W, S 9, 10, 16) 1B, 2A, 3B,
(30) Moonshine Lake, Little (Moonshine), (T 58, R 25W, S.28, 33) 1B, 2A, 3B,
(31) Newman (Putnam) Lake, (T 145, R 34W, S.10, 11). 1B, 2A, 3B;
(32) Otter Lake, (T 30, 31, R 22) 1C, 2Bd, 3B,
(33) Pennington (Mahnomen, Alstead, Arco) Mine Pit, (T 46, R 29W, S 3, 9, 10, 11) 1B, 2A, 3B,
(34) Perch Lake, (T 139, R 31W, S 33) 1B, 2A, 3B,
(35) Pleasant Lake, (T 30, R 22, 23)· 1C, 2Bd, 3B,
(36) Pleasant Lake, (T 137, R 27W, S 19) 1B, 2A, 3B,
(37) *Pokegama Lake, [3/7/88R] (T.54, 55, R 25, 26) 1B, 2A, 3B,
(38) Portsmouth Mine Pit, (T 46, R 29W, S 1, 2, 11) 1B, 2A, 3B,
(39) *Roosevelt Lake, [3/7/88R] (T 138, 139, R 26). 1B, 2A, 3B,
(40) Sagamore Mine Pit, (T 46, R 29W, S 19, T 46, R 30W, S 24) 1B, 2A, 3B,
(41) Section 6 Mine Pit, (T.46, R 29W, S 6) 1B, 2A, 3B,
(42) Snoshoe Mine Pit, (T.46, R.29W, S.17, 18). 1B, 2A, 3B,
(43) Snowshoe (Little Andrus) Lake, (T 139, R 26W, S 29, 30). 1B, 2A, 3B,
(44) Strawberry Lake, (T 137, R 28W, S 27, 34) 1B, 2A, 3B,
(45) Sucker Lake, (T 30, R 22) 1C, 2Bd, 3B,
(46) Taylor Lake, (T 52, R 25W, S 16) 1B, 2A, 3B,
(47) Teepee Lake, (T 141, R 29W, S.30, T 141, R 30W, S 25) 1B, 2A, 3B,
(48) Tioga Mine Pit, (T 55, R 26W, S.26) 1B, 2A, 3B,
(49) Trout Lake, (T 55, 56, R.24)· 1B, 2A, 3B,
(50) *Trout Lake, Big, [3/7/88R] (T 57, 58, R 25) 1B, 2A, 3B,
(51) *Trout Lake, Big, [3/7/88R] (T 137, 138, R.27, 28) 1B, 2A, 3B;
(52) *Trout Lake, Little, [3/7/88R] (T 57, R 25) 1B, 2A, 3B,
(53) Unnamed Swamp, Flensburg, (T.129, R.31, S 25). 7,
(54) Unnamed Slough, Miltona, (T 130, R 37, S.26, 35, 36) 7,
(55) Unnamed Swamp, Staples, (T 133, R 33, S 1) 7;
(56) Unnamed Swamp, Taconite, (T 56, R 24, S 22) 7;
(57) Vadnais Lake, (T.30, R.22). 1C, 2Bd, 3B,
(58) Wabana Lake, (T 57, R 25) 1B, 2A, 3B,
(59) Watab Lake, Big, (T 124, R 30) 1B, 2A, 3B,
(60) Wilkinson Lake, (T 30, R 22) 1C, 2Bd, 3B,
(61) Willard Lake, (T 139, R 30W, S.15) 1B, 2A, 3B, and
(62) Yawkey (North Yawkey) Mine Pit, (T 46, R.29W, S 1) 1B, 2A, 3B.

C Calcareous Fens None currently listed

D. Scientific and Natural Areas

(1) *Itasca Wilderness Sanctuary, [11/5/84P] Waters within the Itasca Wilderness Sanctuary, Clearwater County, (T 143, R 36) 2B, 3B, except wetlands which are 2D,

(2) *Iron Springs Bog, [11/5/84P] Waters within the Iron Springs Bog Scientific and Natural Area, Clearwater County, (T 144, R 36) 2B, 3B, except wetlands which are 2D,

(3) *Pennington Bog, [11/5/84P] Waters within the Pennington Bog Scientific and Natural Area, Beltrami County, (T 146, R 30)· 2B, 3B, except wetlands which are 2D, and

(4) *Wolsfeld Woods, [11/5/84P] Waters within the Wolsfeld Woods Scientific and Natural Area, Hennepin County, (T 118, R 23) 2B, 3B, except wetlands which are 2D

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:

(1) Altermatts Creek (County Ditch No 39), Comfrey, (T 108, R 33, S 17, 19, 20, 30, T 108, R 34, S 24, 25, 35, 36) 7,

(2) Assumption Creek, (T 115, R 23, S 2, T 116, R 23, S 34, 35) 1B, 2A, 3B,

(3) Badger Creek, (T 101, 102, R 28)· 2C,

(4) Beaver Creek, East Fork (County Ditch No. 63), Olivia, Olivia Canning Company, (T.115, R 34, S 1, 2, 3, 4, 5, 6, T 115, R 35, S 1, 12, 13, 14, 23, 24, 25, 26, T.116, R 34, S.16, 20, 21, 28, 29, 30, 32, 33, 34, 35). 7,

(5) Blue Earth River, East Fork, (Brush Creek to mouth): 2C, 3B,

(6) Blue Earth River, West Fork, (Iowa border to mouth)· 2C, 3B,

(7) Boiling Spring Creek (excluding Class 7 segment), (T 113, 114, R 37, 38)· 2C,

(8) Boiling Springs Creek (County Ditch No 1B), Echo, (T 113, R 38, S 5, 8, T 114, R 37, S.19, 30, T 114, R 38, S 25, 26, 27, 32, 33, 34) 7,

(9) Boot Creek (excluding Class 7 segment), (T.105, 106, R 22, 23) 2C,

(10) Boot Creek, New Richland, (T 105, R 22, S 6, 7, T.105, R 23, S 12, 13, 24) 7,

(11) Brafees Creek, (T 116, 117, R 40): 2C;

(12) Brush Creek, (Iowa border to mouth) 2C, 3B,

(13) Bull Run Creek, Little, (T 106, R 24, 25) 2C,

(14) Butterfield Creek, (T 106, 107, R 31, 32, 33) 2C,

(15) Canby Creek, (T 114, R 45, S 17, 18, T 114, R 46, S 13, 14, 21, 22, 23): 1B, 2A, 3B,

(16) Canby Creek (excluding trout waters), (South Dakota border to mouth) 2C, 3B,

(17) Cedar Run Creek, (T 103, 104, R.32, 33) 2C,

(18) Cherry Creek, Cleveland, (T.110, R 25, S 7, 8, 16, 17; T 110, R 26, S 12) 7,

(19) Chetomba Creek (excluding Class 7 segment), (T 116, 117, R.36, 37, 38) 2C,

(20) Chetomba Creek, Prmsburg, (T 116, R 36, S 6, 7, 18, 19, T 116, R 37, S 8, 9, 14, 15, 16, 23, 24, T 117, R 36, S 8, 9, 16, 17, 21, 28, 29, 30, 31, 32) 7,

(21) Cobb Creek, Freeborn, (T 104, R 23, S 7, 8, 17, T 104, R 24, S 11, 12) 7,

(22) Cobb Creek Ditch, Freeborn, (T.103, R.23, S 2, T 104, R 23, S 14, 15, 16, 23, 26, 35) 7,

