

**SUBJECT:** Request authorization for public hearing for Board Order DG-39-10, creation of NR 854 related to water supply service area plans.

**FOR:** OCTOBER 2010 BOARD MEETING

**TO BE PRESENTED BY:** Eric Ebersberger, Section Chief, Drinking Water & Groundwater Bureau

**SUMMARY:**

Board Order DG-39-10 creates NR 854. NR 854 implements the statutory requirement [2007 Wisconsin Act 227, s. 281.348, Stats.] to establish, by rule, a continuing water supply planning process for the preparation of water supply plans for persons operating public water supply systems that serve a population of 10,000 or more, and for persons proposing a new or increased diversion of water from the Great Lakes basin.

The rule sets forth definitions, timelines, and procedures for a water supply service area planning process for persons operating public water supply systems, statewide, that serve a population of 10,000 or more or for persons proposing a diversion of water from the Great Lakes basin.

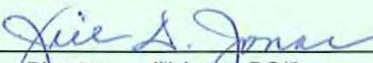
Persons operating a public water supply system serving a population of 10,000 or more must have an approved water supply service area plan by December 31, 2025. However, persons operating public water supply systems in the Great Lakes basin serving populations of 10,000 or more that request a new or increased withdrawal under the terms of the Great Lakes Compact, must have an approved water supply service area plan before receiving approval for a new or increased withdrawal; and persons requesting a diversion of Great Lakes basin water must have an approved water supply service area plan as a condition of receiving a diversion approval--regardless of the population served by the diversion.

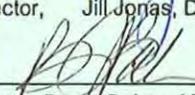
**RECOMMENDATION:**

**LIST OF ATTACHED MATERIALS:**

- |    |                                     |   |     |                                     |          |
|----|-------------------------------------|---|-----|-------------------------------------|----------|
| No | <input type="checkbox"/>            | Fiscal Estimate Required                              | Yes | <input checked="" type="checkbox"/> | Attached |
| No | <input checked="" type="checkbox"/> | Environmental Assessment or Impact Statement Required | Yes | <input type="checkbox"/>            | Attached |
| No | <input type="checkbox"/>            | Background Memo                                       | Yes | <input checked="" type="checkbox"/> | Attached |

**APPROVED:**

  
 Bureau Director, Jill Jonas, DG/5

  
 Administrator, Bruce Baker, AD/8

  
 Secretary, Matt Frank

9/27/10  
 Date

9/27/10  
 Date

10-13-10  
 Date

cc: Laurie J. Ross - AD/8

DATE: September 27, 2010 FILE REF: DG-39-10, NR 854

TO: Members, Natural Resources Board

FROM: Matt Frank, Secretary 

SUBJECT: Recommendation for approval of public hearings for the creation of Wis. Adm. Code Chapter NR 854, Water Supply Service Area Plans.

**1. Why is this rule being proposed?**

Section 281.348, created in 2007 Wisconsin Act 227, directs the department to establish by rule and administer a continuing water supply planning process for the preparation of water supply service area plans for persons operating public water supply systems.

**2. Summary of the Rule.**

The rule establishes a statewide continuous planning process for persons that own or operate a public water supply system that serves a population of 10,000 or more and for persons proposing a new or increased diversion of water from the Great Lakes basin. Persons preparing a water supply service area plan will need to identify water supply alternatives that are based on a cost-effectiveness analysis of regional and individual water supply and water conservation alternatives. Specifically, the planning process will include an evaluation of how future water demands may be offset by implementing water conservation alternatives to preclude the need for additional water supply.

Generally, persons responsible for submitting a water supply service area plan will need to obtain an approved water supply service area plan on or before December 31, 2025. The proposed rule provides specific dates for submittal of a water supply service area plan based on the status of the system pumping capacity, change in water supply source, and size of the population served by a public water supply system. Additionally, persons operating a public water supply system in the Great Lakes basin must have an approved water supply service area plan before the department will grant an approval of a new or increased withdrawal; and persons proposing a new or increased diversion of Great Lakes water must have an approved water supply service area plan as a condition of a diversion approval. The planning period for water supply service area plans is 20 years.

The delineation of the water supply service area to which the public water supply system may provide water is a major element of the water supply service area planning process. The water supply service area must be delineated by an areawide water quality planning agency designated by the Governor, or by the owner in areas of the state where no areawide water quality planning agency is designated. The delineated water supply service area includes the existing water supply service area and the projected growth areas for the 20-year planning period. The area identified as the projected growth area for planning purposes does not obligate the public water supply system to provide water to the projected growth area. The department will review and approve the delineated water supply service areas.

