## Chapter NR 104

### USES AND DESIGNATED STANDARDS

NR 104.01	-Intrastate Waters General (p. 33) Surface water classifications	NR 104.10	Variances and additions appli- cable in the northwest district (p. 50-2)
	and effluent limitations (p. 34)	Subchapter ! NR 104,20	II—Interstate Waters Wisconsin-Illinois waters
NR 104.04 NR 104.05	Provision for changes (p. 37) Variances and additions appli-	NR 104.21	Wisconsin-Minnesota-Iowa- Illinois waters
	cable in the southern district (p. 37)	NR 104,22 NR 104,23	Wisconsin-Minnesota waters Wisconsin-Minnesota-Michi-
NR 104,06	Variances and additions appli- cable in the southeast district	NR 104.24	gan waters Wisconsin-Michigan waters
NR 104.07	(p. 41) Variances and additions appli-	NR 104,25	Wisconsin-Michigan-Illinois- Indiana waters
	cable in the Lake Michigan district (p. 44)	NR 104.26 NR 104.27	Trout waters Fish reproduction
NR 104.08	Variances and additions appli- cable in the north central dis- trict (p. 48)	NR 104.28	Revision of designated uses
NR 104,09	Variances and additions appli- cable in the west central dis- trict (p. 49)		

Note: Chapter NR 104 as it existed on September 30, 1976 was repealed and a new chapter NR 104 was created effective October 1, 1976.

# Subchapter I — Intrastate Waters

NR 104.01 General. (1) "It is . . . the goal of the state of Wisconsin that, wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water be achieved by 1983. . ." s. 147.01(1)(b), Stats. The long-range goal of Wisconsin water quality standards is, therefore, to permit the use of water resources for all lawful purposes. Surface waters which because of natural conditions are not conducive to the establishment and support of the complete heirarchy of aquatic organisms shall not be degraded below present levels, but shall be upgraded as necessary to support assigned uses. Most surface waters within the state of Wisconsin already meet or exceed the goals specified above. However, certain waters of the state may not meet these goals for the following reasons:

- (a) The presence of inplace pollutants,
- (b) Low natural streamflow.
- (c) Natural background conditions, and
- (d) Irretrievable cultural alterations.

(1m) Where it is determined that one or more of these factors may interfere with the attainment of the statutory objectives, a variance from the criteria necessary to achieve those objectives is provided.

- (2) Surface waters within the boundaries of the state shall meet the standards for fish and aquatic life and recreational use with the variances and additions listed below in ss. NR 104.05 to 104.10. A system is provided within which small streams and other surface waters which cannot support high quality uses are granted a variance from the high quality criteria.
- (3) Effluent limitations specified in this chapter shall be achieved by industrial, private and municipal dischargers by July 1, 1983 unless an

Register, July, 1991, No. 427

earlier date is otherwise provided in a permit issued under s. 147.02, Stats. Municipal dischargers eligible for state or federal grant-in-aid shall achieve the specified effluent limitations upon completion of construction or modification of facilities approved by the department of natural resources subsequent to adoption of this chapter unless otherwise provided in a permit issued under s. 147.02, Stats.

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. (1), Register, December, 1977, No. 264, eff. 1-1-78.