(23) Cobb River, Big, (T 104, 105, 106, 107, R 23, 24, 25, 26) 2C,

(24) Cobb River, Little, (T 105, 106, R 23, 24, 25, 26) 2C,

(25) Cottonwood Creek (excluding trout waters), (T.119, 120, 121, R.41, 42) 2C,

(26) Cottonwood Creek, (T 119, R.41, S 4; T 120, R 41, S.21, 28, 33) 1B, 2A, 3B,

(27) County Ditch No 1, Echo, (T 113, R 38, S.8, 9): 7,

(28) County Ditch No 4, Arco, (T 110, R 44, S 5; T 111, R.44, S 32, 33) 7,

(29) County Ditch No 4, Norwood, (T 115, R 25, S.30; T.115, R.26, S.13, 14, 24, 25) 7,

(30) County Ditch No 5, Marietta, (T.117, R 45, S 6, 7, 18, T 117, R.46, S.1, T 118, R 46, S 23, 25, 26, 36) 7,

(31) County Ditch No. 6 (Judicial Ditch No 11), Janesville, (T 107, R 24, S 4, 8, 9, 17, 18, T.107, R 25, S 13) 7,

(32) County Ditch No 7, Lowry, (T 126, R 39, S 25, 26) 7;

(33) County Ditch No 12 (County Ditch No 45), Waseca, (T.107, R 23, S 22, 23) 7,

(34) 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;

(35) 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,

(36) County Ditch No. 22, Montgomery, Green Giant Company, (T.111, R.23, S 4, 9, 10; T 112, R 23, S.33): 7;

(37) 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,

(38) County Ditch No 28, Marietta, (T 118, R 46, S 22, 23, 26) 7,

(39) County Ditch No 38, Storden, (T 107, R.37, S 28, 29) 7;

(40) County Ditch No. 40A, Lafayette, (T 111, R 29, S 8, 14, 15, 16, 17, 23, 24) 7,

(41) County Ditch No 42, Winthrop, (T 112, R.29, S.6, 7) 7,

(42) 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,

(43) 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,

(44) County Ditch No 46, Willmar, (T 119, R.35, S.19, 20, 29) 7;

(45) 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,

(46) County Ditch No. 54, Montgomery, (T 112, R.23, S.26, 33, 34, 35). 7;

(47) County Ditch No 55, see Rush River, North Branch,

(48) County Ditch No. 60 (Chippewa River), Millerville, Millerville Coop Cry., (T 130, R 39, S.14, 22, 23, 27, 28, 32, 33)· 7;

(49) County Ditch No 61, Kerhoven, (T 120, R.37, S.21, 22): 7;

(50) County Ditch No. 63, Hanska, (T.108, R.30, S 11, 12, 14, 17, 18, 19, 20, 21, 22, 23, 27, 28): 7,

(51) County Ditch No. 66, Bird Island, (T.115, R.34, S 15, 16, 17, 18, 22, 23): 7;

(52) County Ditch No 87, Wells, (T.103, R 24, S 6, T 104, R 24, S 31; T.104, R 25, S 36) 7;

(53) 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,

(54) 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;

(55) Crow Creek, (T 112, R 35) 2C,

(56) Dry Creek, (T 108, 109, R 36)· 2C;

(57) Dry Weather Creek, (T 117, 118, R 39, 40, 41): 2C,
(58) Dry Wood Creek, (T.122, R 42, 43). 2C,
(59) Eagle Creek, East Branch, (T 115, R 21, S 18) 1B, 2A, 3B,
(60) Eagle Creek, Main Branch, (T 115, R 21, S 7, 18; T.115, R 22, S 13) 1B, 2A, 3B,
(61) Echo Creek, (T.114, R 37) 2C;
(62) Eight Mile Creek, (T 111, 112, 113, R 31) 2C;
(63) Elm Creek, North Fork, (T 104, R.34) 2C;
(64) Elm Creek, South Fork, (T.103, R 34) 2C;
(65) Emily Creek, (T 118, 119, R 43) 2C,
(66) Fish Creek, (T 123, 124, R.47, 48) 2C,
(67) Five Mile Creek, (T 120, R 44): 2C;
(68) Florida Creek, (South Dakota border to mouth). 2C, 3B,
(69) Foster Creek (excluding Class 7 segment), (T 102, 103, R 24) 2C,
(70) Foster Creek, Alden, (T 103, R 23, S.31, T.103, R 24, S 25, 36) 7,
(71) Hassel Creek, (T.122, 123, R 38, 39)· 2C;
(72) 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;
(73) Hazel Run, (T 115, R 39, 40, 41, 42)· 2C,
(74) Hindeman Creek, (T 111, R.32, S 19, 20, T 111, R 33, S 24)· 1B, 2A, 3B;
(75) Iosco Creek, (T 108, R.23) 2C;
(76) John's Creek, (T 110, R 32, S 1, T 111, R 31, S.31; T 111, R 32, S 36): 1B, 2A, 3B,
(77) Judicial Ditch No 1, Delavan, (T 104, R.27, S 23, 25, 26, 36) 7;
(78) 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;
(79) 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,
(80) Judicial Ditch No 6, Hanska, (T.107, R 30, S 4; T 108, R.30, S.28, 33): 7;
(81) Judicial Ditch No 10, (see Wood Lake Creek),
(82) Judicial Ditch No. 10, Hanska, (T 108, R.30, S 1; T 109, R.30, S 35, 36)· 7,
(83) Judicial Ditch No 12, Tyler, (T 109, R 43, S 9, 15, 16, 17, 18) 7;
(84) Judicial Ditch No 29, Arco, (T.111, R 44, S 21, 28, 33): 7,
(85) Judicial Ditch No 30, Sleepy Eye, Del Monte Corporation, (T.109, R 32, S 4, 5, 6; T 110, R 32, S 31) 7,
(86) Judicial Ditch No. 49 (Providence Creek), Amboy, (T 105, R 27, S.18, 19, T 105, R.28, S 13) 7;
(87) Kennaley's Creek, (T 27, R 23, S.18) 1B, 2A, 3B,
(88) Lac qui Parle River, (Lake Hendricks outlet to Minnesota River)· 2C, 3B,
(89) Lac qui Parle River, West Fork, (South Dakota border to mouth) 2C, 3B;
(90) 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,
(91) Lazarus Creek, (South Dakota border to Canby Creek). 2C, 3B,
(92) Le Sueur River, Little, (T.106, R 22) 2C,
(93) 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;
(94) Long Lake Creek, (T.132, R.41, S 9) 1B, 2A, 3B;

(95) Middle Creek, (T 113, 114, R 36) 2C,

(96) Mink Creek, (T 104, R 30, 31) 2C,

(97) Minneopa Creek, Lake Crystal, (T.108, R 28, S 26, 27, 32, 33, 34) 7,

(98) Minnesota River, (Big Stone Lake outlet to the Lac qui Parle dam) 1C, 2Bd, 3B,

(99) *Minnesota River, [11/5/84R] (Lac qui Parle dam to Granite Falls). 1C, 2Bd, 3B,

(100) *Minnesota River, [11/5/84R] (Granite Falls to Redwood County State Aid Highway 11 bridge) 2B, 3B,

(101) Minnesota River, (River Mile 22 to mouth) 2C, 3B,

(102) Minnesota River, Little, (South Dakota border crossing to Big Stone Lake) 2C, 3B;

(103) Morgan Creek, (T 109, R 29, 30) 2C;

(104) Mud Creek, (T 114, R 43, 44, 45) 2C;

(105) Mud Creek, (T 123, R.36, S 28, 29) 1B, 2A, 3B,

(106) 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,

(107) 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,

(108) Palmer Creek, (T 116, 117, 118, R 39) 2C,

(109) Paul's Creek, (T 110, R 26, S 14, 15) 1B, 2A, 3B,

(110) Pelican Creek, (T 130, R 41, 42): 2C,

(111) Pell Creek, Walnut Grove, (T 109, R 38, S 25, 26, 27, 28) 7,

(112) Perch Creek, (T 104, 105, 106, R 29, 30) 2C,

(113) Ramsey Creek, (T.112, R 36, S 1; T 113, R 36, S.35, 36)· 1B, 2A, 3B,

(114) Redwood River, (T 110, R 42, S 5, 8, 17, T 111, R 42, S 32). 1B, 2A, 3B,

(115) Rice Creek, See County Ditch No. 12,

(116) 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,

(117) 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,

(118) Samt James Creek (excluding Class 7 segment), (T 105, 106, R.31, 32, 33) 2C;

