

## Chapter NR 212

## WASTE LOAD ALLOCATED WATER QUALITY RELATED EFFLUENT LIMITATIONS

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**Note:** Corrections made under s. 13.93 (2m) (b) 7., Stats., Register, September, 1997, No. 501.

**NR 212.01 Purpose.** The purpose of this chapter is to establish the procedures, methodologies and requirements to be used by the department for determining total maximum pollutant loadings and corresponding water quality related effluent limitations in accordance with ss. 283.13 (5), 283.15 and 283.83 (1) (c), Stats. Such restrictions are established to attain and maintain the designated uses specified in the water quality standards appearing in chs. NR 102, 103 and 104.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; correction made under s. 13.92 (4) (b) 7, Stats.

**NR 212.02 Applicability.** (1) The provisions of this chapter are applicable to water quality related effluent limitations for conventional pollutants, ammonia and phosphorus developed through waste load allocations and established under s. 283.15, Stats.

(2) Nothing in this chapter shall in any way inhibit, override, preclude or prevent the department from issuing any permit with toxic effluent limits even if such permit limitations would result in more stringent limitations than provided in this chapter.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81.

**NR 212.03 Definitions.** In addition to the definitions and abbreviations in ss. NR 205.03 and 205.04, the following definitions are applicable to terms used in this chapter:

(1) "Baseline load" means the reference load used in distributing all or part of the total maximum load among multiple point source dischargers to a water quality limited segment.

(2) "Categorical effluent limitation" means a point source effluent limitation for categories and classes of point sources other than publicly-owned treatment works achieved by application of the best practicable control technology currently available, the best conventional pollutant control technology, or the best available technology economically achievable as required by s. 283.13 (2), Stats.; or means a point source effluent limitation for a publicly-owned treatment works achieved by application of secondary treatment as required by s. 283.13 (4), Stats.

(3) "Conventional pollutant" means those pollutants identified in section 304 (a) (4) of the federal clean water act amendments of 1977. These pollutants are: biological oxygen demand (BOD), total suspended solids (TSS), pH, fecal coliform and oil and grease.

(4) "Cost-effective analysis" means a systematic comparison of alternative means of meeting state water quality standards, effluent limitations or other treatment standards in order to identify the alternative which will minimize the total resources costs over the appropriate planning period. These resources costs include monetary costs and environmental as well as other non-monetary costs.

(5) "Critical water quality conditions" means those water conditions upon which are based the most stringent water quality effluent limitations.

(5m) "Designated management agency" means any agency designated in an areawide water quality management plan having responsibility for implementing specific plan recommendations.

(6) "Effluent limitation" whenever used without qualification means any restriction including schedules of compliance, established by the department, on quantities, rates and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into waters of this state.

(7) "Flow reregulation" means any practice with respect to the available surface waters in a basin that would alter the stream flows from those which would occur under existing regimes.

(8) "Infiltration" means water other than waste water that enters a sewerage system, including sewer service connections, from the ground through such sources as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

(9) "Inflow" means water other than waste water that enters a sewerage system, including sewer service connections, from sources such as roof leaders, cellar drains, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

(10) "Instream aeration" means techniques which increase the dissolved oxygen content of a receiving water. Those techniques include, but are not limited to, mechanical aeration devices, diffuser systems, and turbine venting.

(11) "Margin of safety" means a portion of the total maximum load which accounts for the uncertainties concerning the relationship between effluent limitations and water quality or provide a greater assurance that the water quality standards will be met. This portion of the total maximum load is not available for allocation to point sources.

(12) "New point source", for the purposes of this chapter, means a point source which commenced operation after January 1, 1980.

(13) "Nonpoint source" means a source of pollution resulting from a land management activity which contributes to runoff, seepage or percolation; and which is not defined as a point source.

(14) "Nonpoint source allocation" means that portion of the total maximum load distributed or apportioned to nonpoint sources and unavailable for allocation to point sources.

(14e) "Off-machine production" means that quantity of paper or paperboard taken from a paper machine for further processing, conversion or sale exclusive of coating material applied after the paper machine.

(14q) “Projected population change” means an increment of projected population change for a sewer service area pursuant to the appropriate areawide water quality management plan.

(15) “Point source allocation” means that portion of the total maximum load distributed or apportioned to point sources.

(16) “Publicly-owned point source” means any point source which is owned by a municipality.

(17) “Public sector growth” means an increase in waste water discharge from any person except industrial establishments, whose waste water is treated by a publicly-owned point source.

(18) “Reserve capacity” means that portion of the total maximum load reserved for allocation to new or expanding point sources.

(19) “Residential growth” means an increase in population.

(20) “Stream segment” means a portion of a stream including natural and artificial flowages.

(21) “Total maximum load” means the maximum quantity of a pollutant or pollutants that can be discharged into a water quality limited segment over a specified period of time to maintain the applicable water quality standards. The total maximum load is the sum of the point source allocation, the nonpoint source allocation, the reserve capacity and the margin of safety.

(22) “Waste load allocation” means the allocation resulting from the process of distributing or apportioning the total maximum load to each individual point source, nonpoint sources, reserve capacity and margin of safety.

(23) “Water quality limited segment” means any area or portion of a stream which will not meet the established water quality standard with application of only categorical effluent limitations to all point sources.

(24) “Water quality related effluent limitation” means a point source effluent limitation designed to meet applicable water quality standards and which is more restrictive than the categorical effluent limitations. For the purposes of this chapter, water quality related effluent limitations refer to those determined as a result of a waste load allocation.

(25) “Water quality standards” means administrative rules adopted as chs. NR 102, 103 and 104, under authority of s. 281.15, Stats.

(26) “WPDES permit” means a Wisconsin pollutant discharge elimination system permit for the discharge of pollutants issued by the department under ch. 283, Stats.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; cr. (5m), (14e) and (14q), Register, May, 1986, No. 365, eff. 6-1-86.

**NR 212.05 General.** (1) Water quality related effluent limitations and total maximum loads shall be established whenever categorical effluent limits required under s. 283.13, Stats., are less stringent than necessary to achieve the designated water quality standard. Water quality related effluent limitations for point sources shall be specified in a WPDES permit.

(2) For the purposes of this chapter compliance with water quality related effluent limitations is recognized as compliance with s. 283.31 (4) (d), Stats.

(3) In no case shall the water quality related effluent limitations be less stringent than applicable categorical effluent limitations.

(4) Analysis of the samples shall be performed in accordance with ch. NR 219. Laboratory test results for 5-day biochemical oxygen demand and nutrients submitted to the department under this chapter shall be performed by a laboratory certified or registered under ch. NR 149.

**Note:** The requirement in this section to submit data from a certified or registered laboratory is effective on August 28, 1986.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; cr. (4), Register, April, 1986, No. 364, eff. 8-28-86.

**NR 212.06 Determination of the total maximum load.** (1) When required by s. NR 212.05, total maximum loads for stream segments shall be established based upon relevant water quality and quantity considerations including, but not limited to, streamflow, water temperature, pH, dissolved oxygen, suspended solids and hardness or other natural background conditions. The stream conditions to be used for calculating the total maximum load are specified in s. NR 102.03 (3). Variable loadings may be established for a given stream segment to reflect the varying capacity of a stream to assimilate wastes under differing conditions when necessary supporting data is available.

(2) Total maximum loads established in ss. NR 212.40 to 212.70 shall be reviewed at least once every 5 years and if necessary, recalculated by the department prior to permit reissuance, based on factors which shall include but not be limited to changes in stream conditions and advancements in stream modeling techniques, discharge characteristics, readjustment of modeling coefficients, utilization of new data, or baseline load revisions under s. NR 212.065.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; am. (2), Register, May, 1986, No. 365, eff. 6-1-86.

**NR 212.065 Modification of baseline loads.**

(1) Baseline loads established in ss. NR 212.40 to 212.70 shall be reviewed at least once every 5 years and if necessary, revised by the department based on factors that shall include, but not be limited to population projections, modifications to categorical effluent limits, production curtailment or expansions, permit expiration and revocation, cessation of discharge or other issues. Any temporary reallocation under s. NR 212.11 (2) shall be considered as part of baseline load revisions at the 5 year update.

