

## Chapter NR 104

INTRASTATE WATERS — USES AND  
DESIGNATED STANDARDS

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Note: Chapter NR 104 as it existed on September 30, 1976 was repealed and a new chapter NR 104 was created effective October 1, 1976.

**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 hierarchy 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 in-place pollutants,
- (b) Low natural streamflow,
- (c) Natural background conditions, and
- (d) Irrecoverable 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 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 102.01(7), 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  $Q_{\cong}$  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  $Q_{\cong}$  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 be 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 controlled so that waters regardless of their hydrologic and water quality classifications meet the general aesthetic and acute toxicity conditions in s. NR 102.02(1).

(3) VARIANCE CATEGORIES. (a) Surface waters not supporting a balanced aquatic community (intermediate aquatic life):

1. Applicability. This category of variance may be applied to either the continuous or noncontinuous stream hydrologic classification.

2. Surface water criteria. The following water quality criteria shall be met in all surface waters included in this variance category:

a. Dissolved oxygen shall not be less than 3 mg/l.

b. Ammonia nitrogen (as N) at all points in the receiving water shall not be greater than 3 mg/l during warm temperature conditions nor greater than 6 mg/l during cold temperatures to minimize the zone of toxicity and to reduce dissolved oxygen depletion caused by oxidation of the ammonia.

c. The pH shall be within the range of 6.0 to 9.0.

d. Other substances may not exceed concentrations determined in accordance with s. NR 102.02(1).

3. Effluent criteria. a. The effluent limitations determined necessary to meet the surface water criteria listed above are enumerated in table 1.

Parameter	Monthly Average (mg/l)	Daily Maximum (mg/ l)	Weekly Average (mg/l)	Other (mg/l)
BOD <sub>5</sub>	15	30	-	-
Total Suspended Solids	20	30	-	-
NH <sub>3</sub> -N (May-October)	-	-	3	-
NH <sub>3</sub> -N (November-April)	-	-	6	-
Dissolved Oxygen	-	-	-	4 (minimum)

b. Unless otherwise specified in table 1 above, effluent limitations for sewage treatment works shall be as adopted in ch. NR 210.

c. In addition to the effluent limitations enumerated in table 1 above, effluent limitations for these and any other substance necessary to protect assigned uses shall be met.

(b) Marginal surface waters: 1. Applicability. This variance category may be applied to the continuous or noncontinuous stream hydrologic classification, except that it shall be applied to all surface waters classified as effluent channel, wetland or diffuse surface water.

2. Surface water criteria. The following surface water quality criteria shall be met in all surface waters included in this variance category:

a. Dissolved oxygen shall not be less than 1 mg/l.

b. The pH shall be within the range of 6.0 to 9.0.

c. Other substances may not exceed concentrations determined in accordance with s. NR 102.02(1).

3. Effluent criteria. a. The effluent limitations determined necessary to meet the surface water criteria listed above are enumerated in table 2.

Parameter	Monthly Average (mg/		Other (mg/l)
	1)	Weekly Average (mg/1)	
BOD <sub>5</sub>	20	30	-
Total Suspended Solids	20	30	-
Dissolved Oxygen	-	-	4 (minimum)

b. Unless otherwise specified in table 2 above, effluent limitations for sewage treatment works shall be as adopted in ch. NR 210.

c. In addition to the effluent limitations enumerated in table 2 above, effluent limitations for these and any other substance necessary to protect assigned uses shall be met.

(4) OTHER CLASSIFICATIONS AND EFFLUENT CRITERIA. (a) *Surface waters significant to the environmental integrity of the state or region.* Under all hydrologic categories, the department reserves the right to require other effluent limitations, including allocation of wasteloads for organic material, toxicants and chlorine residuals if it is determined that the specified surface water is important to the overall environmental integrity of the area. In waters identified as trout streams, located in scientific areas or wild and scenic areas, providing endangered species habitat or of high recreational potential, effluent criteria will be evaluated on a case-by-case basis.

(b) *Surface waters classified for fish and aquatic life.* 1. Streams. Where flowing streams or rivers are specified to achieve fish and aquatic life criteria, wasteload allocation for organic material, toxicants and chlorine residuals shall determine effluent criteria necessary to achieve that standard.

2. Lakes and flowages. Effluent characteristics for discharges to lakes or flowages shall be based upon an evaluation of water quality necessary to protect fish and aquatic life taking into account mixing zone and nutrient removal criteria.

3. Minimum effluent criteria. If it can be reasonably demonstrated that the quality of the surface water is independent of a wastewater discharge, effluent limitations established under ss. 147.04 and 147.06, Stats., shall apply.