(119) Saint James Creek, Saint James, (T 106, R 31, S.5, 7, 8, 18; T 107, R 31, S 21, 22, 28, 32, 33)· 7,

(120) Seven Mile Creek, (T 109, R 27, S.2, 3, 4, 10, 11, 12) 1B, 2A, 3B,

(121) Shakopee Creek, (T 119, 120, R 36, 37, 38, 39, 40): 2C,

(122) Silver Creek, (T.108, R 23, 24) 2C,

(123) Smith Creek, (T.113, R 35, 36) 2C,

(124) South Creek, (T 102, 103, R.28, 29, 30)· 2C, 3B,

(125) Spring Branch Creek, (T.106, R.29, 30)· 2C,

(126) Spring Creek, (T 110, 111, R 32, 33, 34). 2C,

(127) Spring Creek, (T 117, R 40)· 2C,

(128) Stony Run, (T 121, 122, R 45, 46) 2C,

(129) Stony Run Creek, (T 116, R 40) 2C,

(130) Three Mile Creek, (T 112, R.33) 2C;

(131) Timms Creek, (T 114, 115, R.36) 2C,

(132) Unnamed #1, (T 27, R 23, S 18, T 27, R 24, S.13) 1B, 2A, 3B,

(133) Unnamed #4, (T 27, R 24, S 24) 1B, 2A, 3B,
(134) Unnamed #7, (T 27, R 24, S.26)· 1B, 2A, 3B,
(135) Unnamed Creek, (T 108, R.28, S 1, 2) 1B, 2A, 3B,
(136) Unnamed Creek, (T 108, R 28, S.5, T 109, R 28, S 32) 1B, 2A, 3B,
(137) Unnamed Creek, (T 110, R 26, S 10, 11) 1B, 2A, 3B,
(138) Unnamed Creek, (T 108, R 28, S 6, T 109, R 29, S 25, 36) 1B, 2A, 3B,
(139) Unnamed Creek, Green Isle, (T.114, R 26, S 2, 3, 4, 8, 9, 17) 7,
(140) 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,
(141) Unnamed Creek, Murdock, (T 120, R 38, S 1, 2, T 121, R 38, S 35) 7,
(142) Unnamed Ditch, Burnsville Freeway Sanitary Landfill, (T.27, R 24, S 28, 33). 7,
(143) Unnamed Ditch, Bricelyn, Owatonna Canning Company, (T 101, R 25, S 10) 7,
(144) Unnamed Ditch, Alden, (T 102, R 23, S.4, 5, T 103, R.23, S 31, 32) 7,
(145) Unnamed Ditch, Truman, (T 104, R 30, S 2, 11, T.105, R.30, S 25, 26, 35) 7,
(146) Unnamed Ditch (County Ditch No 47), New Richland, (T 105, R 22, S 17, 18, 19, T 105, R 23, S 24) 7;
(147) Unnamed Ditch, Lewisville, (T 105, R 30, S 3, T 106, R.30, S 14, 23, 26, 34, 35) 7,
(148) Unnamed Ditch, Waldorf, (T 106, R 24, S 34). 7,
(149) Unnamed Ditch (County Ditch No 45), Waseca, (T 107, R 23, S.14, 23) 7;
(150) Unnamed Ditch, Jeffers, (T 107, R 36, S 21) 7,
(151) Unnamed Ditch, Storden, (T.107, R.37, S 19, 30) 7,
(152) Unnamed Ditch, Eagle Lake, (T 108, R 25, S 18, 19, T 108, R 26, S.13) 7,
(153) Unnamed Ditch, Walnut Grove, (T 109, R 38, S.28) 7,
(154) Unnamed Ditch, Tracy, (T 109, R 39, S 18, T 109, R 40, S 13) 7,
(155) 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,
(156) Unnamed Ditch, Lafayette, (T.111, R 29, S.6, 7, 8, T 111, R 30, S.12) 7,
(157) Unnamed Ditch, Wabasso, (T.111, R 37, S 13, 24)· 7,
(158) Unnamed Ditch, Montgomery, (T 112, R 23, S 33). 7;
(159) 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,
(160) Unnamed Ditch, Green Isle, (T 114, R 26, S 19, T 114, R.27, S 11, 12, 13, 14, 24) 7;
(161) Unnamed Ditch, New Auburn, (T 114, R 28, S.20) 7,
(162) Unnamed Ditch, Porter, (T 114, R 44, S 21, 28) 7,
(163) Unnamed Ditch, Bongards, Bongards Creameries, (T 115, R 25, S.9, 16) 7;
(164) Unnamed Ditch, Clarkfield, (T 115, R.41, S 16) 7,
(165) Unnamed Ditch, Clarkfield, (T.115, R 41, S 16, 21)· 7,
(166) Unnamed Ditch, Madison, (T.118, R.44, S 27, 28, 34, 35)· 7,
(167) Unnamed Ditch, Pennock, (T.119, R 36, S.2, 3, 4, 9, 10) 7;
(168) Unnamed Ditch, DeGraff, (T 121, R.38, S 19, 29, 30): 7,
(169) 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;

(170) Unnamed Ditch, Alberta, (T 124, R 43, S 3, 4) 7;

(171) Unnamed Ditch, Farwell, Farwell Coop Cry Assn , (T 126, R 39, S.6). 7;

(172) Unnamed Ditch, Lowry, (T 126, R 39, S.26, 35)· 7,

(173) Unnamed Ditch, Brandon, (T 129, R.39, S.21, 22) 7,

(174) Unnamed Ditch, Evansville, (T.129, R 40, S 10, 11) 7,

(175) Unnamed Dry Run, Near Minneopa, Blue Earth – Nicollet Electric, (T 108, R.27, S 16)· 7;

(176) Unnamed Dry Run, Mankato, Southview Heights Coop Association, (T 108, R 26, S.19, 30, T 108, R 27, S 24)· 7,

(177) Unnamed Stream, Mankato, Midwest Electric Products, (T 109, R 26, S 20, 21, 28): 7;

(178) Unnamed Stream, Savage, (T 115, R 21, S 8, 9). 7,

(179) Unnamed Stream, Dawson, (T 117, R 43, S 22) 7;

(180) Wabasha Creek, (T 112, R 34)· 2C,

(181) Whetstone River, (South Dakota border to mouth): 2C, 3B,

(182) Old Whetstone River Channel, Ortonville, Big Stone Canning Company, (T 121, R.46, S 16, 21). 7,

(183) Willow Creek, (T 104, 105, R 31, 32)· 2C,

(184) Wood Lake Creek, (Judicial Ditch No. 10), (T 113, 114, R 38, 39). 2C,

(185) Yellow Bank River, North Fork, (South Dakota border to mouth) 2C, 3B,

(186) Yellow Bank River, South Fork, (South Dakota border to mouth) 2C, 3B, and

(187) Yellow Medicine River, North Fork, (South Dakota border to mouth) 2C, 3B.