- NR 104.02 Surface water classifications and effluent limitations. (1) HYDROLOGIC CLASSIFICATION. "Surface waters" as defined in s. NR 102.03(6), may be classified according to their hydraulic or hydrologic characteristics. For purposes of this chapter, surface waters will be classified by the department into one of the following categories:
- (a) Lakes or flowages. This classification includes bodies of water whose current is more or less stagnant or which lacks a unidirectional current.
- (b) Diffused surface waters. This classification includes any water from rains, intermittent springs or melting snow which flows on the land surface, through ravines, etc., which are usually dry except in times of runoff. This category does not include waters at the land surface in the vicinity of agricultural or wastewater irrigation disposal systems.
- (c) Wetlands. This classification includes areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which have soils indicative of wet conditions.
- (d) Wastewater effluent channels. This classification includes discharge conveyances constructed primarily for the purpose of transporting wastes from a facility to a point of discharge. Drainage ditches (including those established under ch. 88, Stats.) constructed primarily for the purposes of relieving excess waters on agricultural lands shall not be construed as effluent channels. Modifications made to natural watercourses receiving wastewater effluents for the purpose of increasing or enhancing the natural flow characteristics of the stream shall not be classified as effluent channels.
- (e) Noncontinuous streams. This classification includes watercourses which have a defined stream channel, but have a natural 7-day Q ≅ flow of less than 0.1 cfs and do not exhibit characteristics of being perpetually wet without wastewater discharges.
- (f) Continuous streams. This classification includes watercourses which have a natural 7-day Q≅\*flow of greater than 0.1 cfs or which exhibit characteristics of a perpetually wet environment, are generally capable of supporting a diverse aquatic biota and flow in a defined stream channel.

Note: The application of this classification system is not dependent on the the navigability properties of the watercourse, but is dependent upon the quantity-quality relationships of the surface water.

- (2) WATER QUALITY CLASSIFICATION. (a) Whenever the goals as specified in s. 147.01(1)(b), Stats., cannot be attained because of conditions enumerated in s. NR 104.01(1), a variance may provided. Variances from a specific water quality criteria may be given in s. NR 104.05 et. seq. or a variance under one of the categories provided in this chapter may be specified.
- (b) Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development, or other activities shall be con-Register, July, 1991, No. 427

9.	Tributary - Ceme- tery Creek (Iron Belt)	Channel from the Iron Belt STP out- fall to Cemetery Creek			Effluent limits to l determine
0.	Wetland near Frog Creek (Mi- nong)	Wetland receiving Minong STP effluent	Wetland	II	<b>B</b>
11.	Tributary & Bar-	From the school polishing pond to	Noncontinuous	II	В
	don Creek (Northwestern Junior-Senior High School)	Bardon Creek Bardon Creek	Noncontinuous	I	NA
19	Wetland near	Wetland receiving Ogema lagoon ef-		н	В
٠.	Holmes Creek (Ogema)	fluent			-
13.	Drainageway and Tributary to a Tributary of Whittlesey Creek (Ondossagon	Drainageway from Ondossagon School polishing pond to a noncon- tinuous tributary to an unnamed tributary to Whittlesey Creek Noncontinuous tributary to an un-	water	II	Effluent limits to determin
٠	School)	named tributary to Whittlesey		1,50	resign to
	Black River ( Pate.	Creek Drainageway from Pattison Park STP to the Black River	water		· · · · · · · · · · · · · · · · · · ·
15:	Designações	Designada Area from Pence STP to	Wetland	11	R
	Drainage to Lake Superior (Pureair)	to Lake Superior	Diffused surface water	н	В
17.	Drainage Area	Wattend receiving Radisson STP of-	Wotland		R
18.	Sheep Ranch Creek (Rib Lake)	fluent Sheep Ranch Creek from Rib Lake STP downstream to first town road	Continuous	I	Α .
19,	Tributary - Saw- yer Creek (Shell Lake)	Channel from the Shell Lake STP outfall to Sawyer Creek	Diffused surface water	П	Effluen limits to determin
20.	Wetland (Siren)	Wetland receiving Siren STP effluent	Wetland	II	В
	Ditch & West Branch Big Eau Pleine River	Channel from the Stetsonville lagoon to the West Branch Big Eau Pleine River			Effluen limits to determin
	(Stetsonville)	West Branch Big Eau Pleine River downstream to tributary in the NW%, SW%, Sec. 29, T30N, R2E	Noncontinuous	I	i de la company del primari
22.	Drainage to Pokegama River (Superior, Village of)	lagoon to Pokegama River Pokegama River from above location to St. Louis Bay	water Continuous	1	etika albi. Pathiden
23.	Drainage to	Channel from Tony lagoon to wet-	Effluent ditch	· . II	В
	Deertail Creek (Tony)	Channel from Tony lagoon to wet- land Drainage from effluent ditch to Town Line Rd.	* 2.2		
	jan grada sita	Tributary to Deertail Creek below Town Line Rd.	Noncontinuous		on Hilli
24.	Tributary - Clam River (Webster)	Tributary from the Webster lagoon to the Clam River	Noncontinuous	t. säite	В
25.	Tributary - Soft Maple Creek (Weyerhauser)	Drainage from Weyerhauser lagoon to tributary Tributary of Soft Maple Creek up- stream from CTH "F"	Diffused surface water Noncontinuous		B NA
26.	Seepage Area near Brunet River (Winter)	Area receiving the Winter lagoon effuent	water	gran i	<b>B</b> *
	( in inter )	$(\mathcal{A}_{i,j}, \mathcal{A}_{i,j}, A$	Register, July, 19	991, No.	427