(c) *Wastewater treatment lagoons.* Effluents from fill-and-draw wastewater treatment lagoons or domestic waste stabilization ponds discharging to waters receiving a variance in this chapter may be permitted to vary from the limitations specified in table 1 or 2 provided the following conditions are met:

1. The discharge occurs only during the spring and fall of the year when the flow in the receiving water is normally high, and the temperature is low. The rate of discharge shall not exceed that specified in a permit under s. 147.02, Stats., or where no rate is indicated, the allowable discharge quantities shall be determined by the department based upon current evaluation of the receiving water.

2. In lieu of the previous conditions, the discharge from a fill-and-draw lagoon may occur at any time provided the rate does not exceed the assimilative capacity of the receiving water as specified in a permit under s. 147.02, Stats.

3. The dissolved oxygen in the effluent is maintained at a level greater than or equal to 4 mg/l, and the permitted rate of discharge shall be such that the dissolved oxygen and ammonia nitrogen criteria necessary to sustain fish and aquatic life are maintained in the stream during the period of discharge.

4. The effluent limitations do not exceed those established under ss. 147.04 and 147.06, Stats.

(5) **CHANGES IN CLASSIFICATION.** Surface waters which exhibit changing hydrologic and quality characteristics shall be classified accordingly. Effluent criteria for upstream discharges shall be based upon the most critical downstream classification and shall be specified by the department either on the basis of justified inference or by the application of a wasteload allocation analysis. Any subsequent changes in a stream's morphology or potential may necessitate the reevaluation of the classification.

**History:** Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. Tables 1 and 2, (2), (3) (a) 2a and d, (3) (b) 2a and c, (4) (c), Register, December, 1977, No. 264, eff. 1-1-78; am. (3) (a) 2a, Register, June, 1978, No. 270, eff. 7-1-78; am. (1) (c), Register, June, 1984, No. 342, eff. 2-1-84; r. (3) (a) 2. b. to d., (b) 2. b. and c., renum. (3) (a) 2. e. to g. and (3) (b) 2. d. and e. to be (3) (a) 2. b. to d. and (3) (b) 2. b. and c. and am (3) (a) 2. g. and (3) (b) 2. c., am. (3) (a) 3. a. and (3) (b) 3. a., Register, October, 1986, No. 370, eff. 11-1-86.

**NR 104.03 Classification of surface waters and antidegradation.** In no case shall the effluent criteria specified herein cause degradation of surface water quality below present levels. Surface waters which, because of their hydrologic classification, are permitted to receive a new effluent of a quality specified in NR 104.02 shall not receive such effluent unless it has been affirmatively demonstrated to the department that such degradation is necessary to protect the public health or to maintain or restore the environmental integrity of a higher value resource. In no case shall a new effluent interfere with or become injurious to any assigned uses made of or presently possible in any surface water.

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

**NR 104.04 Provision for changes.** The surface waters specified in this chapter are not intended to be an exclusive listing nor do the specified effluent criteria purport to meet the 1983 water quality goals set forth in ch. 147, Stats. Additions to or deletions from these listings may be made based upon the accumulation of information necessary to make such determination and in accordance with the requirements of ch. 227, Stats.

**History:** Cr. Register, September, 1976, No. 249, eff. 10-1-76.

**NR 104.05 Variances and additions applicable in the southern district.** Subject to the provision of NR 104.04, intrastate surface waters in the southern district counties of Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock and Sauk shall meet the criteria for fish and aquatic life and recreational use with exceptions and additions as follows:

Register, October, 1986, No. 370

(1) ADDITION. The public water supply standard shall be met on the Wisconsin river in section 8, township 10 north, range 7 east.

(2) VARIANCE. Surface waters in the southern district subject to a variance under NR 104.02(3) are listed in table 3.

TABLE 3  
SOUTHERN DISTRICT

Surface Water (Facility Affected)	Reach Description	Hydrologic Classification	Applicable Criteria (1)	Effluent Limitations (2) Effluent limitations to be determined
1. Goose Lake Tributary (Arlington)	Tributary upstream from Goose Lake	Noncontinuous	II	B
2. Tributary - East Branch Pecatonica River (Barneveld)	From the Barneveld STP downstream to the East Branch Pecatonica River	Noncontinuous	II	B
3. Williams Creek (Blue Mounds)	From the Blue Mounds STP downstream to the east line of Sec. 14, T6N, R5E	Noncontinuous	I	A
4. Sanders Creek (Boscobel)	From the Boscobel STP downstream to the Wisconsin River	Continuous	I	A
5. Allen Creek (Brooklyn)	Upstream from Butts Corner Road	Continuous	I	A
6. Kummel Creek (Brownsville)	From Brownsville STP downstream to CTH "HH"	Noncontinuous	I	A
7. Spring Brook and Tributary (Clinton)	Tributary from the Clinton STP to Spring Brook	Effluent ditch	II	B
8. Tributary - Dead Creek (Clyman)	Spring Brook in Clinton Township	Continuous	II	NA
9. West Branch Pecatonica River (Cobb)	Tributary from Clyman STP downstream to Dead Creek	Noncontinuous	II	B
10. Door Creek (Cottage Grove)	From the Cobb STP downstream to confluence with an unnamed tributary NE¼, NW¼, Sec. 2, T5N, R1E.	Continuous	I	A
11. Coon Branch (Cuba City)	Door Creek upstream from STH 12 & 18	Noncontinuous	I	A
12. Mud Creek and Tributary (Deerfield)	From STH 12 & 18 downstream to Lake Kegonsa	Continuous	I	NA
	Upstream from westerly tributary approximately 1 mile above STH "11"	Noncontinuous	II	B
	Downstream from above tributary to confluence with Galena River	Continuous	I	NA
	Tributary from Deerfield STP to confluence with Mud Creek	Effluent ditch	II	B
	Mud Creek from above tributary downstream to confluence with Koshkonong Creek	Continuous	I	