B Lakes

(1) Amber Lake, (T 102, R 30) 1C, 2Bd, 3B,

(2) Bardwell Lake, (T 102, R.30) 1C, 2Bd, 3B,

(3) Budd Lake, (T 102, R 30) 1C, 2Bd, 3B,

(4) Courthouse Lake, (T.115, R 23W, S.9) 1B, 2A, 3B;

(5) George Lake, (T 102, R 30) 1C, 2Bd, 3B,

(6) Hall Lake, (T 102, R 30) 1C, 2Bd, 3B;

(7) Mud Lake, (T 102, R 30) 1C, 2Bd, 3B,

(8) One Hundred Acre Slough, Saint James, (T 106, R 31, S.7). 7;

(9) Silver Lake, North, (T 101, R 30): 1C, 2Bd, 3B,

(10) Sisseton Lake, (T.102, R.30). 1C, 2Bd, 3B;

(11) Unnamed Marsh, Barry, (T 124, R.47, S.8) 7;

(12) Unnamed Slough, Kensington, (T.127, R 40, S 34): 7;

(13) Unnamed Slough, Brandon, (T.129, R 39, S 21, 22) 7,

(14) Unnamed Swamp, Minnesota Lake, (T 104, R 25, S 3, 4) 7,

(15) Unnamed Swamp, Storden, (T.107, R 37, S 30). 7,

(16) Unnamed Swamp, Sunburg, Sunburg Coop Cry , (T 122, R.36, S 30). 7;

(17) Unnamed Swamp, Lowry, (T 126, R 39, S 35, 36). 7, and

(18) Wilmert Lake, (T 101, R 30). 1C, 2Bd, 3B

C Calcareous Fens.

(1) *Blackdog Preserve fen, 63, Dakota [3/7/88R] (T 27, R 24, S 27, 34): 2D;

(2) *Blue Mounds fen, 1, Pope [4/18/94R] (T.124, R 39, S 14, 15) 2D;

(3) *Fort Ridgely fen, 21, Nicollet [3/7/88R] (T.111, R.32, S.6) 2D;

(4) *Fort Snelling State Park fen, 25, Dakota [3/7/88R] (T.27, R.23, S.4). 2D,

(5) *Lake Johanna fen, 4, Pope [4/18/94R] (T.123, R 36, S 29): 2D,

(6) *Le Sueur fen, 32, Nicollet [3/7/88R] (T 111, R 26, S 16): 2D,
(7) *Nicols Meadow fen, 24, Dakota [3/7/88R] (T 27, R 23, S 18) 2D,
(8) *Ordway Prairie fen, 35, Pope [3/7/88R] (T 123, R 36, S 30) 2D;
(9) *Ottawa Bluffs fen, 56, Le Sueur [4/18/94R] (T 110, R 26, S 3) 2D,
(10) *Ottawa WMA fen, 7, Le Sueur [3/7/88R] (T.110, R 26, S 11)· 2D,
(11) *Ottawa WMA fen, 60, Le Sueur, [3/7/88R] (T.110, R 26, S 14)· 2D,
(12) *Perch Creek WMA fen, 33, Martin [3/7/88R] (T 104, R 30, S 7) 2D,
(13) *Savage fen, 22, Scott [3/7/88R] (T 115, R 21, S 17) 2D;
(14) *Savage fen, 66, Scott [3/7/88R] (T 115, R 21, S 16, 17) 2D;
(15) *Savage fen, 67, Scott [3/7/88R] (T.115, R.21, S 17). 2D,
(16) *Seminary fen, 75, Carver [4/18/94R] (T.116, R 23, S 35) 2D,
(17) *Sioux Nation WMA NHR fen, 29, Yellow Medicine [3/7/88R] (T 114, R 46, S 17)· 2D,
(18) *Swedes Forest fen, 8, Redwood [4/18/94R] (T.114, R.37, S.19, 20) 2D,
(19) *Swedes Forest fen, 9, Redwood [4/18/94R] (T 114, R 37, S 22, 27): 2D, and
(20) *Yellow Medicine fen, 30, Yellow Medicine [4/18/94R] (T 115, R 46, S 18)· 2D

D Scientific and Natural Areas *Blackdog Preserve, [3/7/88P] Waters within the Blackdog Preserve Scientific and Natural Area, Dakota County (T 27, R 24, S 27, 34)· 2B, 3B, except wetlands which are 2D

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

(1) Bang's Brook, (T 41, R 17, S 15, 20, 21, 22, 29). 1B, 2A, 3B,
(2) Barnes Spring, (T 41, R 18, S 1, 12) 1B, 2A, 3B,
(3) Bear Creek, (T 43, R 23, 24) 2C,
(4) Beaver Creek, (T 35, R 20, S 7, 8, 17, T 35, R 21, S.3, 4, 10, 12, 13, 14, 15, T 36, R 21, S 33, 34) 1B, 2A, 3B,
(5) Bergman Brook, (T 42, 43, R 23, 24) 2C,
(6) Bjork Creek, (T 42, R 16, S 2, 9, 10, 11) 1B, 2A, 3B,
(7) Brown's Creek, (T 30, R.20, S 12, 13, 18, 19, 20, 21) 1B, 2A, 3B,
(8) Cons Creek, (T 41, R 17, S.15, 16, 22) 1B, 2A, 3B,
(9) Crooked Creek, (T 41, R 17, S 6, 7, 18, 19, 20, 29, 30; T 41, R 18, S 11, 12, 13, T 42, R 17, S.31). 1B, 2A, 3B;
(10) Crooked Creek, West Fork, (T 41, R 18, S 11, 12, T.42, R.18, S.3, 4, 9, 10, 16, T.43, R.18, S.27, 34) 1B, 2A, 3B,
(11) Crystal Creek, (T.41, R 16, S 9, 10, 15) 1B, 2A, 3B,
(12) Grindstone River, (T 42, R.21, S 20, 21, 28, 29) 1B, 2A, 3B,
(13) Groundhouse River, West Fork, (T.39, 40, R.26). 2C;
(14) Hay Creek, (T.40, R 18, S 6, 7, 8, 18, 19; T 41, R.18, S 10, 15, 20, 21, 22, 29, 32, 33) 1B, 2A, 3B,
(15) Hay Creek, (T 42, 43, 44, R.15, 16) 1B, 2Bd, 3B,
(16) Hay Creek, Little, (T 40, R 18, S 8, 9) 1B, 2A, 3B,
(17) *Kettle River, [11/5/84R] (From the north Pine County line to the dam at Sandstone): 2B, 3B,
(18) *Kettle River, [11/5/84P] (From the dam at Sandstone to its confluence with the Saint Croix River) 2B, 3B,
(19) King Creek, (T.47, R.18, S.18, 19, T.47, R.19, S.1, 12, 13)· 1B, 2A, 3B,
(20) Larson Creek, (T 44, R.17, S 4, 5, T.45, R 17, S 29, 32): 1B, 2A, 3B,
(21) Lawrence Creek, (T 33, R.19, S 2, 3, 10)· 1B, 2A, 3B,

(22) Lost Creek, (T 40, R 19, S 9, 10, 15)· 1B, 2A, 3B;

(23) McCullen Creek, (T.42, R 16, S 28, 33): 1B, 2A, 3B,

(24) Mission Creek, (T 40, R 21, S 1, 2, T 41, R 20, S.31, T.41, R.21, S 36) 1B, 2A, 3B,

(25) Mission Creek (excluding trout waters), (T 39, 40, 41, R 20, 21) 1B, 2Bd, 3B,

(26) Moosehorn River, (T 48, R 18, S 3, 9, 10, 14, 15, 16, 23, 26, 34, 35) 1B, 2A, 3B,

(27) Old Mill Stream, (T 31, R 19, S 6, T 31, R 20, S 1, T 32, R 20, S 36). 1B, 2A, 3B,

(28) Pelkey Creek, (T 41, R 20, S 33, 34, 35) 1B, 2A, 3B,

(29) Rock Creek, (T 37, 38, R 20, 21) 1B, 2Bd, 3B,

(30) Rush Creek, (T 37, R 20, 21) 1B, 2Bd, 3B,

(31) *Saint Croix River, [11/5/84R] (Wisconsin border crossing to Taylors Falls) 1B, 2Bd, 3B,