(2) In proposing revisions to total maximum daily loads or baseline loads in ss. NR 212.40 to 212.70 due to reallocation, the department staff shall consider increases in allocations only for circumstances when:

(a) A new discharger requires a wasteload allocation due to insufficient reserve capacity being available in the applicable stream segment; or

(b) An existing discharger demonstrates to the satisfaction of the department that additional wasteload allocation is required due to a production expansion or municipal growth. The demonstration shall include an analysis of the discharger’s current wastewater treatment facility’s capability to adequately treat the increased influent. The demonstration shall also include an analysis that the discharger’s wastewater treatment facility is adequately maintained and operated at optimal efficiency; or

(c) An existing discharger demonstrates to the satisfaction of the department that additional wasteload allocation is required due to the inability of its wastewater treatment facility to attain existing wasteload allocations. The demonstration shall include an analysis that the discharger has installed appropriate treatment technology and that the current facility is maintained and operated at optimal efficiency.

(d) A reallocation of total maximum daily loads would result in establishment of a reserve capacity through procedures identified in ss. NR 212.40 through 212.70.

(e) Through use of a toxicity test approved by the department, the discharger applying for an increased total maximum daily load demonstrates that such increase will not result in a failure, as defined by the department, of the toxicity test.

**History:** Cr. Register, May, 1986, No. 365, eff. 6-1-86.

**NR 212.07 Allocation for reserve capacity.** The allocation for a reserve capacity for a particular stream segment shall be zero unless otherwise specified in ss. NR 212.40 to 212.70.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; am. Register, May, 1985, No. 353, eff. 6-1-85.

**NR 212.08 Allocation for margin of safety.** The allocation for a margin of safety shall be zero unless otherwise specified in ss. NR 212.40 to 212.70.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; am. Register, May, 1985, No. 353, eff. 6-1-85.

**NR 212.09 Nonpoint source allocation.** The allocation for nonpoint sources shall be zero unless otherwise specified in ss. NR 212.40 to 212.70.

**Note:** For those stream conditions where the allocation of water quality related effluent limitations is necessary, nonpoint source effects on stream segments will normally be accounted for in the water quality model or other technical analysis used to determine the total maximum load. In unforeseen circumstances requiring the specific allocation of a portion of the total maximum load for contributions from nonpoint sources, s. NR 212.09 can be used. Direct control of contributions from nonpoint sources will be implemented through land management control practices and will not normally be included in a waste load allocation.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; am. Register, May, 1985, No. 353, eff. 6-1-85.

**NR 212.10 Point source allocations. (1)** The water quality related effluent limitations for a point source discharge to a stream segment which is not impacted by any other point source shall be calculated by subtracting any allocations for reserve capacity, margin of safety or nonpoint sources from the total maximum loading.

**(2)** The procedures for determining water quality related effluent limitations for point source dischargers to a stream segment affected by more than one discharger are found in ss. NR 212.40 to 212.70.

**(3)** The department may permit point source water quality related effluent limitations to vary according to flow, temperature or other water quality conditions only when all of the following are met:

(a) The limitations shall result in the attainment of water quality standards; and

(b) During the term of the permit the discharger provides sufficient monitoring capability where such capability does not otherwise exist.

**(4)** Water quality related effluent limits shall be expressed as daily maximum loads. Consistent with techniques established under ss. NR 212.40 through 212.70 effluent limits may be expressed as averages in conjunction with daily maximum limits if the permittee demonstrates that such limits would not increase the probability of water quality standards violations. The flow and temperature measurements of stream conditions for flow and temperature related permits may be based on averages in cases where averages better approximate actual river conditions.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; am. (2) and (4), Register, May, 1985, No. 353, eff. 6-1-85.

**NR 212.11 Modifications and temporary reallocation of point source allocations. (1)** When a discharger to a publicly-owned point source covered by this chapter applies to receive a separate WPDES permit or when a person with a WPDES permit applies to terminate its direct discharge in order to contribute to a publicly-owned point source covered by this chapter, permit modification procedures contained in ss. 283.37 and 283.53 (2), Stats., shall apply. Any reallocation pursuant to such action shall only affect the applicant and the publicly-owned point source to which it discharges.

**(2)** Procedures for temporary reallocation for individual stream segments are identified in ss. NR 212.40 through 212.70. Notwithstanding procedures identified in ss. NR 212.40 through 212.70, temporary reallocation of wasteload allocations may be allowed under the following conditions:

(a) Reallocations approved by the department shall be for at least one calendar year and shall expire at the end of the affected discharger's WPDES permit term;

(b) Reallocations shall account for differences in waste characteristics and location of discharge as determined by the depart-

ment and may not adversely affect a downstream segment's wasteload allocation; and

(c) Reallocations may not affect baseline loads in affected stream segments but may result in an adjustment to total maximum daily loads identified in ss. NR 212.40 through 212.70.

**(3)** Reallocations may not be approved by the department until the discharger applying for a reallocation demonstrates through the use of a toxicity test approved by the department that such reallocation will not result in toxicity in the receiving water.

**(4)** Prior to department approval of a reallocation, all parties to the transfer shall waive all rights under s. 227.51, Stats., to retain any reallocation beyond the expiration date of the WPDES permit of the dischargers applying to receive a reallocation. The waiver shall be effectuated through incorporation into the WPDES permit of the affected discharger.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; r. and recr. Register, August, 1985, No. 356, eff. 9-1-85.

#### **NR 212.115 Transferable wasteload allocation.**

**(1)** Transfers of wasteload allocations between point source dischargers may be allowed through the permit issuance or modification process under the following conditions:

(a) The discharger applying to receive a transfer secures a legally binding agreement approved by the department, that the WPDES permit allocations for one or more existing dischargers shall be reduced by an amount sufficient to prevent the total maximum load under ss. NR 212.40 to 212.70 from being exceeded;

(b) The department shall consider the differences in waste characteristics and location of the affected point sources to determine amounts by which the existing point source allocations are reduced; and

(c) Transfer agreements approved by the department shall be for at least one wasteload allocation season and may not extend beyond the term of the seller's discharge permit.

(d) Transfers may not be approved by the department until the discharger applying for an increased wasteload allocation demonstrates through the use of a toxicity test approved by the department that the transfer will not result in a failure, as defined by the department, of the toxicity test.

**(2)** Prior to department approval of a transfer, the discharger applying for an increased wasteload allocation shall demonstrate to the satisfaction of the department that the increase is needed due to:

(a) New production by a new discharger,

(b) Increased production which cannot be accommodated by the current treatment facility, or

(c) The inability of the current waste treatment facility to meet current wasteload allocations despite optimal operation and maintenance of the treatment facility.

**(3)** Prior to department approval of a transfer, all parties to the transfer shall waive all rights under s. 227.51, Stats., to retain any transfer beyond the expiration date of the WPDES permit of the dischargers applying to receive a transfer. The waiver shall be incorporated into both the legally binding agreement in sub. (1) (a) and the WPDES permit of all parties to the agreement.

**History:** Cr. Register, March, 1986, No. 363, eff. 4-1-86.

**NR 212.12 Instream aeration. (1)** Total maximum loads established under this chapter may be calculated based on the use of instream aeration techniques when WPDES permit applications meet both the following conditions:

(a) A cost-effectiveness analysis is submitted to the department which demonstrates that instream aeration is a satisfactory means of attaining water quality standards; and

(b) A demonstration is made to the satisfaction of the department that applicable water quality standards will be met and no



environmental pollution as defined in s. 299.01 (4), Stats., will occur.

(2) Instream aeration may not be used to accommodate new or increased discharges of pollutants either from new point sources or from the expansion of existing point sources, except that instream aeration may be available on a temporary basis to accommodate increased pollution loads due to the growth of a municipality when:

- (a) The use of aeration for this purpose is restricted to residential or public sector growth;
- (b) Adequate operation and maintenance of the publicly-owned point source exists;
- (c) Excessive infiltration and inflow have been removed from the collection systems;
- (d) No bypasses exist which are not authorized by the department; and
- (e) The municipality has taken all reasonable steps to obtain federal and state financing for its point source.

(3) The use of instream aeration under sub. (2) shall be allowed for a period not to exceed 5 years, at which time the publicly-owned point source shall have sufficient treatment capability in place to meet the waste water treatment needs as required by an approved municipal waste water treatment facility plan developed under ch. NR 110.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81.