13. Indian Creek and Tributary (Dickeyville)	Tributary from Dickeyville STP to confluence with Indian Creek	Noncontinuous	II	NA
	Indian Creek from above tributary downstream to confluence with Platte River	Continuous	I	A
14. Dodge Branch (Dodgeville)	Upstream from a point approximately 3,500 feet downstream from STH "191"	Noncontinuous	I	A
15. Tributary - North Branch Crawfish River (Fall River)	Tributary from the Fall River STP downstream to the North Branch Crawfish River	Noncontinuous	II	Effluent limitations to be determined
16. Gregory Branch (Fennimore)	Upstream from STH "61"	Continuous	I	A
17. Tributary - Rock River (Hidden Meadows Mobile Home Park)	Tributary from the Hidden Meadows Mobile Park STP discharge downstream to the Rock River	Noncontinuous	II	B
18. Big Spring Branch (Highland)	Upstream from the North line of Sec. 19, T7N, R1E	Noncontinuous	I	A
19. Pedler Creek (Iowa Co. Nursing Home)	From the Iowa Co. Nursing Home STP downstream to the confluence with an unnamed tributary, SE¼, SE¼, Sec. 34, T6N, R2E	Noncontinuous	I	A
20. Tributary - Wildcat Creek (Iron Ridge)	From the Iron Ridge STP downstream to Wildcat Creek	Noncontinuous	II	B
21. Tributary & Rock River Tributary (Ixonian San. Dist.)	From the Ixonian San. Dist. STP downstream to the juncture with the Rock River Tributary	Noncontinuous	II	B
	Rock River Tributary from above tributary to confluence with Rock River	Continuous	II	NA
22. Tributary - Menominee River (Jamestown San. Dist. #2)	From Jamestown San. Dist. #2 STP to the Menominee River	Diffused surface water	II	B
23. Dead Creek (Juneau)	Upstream from CTH "M"	Effluent ditch	II	B
	From CHT "M" to St. Helena Rd.	Continuous	I	NA
24. Sinipee Creek (Kieler San. Dist. #1)	From Kieler lagoon outfall to Bluff Road	Continuous	I	A
25. Rock Creek (Lake Mills)	From the Lake Mills STP downstream to CTH "V"	Noncontinuous	I	A
	From CTH "V" to Harper's Mill Pond	Continuous	I	NA
26. Tributary - Pigeon Creek (Lancaster)	Tributary from Lancaster STP downstream to south line of section 10	Continuous	II	Effluent limitations to be determined
	Tributary from above point downstream to confluence with Pigeon Creek	Continuous	I	determined
27. Tributary - Baker Creek (Lebanon San. Dist.)	From Lebanon STP downstream to Baker Creek	Noncontinuous	II	B
28. Little Platte River (Livingston)	From Livingston STP downstream to New California Road	Noncontinuous	I	A
29. Tributary-East Branch Rock River (Lomira)	Tributary upstream from confluence with East Branch Rock River.	Noncontinuous	I	A
30. (Madison Metro Sewerage Commission)	From the STP outfall aerator to the Oregon Branch	Effluent ditch	II	Effluent limitations to be determined