(32) *Saint Croix River, [11/5/84R] (Taylors Falls to mouth) 1C, 2Bd, 3B;

(33) Sand River, (T 43, R 18, S 4, 5, 7, 8, 18, 19, 24, T.44, R 18, S 33, 34) 1B, 2A, 3B,

(34) Spring Brook, (T 41, R 20, S 16, 17, 18, 21) 1B, 2A, 3B;

(35) Sunrise River, West Branch, (T 34, R 21, 22) 1B, 2Bd, 3B,

(36) Tamarack River, Lower, (Hay Creek to mouth). 1B, 2Bd, 3B;

(37) Tamarack River, Upper (Spruce River), (T 42, R 15, 16)· 1B, 2Bd, 3B;

(38) Unnamed Ditch, Chisago City, (T.34, R 20, S 19, 29, 30, 31, 32) 7,

(39) Unnamed Ditch, Almelund, Almelund Coop Cry , (T 35, R.20, S 25)· 7,

(40) Unnamed Ditch, Moose Lake, (T 46, R 19, S 30) 7,

(41) Unnamed Dry Run, Wahkon, (T.41, R.25, S 3, T 42, R 25, S.29, 32, 33, 34)· 7,

(42) Unnamed Stream (Falls Creek), (T.32, R 19, S.6, 7, T 32, R 20, S 1, 12) 1B, 2A, 3B,

(43) Unnamed Stream (Gilbertson), (T 32, R 19, S 19). 1B, 2A, 3B;

(44) Unnamed Stream, Shafer, (T.34, R 19, S.32, 33, 34) 7,

(45) Unnamed Stream (Willow Brook), (T 31, R 19, S 19) 1B, 2A, 3B;

(46) Valley Creek, (T 28, R 20, S 9, 10, 14, 15, 16, 17) 1B, 2A, 3B,

(47) Wilbur Brook, (T 41, R 17, S.29, 30, T 41, R 18, S 23, 25, 26) 1B, 2A, 3B, and

(48) Wolf Creek, (T 42, R 18, S 4, 9, 16, T 43, R 18, S 32, 33) 1B, 2A, 3B

B Lakes

(1) *Grindstone Lake, [3/7/88R] (T 42, R.21) 1B, 2A, 3B, and

(2) Unnamed Swamp, Shafer, (T 34, R 19, S 31, 32) 7

C Calcareous Fens. None currently listed

D. Scientific and Natural Areas:

(1) *Boot Lake, [11/5/84P] Waters within the Boot Lake Scientific and Natural Area, Anoka County, (T.33, R.22)· 2B, 3B, except wetlands which are 2D,

(2) *Falls Creek, [4/18/94P] (trout designated waters within Washington County), (T 32, R.19, S 7, T.32, R 20, S 12) 1B, 2A, 3B,

(3) *Falls Creek, [4/18/94P] Waters within the Falls Creek Scientific and Natural Area, Washington County, (T.32, R.19, S.7, T 32, R 20, S 12) 2B, 3B, except wetlands which are 2D, and

(4) *Kettle River, [11/5/84P] Waters within the Kettle River Scientific and Natural Area, Pine County, (T 41, R 20) 2B, 3B.

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

(1) Ahrensfeld Creek, (T 105, R 8, S 8, 9, 16, 17, 19, 20) 1B, 2A, 3B,

(2) Albany Creek, West, (T 110, 111, R 12, 13) 2C,

(3) Badger Creek, (T 103, R 6, S 16, 21, 22, 27, 28, 34) 1B, 2A, 3B,

(4) Bear Creek, (T.107, R 9, S 13, 14, 15, 16, 22) 1B, 2A, 3B,

(5) Bear Creek, North, Spring Grove (T 101, R 7, S 26, 27, 35) 7,

(6) Bear Creek (excluding trout waters), (T 107, R 9) 2C,

(7) Beaver Creek, (T 102, R 6, S 5, 18, 19, 29, 30, T 103, R 6, S 31, 32) 1B, 2A, 3B,

(8) Beaver Creek, East, (T 102, R.6, S 5, 6, 8, 17) 1B, 2A, 3B,

(9) 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,

(10) Beaver Creek, (T 108, R 10, S 15, 16, 19, 20, 21, T 108, R 11, S 24). 1B, 2A, 3B,

(11) Bee Creek, (T 101, R 6, S 29, 32, 33) 1B, 2A, 3B,

(12) Big Springs Creek, (T 104, R 9, S 21, 22, 26, 27) 1B, 2A, 3B,

(13) Borson Spring, (T 105, R 8, R.29, 32, 33). 1B, 2A, 3B,

(14) Brush Valley Creek (excluding trout waters), (T 104, R 5) 2C,

(15) Brush Valley Creek, (T 104, R 5, S 23, 24, 26) 1B, 2A, 3B,

(16) Bullard Creek, (T 112, R 14, S 1, 2, 3, 10, T 113, R 14, S 36) 1B, 2A, 3B;

(17) Burns Valley Creek, East Branch, (T 106, R 7, S 3, 10, 15) 1B, 2A, 3B,

(18) Burns Valley Creek, West Branch, (T 106, R 7, S 3, 4, T 107, R 7, S 34) 1B, 2A, 3B,

(19) Burns Valley Creek, Main Branch, (T 106, R 7, S 2; T 107, R 7, S 35). 1B, 2A, 3B,

(20) Butterfield Creek, (T 103, R.4, S 6, 7, 8, 18) 1B, 2A, 3B,

(21) 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,

(22) Camp Hayward Creek, (T 104, R 8, S 31, 32)· 1B, 2A, 3B,

(23) Campbell Creek, (T 104, R 6, S 5, 7, 8, 18) 1B, 2A, 3B,

(24) Campbell Creek, (T 105, R.6, S.21, 28, 29, 32). 1B, 2A, 3B,

(25) *Cannon River, [11/5/84R] (From the northern city limits of Faribault to its confluence with the Mississippi River) 2B, 3B,

(26) 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,

(27) Carters Creek, Wykoff, (T 103, R 12, S 4, 9, 15, 16, 22) 7;

(28) 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, T 107, R 6, S 1) 1B, 2A, 3B,

(29) Chub Creek, North Branch, (T 112, 113, R 19)· 2C,

(30) Cold Creek (Cold Spring Brook) (excluding trout waters), (T 110, 111, R 14) 2C,

(31) Cold Spring Brook, (T 110, R 13, S 30, 31; T 110, R 14, S 25, 36). 1B, 2A, 3B,

(32) Coolridge Creek, (T 105, R.9, S 23, 26) 1B, 2A, 3B,

(33) Corey Creek, (T.105, R 6, S 18, 19, T 105, R 7, S 24, 25, 26, 27, 34) 1B, 2A, 3B,

(34) County Ditch No 15, Kilkenny, (T 110, R.23, S 22, 23)· 7,

(35) Crane Creek, (T.107, 108, R 20, 21, 22)· 2C;