**NR 212.13 Flow reregulation.** (1) Total maximum loads established under this chapter may be calculated based on the use of flow reregulation techniques when WPDES permit applicants meet all of the following conditions:

- (a) A cost-effectiveness analysis is submitted to the department which demonstrates that flow reregulation is a satisfactory means of attaining water quality standards.
- (b) A technical analysis is presented to the satisfaction of the department which determines the critical water quality conditions for the affected stream segment as a function of the flow reregulation technique.

(c) Legally binding assurances are provided to the satisfaction of the department that the entity responsible for reregulating flows on the affected stream segment will undertake the agreed-upon flow reregulation activities.

(d) The flow reregulation does not interfere with the uses for which the impoundment was authorized.

(2) Flow reregulation may not be used to accommodate new discharges of pollutants either from new point sources or from the expansion of existing point sources.

(3) Flow reregulation may not be accomplished by the construction of new impoundments built for the primary purpose of increasing flows to accommodate pollution loadings.

(4) Flow reregulation may not be accomplished by flow augmentation practices which would increase the overall quantity of surface water in the basin. Prohibited practices include interbasin transfers or groundwater pumping.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81.

**NR 212.40 Determination of lower Fox river water quality related effluent limitations.** Effluent limitations for point sources discharging BOD<sub>5</sub> to the lower Fox river shall be calculated according to the procedures contained in this section. These limitations shall apply from May 1 to October 31 annually.

(1) (a) The total maximum daily BOD<sub>5</sub> loads which are available for allocation to point sources discharging to the lower Fox river between milepoints 40.0 and 32.4 are shown in Table 1-a.

(b) The total maximum daily BOD<sub>5</sub> loads which are available for allocation to point sources discharging to the lower Fox river between milepoints 32.4 and 19.2 are shown in Table 1-b.

(c) The total maximum daily BOD<sub>5</sub> loads which are available for allocation to point sources discharging to the lower Fox river between milepoints 7.2 and 0.0 are shown in Table 1-c. For the period June 1 through June 30 of each year, section A of the MAY-JUNE table shall be replaced with section A of the JULY-AUGUST table. The total maximum daily BOD<sub>5</sub> loads shown in Table 1-c have been determined in accord with ss. NR 102.02 and 102.03 to maintain the dissolved oxygen criteria except for natural conditions and the historically altered hydraulic characteristics.

(2) Determine baseline loads for each point source subject to the waste load allocation.

(a) Publicly-owned point sources between milepoints 40.0 and 19.2. The baseline load expressed in pounds per day for each publicly-owned point source shall be calculated as follows:

$$\text{Baseline Load} = (Q) (8.34) (60)$$

Where: Q = The average daily flow for the publicly-owned point source during 1976 and 1977 expressed in million gallons per day, computed as: 12.09 million gallons per day for the publicly-owned point source located between milepoints 38.0 and 37.0 on the Menasha channel.

1.40 million gallons per day for the publicly-owned point source located between milepoints 36.0 and 35.0.

10.47 million gallons per day for the publicly-owned point source located between milepoints 30.0 and 25.0.

2.99 million gallons per day for the publicly-owned point source located between milepoints 23.0 and 22.0.

8.34 = Conversion factor (lbs./gal.).

60 = Concentration of BOD<sub>5</sub> expressed in milligrams per liter.

(am) Publicly-owned point sources between milepoints 7.2 and 0.0. The baseline load expressed in pounds per day for each publicly-owned point source shall be calculated as follows:

$$\text{Baseline Load} = (Q) (8.34) (60)$$

Where: Q = The average daily flow for the publicly-owned point source during 1979 expressed in millions of gallons per day, computed as:

3.96 million gallons per day for the publicly-owned point source located between milepoints 7.0 and 6.0.

19.03 million gallons per day for the publicly-owned point source located between milepoints 1.0 and 0.0.

8.34 = Conversion factor (lbs./gal.).

60 = Concentration of BOD<sub>5</sub> expressed in milligrams per liter.

(b) Nonpublicly-owned point sources between milepoints 40.0 and 19.2. The baseline load expressed in pounds per day for each nonpublicly-owned point source shall be calculated as follows:

Baseline Load = (BPT) (Production) (0.85)

Where: BPT = The final best practicable waste treatment effluent limitations for the point source as provided in chs. NR 284 and 285, or 217, where applicable, expressed in pounds of BOD<sub>5</sub> per ton of production.

Production = The maximum weekly off-machine production during 1973 expressed as tons per day.

0.85 = Adjustment factor to approximate daily average off-machine production.

(c) Nonpublicly-owned point sources between milepoints 7.2 and 0.0. The baseline load expressed in pounds per day for each nonpublicly-owned point source shall be calculated as follows:

Baseline Load = (BPT) (Production)

Where: BPT = The final best practicable waste treatment effluent limitations for the point source as provided in chs. NR 284 and 285 or 217, where applicable, expressed in pounds of BOD<sub>5</sub> per ton of production.

Production = 1977 average daily off-machine production.

(d) Mini-cluster adjustment. The baseline load for nonpublicly-owned point sources between milepoints 0.8 and 0.5, and 0.4 and 0.0 shall be adjusted by subtracting 10% of the contractual maximum daily BOD<sub>5</sub> discharged to the publicly-owned point source located between milepoint 1.0 and 0.0. The 10% contractual maximum figure for both non-publicly-owned point sources shall be added to the baseline load for the publicly-owned point source located between milepoints 1.0 and 0.0.

(3) (a) Determine the reserve capacity adjustment. The reserve capacity for each publicly-owned point source located between milepoints 40.0 and 19.2 shall be calculated as follows:

Reserve Capacity = (P) (124) (8.34) (60)

Where: P = Projected population change for the area between the years 1977 and 2000 expressed in millions of persons.

124 = Projected per-capita waste water flow expressed in gallons per day.

8.34 = Conversion factor (lbs./gal.).

60 = Concentration of BOD<sub>5</sub> expressed in milligrams per liter.

(b) The reserve capacity for each publicly-owned point source located between milepoints 7.0 and 6.0 shall be calculated as follows:

Reserve Capacity = (P) (110) (8.34) (60)

Where: P = Projected population change for the area between the years 1979 and 2000 expressed in millions of people.

110 = Projected per-capita wastewater flow expressed in gallons per day.

8.34 = Conversion factor (lbs./gal.).

60 = Concentration of BOD<sub>5</sub> expressed in milligrams per liter.

(c) The reserve capacity for each publicly-owned point source located between milepoints 1.0 and 0.0 shall be calculated as follows:

Reserve Capacity = (P) (111) (8.34) (60)

Where: P = Projected population change for the area between the years 1979 and 2000 expressed in millions of people.

111 = Projected per-capita wastewater flow expressed in gallons per day.

8.34 = Conversion factor (lbs./gal.).

60 = Concentration of BOD<sub>5</sub> expressed in milligrams per liter.

(4) Determine the adjustments to the baseline loads.

(a) The adjusted baseline load for each publicly-owned point source shall be equal to the baseline load for the source calculated in sub. (2) (a) or (am) plus the reserve capacity for the same source calculated in sub. (3), plus the mini-cluster adjustment, if any, calculated in sub. (2) (d).

(b) The adjusted baseline load for each nonpublicly-owned point source shall be calculated as follows:

$$\text{Adjusted Baseline Load} = (\text{BL}) - \left( \frac{\text{BL}}{\text{Total BL}} \right) \times (\text{Total Reserve Capacity})$$

Where: BL = The baseline load for the nonpublicly-owned point source as determined using the procedures in sub. (2) (b) and (c)

Total BL = The sum of all the baseline loads for nonpublicly-owned point sources calculated in sub. (2) (b) and (c) within the applicable stream segment defined in sub. (1).

Total Reserve Capacity = The sum of all the reserve capacities for publicly-owned point sources calculated in sub. (3) within the applicable stream segment defined in sub. (1).