NR 104

27. Drainage from Village of Turtle Lake to Moon Creek (Turtle Lake)	Drainage area from effluent pipes to impoundment	Wetland	H	<b>B</b>
3	Impoundment formed by constructed dam in the SW¼, SW¼, sec. 32, T34N, R14W	Flowage		NA
* • * * * * * * * * * * * * * * * * * *	Drainage from the dam to the south line of sec. 32, T34N, R14W	Noncontinuous	I	NA
.)	Drainage area from the north line to	Wetland	II	NA

(1) Criteria I requires the maintenance of surface water criteria specified in NR 104.02(3)(a)2.

Criteria II requires the maintenance of surface water criteria specified in NR

104.02(3)(b)2.

(2) Effluent limitation A requires those limits specified in NR 104.02(3)(a)3. Effluent limitation B requires those limits specified in NR 104.02(3)(b)3. NA - Not applicable

- (3) Other variances. (a) The Flambeau river from the upper dam at Park Falls downstream to the Crowley dam shall meet the standards for fish and aquatic life and recreational use, except that the dissolved oxygen may not be lowered to less than 3.0 mg/L at any time. On June 30, 1984, this variance shall expire and after that date all portions of the Flambeau river shall meet the standards for fish and aquatic life and recreational use, including the dissolved oxygen standard of 5.0 mg/L.
- (b) Newton creek in the city of Superior, from the headwaters to its mouth into Hog Island Inlet of Superior Bay shall be classified as a noncontinuous stream and shall also be classified for fish and aquatic life uses with the subcategory of limited forage fish communities. Hog Island Inlet and Superior Bay shall be classified for fish and other aquatic life uses with the subcategory of great lake communities.

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. table 8, Register, December, 1977, No. 264, eff. 1-1-78; cr. entry 27, table 8, Register, September, 1981, No. 309, eff. 10-1-81; am. (3) (a), Register, May, 1983, No. 329, eff. 6-1-83; am. (3) (b), Register, February, 1989, No. 398, eff. 3-1-89; am. (3) (b), Register, April, 1991, No. 424, eff. 5-1-91.

### Subchapter II — Interstate Waters

NR 104.20 Wisconsin-Illinois waters. (1) The Des Plaines River, Pitscasaw Creek, Nippersink Creek and Turtle Creek upstream of the Rock-Walworth county line are used for wildlife and stock watering, waste assimilation, warm water fishery and recreation. Dutch Gap Canal and Trevor Creek have similar uses excepting waste assimilation. The main stems of these streams shall meet the requirements for recreational use and fish and aquatic life.