(36) 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,

(37) Crooked Creek, North Fork, (T 102, R 5, S 17, 20, 21, 22, 23, 26) 1B, 2A, 3B;
(38) Crooked Creek, South Fork, (T 102, R 5, S 26, 27, 28) 1B, 2A, 3B;
(39) Crystal Creek, (T 102, R.11, S 35, 36) 1B, 2A, 3B;
(40) Crystal Creek, (T 103, R.5, S 6, 7, 18, 19; T 103, R.6, S.1, 12) 1B, 2A, 3B,
(41) Dakota Creek (excluding trout waters), (T 105, R 5): 2C;
(42) Dakota Creek, (T 105, R 4, S.7; T 105, R.5, S.1, 2, 3, 11, 12). 1B, 2A, 3B,
(43) Daley Creek, (T.103, R.7, S 4, 5, 8, T 104, R 7, S 33). 1B, 2A, 3B,
(44) Diamond Creek, (T 103, R 8, S 18, 19, T 103, R 9, S 11, 13, 14, 24) 1B, 2A, 3B,
(45) Dry Creek, (T 108, R 12, 13)· 2C,
(46) Dry Run Creek, (T.108, R 14, S 4, T 109, R 14, S 33). 1B, 2A, 3B;
(47) Duschee Creek, (T.102, R.10, S 1, T 103, R 10, S.23, 24, 25, 26, 36): 1B, 2A, 3B,
(48) Dutch Creek, (T 112, R 20, 21): 2C,
(49) Eitzen Creek, (T.101, R 5, S 22, 23) 1B, 2A, 3B,
(50) Etna Creek, (T 102, R 13, S 25, 36) 1B, 2A, 3B,
(51) Ferguson Creek, (T 105, R 8, S 18; T 105, R 9, S 12, 13)· 1B, 2A, 3B,
(52) Ferndale Creek, (T.104, R 7, S.29, 30, 31) 1B, 2A, 3B,
(53) Forestville Creek, North Branch, (T 102, R.12, S.13, 14, 15) 1B, 2A, 3B,
(54) Forestville Creek, South Branch, (T 102, R.12, S.24, 25) 1B, 2A, 3B,
(55) Frego Creek, (T 101, R 9, S 14, 15, 22, 23): 1B, 2A, 3B,
(56) Garvin Brook, (T 106, R 8, S.4, 5, 8, 17; T 107, R 8, R 14, 23, 26, 27, 33, 34, 35): 1B, 2A, 3B,
(57) Gilbert Creek, (T 111, R 13, S 1, 2, 3, 4, 10, 11, 12)· 1B, 2A, 3B,
(58) Gilmore Creek, (T 106, R 7, S.6; T 107, R 7, S 20, 29, 30, 31, 32)· 1B, 2A, 3B;
(59) Girl Scout Camp Creek, (T 103, R.7, S.29, 30). 1B, 2A, 3B,
(60) 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,
(61) Gribben Creek, (T 103, R 9, S 9, 16, 21, 27, 28). 1B, 2A, 3B;
(62) Hamilton Creek, (T 103, R.13, S.6, T.103, R.14, S 1) 1B, 2A, 3B,
(63) Hemmmgway Creek, (T 105, R.9, S.26, 28, 33, 34, 35) 1B, 2A, 3B,
(64) Hammond Creek, (T.109, R.13, S.28, 29): 1B, 2A, 3B;
(65) Harkcom Creek, (T 108, R 16) 2C,
(66) 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) 1B, 2A, 3B;
(67) Homer Creek, (T.106, R.6). 2C,
(68) 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;
(69) Indian Creek, West, (T 109, R 11, S.6, 7, 8, 16, 17, 21)· 1B, 2A, 3B;
(70) Indian Spring Creek (excluding trout waters), (T 103, R 5): 2C,
(71) Indian Springs Creek (Dexter), (T 103, R.5, S 12, 13, 14, 15, 21, 22, 28)· 1B, 2A, 3B,
(72) Iowa River, Little, (T 101, 102, R.14)· 2C,
(73) Jordan Creek, Little, (T 104, R 12, S.21, 22, 26, 27, 28) 1B, 2A, 3B,
(74) 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,
(75) Kedron Creek, (T 104, R 13, S 36) 1B, 2A, 3B,

(76) King Creek, (T 111, R.11, 12) 2C,
(77) Kinney Creek, (T 105, R 13, S 1, 12, 13, T.106, R 13, S 36) 1B, 2A, 3B;
(78) Lanesboro Park Pond, (T.103, R.10, S 13) 1B, 2A, 3B,
(79) LeRoy Trout Pond, (T 101, R 14, S 36)· 1B, 2A, 3B,
(80) Logan Creek, (T 107, R.11, S 3)· 1B, 2A, 3B,
(81) Long Creek (excluding trout waters), (T 108, 109, R.12) 2C,
(82) Long Creek, (T 109, R.12, S 3, 10, 15, 22, 27, 28) 1B, 2A, 3B,
(83) Lost Creek, (T 104, R 11, S.18, T 104, R 12, S 9) 1B, 2A, 3B,
(84) Lynch Creek, (T 104, R 11, S 2, 11, 14) 1B, 2A, 3B,
(85) MacKenzie Creek, (T 108, 109, R 21) 2C,
(86) Mahoney Creek, (T 103, R.10) 2C;
(87) Mahoods Creek, (T 103, R 12, S.20) 1B, 2A, 3B;
(88) Maple Creek, (T 102, R 8, S 3, 4, T.103, R 8, S 27, 28, 33, 34)· 1B, 2A, 3B,
(89) 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;
(90) Middle Creek, (T.109, R 11, S.18; T 109, R.12, S 2, 3, 11, 13, 14) 1B, 2A, 3B,
(91) 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;
(92) Miller Creek, (T.111, R 12, S 7, 8, 9, 18, T 111, R 13, S.13, 24) 1B, 2A, 3B;
(93) Money Creek, (T 105, R 7, S 3, 4, 6, 7, 8, 9, 16, 17) 1B, 2A, 3B,
(94) Mound Prairie Creek, (T.104, R 5) 2C,
(95) Mud Creek, (T 108, 109, R 20, 21) 2C,
(96) Nepstad Creek, (T 102, R.8, S 4, 5, 7, 8, 9, T.102, R 9, S 1, 2, 12) 1B, 2A, 3B,
(97) Newburg Creek (M–9–10–10–1), (T 101, R 8, S 5, 8). 1B, 2A, 3B,
(98) New York Hollow Creek, (T.101, R 5, S 25, 26)· 1B, 2A, 3B,
(99) Partridge Creek, (T.101, R.10, S.4, T 102, R 10, S.33) 1B, 2A, 3B,
(100) Peterson Creek, (T 106, R 8, S.7, 8)· 1B, 2A, 3B,
(101) Pickwick Creek, (T 106, R 5, S 7, 18; T 106, R 6, S 13, 23, 24, 26, 34, 35) 1B, 2A, 3B,
(102) Pickwick Creek, Little, (T 106, R 5, S 18, 19, 29, 30, 32, T 106, R 6, S 13) 1B, 2A, 3B,
(103) Pine Creek (excluding Class 7 segment), (T 101, R 10) 2C, 3B,
(104) Pine Creek, (T 105, R 5, S 18, 19, 20, 29, 30, 31, 32, T 105, R 6, S 13, 36) 1B, 2A, 3B;
(105) Pine Creek, Harmony, (T 101, R 9, S 31, T.101, R.10, S 24, 25, 36): 7,
(106) Pine Creek, South Fork, (T.105, R 5, S 19, T 105, R.6, S 24) 1B, 2A, 3B;
(107) 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,
(108) Pine Creek (excluding trout waters), (T.112, 113, R 17, 18) 2C,
(109) 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;
(110) Pleasant Valley Creek (excluding trout waters), (T.106, 107, R.6, 7) 2C;
(111) Pleasant Valley Creek, (T.106, R 6, S 7, 18, 19, T 106, R 7, S 1, 12, 13, 24, 25)· 1B, 2A, 3B,
(112) Plum Creek, (T 108, R.15) 2C;

(113) Prairie Creek, (T 110, 111, 112, R 18, 19, 20) 2C,

(114) Rice Creek, (T 103, R 11, S 3, 5, 7, 8, 9, T 104, R 11, S 14, 23, 33) 1B, 2A, 3B,