(c) The adjusted baseline load for publicly-owned and nonpublicly-owned point sources from milepoints 32.4 through 19.2 shall include an incremental addition as follows:

Milepoint	BOD <sub>5</sub> Increment (lb/day)
32.4 – 30.0	591
30.0 – 28.0	1619
28.0 – 26.0	3085
26.0 – 23.0	1710
23.0 – 22.7	565
22.7 – 22.5	2629

(d) The adjusted baseline load for nonpublicly-owned point source located between milepoint 0.8 and 0.5 shall be reduced by 2500 pounds of BOD<sub>5</sub> from the amount calculated in par. (b).

(5) Determine the allocation for each point source. The allocation for each point source shall be calculated as follows:

$$\text{Point Source Allocation} = (\text{Adjusted Baseline Load}) \frac{T}{C+D}$$

Where: Adjusted

Baseline Load = The adjusted baseline load for the point source calculated in sub. (4)

- T = The applicable total maximum daily BOD<sub>5</sub> load available for allocation as shown in sub. (1)
- C = The sum of all the adjusted baseline loads within the applicable stream segment as defined in sub. (1) for publicly-owned point sources calculated in sub. (4) (a).
- D = The sum of all the adjusted baseline loads within the applicable stream segment defined in sub. (1) for nonpublicly-owned point sources calculated in sub. (4) (b).

(6) For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

(a) For a point source discharging into the lower Fox river from milepoints 40.0 through 19.2, the sum of the actual daily discharges for any 7-consecutive-day-period may not exceed the sum of the daily point source allocation values calculated under sub. (5) for the same 7-consecutive-day-period; and

(am) For a point source discharging into the lower Fox river from milepoints 7.2 through 0.0, the sum of the actual daily discharges for any 7-consecutive-day-period may not exceed the sum of the daily point source allocation values calculated under sub. (5) for the same 7-consecutive-day-period; and

(b) For any one day period;

1. For a point source discharging into the lower Fox river between milepoints 40.0 through 32.4, the actual discharge may not exceed 138% of the allocation for that day as calculated under sub. (5).

2. For a point source discharging into the lower Fox river between milepoints 32.4 and 19.2, the actual discharge may not exceed 120.0% of the allocation for that day as calculated under sub. (5).

3. For a point source discharging into the lower Fox river between milepoints 7.2 and 0.0, the actual discharge may not exceed 134% of the allocation for that day as calculated under sub. (5).

(7) The flow and temperature conditions used to determine compliance with permit effluent limits shall be the representative measurements of the flow averaged over the previous 4 days and temperature of the previous day.

(8) REALLOCATION OF AVAILABLE WASTELOAD ALLOCATIONS.

(a) Wasteload allocations may be reallocated under par. (c) when a wasteload allocated permit expires, is revoked or surrendered for the following purposes:

1. Provide for the wasteload needed due to the reactivation of a facility that had closed and made the wasteload available.

2. Provide the wasteload for new production increases by existing dischargers.

3. Provide the wasteload for production by a new discharger.

4. Provide for existing dischargers to raise their existing allocations in the appropriate stream segment towards categorical effluent limitation levels based upon a demonstration of need that the dischargers' treatment facility is incapable of meeting applicable wasteload allocations.

(b) Reallocations shall include an explicit reserve capacity for future new dischargers or future production increases by existing dischargers.

(c) The following procedures shall be used to reallocate available wasteloads:

1. Upon notification by the department of an available wasteload allocation pursuant to par. (a), the designated management agency shall publish a notice of wasteload availability.

2. A 6 month period shall be provided for persons to declare interest in available wasteload allocations.

3. Within 60 days of the end of the 6 month period the designated management agency shall conduct a public meeting regarding the proposed reallocation.

4. The designated management agency shall recommend a reallocation proposal to the department including an explicit reserve capacity.

5. The department shall notify the designated management agency of acceptance or rejection of the recommendation within 6 months.

**History:** Cr. Register, September, 1981, No. 309, eff. 10-1-81; cr. (8), Register, August, 1985, No. 356, eff. 9-1-85; am. (2) (a) and (b), (3), (5) and (6) b. 1. and 2., cr. (4) (c), r. and recr. (8), Register, May, 1986, No. 365, eff. 6-1-86; cr. (1) (c), (2) (am), (c) and (d), (3) (b) and (c), (6) (am) and (b) 3., am. (4) (a) and (b), renun. (3) to be (3) (a), Register, March, 1987, No. 375, eff. 4-1-87; am. (1) (c) and (4) (a), Register, April, 1988, No. 388, eff. 5-1-88; cr. (4) (d), r. and recr. Table 1-C, Register, March, 1996, No. 483, eff. 4-1-96.

**NR 212.60 Determination of upper Wisconsin river water quality related effluent limitations.** Effluent limitations for point sources discharging BOD<sub>5</sub> to the upper Wisconsin river shall be calculated according to the procedures contained in this section. These limitations shall apply from May 1 to October 31 annually.

(1) Determine baseline loads for each point source subject to the waste load allocation.

(a) The baseline load for each publicly-owned point source located between milepoints 205.3 and 171.9 shall be calculated as follows:

Baseline Load = (Q) (8.34) (60) (C)

Where Q = The average daily flow for the publicly-owned point source during 1978 expressed in millions of gallons per day.

8.34 = Conversion factor (lbs./gal.).

60 = Concentration of BOD<sub>5</sub> expressed in milligrams per liter.

C = Reallocation conversion factor which has a value of 1.0 for the publicly-owned point source located between milepoints 205.3 and 199.4 and a value of 1.18 for the publicly-owned point sources located between milepoints 199.3 and 171.9.

(b) The baseline load for each nonpublicly-owned point source located between milepoints 205.3 and 171.9 shall be calculated as follows:

Baseline Load = (BPT) (Production)

Where BPT = The final best practicable waste treatment effluent limitations for the point source as provided in chs. NR 284 and 285, expressed as pounds of BOD<sub>5</sub> per ton of production. If chs. NR 284 and 285 do not apply, the best practicable waste treatment effluent limitations as determined under ch. NR 217, shall apply.

Production = The annual average off-machine production during 1978 expressed as tons per day.

(c) The baseline load for each publicly-owned point source located between milepoints 235.4 and 271.1 shall be calculated as follows:

Baseline Load = (Q) (8.34) (C)

Where Q = 0.55 million gallons per day for publicly-owned point sources located between milepoints 240.0 and 250.0

4.0 million gallons per day for publicly-owned point sources located between milepoints 250.0 and 260.0.

8.2 million gallons per day for publicly-owned point sources located between milepoints 260.0 and 265.0.

0.1 million gallons per day for publicly-owned point sources located between milepoints 265.0 and 271.1.

8.34 = Conversion factor (lbs./gal.).

C = 45 milligrams per liter concentrations of BOD<sub>5</sub> for publicly-owned point sources located between milepoints 240.0 and 250.0, 250.0 and 260.0, and 265.0 and 271.1

60 milligrams per liter concentration of BOD<sub>5</sub> for publicly-owned point sources located between milepoints 260.0 and 265.0.

(d) The baseline load for each nonpublicly-owned point source with best practicable waste treatment effluent limitations of less than 500 pounds per day located between milepoints 271.1 and 240.0 shall be calculated as follows:

Baseline Load = (BPT) (Production)

Where BPT = The final best practicable waste treatment effluent limitations for the point source as provided in chs. NR 284 and 285, or 217, where applicable, expressed as pounds of BOD<sub>5</sub> per ton of production.

Production = The maximum weekly off-machine production during 1981 expressed as tons per day.

(e) The baseline load for each nonpublicly-owned point source with best practicable waste treatment effluent limitations of BOD<sub>5</sub> equal to or exceeding 500 pounds per day located between milepoints 271.1 and 240.0 shall be calculated as follows:

Baseline Load = (BPT) (Production)

Where BPT = The final best practicable waste treatment effluent limitations for the point source as provided in chs. NR 284 and 285 or 217, where applicable, expressed as pounds of BOD<sub>5</sub> per ton of production.

Production = The average weekly off-machine production expressed as tons per day from March to December 1973 for point sources located between milepoints 271.0 and 258.5 and the BPT WPDES permit limits for 1978 for point sources located between milepoints 258.4 and 258.2 and the average weekly off-machine production expressed as tons per day during 1974 for point sources located between milepoints 258.19 and 249.0 and the average weekly off-machine production expressed as tons per day during 1973 plus the woodroom allowance for sources located between milepoints 248.9 and 240.0.