The content of a water supply service area plan includes a description of the existing water supply system; a description of water sources and water withdrawals; a description of water use by customers; population projections, and projected water demand needs over the 20-year planning period.

A public water supply system planning to meet the projected water demand with new or enlarged facilities must submit a water supply service area plan that includes a cost-effectiveness analysis of water supply alternatives that would provide an adequate quantity and quality of water to the system's customers. The cost-effectiveness analysis will evaluate the anticipated costs associated with implementing the water supply alternative and associated infrastructure needs. The evaluation of water supply alternatives will include an assessment of environmental impacts associated with implementing the water supply alternative.

A public water supply system that plans to meet the water demand with existing water supply facilities will need to submit a water supply service area plan that provides a determination and description of the system's ability to meet the forecasted water demand. The public water supply system will need to demonstrate that the available water supply source will be sustainable over the 20-year planning period. Public water systems that can meet the projected water demand using existing water supply facilities will not have to provide a cost-effectiveness analysis or environmental assessment of water supply alternatives.

The water supply service area planning process encourages intergovernmental cooperation. The plans will need the approval of the governing body of each city, village and town whose public water supply is addressed by the plan. The plans must also be consistent with approved comprehensive plans, areawide water quality plans, and other applicable planning efforts.

The water supply service area planning process also includes a public participation process. Owners of a public water supply systems preparing a water supply service area plan must hold at least one public hearing prior to approval of the plan by the governing body of each city, village, and town whose public water supply is addressed by the plan before the plan is submitted to the department for approval.

Water withdrawals proposed in a water supply service area plan must comply with applicable withdrawal requirements specified by statute and rule. Withdrawals within the Great Lakes basin subject to state or Compact decision-making standards must comply with the applicable decision-making standards prior to the department approval of a water supply service area plan.

The proposed rule establishes a department approval process, a conditional approval process, and establishes a process to revise an approved water supply service area plan.

### **3. How does this proposal affect existing policy?**

The establishment of a continuing water supply planning process is new and there are no pre-existing policies relating to development of long-term water supply area planning.

Near-term development related to the operation, design, and construction of a public water supply system is referenced in Chapter NR 811, "Requirements for the Operation and Design of Community Water Systems"; however, NR 811 does not address long-term public water supply planning objectives to develop an adequate quantity and quality of water for a public water supply system over an extended planning period.

**4. Has the Board dealt with these issues before?**

The Board has not dealt with the issue of developing a water supply service area planning process before; however, there are several related rules that the Board has recently reviewed and addressed related to water use regulations that were created in 2007 Wisconsin Act 227 and 2009 Wisconsin Act 28. The rules include NR 850 Water Use Fees, NR 852 Water Conservation and Water Use Efficiency, NR 856 Water Use Registration and Reporting and NR 860 Water Use Permitting.

**5. Who will be impacted by the proposed rule? How?**

The proposed rule is estimated to affect approximately 77 public water supply systems throughout the state, including an estimated 20 consecutive water systems that purchase water from other public water supply systems. The rule will affect persons operating public water supply systems owned primarily by a city, village, town, utility district or municipal water district.

**6. Information on environmental analysis, if needed.**

No environmental analysis is required. This is a Type III action under ch. NR 150, Wis. Adm. Code

**7. Small business analysis.**

A. 1. Describe the compliance and/ or reporting requirements imposed on small business.

2. Can these compliance and/or reporting requirements be made less stringent for small business? Explain.

The requirement to prepare a water supply service area plan is imposed on persons operating a public water supply system serving a population of 10,000 or more and persons proposing a new or increased diversion of water from the Great Lakes basin. Operators of public water supply systems are not considered a small business as specified under s. 227.114(1).

B. 1. Describe the schedules or deadlines for the compliance or reporting imposed on small business.

2. Can these schedules or deadlines be made less stringent for small business? Explain.

N/A

C. Can the compliance or reporting requirements for small business be consolidated or simplified? Explain.

N/A

D. Can performance standards be established for small businesses in lieu of design or operational standards? Explain.

N/A

E. Can small businesses be exempted from any of the requirements of the rule?

N/A

F. Initial Regulatory Flexibility and Analysis

1. Describe the type of small business that will be affected by this rule.
2. Briefly explain the reporting, bookkeeping and other procedures required for compliance with the rule.