(115) 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,

(116) Riceford Creek, Mabel, (T 101, R 8, S.24, 25, 26) 7,

(117) Rollingstone 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,

(118) Rollingstone Creek, Middle Branch, (T 107, R 8, S 9, 16) 1B, 2A, 3B,

(119) 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,

(120) 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,

(121) Rose Valley Creek, (T 105, R 5, S 22, 27, 34, 35) 1B, 2A, 3B;

(122) Rupprecht Creek, (T.107, R 9, S 13, 24, 25, 26, 35): 1B, 2A, 3B;

(123) 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,

(124) Salem Creek, (T 106, R 15, 16)· 2C,

(125) Schueler Creek, (T 104, R 8, S 1, 2, 3) 1B, 2A, 3B,

(126) Second Creek, (T 111, R 12, S 15) 1B, 2A, 3B,

(127) Shady Creek, (T 104, R 11, S 19, 30) 1B, 2A, 3B,

(128) Shingle Creek, (T 109, 110, R 17) 2C,

(129) Silver Creek (excluding trout waters), (T 104, 105, R 6) 2C,

(130) Silver Creek, (T 104, R 6, S 1, 2, 11, 12, 14, T 105, R 6, S 34, 35) 1B, 2A, 3B,

(131) Silver Spring Creek, (T 108, 109, R 13) 2C,

(132) Snake Creek (excluding trout waters), (T 109, R 10) 2C;

(133) Snake Creek, (T 109, R 10, S 10, 11, 14, 15, 16) 1B, 2A, 3B,

(134) Speltz Creek, (T 107, R 8, S 5, 6; T 108, R 8, S 31; T 108, R 9, S 36) 1B, 2A, 3B,

(135) Spring Brook, (T 111, R 20, S 2, 3, 4) 1B, 2A, 3B,

(136) Spring Creek, (T 110, R 12, S 7, 17, 18, 20, 21, 27, 28, 29) 1B, 2A, 3B,

(137) Spring Creek, (T 112, R 15, S 5, 6, 7, 18, T 113, R 15, S 29, 31, 32, 33, 34) 1B, 2A, 3B,

(138) 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,

(139) Stockton Valley Creek, (T 106, R 8, S 2, 3, 10, 11, 14, 23, T 107, R.8, S 34). 1B, 2A, 3B,

(140) Storer Creek, (T 104, R 5, S 17, 18, 19, 30) 1B, 2A, 3B,

(141) Sugar Creek (Sugarloaf Creek), (T 111, 112, R.12, 13) 2C;

(142) Sullivan Creek (excluding trout waters, (T.103, R 5) 2C;

(143) Sullivan Creek, (T 103, R 5, S.12, 13, 14, 23, 24, 25, 26) 1B, 2A, 3B,

(144) Swede Bottom Creek, (T 103, R 6, S 10) 1B, 2A, 3B,

(145) 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,

(146) Torkelson Creek, (T 104, R 10, S 25, 36) 1B, 2A, 3B,

(147) Trout Brook, (T 110, R 11, S 5, 8). 1B, 2A, 3B,

(148) Trout Brook, (T 112, R 17, S.1, T 113, R 17, S 26, 27, 35, 36) 1B, 2A, 3B,

(149) Trout Brook (Hay Creek Tributary), (T 113, R 15, S 35, 36) 1B, 2A, 3B,

(150) Trout Brook (Mazeppa Creek), Goodhue, (T 110, R 15, S 3, 4, T 111, R 15, S 28, 33, 34) 7,

(151) Trout Creek, Little, (T.106, R 5, 6)· 2C;

(152) 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,

(153) Trout Run Creek (Trout Creek) (excluding trout waters), (T 105, R.10) 2C,

(154) Trout Run–Whitewater Park, (T 107, R.10, S 29) 1B, 2A, 3B,

(155) Trout Valley Creek, (T.108, R 9, S 5, 8, 17, 20, T 109, R 9, S 31) 1B, 2A, 3B,

(156) Unnamed Creek, (T 101, R 4, S 21) 1B, 2A, 3B,

(157) Unnamed Creek, Spring Grove, (T 101, R 7, S 14, 22, 23, 27) 7,

(158) Unnamed Creek, (T 102, R 4, S 18, 19, 20, 29, 30) 1B, 2A, 3B,

(159) Unnamed Creek, (T 103, R 7, S 31) 1B, 2A, 3B,

(160) Unnamed Creek, Canton, (T 101, R 9, S 20) 7,

(161) Unnamed Creek, Byron, (T 107, R 15, S 17, 20, 29) 7,

(162) Unnamed Creek (Helbig), (T 110, R 11, S.28, 33) 1B, 2A, 3B,

(163) Unnamed Creek (M–9–10–5–3), (T 101, R 7, S 6, T.101, R 8, S 1, 2) 1B, 2A, 3B,

(164) Unnamed Creek (Whitewater Tributary), (T 108, R 10, S 35, 36) 1B, 2A, 3B,

(165) Unnamed Creek, (T 105, R 7, S 19, 29, 30, T 105, R 8, S 24). 1B, 2A, 3B,

(166) Unnamed Creek (Miller Valley), (T 106, R 5, S 21, 22, 27, 28) 1B, 2A, 3B;

(167) Unnamed Creek (Richmond), (T 106, R 5, S 17, 20, 21) 1B, 2A, 3B,

(168) Unnamed Creek (Deering Valley), (T 108, R 8, S 20, 28, 29) 1B, 2A, 3B,

(169) Unnamed Creek (M–9–10–5–4), (T 101, R 8, S 12, 13) 1B, 2A, 3B,

(170) Unnamed Creek (M–9–10–10–5), (T 102, R 8, S 32, 33) 1B, 2A, 3B,

(171) Unnamed Creek (M–9–10–6), (T 103, R 8, S 36) 1B, 2A, 3B;

(172) Unnamed Creek (T 104, R 8, S 19, 30) 1B, 2A, 3B,

(173) Unnamed Creek, Plainview, (T.108, R.11, S.16, 17, 20, 21, 22, 27, 34). 7;

(174) Unnamed Creek, West Concord, (T 108, R 17, S 17, 20, 21) 7,

(175) Unnamed Creek, Hayfield, (T 105, R.17, S.3, 4)· 7,

(176) Unnamed Ditch, Claremont, (T 107, R 18, S.27, 34): 7,

(177) Unnamed Ditch, Lonsdale, (T 112, R 22, S 25, 35, 36) 7;

(178) Unnamed Ditch, Hampton, (T 113, R.18, S 5, 6, T 114, R 18, S 31) 7,

(179) Unnamed Dry Run, Altura, (T 107, R 9, S 7, 18) 7;

(180) Unnamed Dry Run, Owatonna, Owatonna Canning Company, (T 107, R.20, S 6; T.107, R 21, S.1) 7,

(181) Unnamed Dry Run, Owatonna, Owatonna Canning Company, (T 107, R 20, S 6, T 107, R 21, S 1) 7;

(182) Unnamed Stream, Dodge Center, Owatonna Canning Company, (T 107, R 17, S 27, 34) 7;

(183) 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,

(184) Vesta Creek, (T 102, R.8, S.10, 11, 14, 15, 23) 1B, 2A, 3B,

(185) Wapsipinicon River, (T 101, R 15) 2C, 3B,

(186) Waterloo Creek, (T 101, R.6, 7)· 1B, 2Bd, 3B,

(187) 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,

(188) West Albany Creek, (T 110, R.12, S 28, 29, 30, T 110, R 13, S 23, 24, 25, 26) 1B, 2A, 3B,

(189) 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,

(190) 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,

(191) 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,

(192) 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,

(193) Whitewater River, North Fork, Elgin, (T 108, R.12, S 25, 26, 27)· 7,

(194) Wildcat Creek (excluding trout waters), (T 103, R.4) 2C,

(195) Wildcat Creek, (T 103, R 4, S.26, 27, 28, 29, 32, 33, 34, 35)· 1B, 2A, 3B,

(196) Willow Creek, (T.101, R.11, S 1, 12, T 102, R.11, S.1, 12, 13, 24, 25, 36) 1B, 2A, 3B,

(197) 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

(198) Wisel Creek, (T 101, R.8, S 5, 6, 8, T 102, R 8, S.19, 20, 29, 30, 31, 32) 1B, 2A, 3B

B Lakes

(1) Unnamed Marsh, Kilkenny, (T 110, R.23, S 22, 23)· 7, and

(2) Unnamed Swamp, Hampton, (T 113, R 18, S 8)· 7

C Calcareous Fens.