(f) The baseline load for each publicly-owned point source located between milepoints 341.4 and 305.9 shall be calculated as follows:

Baseline Load = (Q) (8.34) (30)

Where Q = The design flow for the publicly-owned point source located between milepoints 341.4 and 313.2 and the year 2000 flow projection for those located between milepoints 313.3 and 305.9 expressed in millions of gallons per day.

8.34 = Conversion factor (lbs./gal.).

30 = Concentration of BOD<sub>5</sub> expressed in milligrams per liter.

(g) The baseline load for each nonpublicly-owned point source located between milepoints 341.4 and 305.9 shall be calculated as follows:

Baseline Load = (BPT) (Production)

Where BPT = The final best practicable waste treatment effluent limitations for the point source as provided in chs. NR 284 and 285, expressed as pounds of BOD<sub>5</sub> per ton of production. If chs. NR 284 and 285 do not apply, the best practicable waste treatment effluent limitations as determined under ch. NR 217 shall apply.

Production = The annual average off-machine production during 1978 expressed as tons per day.

(2) Determine the allocation for each point source.

(a) The allocation for each publicly-owned point source located between milepoints 205.3 and 171.9 shall be its baseline load as determined in sub. (1) (a).

(b) The allocation for each nonpublicly-owned point source located between milepoints 205.3 and 171.9 shall be calculated as follows:

Point Source Allocation =  $\frac{BL(T)}{D}$

Where BL = The baseline load for the individual point source calculated under sub. (1) (b)

T = The total maximum daily BOD<sub>5</sub> load available for allocation as shown in Table 1-m minus the sum of the point source allocations as determined in par. (a)

D = The sum of the baseline loads for nonpublicly-owned point sources calculated under sub. (1) (b).

For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

1. The sum of the actual daily discharges for any 5-consecutive-day-period may not exceed the sum of the daily point source allocation values calculated under the formula for the same 5-consecutive-day-period; and

2. For any one day period, the actual discharge for the point source may not exceed 120.5% of the allocation for that day as calculated under the formula.

(c) 1. The allocation for publicly-owned point source located between milepoint 240.0 and 250.0 shall be its baseline load as determined under sub. (1) (c).



2. The allocation for publicly-owned point sources located between milepoint 250.0 and 260.0 shall be determined as follows:

a. For the period January 1, 1986 through December 31, 1990, the allocation shall be determined as follows:

$$\text{Point Source Allocation} = (Q) (8.34) (45)$$

Where Q = 3.1 million gallons per day

8.34 = Conversion factor (lbs./gal.)

45 = 45 milligrams per liter concentration of BOD<sub>5</sub>

b. For each 5-year period beginning January 1, 1991 through December 31, 2005, the allocation shall be redetermined on the basis of projected flows and the demonstrated treatment capability of the point source. The redetermination shall be made at the time of each 5-year reevaluation under s. NR 212.06 (2). No allocation may exceed the baseline load as determined in sub. (1) (c).

3. The allocation for the publicly-owned point sources located between milepoints 260.0 and 265.0 shall be a reduction in discharge to levels appearing in Table 8-m. For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

a. The sum of actual daily discharges for any 5-consecutive-day period may not exceed the sum of the daily point source allocation values calculated for the same 5-consecutive-day period.

b. For any one day period, the actual discharge for the point source may not exceed 108.5% of the allocation for that day calculated for those flow/temperature regimes identified as Condition A in Table 8-m or 101.8% of the allocation for that day calculated for those flow/temperature regimes identified as Condition B in Table 8-m or 113.0% of the allocation calculated for those flow/temperature regimes identified as Condition C in Table 8-m.

4. The allocation for publicly-owned point sources located between milepoints 265.0 and 271.1 shall be its baseline load as determined under sub. (1) (c).

(d) The allocation for each nonpublicly-owned point source located between milepoints 271.1 and 240.0 with best practicable waste treatment effluent limits of less than 500 pounds of BOD<sub>5</sub> per day shall be its baseline load as determined under sub. (1) (d).

(e) The allocation for each nonpublicly-owned point source located between milepoints 271.1 and 258.5 with best practicable waste treatment effluent limits equal to or exceeding 500 pounds of BOD<sub>5</sub> per day shall be a reduction in its discharge to levels appearing in Table 2-m. For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

1. The sum of the actual daily discharges for any 5-consecutive-day period may not exceed the sum of the daily point source allocation values calculated under Table 2-m for the same 5-consecutive-day period.

2. For any one day period, the actual discharge for the point source may not exceed 101.8% of the allocation for that day calculated for those flow/temperature regimes identified as Condition B in Table 2-m or 113.0% of the allocation calculated for those flow/temperature regimes identified as Condition C in Table 2-m. No percentage adjustment shall be made for conditions identified as Condition A in Table 2-m.

(f) The allocation for each nonpublicly-owned point source located between milepoints 258.4 and 258.2 with best practicable waste treatment effluent limits equal to or exceeding 500 pounds of BOD<sub>5</sub> per day shall be a reduction in its discharge to levels appearing in Table 3-m. For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

1. The sum of the actual daily discharges for any 5-consecutive-day period may not exceed the sum of the daily point source allocation values calculated under Table 3-m for the same 5-consecutive-day-period.

2. For any one day period, the actual discharge for the point source may not exceed 108.5% of the allocation for that day calculated for those flow/temperature regimes identified as Condition A in Table 3-m or 101.8% of the allocation calculated for those flow/temperature regimes identified as Condition B in Table 3-m or 113.0% of the allocation calculated for those flow/temperature regimes identified as Condition C in Table 3-m.

(g) The allocation for each nonpublicly-owned point source located between milepoints 258.19 and 249.0 with best practicable waste treatment effluent limits equal to or exceeding 500 pounds of BOD<sub>5</sub> per day shall be a reduction in its discharge to levels appearing in Table 4-m. For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

1. The sum of actual daily discharges for any 5-consecutive-day period may not exceed the sum of the daily point source allocation values calculated for the same 5-consecutive-day period.

2. For any one day period, the actual discharge for the point source may not exceed 108.5% of the allocation for that day for those flow/temperature regimes identified as Condition A in Table 4-m or 101.8% of the allocation calculated for those flow/temperature regimes identified as Condition B in Table 4-m or 113.0% of the allocation calculated for those flow/temperature regimes identified as Condition C in Table 4-m.

(h) The allocation for each nonpublicly-owned point source located between milepoints 248.9 and 240.0 with best practicable waste treatment effluent limits equal to or exceeding 500 pounds of BOD<sub>5</sub> per day shall be a reduction in its discharges to levels appearing in Table 5-m. For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

1. The sum of the actual daily discharges for any 5-consecutive-day period may not exceed the sum of the daily point source allocation values calculated under Table 5-m for the same 5-consecutive-day period.

2. For any one day period, the actual discharge for the point source may not exceed 113.4% of the allocation for that day calculated for those flow/temperature regimes identified as Condition A in Table 5-m or 110.2% of the allocation for that day calculated for those flow/temperature regimes identified as Condition B in Table 5-m or 113.0% of the allocation for that day calculated for those flow/temperature regimes identified as Condition C in Table 5-m.

(i) The allocation for each publicly-owned point source located between milepoints 341.4 and 305.9 shall be its baseline load as determined under sub. (1) (f).

(j) The allocation for each nonpublicly-owned point source located between milepoints 341.4 and 313.2 with best practicable waste treatment limits equal to or exceeding 550 pounds of BOD<sub>5</sub> per day shall be a reduction in its discharge to levels appearing in Table 6-m. For purposes of determining compliance with water quality related effluent limits, the following conditions shall be met:

1. The sum of the actual daily discharges for any 5-consecutive-day period may not exceed the sum of the daily point source allocation values calculated under Table 6-m for the same 5-consecutive-day period.

2. For any one day period, the actual discharge for the point source may not exceed 106.5% of the allocation for that day calculated for those flow/temperature regimes identified as Condition B in Table 6-m. No percentage adjustments shall be made for conditions identified as Condition A in Table 6-m.