- (2) The Fox River is used for recreation, waste assimilation, industrial supply, fishing and irrigation. Water quality in the Fox River shall meet the standards for recreational use and fish and aquatic life.
- (3) Benet/Shangrila, Cross and Elizabeth Lakes are located on the Wisconsin-Illinois boundary and used for fishing and recreation. Their water quality shall meet the requirements for fish and aquatic life and recreational use.
- (d) The Rock River and Sugar River are used for waste assimilation, recreation, fish and aquatic life, irrigation, stock and wildlife watering and hydropower. Their waters shall meet water quality standards for recreational use and fish and aquatic life.
- (5) Turtle Creek below the Rock-Walworth county line, Raccoon Creek, East Fork Raccoon Creek, East Fork Galena River, Spafford Creek, Menominee River, Register, July, 1991, No. 427

Pecatonica River and Galena River are used for recreation, stock and wildlife watering, waste assimilation and fish and aquatic life. Richland Creek and East Branch Richland Creek, Apple River and West Fork Apple River, Sinsinawa River, Little Menominee River and a tributary of the East Fork Galena River have similar uses excepting waste assimilation. Water quality of these streams shall meet standards for recreational use and fish and aquatic life.

- (6) Honey Creek is used for waste assimilation, stock and wildlife watering, recreation and fish and aquatic life. A section from the Wisconsin-Illinois state line upstream to the Clarno-Cadiz town line shall meet the requirements for recreational use and fish and aquatic life.
- (7) Variance. The sector of Honey Creek above the Clarno-Cadiz town line shall meet the standards for fish and aquatic life except that the dissolved oxygen shall not be lowered to less than 2 mg/1 at any time. The membrane filter fecal coliform count in this sector shall not exceed 1,000 per 100 ml as a monthly geometric mean based on not less than 5 samples per month, nor exceed 2,000 per ml in more than 10% of all samples during any month.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. from NR 103.01, Register, July, 1991, No. 427, eff. 8-1-91.

NR 104.21 Wisconsin-Minnesota-Iowa-Illinois waters. The Mississippi River is used for commercial and recreational fishing, industrial and cooling water supply, boating, hunting, commercial shipping and waste assimilation. Water quality shall meet the standards and requirements for recreational use and fish and aquatic life.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. from NR 103.02, Register, July, 1991, No. 427, eff. 8-1-91.

- NR 104.22 Wisconsin-Minnesota waters. (1) The St. Croix River has high scenic and aesthetic value and is used for recreation, fishing, hydropower, commercial shipping, stock and wildlife water supply, and waste assimilation. An anticipated use involves industrial and cooling water supply. Its water quality shall meet the standards and requirements for recreational use and fish and aquatic life. The standards for public water supply shall be met downstream from the north line of Polk county.
  - (2) Upper Tamarack River, East Branch Hay Creek and West Branch Hay Creek are used for recreation, fishing, and stock and wildlife water supply. Their water quality shall meet the requirements for recreation and fish and aquatic life.
- (3) The St. Louis River adjoining Wisconsin is used for recreation, fishing, waste assimilation and commercial shipping. It is anticipated that a future use in the Lower St. Louis River will include cooling and industrial water supply. The St. Louis River water quality shall meet standards for recreational use and fish and aquatic life,
- (4) Black River and Black Lake, Nemadji River and South Fork Nemadji River, Mud Creek, Clear Creek, Pokegama River and Red River are used for fishing, stock and wildlife water supply and recreation. Water quality of these streams shall meet the standards and requirements for recreation and fish and aquatic life, A section of Black River is classified for trout.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. from NR 103.03, Register, July, 1991, No. 427, eff. 8-1-91.

NR 104.23 Wisconsin-Minnesota-Michigan waters. Lake Superior is used for recreation, commercial and recreational fishing, shipping, municipal water supply, industrial and cooling water, and waste assimilation. Lake Superior open wa-

Register, July, 1991, No. 427

NR 104

ters shall meet the criteria and requirements for public water supplies. All waters of Lake Superior shall meet the standards for recreational use and fish and aquatic life.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. from NR 103.04, Register, July, 1991, No. 427, eff. 8-1-91.

NR 104.24 Wisconsin-Michigan waters. (1) The Montreal River is used for hydropower, recreation, wildlife and stock watering, waste assimilation and has aesthetic value. Its waters shall meet the standards and requirements for recreational use and fish and aquatic life.