(1) *Cannon River Wilderness Area fen, 18, Rice [3/7/88R] (T 111, R 20, S.34) 2D,

(2) *Cannon River Wilderness Area fen, 73, Rice [4/18/94R] (T 111, R 20, S 22) 2D,

(3) *High Forest fen, 12, Olmsted [4/18/94R] (T 105, R 14, S 14, 15) 2D,

(4) *Holden 1 West fen, 3, Goodhue [4/18/94R] (T.110, R 18, S 1)· 2D;

(5) *Houston fen, 62, Houston [4/18/94R] (T 104, R 6, S 26)· 2D,

(6) *Nelson WMA fen, 5, Olmsted [3/7/88R] (T 105, R 15, S.16): 2D,

(7) *Perched Valley Wetlands fen, 2, Goodhue [3/7/88R] (T 112, R 13, S 8): 2D,

(8) *Red Wing fen, 72, Goodhue [4/18/94R] (T 113, R 15, S 21) 2D; and

(9) *Wiscoy fen, 58, Winona [3/7/88R] (T 105, R.7, S 15) 2D.

D. Scientific and Natural Areas· None currently listed

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

(1) Bancroft Creek, (T 103, 104, R 21)· 2C,

(2) Bear Creek (excluding Class 7 segment), (Source to Iowa border) 2C, 3B;

(3) Beaver Creek, (T 101, 102, R 13, 14) 2C, 3B,

(4) Cedar River, Little, (Source to Iowa border)· 2C, 3B,

(5) Clear Creek, (T.102, R 4). 2C,

(6) County Ditch No 11, Sherburne, (T 101, R 32, S 4, 9, 10, T.102, R 32, S.7, 8, 16, 17, 21, 27, 28, 33, 34) 7;

(7) County Ditch No 48, Conger, (T.102, R 22, S 19, 20; T.102, R.23, S 24, 25, 26, 35)· 7,

(8) Deer Creek, (T 101, R.19, 20) 2C, 3B,
(9) Dobbins Creek, (T 103, R 16, 17) 2C,
(10) 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,
(11) Heron Lake Outlet, (T 104, 105, R 37). 2C,
(12) Jack Creek, Wilmont, (T 104, R 41, S 25, 26, 30, 31, 32, 33, 34, 35, 36) 7;
(13) Lime Creek, (T 101, R 22, 23) 2C, 3B,
(14) Murphy Creek, (T 103, R 18) 2C;
(15) Okabena Creek (excluding Class 7 segment), (T 102, 103, R.37, 38, 40) 2C,
(16) 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,
(17) Orchard Creek, (T 102, R.18, 19) 2C;
(18) Roberts Creek, (T 103, 104, R 16, 17, 18)· 2C;
(19) Rose Creek, (T.102, 103, R.16, 17, 18). 2C;
(20) Scheldorf Creek, (T 106, R.36, S 19, 30, 31, T 106, R 37, S 13, 24, 25): 1B, 2A, 3B,
(21) Soldier Creek, (T 101, R 32, 33). 2C, 3B;
(22) Turtle Creek, (T.103, R 18, 19, 20) 2C;
(23) Unnamed Creek, Emmons, (T 101, R 22, S 31) 7;
(24) Unnamed Creek, Brownsdale, (T 103, R 17, S 4, 9) 7,
(25) Unnamed Creek, Blooming Prairie, (T 104, R 18, S 5, 8, 9, 16, T 105, R 18, S 31). 7,
(26) 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,
(27) Wolf Creek, (T 103, R 16, 17, 18): 2C,
(28) Woodbury Creek, (T 101, 102, R.18, 19) 2C, and
(29) Woodson Creek, (T 102, R.18, S 14, 15) 1B, 2A, 3B

B Lakes None currently listed

C Calcareous Fens:

(1) *Heron Lake fen, 45, Jackson [3/7/88R] (T 103, R 36, S 29) 2D, and
(2) *Thompson Prairie fen, 20, Jackson [3/7/88R] (T.103, R 35, S 7) 2D

D. Scientific and Natural Areas *Prairie Bush Clover, [3/7/88P] Waters within the Prairie Bush Clover Scientific and Natural Area, Jackson County, (T 103, R 35, S 17) 2B, 3B, except wetlands which are 2D.

Subp. 9 **Missouri River Basin.** The water use classifications for the listed waters in the Missouri River Basin are as identified in items A and C

A. Streams

(1) Ash Creek, (T.101, R 45) 2C;
(2) Beaver Creek, (T.102, 103, 104, R 45, 46, 47). 2C, 3B,
(3) Flandreau Creek (excluding Class 7 segment), (T 107, 108, R 46, 47) 2C, 3B;
(4) Flandreau Creek, Lake Benton, (T 108, R 46, S 1, 2, 11, T 109, R 45, S 30, 31, T.109, R 46, S.36) 7,
(5) Kanaranzi Creek, (Source to Iowa border): 2C, 3B,
(6) Medary Creek, (Source to South Dakota border) 2C, 3B;
(7) Mound Creek, (T 103, 104, R 45). 2C,
(8) Mud Creek, (T 101, 102, R 45, 46) 2C, 3B;
(9) Pipestone Creek, (Source to South Dakota border). 2C, 3B,
(10) Rock River (excluding Class 7 segment), (Source to Iowa border) 2C, 3B,

(11) Rock River, Holland, (T 107, R 44, S 18, 19, 20, 29; T.107, R 45, S 12, 13) 7,

(12) Rock River, Little, (Source to Iowa border) 2C, 3B,

(13) Sioux River, Little, (Source to Iowa border) 2C, 3B,

(14) Sioux River, West Fork Little, (Source to Iowa border) 2C, 3B,

(15) Skunk Creek, (T 101, 102, R 37, 38, 39) 2C,

(16) Split Rock Creek, (Split Rock Lake outlet to South Dakota border) 2C, 3B,

(17) Unnamed Creek, Jasper, (T 104, R 46, S 6) 7;

(18) Unnamed Creek, Hatfield, (T 105, R 44, S 6, 7, 8, T 105, R.45, S 1, T 106, R 45, S 36) 7,

(19) Unnamed Creek, Hatfield, (T 106, R 45, S 34, 35, 36) 7,

(20) Unnamed Ditch, Steen, (T 101, R 45, S 31, 32) 7,

(21) Unnamed Ditch, Hills, (T 101, R.46, S.28, 33) 7, and

(22) Unnamed Ditch, Lake Benton, (T 109, R 45, S 17, 19, 20) 7

B Lakes None currently listed

C Calcareous Fens

(1) *Burke WMA fen, 57, Pipestone [11/12/90R] (T 106, R 44, S 28). 2D,

(2) *Hole-in-the-Mountain Prairie fen, 6, Pipestone [11/12/90R] (T 108, R 46, S 1, T 109, R.45, S 31) 2D,

(3) *Lost Timber Prairie fen, 13, Murray [4/18/94R] (T 105, R 43, S 2). 2D, and

(4) *Westside fen, 59, Nobles [11/12/90R] (T.102, R 43, S 11) 2D

D Scientific and Natural Areas None currently listed

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

History: *18 SR 2195*