(k) The allocation for each nonpublicly-owned point source located between milepoints 313.19 and 305.9 with best practicable waste treatment limits equal to or exceeding 550 pounds of BOD<sub>5</sub> per day shall be a reduction in its discharge to levels appearing in Table 7-m. For purposes of determining compliance with



water quality related effluent limits, the following conditions shall be met:

1. The sum of the actual daily discharges for any 5-consecutive-day period may not exceed the sum of the daily point source allocation values calculated under Table 7-m for the same 5-consecutive-day period.

2. For any one day period, the actual discharge for the point source may not exceed 106.5% of the allocation for that day calculated for those flow/temperature regimes identified as Condition B in Table 7-m. No percentage adjustments shall be made for conditions identified as Condition A in Table 7-m.

**(3)** The flow and temperature conditions used to determine compliance with permit effluent limits shall be the representative measurements of the flow and temperature of the previous day.

**(4)** REALLOCATION OF AVAILABLE WASTELOAD ALLOCATIONS.

(a) Wasteload allocations may be reallocated under par. (c) when a previously issued wasteload allocated permit expires, is revoked

or is voluntarily surrendered. Such reallocation may be accomplished for the following purposes:

1. Provide for the wasteload needed due to the reactivation of a facility that had previously closed and caused the wasteload to become available.

2. Provide for new production increases by existing dischargers.

3. Provide for production by a new discharger.

4. Provide for existing dischargers to raise their existing allocation in the appropriate stream segment towards categorical effluent limitation levels based upon a demonstration of need that the discharger's treatment facility is incapable of meeting applicable wasteload allocations.

(b) Any reallocation shall include explicit reserve capacity for future new dischargers or future production increase by existing dischargers.

TABLE 1-a  
**LBS PER DAY OF BOD<sub>5</sub>**  
 (river mile 40.0 to 32.4)  
**Flow at Rapide Croche Dam (cfs) (Previous four day average)**

Flow (cfs) Temp ° F	750 Or Less	751 To 1000	1001 To 1250	1251 To 1500	1501 To 1750	1751 To 2000	2001 To 2250	2251 To 2500	2501 To 2750	2751 To 3000	3001 To 3500	3501 To 4000	4001 To 5000	5001 To 8000	8001 Or More
<b>(Previous Day Average)</b>	<b>MAY - JUNE</b>														
86.0 OR GREATER	12100	12790	13780	14640	15460	16290	17250	18340	19700	21250	23530	24970	27220	39570	47520
82.0 TO 85.0	12980	13810	14920	15920	16940	18080	19400	20920	22640	23200	24350	25530	30150	43000	52580
78.0 TO 81.0	14380	15350	16600	17840	19260	20910	22210	22590	23340	24250	25050	27250	35380	49270	52870
74.0 TO 77.0	15770	16830	18250	19870	21830	22170	22610	23800	24280	24870	26030	31430	39800	52870	52870
70.0 TO 73.0	17130	18270	20050	21940	22020	22460	23710	24180	24880	25730	28790	36160	44190	52870	52870
66.0 TO 69.0	18520	19840	22010	21940	22280	23580	24130	24850	25870	28070	33110	41340	49570	52870	52870
62.0 TO 65.0	20210	22030	21840	22060	23430	24070	24960	26120	29330	33050	40410	46740	52870	52870	52870
58.0 TO 61.0	22310	21780	21820	23270	24050	25240	27350	31390	35860	41830	46940	52870	52870	52870	52870
54.0 TO 57.0	21600	21510	23070	24130	25780	29890	34900	42040	46150	50410	52870	52870	52870	52870	52870
50.0 TO 53.0	21270	22060	24240	26960	33290	39800	47480	52690	52870	52870	52870	52870	52870	52870	52870
46.0 TO 49.0	22110	24290	29350	37710	48610	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870
42.0 TO 45.0	25220	31510	42930	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870
41.0 OR LESS	36890	48250	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870
<b>(Previous Day Average)</b>	<b>JULY</b>														
86.0 OR GREATER	11900	11900	11900	11900	11900	11900	13510	15550	18070	20820	22430	22640	23590	27000	34740
82.0 TO 85.0	11900	11900	11900	11900	12340	14340	16600	19080	22050	22520	22690	23460	24500	31450	40630
78.0 TO 81.0	11900	11900	11900	13650	15960	18560	21470	22820	23080	23130	23730	24600	26210	39430	50540
74.0 TO 77.0	11900	12300	14350	16860	19820	21720	23050	23390	23460	24040	24760	26040	31350	48000	52870
70.0 TO 73.0	12960	14490	17200	20430	21670	22050	23350	23850	24480	25060	26080	30170	37300	52870	52870
66.0 TO 69.0	14950	16960	20410	21690	22000	23340	23890	24620	25610	26410	30100	35570	44020	52870	52870
62.0 TO 65.0	17400	20100	21670	21850	23290	23950	24880	26090	28540	31400	35760	42330	52260	52870	52870
61 OR LESS	20740	21680	21670	23210	24050	25320	27800	31120	34570	38040	43500	51580	52870	52870	52870
<b>(Previous Day Average)</b>	<b>AUGUST</b>														
86.0 OR GREATER	11900	11900	11900	11900	11900	11900	11900	11980	13820	15930	19320	22650	23370	25770	30630
82.0 TO 85.0	11900	11900	11900	11900	11900	11900	13450	15250	17540	20120	22710	23280	24200	28680	36100
78.0 TO 81.0	11900	11900	11900	12080	13760	15700	17940	20400	21700	22740	23540	24310	25630	35700	45680
74.0 TO 77.0	11900	11900	13120	15010	17290	19880	21340	21810	22940	23360	24430	25500	28990	43650	52870
70.0 TO 73.0	12450	13640	15730	18270	21100	21360	22650	23000	23540	24290	25500	27920	34160	52250	52870
66.0 TO 69.0	14350	15930	18680	21190	21360	22670	23110	23710	24620	25690	27870	32850	40540	52870	52870
62.0 TO 65.0	16620	18820	21230	21280	22640	23180	23970	25030	26430	29140	33120	39170	48590	52870	52870
61.0 OR LESS	19730	21310	21150	22550	23250	24360	25840	29010	32170	35400	40430	48140	52870	52870	52870
<b>(Previous Day Average)</b>	<b>SEPTEMBER</b>														
86.0 OR GREATER	11900	11900	11900	11900	11900	11900	11900	11900	11900	12700	15400	19440	23550	25820	30900
82.0 TO 85.0	11900	11900	11900	11900	11900	11900	11900	12890	14660	16730	20220	22880	24220	28550	36130
78.0 TO 81.0	11900	11900	11900	11900	12510	13890	15600	17610	20220	22030	22610	23940	25430	35030	45680
74.0 TO 77.0	11900	11900	12590	13870	15590	17690	20200	21880	22160	22570	23480	25160	27910	42840	52870
70.0 TO 73.0	12590	13290	14730	16690	19200	20710	21880	22150	22680	23400	24760	26450	32620	51470	52870
66.0 TO 69.0	14100	15180	17320	20120	20730	21900	22260	22810	23680	24740	26320	31140	38800	52870	52870
62.0 TO 65.0	15980	17700	20760	20670	21860	22300	23030	24020	25410	27180	31160	37270	47030	52870	52870
58.0 TO 61.0	18670	20870	20550	21750	22320	23340	24740	26600	30050	33250	38290	46210	52870	52870	52870
54.0 TO 57.0	20760	20370	21550	22370	23820	25880	30150	33950	38050	42320	49160	52870	52870	52870	52870
50.0 TO 53.0	20120	21280	22400	24580	28870	34630	39610	44880	50650	52870	52870	52870	52870	52870	52870

TABLE 1-a (Continued)