31. Brewery (Furnance) Creek (Mineral Point)	Brewery Creek upstream from confluence with Mineral Point Branch	Continuous	II	B (Note: the above limitation shall remain in effect until significant nonpoint source problems can be corrected)
32. Tributary - Blue River (Montfort)	From the Montfort STP downstream to the Blue River	Continuous	I	A
33. Little Grant River (Mount Hope)	From the Mt. Hope STP downstream to the west boundary of Sec. 10, T5N, R4W	Noncontinuous	I	A
34. West Branch Sugar River (Mt. Horeb)	From Mt. Horeb STP downstream to CTH "JG".	Continuous	I	A
35. Tributary - Austin Branch (Orchard Manor)	Drainage from Orchard Manor outfall to Austin Branch	Diffused surface waters	II	Effluent limitations to be determined
36. Oregon Branch - Badfish Creek (Oregon)	From the Oregon outfall downstream to juncture with the Madison Met effluent ditch	Noncontinuous	II	Effluent limitations to be determined
	From this point downstream to CTH "A"	Continuous	I	
37. Swan Creek and Tributary (Orfordville)	Tributary from Orfordville STP outfall to Swan Creek.	Effluent ditch	II	NA
	Swan Creek from confluence with above tributary to Dicky Road.	Noncontinuous	I	A
38. Tributary - Blake Fork (Patch Grove)	Tributary from the Patch Grove STP downstream to Blake Fork	Noncontinuous	I	A
39. Tributary - Honey Creek (Plain)	From the Plain STP downstream to Honey Creek	Continuous	I	Effluent limitations to be determined
40. Randolph Branch - Tributary	From the Randolph STP downstream to Beaver Creek Tributary	Noncontinuous	II	Effluent limitations to be determined
Beaver Creek (Randolph)	Tributary to Beaver Creek upstream from Beaver Creek	Noncontinuous	I	A
41. Tributary-Beaver Dam River (Reeseville)	Tributary from Reeseville STP to confluence with Beaver Dam River	Noncontinuous	I	A
42. Conley - Smith Creek (Ridgeway)	From the Ridgeway STP downstream to the south boundary of Sec. 14, T6N, R4E	Noncontinuous	I	Effluent limitations to be determined
43. Tributary - Rocky Run Creek (Rio)	From the Rio STP downstream to Rocky Run Creek	Noncontinuous	II	B
44. Tributary - Narrows Creek (Sauk Co. Health Care Center)	From the Sauk County Health Care Center STP downstream to Narrows Creek	Noncontinuous	I	A
45. Duck Creek and Tributary (Sullivan)	Tributary from the Sullivan STP to Duck Creek	Effluent channel	II	Effluent limitations to be determined
	Duck Creek from the effluent ditch downstream juncture with northerly drainage ditch in Sec. 5, T6N, R16E	Noncontinuous	I	
46. Koshkonong Creek (Sun Prairie)	Koshkonong Creek upstream from first bridge above Sun Prairie STP	Noncontinuous	II	Effluent limitations to be determined
	Koshkonong Creek from above location to CTH "T".	Continuous	II	A
47. Badger Mill Creek (Verona)	Badger Mill Creek from road at Verona STP downstream to STH "69".	Continuous	I	A



48. Tributary - Murphy Creek (Wisconsin Department of Health & Social Services - Oakwood State Camp)	Tributary from Oakwood State Camp STP downstream to Murphy Creek	Noncontinuous	II	B
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- (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

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. table 3, r. (3), Register, December, 1977, No. 264, eff. 1-1-78.

**NR 104.06 Variances and additions applicable in the southeast district.** Subject to the provisions of NR 104.04, intrastate surface waters in the southeast district counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington and Waukesha shall meet the criteria for fish and aquatic life and recreational use with exceptions and additions as follows.

(1) **VARIANCE.** Surface waters in the southeast district subject to a variance under NR 104.02(3) are listed in table 4.

(2) **OTHER VARIANCES.** (a) The following surface waters in the southeast district 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, nor shall the membrane filter fecal coliform count 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 100 ml in more than 10% of all samples during any month:

1. Underwood creek in Milwaukee and Waukesha counties below Jeanne boulevard.
2. Barnes creek in Kenosha county.
3. Pike creek, a tributary of Pike river, in Kenosha county.
4. Pike river in Racine county.
5. Indian creek in Milwaukee county.
6. Honey creek in Milwaukee county.
7. Menomonee river in Milwaukee county below the confluence with Honey creek.
8. Kinnickinnic river in Milwaukee county.
9. Lincoln creek in Milwaukee county.

(b) The following surface waters in the southeast district 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, nor shall the membrane filter fecal coliform count exceed 1,000 per 100 ml as a monthly geometric mean based on not less than 5 samples per month nor exceed 89DF at any time at the edge of the mixing zones established by the department under s. NR 102.03 (4):