N/A

**Fiscal Estimate — 2009 Session**

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Updated	LRB Number	Amendment Number if Applicable
<input type="checkbox"/> Corrected	<input type="checkbox"/> Supplemental	Bill Number	Administrative Rule Number DG-39-10 (NR 854)

Subject  
 Water Supply Service Area Planning Rule

**Fiscal Effect**

State:  No State Fiscal Effect  
 Indeterminate

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

- |  |   |
|--|---|
| <input type="checkbox"/> Increase Existing Appropriation | <input type="checkbox"/> Increase Existing Revenues |
| <input type="checkbox"/> Decrease Existing Appropriation | <input type="checkbox"/> Decrease Existing Revenues |
| <input type="checkbox"/> Create New Appropriation        |   |

Increase Costs — May be possible to absorb within agency's budget.

Yes  No

Decrease Costs

Local:  No Local Government Costs  
 Indeterminate

1.  Increase Costs  
 Permissive  Mandatory
2.  Decrease Costs  
 Permissive  Mandatory

3.  Increase Revenues  
 Permissive  Mandatory
4.  Decrease Revenues  
 Permissive  Mandatory

5. Types of Local Governmental Units Affected:

- Towns  Villages  Cities  
 Counties  Others Water Utilities  
 School Districts  WTCS Districts

**Fund Sources Affected**

GPR  FED  PRO  PRS  SEG  SEG-S

**Affected Chapter 20 Appropriations**

20.370(4)(ai)

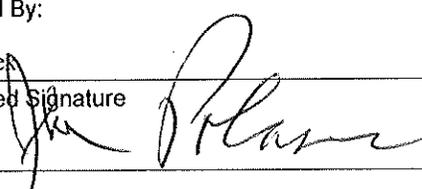
**Assumptions Used in Arriving at Fiscal Estimate**

Rule Summary: Section 281.348, Stats., directs the department to establish by rule, and administer a continuing water supply planning process for the preparation of water supply plans for persons operating public water supply systems serving populations of 10,000 or more and persons proposing a new or increased diversion of water from the Great Lakes basin. The purpose of water supply service area planning is to systematically evaluate alternative means of supplying water to a delineated water supply service area and to identify a cost-effective water supply alternative for a 20-year planning period. The rule requires that persons preparing a water supply service area plan: identify water supply options that are based on a cost-effectiveness analysis of regional and individual water supply and water conservation alternatives; delineate a water supply service area; forecast populations and water demand; assess environmental impacts of implementing water supply alternatives; analyze how the plan is consistent with comprehensive and other planning processes; and conduct a public participation process, including review and comment, for a proposed water supply service area plan.

There are an estimated 57 public water systems that serve populations of 10,000 or more throughout the state and that withdraw water from waters of the state; approximately 20 consecutive systems that serve populations of 10,000 or more but receive their water from larger public water systems, and 2 cities that have proposed a new or increased diversion of water from the Great Lakes Basin and have already submitted water supply service area plans. Persons responsible for submitting a water supply service area plan will need to have an approved plan by December 31, 2025. However, if the public water system is located in the Great Lakes basin and requests a new or increased withdrawal under the Great Lakes Compact, the system must have an approved plan prior to receiving approval for the new or increased withdrawal. For purposes of this fiscal note, the department assumes that costs associated with the water supply service area planning process can be distributed over a 20-year timeframe.

**Long-Range Fiscal Implications**

None

Prepared By:	Telephone No.	Agency
Joe Polasek	266-2794	Department of Natural Resources
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
	266-2794	10-13-10

## Fiscal Estimate — 2009 Session

### Page 2 Assumptions Narrative Continued

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number DG-39 -10 (NR 854)

#### Assumptions Used in Arriving at Fiscal Estimate – Continued

##### State Fiscal Effect

Annual Costs (These costs will be covered by the funding and staffing provided in 2009 Wisconsin Act 28.)  
The primary annual state fiscal effect will result from the review and approval of water supply service area plans, which will include the review of the delineated water supply service area, system infrastructure, description of the existing and future water supply system, description of water source and withdrawals, description of water use by customers, population projections, and projected water demand needs over a 20-year planning period. The review will be conducted by a Water Supply Specialist. An estimated 77 water supply service area plans will need to be reviewed beginning in 2023 through 2025 and every 20-years thereafter. A few public water supply systems may need to submit a water supply service area plan before the required 2025 approval date, however, the department expects to review 10 or fewer plans prior to 2023.

Annual costs related to the department's review of water supply service area plans are estimated at \$3,300 for salary, travel and related expenditures.