(2) Several waters cross the Wisconsin-Michigan line including Wester Creek, Black River tributaries, McDonald Creek tributaries, Bena Lake Inlet, Harris Creek, Moraine Creek, Oxbow Lake Inlet, Unnamed Creek between Little Presque Isle Lake and Twin Island Lake, South and East Branch Presque Isle River, tributary to Palmer Lake, Johnson Springs Outlet, Lobischer Creek and Elvoy Creek and the following lakes:

(a)	Unnamed (T44N, R5E,	· (j)	Big
	Sec. 18)	(k)	West Bay
(b) -	Moraine	(1)	Mamie
(c)	Stateline	(m)	Big Bateau
(d)	Basin	(n)	Mill
(e)	Little Presque Isle	(o)	Mili Crystal
(f)	Roach	(p)	Eleanor
(g) -	Tenderfoot	(p)	Lac Vieux Desert
(h)	Plum	$(\mathbf{r})$	Nurwood
(i)	Crampton	(s)	Smoky

Uses of these waters include fishing, recreation, aesthetic, and stock and wildlife watering. Their water quality shall meet the requirements and standards for recreation and fish and aquatic life. The Black River tributaries and Elvoy Creek are classified as trout waters.

- (3) The Brule and Menominee Rivers are used for hydropower production and the latter stream is used for waste assimilation and industrial water supply. Fishing, recreation, aesthetic values and stock, and wildlife watering are common to both. The Brule River is classified as a trout stream and it shall meet the requirements for recreation and the standards for trout waters. Waste quality requirements and standards on the Menominee River shall meet the standards for recreational use and fish and aquatic life.
- (4) Green Bay is used for public water supply, recreation, commercial and recreational fishing, industrial and cooling water, and waste assimilation. The waters of Green Bay, except as provided below, shall meet the standards for fish and aquatic life and recreational use.
- (5) Green Bay waters southeasterly from the navigation channel and southerly from the north line of Brown County shall from January 1 to April 1 annually meet the standards for recreational use and fish and aquatic life except that the dissolved oxygen shall not be lowered to less than 2 mg/1 at any time.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. from NR 103.05, Register, July, 1991, No. 427, eff. 8-1-91.

NR 104.25 Wisconsin-Michigan-Illinois-Indiana waters. Lake Michigan is used for recreation, commercial and recreational fishing, shipping, public water supply, waste assimilation, and industrial and cooling water. All Lake Michigan waters Register, July, 1991, No. 427

# DEPARTMENT OF NATURAL RESOURCES

50-7

NR 104

shall meet the standards for public water supplies and the standards for recreational use and fish and aquatic life, in addition to the thermal criteria contained in s. 102.04, Stats.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; reprinted to correct printing error, Register, February, 1987, No. 374; renum. from NR 103.06, Register, July, 1991, No. 427, eff. 8-1-91.

NR 104.26 Trout waters. Trout waters include the open waters of Lakes Superior and Michigan as well as those classified by the department of natural resources. They must be given special protection as required by the fish and aquatic life standards.

History: Cr. Register, September, 1973, no. 213, eff. 10-1-73; reprinted to correct printing error, Register, February, 1987, No. 374; renum. from NR 103.07, Register, July, 1991, No. 427, eff. 8-1-91.

NR 104.27 Fish reproduction. Standards adequate to maintain fish reproduction shall be maintained in the open waters of Lake Superior and Lake Michigan and in all other interstate waters which are designated by the department as of primary importance in the public interest for the maintenance of fish reproduction.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. from NR 103.08, Register, July, 1991, No. 427, eff. 8-1-91.

NR 104.28 Revision of designated uses. Modification of the uses and designated standards established in this chapter may be initiated by the department, by petition of any interested person, or by the natural resources board, subject to the provisions of ch. 227, Stats.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. from NR 103.08, Register, July, 1991, No. 427, eff. 8-1-91.