1. Milwaukee river in Milwaukee county downstream from the North Avenue dam.

2. South Menomonee canal and Burnham canal in Milwaukee county.

TABLE 4  
SOUTHEAST DISTRICT

Surface Water (Facility Affected)	Reach Description	Hydrologic Classification	Applicable Criteria (1)	Effluent Limitations (2)
1. Tributary - Onion River (Belgium)	From Belgium to the Onion River	Noncontinuous	II	B
2. Tributary - Des Plaines River (Bristol)	Tributary from Bristol to the Des Plaines River	Noncontinuous	II	Effluent limitations to be determined
3. Tributary - Darien Creek - Little Turtle Creek (Darien)	Darien Creek tributary from the origin to Darien Creek	Effluent ditch	II	B
	Darien Creek from its origin to Little Turtle Creek	Continuous	I	NA
	Little Turtle Creek from its origin to Turtle Creek	Continuous	I	NA
4. Eagle Creek (Eagle Lake San. Dist.)	From Eagle Lake to CTH "J"	Noncontinuous	II	B
	From CTH "J" to the Fox River	Noncontinuous	I	NA
5. East Branch Root River Canal (Fonk Mobile Home Park #1)	Upstream from STH "20"	Noncontinuous	II	B
	From STH "20" downstream to the West Branch Root River Canal	Noncontinuous	I	NA
6. Tributary - Des Plaines River (Fonk Mobile Home Park #2 and Union Grove Ind.)	From Fonks tributary downstream to the Union Grove Industrial tributary	Noncontinuous	II	Effluent limitations to be determined
	The Union Grove Industrial tributary to the juncture of Fonks tributary	Effluent ditch	II	to be determined
	The Union Grove tributary below Fonks Trib.	Noncontinuous	I	NA
7. Hales Corners Tributary (Hales Corners)	Upstream from the Hales Corners STP (except for Upper Kelly Lake)	Noncontinuous	II	NA
	From Hales Corners STP downstream to Whitehall Park Pond	Noncontinuous	I	A
8. Dover Ditch - Goose Lake Branch Canal (Holy Redeemer College)	Dover Ditch upstream from Dover Line Road	Noncontinuous	II	B
9. Tributary - Muskego Lake (Muskego)	From the Muskego STP downstream to wetland near Muskego Lake	Effluent ditch	II	Effluent limitations
	Drainage from above location to Muskego Lake	Wetland	II	to be determined
10. Tess Corners Creek (Muskego NE District)	Upstream from STH "45"	Noncontinuous	I	A
	From STH "45" downstream to Whitnall Park Pond	Continuous	I	NA
11. Poplar Creek (New Berlin High School & Cleveland Heights School)	From the treatment plant outfalls downstream to the Chicago & Northwestern railroad bridge	Noncontinuous	II	B
	From the railroad bridge downstream to the confluence of the Fox River	Continuous	I	NA
12. Drainage and Tributary - Root River (New Berlin Memorial Hospital)	From the New Berlin Memorial Hospital STP to Root River tributary	Diffuse Surface Waters	II	B
	Tributary to the Root River downstream from New Berlin Memorial Hospital STP	Noncontinuous	II	NA
13. Deer Creek (New Berlin-Regal Manor)	Deer Creek from its origin to Poplar Creek	Noncontinuous	II	B
14. Tributary - Lake Michigan (North Park)	Tributary from its origin to Lake Michigan	Noncontinuous	I	A

15.	Drainage - Tributary - Brighton Creek (Paddock Lake)	Drainage at Paddock Lake STP and near Brighton Creek	Wetland	II	B
		Tributary between above wetlands areas	Noncontinuous	II	NA
16.	Drainage - Mud Lake (Paramski Mobile Home Park)	From the Mobile Home STP to Mud Lake	Wetland	II	B
17.	Tributary - Lake Michigan (Pleasant Park San. Dist.)	From the Pleasant Park STP to the Illinois State line	Noncontinuous	II	B
18.	Pleasant Prairie Tributary (Pleasant Prairie Util. District D)	Pleasant Prairie Tributary from its origin to the Des Plaines River	Noncontinuous	II	Effluent limitations to be determined
19.	Tributary - Des Plaines (Pleasant Prairie S.D. #73-1)	From its origin to the Illinois State line	Noncontinuous	II	B
20.	Tributary and Hoods Creek (Racine County Hwy. & Park Comm.)	Tributary up from Hoods Creek towards Ives Grove	Noncontinuous	II	B
		Hoods Creek from STH "20" downstream to confluence with Root River	Noncontinuous	I	NA
21.	Tributary - Root River (Rawson Homes Sanitary Trust)	From the Rawson Homes STP to the Root River	Noncontinuous	II	B
22.	Salem Branch (Salem Utility District 1)	Salem Branch from Salem Utility District 1 STP downstream to 216th Avenue.	Noncontinuous	I	A
23.	Little Turtle River (Sharon)	Little Turtle River from Sharon STP downstream to Rock-Walworth County line	Noncontinuous	II	B
24.	Drainage - Kenosha County (Sienadale Motherhouse)	From the Sienadale STP downstream to an intermittent stream	Effluent ditch	II	Effluent limitations to be determined
		Intermittent stream in Secs. 13, 14, 23, T1N, R22E	Noncontinuous	II	
25.	Tributary - Rubicon River (Slinger)	Rubicon River from origin downstream to easterly tributary confluence in NW¼, NE¼, Section 13, T10N, R18E	Noncontinuous	II	Effluent limitations to be determined
		Easterly tributary which flows into the Rubicon River at above location.	Wetland	II	
		Rubicon River from above location downstream to confluence with Slinger tributary	Noncontinuous	I	Effluent limitations to be determined
		Tributary of the Rubicon River from the Slinger STP downstream to the wetland adjacent to Slinger Road.	Effluent ditch	II	Effluent limitations to be determined
		Wetland adjacent to Slinger Road downstream from Slinger STP	Wetland	II	
		Tributary from above location downstream to Rubicon River	Noncontinuous	II	
26.	Tributary - South Branch Pike River (Somers Util. Dist. 1)	Tributary from its origin to South Branch Pike	Noncontinuous	II	Effluent limitations to be determined
		South Branch Pike River from Somers Tributary to Pike River	Continuous	I	
27.	Tributary - Pike River (St. Bonaventure School)	Tributary from St. Bonaventure School STP downstream to Sturtevant tributary	Noncontinuous	II	Effluent limitations to be determined
28.	Wayne Creek (St. Killian Cheese Factory)	Wayne Creek from its origin to the Kohlsville River	Noncontinuous	I	A
29.	Tributary - Pike River (Sturtevant)	Tributary from Sturtevant STP downstream to first railroad crossing at S.C. Johnson Co.	Effluent ditch	II	NA