Flow (cfs) Temp °F	750 Or Less	751 To 1000	1001 To 1250	1251 To 1500	1501 To 1750	1751 To 2000	2001 To 2250	2251 To 2500	2501 To 2750	2751 To 3000	3001 To 3500	3501 To 4000	4001 To 5000	5001 To 8000	8001 Or More
46.0 TO 49.0	21130	22330	25570	33280	40820	47690	52870	52870	52870	52870	52870	52870	52870	52870	52870
42.0 TO 45.0	22950	26610	38240	49250	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870
41.0 OR LESS	31510	43060	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870
(Previous Day Average)	<b>OCTOBER</b>														
66.0 OR GREATER	12890	13610	15330	17810	20920	21000	21280	21780	22650	23730	25830	30120	38610	52870	52870
62.0 TO 65.0	14390	15790	18640	20930	20970	21300	21980	22910	24320	25990	29770	36340	46710	52870	52870
58.0 TO 61.0	16720	19200	20850	20840	21260	22190	23530	25280	28320	31640	36940	45280	52870	52870	52870
54.0 TO 57.0	20190	19610	20580	21210	22530	24490	27630	32020	36260	40660	47790	52870	52870	52870	52870
50.0 TO 53.0	19270	20220	21090	23080	26050	32320	37430	42800	48740	52870	52870	52870	52870	52870	52870
46.0 TO 49.0	19900	20830	23770	29750	38090	45100	52650	52870	52870	52870	52870	52870	52870	52870	52870
42.0 TO 45.0	21110	24340	34110	45940	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870
41.0 OR LESS	26620	38050	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870	52870

TABLE 1-b  
LBS PER DAY OF BOD<sub>5</sub>  
(river mile 32.4 to 19.2)

Flow at Rapide Croche Dam (cfs) (Previous four day average)

Flow (cfs) Temp °F	750 Or Less	751 To 1000	1001 To 1250	1251 To 1500	1501 To 1750	1751 To 2000	2001 To 2250	2251 To 2500	2501 To 2750	2751 To 3000	3001 To 3500	3501 To 4000	4001 To 5000	5001 To 8000	8001 Or More
(Previous Day Average)	<b>MAY - JUNE</b>														
86.0 OR GREATER	19530	20420	22080	24040	26140	28260	30320	32250	34310	36350	39600	44250	51010	63910	73520
82.0 TO 85.0	19420	20430	22210	24390	26660	28890	31030	33000	35220	38020	41600	46650	53800	68020	79650
78.0 TO 81.0	19150	20410	22530	25040	27560	29970	32480	35440	38760	41280	44870	51070	59210	75180	91320
74.0 TO 77.0	18870	20380	22960	25780	28460	31830	35330	38750	41510	44240	48790	55300	63740	84040	100580
70.0 TO 73.0	18660	20460	23470	26610	30480	34470	38310	41220	44390	47680	52700	60590	68590	95110	100580
66.0 TO 69.0	18680	20900	24270	28610	33110	37570	40930	44350	48270	51980	57640	65690	75390	100580	100580
62.0 TO 65.0	19050	21620	26390	31540	36770	40720	44820	49180	53430	57720	64970	72530	85540	100580	100580
58.0 TO 61.0	19930	23850	29850	36110	40930	46030	51270	55990	61520	67050	73540	84150	100580	100580	100580
54.0 TO 57.0	22540	27670	35440	41500	48070	54250	60610	67770	73110	79020	88690	100580	100580	100580	100580
50.0 TO 53.0	27120	34180	42260	50880	58700	67790	75380	83010	91490	100580	100580	100580	100580	100580	100580
46.0 TO 49.0	35180	42700	53730	65030	77230	87490	98940	100580	100580	100580	100580	100580	100580	100580	100580
42.0 TO 45.0	46260	56540	72970	90120	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580
41.0 OR LESS	63960	81400	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580
(Previous Day Average)	<b>JULY</b>														
86.0 OR GREATER	19410	20220	22000	23990	25710	26170	26980	28180	29240	29780	31330	34160	38470	50880	59440
82.0 TO 85.0	19570	20540	22190	24300	26280	27480	28340	29090	29860	31520	33910	36900	42800	55660	66240
78.0 TO 81.0	19430	20700	22610	24790	26830	28610	30110	31750	33760	35510	38010	43030	49440	64460	79010
74.0 TO 77.0	19460	20690	22950	25250	27350	29900	33050	35410	37540	39570	43590	48790	55230	74500	93610
70.0 TO 73.0	19270	20860	23210	25670	28940	32850	36710	39140	41770	44770	48930	54010	61490	86460	100580
66.0 TO 69.0	19230	21110	23690	27390	31930	36490	39940	43480	46990	50190	53910	59720	69370	100580	100580
62.0 TO 65.0	19500	21570	25470	30620	36130	40270	44530	49080	52330	55260	60080	67690	80270	100580	100580
61.0 OR LESS	20140	23290	29180	35830	40920	46310	51590	55020	58840	62930	69640	80040	97410	100580	100580

TABLE 1-b (Continued)

Flow (cfs) Temp ° F	750 Or Less	751 To 1000	1001 To 1250	1251 To 1500	1501 To 1750	1751 To 2000	2001 To 2250	2251 To 2500	2501 To 2750	2751 To 3000	3001 To 3500	3501 To 4000	4001 To 5000	5001 To 8000	8001 Or More
(Previous Day Average)	<b>AUGUST</b>														
86.0 OR GREATER	17100	17820	19550	21660	23750	25630	27250	28660	29950	31130	32730	34200	37550	47950	54910
82.0 TO 85.0	17100	17980	19830	22050	24160	26080	27770	29210	30630	31780	34020	36110	41620	52690	61150
78.0 TO 81.0	17100	18250	20290	22640	24880	26880	28660	30250	32660	35080	37160	41870	47280	60390	73230
74.0 TO 77.0	17100	18430	20740	23240	25590	27710	30360	33520	36040	38390	42230	46740	52860	69620	86960
70.0 TO 73.0	17100	18620	21190	23820	26350	30100	33650	36450	39290	42320	46710	51760	58250	81040	100580
66.0 TO 69.0	17110	19080	21860	24970	29300	33490	36810	40050	43740	47670	51710	56920	65590	94940	100580
62.0 TO 65.0	17560	19750	23220	28190	33180	37130	41120	45370	50290	52990	57310	64230	76010	100580	100580
61.0 OR LESS	18330	21220	26890	32890	37770	42880	48300	52880	56320	60040	66160	75970	92360	100580	100580
(Previous Day Average)	<b>SEPTEMBER</b>														
86 OR GREATER	17100	17100	17100	18950	21280	23430	25440	27290	29040	30650	32770	34940	38300	48160	55220
82 TO 85	17100	17100	17100	19430	21810	24010	25990	27810	29670	31340	32690	36020	41730	52560	61180
78 TO 81	17100	17100	17620	20220	22700	25020	27140	29050	30780	32160	35280	40840	46540	59660	73230
74 TO 77	17100	17100	18250	20960	23540	25940	28140	30320	32850	35340	39370	45460	51770	68700	86890
70 TO 73	17100	17100	18850	21690	24340	27510	30270	33010	36010	39020	44360	50300	56670	80100	100580
66 TO 69	17100	17100	19690	22660	26690	30070	33330	36690	40350	44350	49880	55150	63700	94080	100580
62 TO 65	17100	17520	20730	25590	29710	33590	37660	41850	46850	51040	55250	62160	74200	100580	100580
58 TO 61	17100	18710	24240	29320	34110	39220	44600	50480	54100	57710	63740	73690	90340	100580	100580
54 TO 57	17710	22400	28760	34820	41390	48550	54250	58710	63740	69330	78450	92890	100580	100580	100580
50 TO 53	22010	27710	35520	44320	53280	59620	66000	73280	81330	90010	100580	100580	100580	100580	100580
46 TO 49	28330	35720	47640	59240	67770	77480	88370	100450	100580	100580	100580	100580	100580	100580	100580
42 TO 45	38730	50510	66520	79740	94890	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580
41 OR LESS	56940	73990	96270	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580
(Previous Day Average)	<b>OCTOBER</b>														
66 OR GREATER	17100	17100	17350	20360	23070	26070	29340	32820	36620	40820	48090	54100	63500	96160	100580
62 TO 65	17100	17100	18280	22130	25690	29540	33740	37970	43200	48860	53790	61140	73830	100580	100580
58 TO 61	17100	17100	20910	25210	29930	35110	40550	46650	52270	55950	62210	72590	90220	100580	100580
54 TO 57	17100	18930	24460	30400	37000	44160	51740	56540	61660	67340	76760	91840	100580	100580	100580
50 TO 53	18180	23110	30750	39480	49160	56990	63400	70680	78880	87730	100580	100580	100580	100580	100580
46 TO 49	23260	30400	42140	54620	64450	74170	85110	97250	100580	100580	100580	100580	100580	100580	100580
42 TO 45	32620	44150	60850	75480	90500	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580
41 OR LESS	50540	66850	90710	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580	100580