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	Tributary from above location downstream to confluence with Pike River	Continuous	I	A
30. West Branch Root River Canal (Union Grove)	West Branch Root River Canal from 67th Drive downstream to CTH "C"	Noncontinuous	II	NA
	West Branch Root River Canal from above location downstream to STH "20"	Noncontinuous	I	A
31. Tributary - Des Plaines River (Wis. DOT Kenosha Rest Area 26)	From the Information Center STP to the Des Plaines River	Noncontinuous	II	B

(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

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. Table 4, Register, December, 1977, No. 264, eff. 1-1-78; reprinted to correct error in table 4, line 11, Register, August, 1982, No. 320.

**NR 104.07 Variances and additions applicable in the Lake Michigan district.** Subject to the provisions of NR 104.04, intrastate surface waters in the Lake Michigan district counties of Brown, Calumet, Door, Florence, Fond du Lac, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara and Winnebago shall meet the criteria for fish and aquatic life and recreational use with exceptions and additions as follows:

(1) ADDITION. The public water supply standard shall be met in the following surface waters:

(a) Lake Winnebago.

(b) Fox river from Lake Winnebago downstream to the upper dam in the city of Appleton.

(c) West branch Wolf river at Neopit.

(d) Rainbow lake in Waupaca county.

(2) VARIANCE. Surface waters in the Lake Michigan district subject to a variance under NR 104.02 (3) are listed in table 5.

TABLE 5  
LAKE MICHIGAN DISTRICT

Surface Water (Facility Affected)	Reach Description	Hydrologic Classification	Applicable Criteria (1)	Effluent Limitations (2)
1. Ditch - Tributary - Rock River (Alto Co-op Creamery)	Ditch from the Alto Co-op process water discharge to the tributary Tributary from its origin to the Rock River	Effluent ditch	II	Effluent limitations to be determined
2. Tributary - Dutchman Creek (Austin Straubel Field)	Tributary upstream from CTH "GH" From CTH "GH" to Dutchman Creek	Noncontinuous	I	B
3. Bear Creek (Bear Creek)	From the Bear Creek STP to the Embarrass River	Noncontinuous	II	NA
4. Tributary - Fox River (Beucher & Sons of WI, Inc.)	From the discharge location downstream to the Fox River	Continuous	I	A
5. Black Creek (Black Creek)	Black Creek from Black Creek STP to confluence with Shiock River (see Black Creek at Seymour)	Noncontinuous	II	B
6. Drainage to	Upstream from STH "49" to Brandon	Effluent ditch	I	A
			II	B

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14. Drainage Area - Tributary Hutton Creek (Emerald, Emerald and Glenwood S.D.)	From Emerald STP discharge to E/W town road in Sec. 13, T30N, R16W	Effluent ditch	II	B
	From E/W town road to Hutton Creek tributary	Diffused surface waters	II	NA
	Tributary to Hutton Creek and Hutton Creek	Noncontinuous	II	NA
15. Tributary - Schoolhouse Creek (Fairchild)	From Fairchild STP to railroad grade in NW¼, Sec. 2, T24N, R5W	Effluent ditch	II	Effluent Limitations to be determined
	From above location along railroad grade to spring flow	Noncontinuous	I	
16. Brown Brook Tributary - Trade River (Frederic)	From spring flow to Schoolhouse Creek	Continuous	I	A
	Tributary from Frederic STP to conflu- ence with Trade River	Noncontinuous	I	
17. Drainage Area (Hammond)	Drainage area in center of N½, Sec. 28, T29N, R17W	Diffused surface waters	II	B
18. Tributary - Yel- low River (Lake- land San. Dist.)	Tributary from Lakeland stabilization ponds to Yellow River	Noncontinuous	I	A
19. Bear Creek (Loyal)	Bear Creek from Loyal STP down- stream to Town Road on north line of Section 8.	Noncontinuous	I	A
20. Drainage - North Star Creek tribu- tary to Trade River (Luck)	Tributary from Luck STP downstream to center of Section 21	Effluent ditch	II	B
21. Drainage Area Tributary Rice Lake (Milltown)	Drainage area north of Rice Lake in Section 17	Wetland	II	B
22. Drainage Area - Duncan Creek (New Auburn)	Drainage Area in S½, SE¼, Sec. 36, T32N, R10W	Wetland	II	B
23. Tributary - Allen Creek (Oakdale)	From Oakdale stabilization pond dis- charge south 375 feet to drainage ditch	Effluent ditch	II	B
	Drainage ditch south 900 feet and east to Allen Creek	Noncontinuous	II	NA
24. Twin Lakes (Roberts)	Allen Creek	Continuous Wetland	I II	NA B
	Twin Lakes (east lake)			
25. Drainage - La Crosse River (Rockland)	Drainage area in N½, NW¼, Sec. 36, T17N, R5W	Wetland	II	B
26. Tributary - Mor- mon Creek (St. Joseph)	Tributary from St. Joseph STP to Mormon Creek	Noncontinuous	I	A
27. Tributary - North Fork Eau Claire River (Thorp)	Tributary from Thorp STP down- stream to North Fork Eau Claire River	Noncontinuous	I	A
29. Tributary to Spr- ingville Branch Bad Axe River (Vernon County Home)	Tributary from Vernon County Home in Sec. 29 downstream to large spring above Springville	Noncontinuous	II	B
30. Tributary to Spr- ingville Branch Bad Axe River (Viroqua)	Tributary from Viroqua STP in Sec. 31 downstream to large spring above Springville.	Noncontinuous	II	Effluent limitations to be determined.
31. Tributary to North Fork Bad Axe River (Westby)	Tributary from Westby STP down- stream to line between Sec. 35 and 36, T14N, R5W.	Noncontinuous	II	B
32. Drainage Area - Trempealeau River (Whitehall)	Drainage area from Whitehall STP to Trempealeau River	Wetland	II	B
33. Tributary-Eau Galle River (Woodville)	Tributary from Woodville STP down- stream to Eau Galle River	Noncontinuous	II	B
	Eau Galle River downstream to CTH "N"	Noncontinuous	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.

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. table 6, Register, December, 1977, No. 264, eff. 1-1-78; r. (2) table 7, entry 28, Register, September, 1981, No. 309, eff. 10-1-81.

**NR 104.10 Variances and additions applicable in the northwest district.** Subject to the provisions of NR 104.04, intrastate waters in the northwest district counties of Ashland, Bayfield, Burnett, Douglas, Iron, Price, Rusk, Sawyer, Taylor and Washburn shall meet the criteria for fish and aquatic life and recreational use with exceptions and additions as follows:

(1) **ADDITION.** The public water supply standard shall be met in the following surface waters:

- (a) Lake Lavina in Iron county.  
 (b) Little Rib lake in Taylor county.

(2) **VARIANCE.** Surface waters in the northwest district subject to a variance under NR 104.02(3) are listed in table 8.

**TABLE 8  
NORTHWEST DISTRICT**

Surface Water (Facility Affected)	Reach Description	Hydrologic Classification	Applicable Criteria (1)	Effluent Limitations (2)
1. Drainage to Amnicon River (Camp Amnicon)	Drainageway from the Camp Amnicon lagoon to the Amnicon River	Diffused surface water	II	B
2. Ditch & Seepage Area (Clam Lake Field Sta.)	Channel receiving Clam Lake Field Station polishing pond effluent	Effluent ditch	II	B
3. Bear Creek (Douglas Co. Health Care Facility)	Bear Creek from the Douglas Co. Health Care Facility STP to Allouez Bay	Noncontinuous	I	A
4. Drainage to Hackett Creek (Flambeau State Camp)	Drainage from Flambeau State Camp lagoon to Hackett Creek	Wetland	II	B
5. Drainage to Yellow River (Gilman)	Drainage area from Gilman lagoon to Yellow River	Diffused surface water	II	B
6. Tributary - Deertail Creek (Glen Flora Sch.)	Channel from Glen Flora School polishing pond to Deertail Creek	Effluent ditch	II	Effluent limits to be determined
7. South Fork Main Creek (Hawkins)	South Fork Main Creek from Hawkins Millpond Dam downstream to CTH "M"	Continuous	I	A
8. Bradley Brook (Hayward)	From Hayward STP outfall to the confluence with Namekagon River	Continuous	I	A
9. Tributary - Cemetery Creek (Iron Belt)	Channel from the Iron Belt STP outfall to Cemetery Creek	Effluent ditch	II	Effluent limits to be determined
10. Wetland near Frog Creek (Minong)	Wetland receiving Minong STP effluent	Wetland	II	B
11. Tributary & Bardon Creek (Northwestern Junior-Senior High School)	From the school polishing pond to Bardon Creek Bardon Creek	Noncontinuous Noncontinuous	II I	B NA