TABLE 1-c  
LBS PER DAY OF BOD<sub>5</sub>  
(river mile 73.0 to 0.0)

Flow at Rapide Croche Dam (cfs) (Previous four day average)

Flow (cfs) Temp °F	750 Or Less	751 To 1000	1001 To 1250	1251 To 1500	1501 To 1750	1751 To 2000	2001 To 2250	2251 To 2500	2501 To 2750	2751 To 3000	3001 To 3500	3501 To 4000	4001 To 5000	5001 To 8000	8001 Or More
(Previous Day Average)	MAY – JUNE														
	A														
86 OR GREATER	30750	30750	30750	30750	30750	30750	30750	30750	40850	53610	76790	115120	146430	146430	146430
82 TO 85	30750	30750	30750	30750	30750	30750	30750	34900	45170	57470	79680	116190	146430	146430	146430
78 TO 81	30750	30750	30750	30750	30750	30750	34270	42680	52900	64900	86230	120710	146430	146430	146430
74 TO 77	30750	30750	30750	30750	30750	35050	42600	51730	62450	74710	95970	129530	146430	146430	146430
70 TO 73	30750	30750	30750	30750	35840	43520	52590	63000	74760	87820	109830	143550	146430	146430	146430
66 TO 69	30750	30750	30750	35230	44060	54050	65170	77420	90750	105170	128740	146430	146430	146430	146430
62 TO 65	30750	30750	31830	42800	54720	67560	81290	95910	111380	127680	146430	146430	146430	146430	146430
58 TO 61	30750	30750	38350	53200	68750	84980	101880	119410	137560	146430	146430	146430	146430	146430	146430
54 TO 57	30750	30750	48080	67350	87080	107260	127860	146430	146430	146430	146430	146430	146430	146430	146430
50 TO 53	30750	37970	61960	86190	110650	135320	146430	146430	146430	146430	146430	146430	146430	146430	146430
46 TO 49	30750	51180	80920	110660	140400	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430
42 TO 45	44490	69850	105880	141690	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430
41 OR LESS	64630	94910	137800	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430
(Previous Day Average)	JULY – AUGUST														
	A														
86 OR GREATER	57130	52880	48150	44920	43130	42730	43650	45830	49200	53720	62490	77590	106550	146430	146430
82 TO 85	54020	50450	46650	44340	43460	43940	45710	48730	52930	58250	68180	84760	115790	146430	146430
78 TO 81	49840	47400	45190	44430	45060	47030	50270	54710	60300	66970	78890	97990	132570	146430	146430
74 TO 77	46630	45390	44860	45750	48010	51560	56350	62310	69390	77530	91570	113400	146430	146430	146430
70 TO 73	44390	44410	45670	48310	52280	57520	63960	71550	80220	89910	106220	130970	146430	146430	146430
62 TO 65	42830	45590	50700	57140	64840	73740	83780	94910	107050	120140	141440	146430	146430	146430	146430
61 OR LESS	43510	47740	54930	63410	73120	84000	95990	109030	123050	138000	146430	146430	146430	146430	146430
(Previous Day Average)	SEPTEMBER – OCTOBER														
86 OR GREATER	30750	30750	30750	30750	36420	46400	57180	68680	80820	93520	113440	141190	146430	146430	146430
82 TO 85	30750	30750	30750	31260	38930	47480	56840	66910	77630	88890	106660	131540	146430	146430	146430
78 TO 81	30750	30750	30750	35830	41960	48970	56770	65290	74440	84150	99570	121310	146430	146430	146430
74 TO 77	30750	31200	34690	39210	44690	51050	58190	66050	74550	83590	98000	118380	146430	146430	146430
70 TO 73	31980	33930	37670	42440	48170	54760	62150	70240	78960	88230	102980	123800	146430	146430	146430
66 TO 69	32990	35750	40640	46550	53410	61140	69660	78880	88730	99120	115550	138590	146430	146430	146430
62 TO 65	33500	37700	44620	52570	61470	71230	81770	93020	104890	117300	136740	146430	146430	146430	146430
58 TO 61	34550	40800	50660	61540	73370	86050	99520	113680	128470	143790	146430	146430	146430	146430	146430
54 TO 57	37170	46100	59790	74500	90140	106650	123930	141910	146430	146430	146430	146430	146430	146430	146430
50 TO 53	42390	54630	73040	92470	112840	134060	146430	146430	146430	146430	146430	146430	146430	146430	146430
46 TO 49	51250	67430	91460	116500	142480	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430
42 TO 45	64790	85520	116070	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430
41 OR LESS	84030	109960	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430	146430

TABLE 1-m  
LBS PER DAY OF BOD<sub>5</sub>  
(river mile 205.3 to 171.9)

Previous Day Average Flow at Biron Dam (cfs)

FLOW (cfs) Temp ° F	0 To 999	1000 To 1199	1200 To 1499	1500 To 1999	2000 To 2499	2500 To 2999	3000 To 3999	4000 To 4999	5000 To 5999	6000 Or More
<b>Previous Day Average</b>	<b>MAY – JUNE</b>									
82 OR GREATER	14090	19450	24280	32740	43710	56020	57890	109930	126010	126010
78 TO 81	14270	20150	25460	34860	47570	61490	63040	124130	126010	126010
74 TO 77	14430	20840	26730	37330	51730	67770	69550	126010	126010	126010
70 TO 73	15060	22070	28570	40280	56940	76260	78310	126010	126010	126010
66 TO 69	17220	25400	33030	46930	67170	90740	92900	126010	126010	126010
62 TO 65	20420	30380	39740	57380	83000	113150	116070	126010	126010	126010
58 TO 61	25230	37960	50230	73270	107730	126010	126010	126010	126010	126010
54 TO 57	32780	50170	67460	98190	126010	126010	126010	126010	126010	126010
50 TO 53	44980	70700	96520	126010	126010	126010	126010	126010	126010	126010
46 TO 49	65950	105300	126010	126010	126010	126010	126010	126010	126010	126010
42 TO 45	104080	126010	126010	126010	126010	126010	126010	126010	126010	126010
41 OR LESS	126010	126010	126010	126010	126010	126010	126010	126010	126010	126010
<b>Previous Day Average</b>	<b>JULY–AUGUST</b>									
82 OR GREATER	10220	12730	15260	20280	27850	36910	37990	77790	106430	121800
78 TO 81	10220	13400	16750	23250	32790	44090	45460	95180	126010	126010
74 TO 77	10220	14460	18710	26700	38440	52210	53520	116110	126010	126010
70 TO 73	10770	15940	20990	30630	44740	61400	63240	126010	126010	126010
66 TO 69	13080	19510	25890	37870	55600	76530	78600	126010	126010	126010
62 TO 65	16210	24690	32910	48560	71670	99270	102140	126010	126010	126010
61 OR LESS	20900	32370	43510	64910	90410	126010	126010	126010	126010	126010
<b>Previous Day Average</b>	<b>SEPTEMBER – OCTOBER</b>									
82 OR GREATER	10220	10220	10220	11890	17810	24650	25520	54880	76010	87260
78 TO 81	10220	10220	10220	14100	21750	30380	31340	69790	97910	113060
74 TO 77	10220	10220	10880	17140	26390	37320	38460	89310	122210	126010
70 TO 73	10220	10220	13270	20940	32350	45880	47080	110380	126010	126010
66 TO 69	10220	12590	17740	27700	42400	59880	61710	126010	126010	126010
62 TO 65	10220	17080	24020	37280	57030	80460	82480	126010	126010	126010
58 TO 61	14260	23670	33250	51710	79170	111910	115150	126010	126010	126010
54 TO 57	20210	34030	47890	74560	114650	126010	126010	126010	126010	126010
50 TO 53	30240	51240	72530	113710	126010	126010	126010	126010	126010	126010
46 TO 49	47330	80810	114710	126010	126010	126010	126010	126010	126010	126010
42 TO 45	78580	126010	126010	126010	126010	126010	126010	126010	126010	126010
41 OR LESS	126010	126010	126010	126010	126010	126010	126010	126010	126010	126010