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12. Wetland near Holmes Creek (Ogema)	Wetland receiving Ogema lagoon effluent	Wetland	II	B
13. Drainageway and Tributary to a Tributary of Whittlesey Creek (Ondossagon School)	Drainageway from Ondossagon School polishing pond to a noncontinuous tributary to an unnamed tributary to Whittlesey Creek	Diffused surface water	II	Effluent limits to be determined
	Noncontinuous tributary to an unnamed tributary to Whittlesey Creek	Noncontinuous	I	
14. Drainage to the Black River (Pattison State Park)	Drainageway from Pattison Park STP to the Black River	Diffused surface water	II	Effluent limits to be determined
15. Drainage to Meads Creek (Pence)	Drainage Area from Pence STP to Meads Creek	Wetland	II	B
16. Drainage to Lake Superior (Pureair)	Drainageway from the Pureair STP to Lake Superior	Diffused surface water	II	B
17. Drainage Area - Couderay River (Radisson)	Wetland receiving Radisson STP effluent	Wetland	II	B
18. Sheep Ranch Creek (Rib Lake)	Sheep Ranch Creek from Rib Lake STP downstream to first town road	Continuous	I	A
19. Tributary - Sawyer Creek (Shell Lake)	Channel from the Shell Lake STP out-fall to Sawyer Creek	Diffused surface water	II	Effluent limits to be determined
20. Wetland (Siren)	Wetland receiving Siren STP effluent	Wetland	II	B
21. Ditch & West Branch Big Eau Pleine River (Stetsonville)	Channel from the Stetsonville lagoon to the West Branch Big Eau Pleine River	Effluent ditch	II	Effluent limits to be determined
	West Branch Big Eau Pleine River downstream to tributary in the NW¼, SW¼, Sec. 29, T30N, R2E	Noncontinuous	I	
22. Drainage to Pokegama River (Superior, Village of)	Drainageway from Village of Superior lagoon to Pokegama River	Diffused surface water	II	B
	Pokegama River from above location to St. Louis Bay	Continuous	I	
23. Drainage to Deertail Creek (Tony)	Channel from Tony lagoon to wetland	Effluent ditch	II	B
	Drainage from effluent ditch to Town Line Rd.	Wetland	II	NA
	Tributary to Deertail Creek below Town Line Rd.	Noncontinuous	I	NA
24. Tributary - Clam River (Webster)	Tributary from the Webster lagoon to the Clam River	Noncontinuous	II	B
25. Tributary - Soft Maple Creek (Weyerhaeuser)	Drainage from Weyerhaeuser lagoon to tributary	Diffused surface water	II	B
	Tributary of Soft Maple Creek upstream from CTH "F"	Noncontinuous	II	NA
26. Seepage Area near Brunet River (Winter)	Area receiving the Winter lagoon effluent	Diffused surface water	II	B
27. Drainage from Village of Turtle Lake to Moon Creek (Turtle Lake)	Drainage area from effluent pipes to impoundment	Wetland	II	B
	Impoundment formed by constructed dam in the SW¼, SW¼, sec. 32, T34N, R14W	Flowage	II	NA
	Drainage from the dam to the south line of sec. 32, T34N, R14W	Noncontinuous	I	NA
	Drainage area from the north line to the south line of sec. 5, T33N, R14W	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 from Stinson avenue to the mouth at Superior Bay in the city of Superior, Douglas county is classified as a noncontinuous stream. The water quality of Newton creek shall meet those criteria specified in s. NR 102.02 (1), and shall be maintained at a dissolved oxygen concentration of at least 5.0 mg/l at all times. Superior Bay shall meet the standards for fish and aquatic life and recreational uses except that the average total ammonia nitrogen concentration in the bay shoreward from Hog Island shall not exceed 2.83 mg/l. Determinations of average total ammonia nitrogen concentration shall be based on samples taken at 4 representative locations.

**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.