1) Salary and fringe for a Water Supply Specialist is estimated as \$2,800 annually [86 hours x \$32.73/hour (salary and fringe) x 1 FTE]. The FTE will review and approve the water supply service area plans that are submitted to the department. Costs estimates are based on the following:

a) Estimated number of public water supply systems that plan to meet the projected water demand in their water supply service area plan with new or enlarged facilities = 38

Hours for the department to review and approve the plans = 40 hrs x 38 plans = 1520 hours

b) Estimated number of public water supply systems that plan to meet the projected water demand with existing water supply facilities = 19

Hours for the department to review the plans = 6 hours x 19 plans = 114 hours

c) Estimated number of consecutive water systems that will have to prepare an abbreviated water supply service area plan = 20

Hours for the department to review the plans = 4 hours x 20 plans = 80 hours

Total Hours to review plans in (a), (b), and (c) = 1714 hours

Annual review hours = 1714 hours/20-year planning period = 86 hours

Annual Cost = 86 hours x \$32.73/hour = \$2,800 plus associated travel and supply costs (\$500) = \$3,300.

##### Local Government Fiscal Impact

The Department estimates that there are 77 public water supply systems that will need an approved water supply service area plan by December 31, 2025. The Department estimates that 10 or fewer public water systems may need an approved water supply service area plan prior to the December 31, 2025 date.

The water supply service area planning process will require a public water supply system to delineate a water supply service area, describe the existing and future water supply system needs, describe the water source and withdrawals, describe the water use by customers, and provide population projections and projected water demand over a 20-year planning period. An estimated 38 of the 77 public water supply systems will need to provide a cost-effectiveness analysis of water supply alternatives and provide an environmental assessment of implementing the alternatives.

As described below, the department assumes that the annualized costs to public water systems are relatively low; in part because many municipalities already do water supply planning. Local governmental units may choose to pay for these costs out of existing funds. However, the costs will be incurred at the beginning of the planning period, and if existing water utility revenues are insufficient to cover these up-front planning costs, the department assumes that public water supply systems regulated by the Public Service Commission (PSC) will have the option to recover the water supply service area planning cost from water supply users in a variety of ways.

Annual Local Government Fiscal Impact: The department estimates that the annualized cost to local governments totals \$5,100 as discussed below.

1) The department estimates that 38 public water supply systems will plan to meet the projected water demand in their water supply service area plan with new or enlarged water supply facilities. The estimated costs to these systems to prepare a water supply service area plan include all the requirements listed in the attached Table of Local Government Costs. As shown in the attached table, the cost to prepare a water supply service area plan for public water supply systems that plan to meet projected water demand with new or enlarged water supply facilities is \$57,300 per facility. The department assumes that the \$57,300 cost to prepare the plan would be spread over a 20-year planning period; therefore the annual cost would be  $\$57,300/20 = \$2,900$ .

2) The department estimates that 19 public water supply systems will plan to meet the projected water demand with existing water supply facilities. The estimated costs to these systems to prepare a water supply service area plan include the requirements listed in the attached Table of Local Government Costs with the exception of costs described in row F "NR 854.06(6) Plan to Meet Demand with Expanded Facilities". The cost estimate to prepare a water supply service area plan for public water supply systems that plan to meet projected water demand with existing water supply facilities is \$27,300 per facility. The department assumes that the \$27,300 cost to prepare the plan would be spread over a 20-year planning period; therefore the annual cost would be  $\$27,300/20 = \$1,400$ .

3) The department estimates that 20 consecutive public water supply systems will have to prepare a water supply service area plan that includes items in rows A, B, D, E, I, J, and K in the attached Table of Local Government Costs. The cost estimate for consecutive systems to prepare a water supply service area plan is \$16,500 per facility. The department assumes that the \$16,500 cost to prepare the plan would be spread over a 20-year planning period; therefore the annual cost would be  $\$16,500/20 = \$800$ .

**Fiscal Estimate Worksheet — 2009 Session**  
 Detailed Estimate of Annual Fiscal Effect

Original       Updated  
 Corrected       Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number DG-39-10 (NR 854)

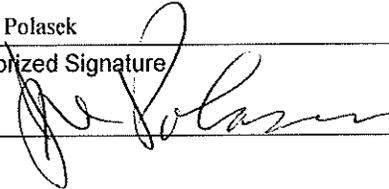
Subject  
 Water Supply Service Area Plans Rule

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):  
 \$10,000 related to rule drafting and public involvement. These costs are covered by the staffing and funding provided in 2009 Wisconsin Act 28.

Annualized Costs:		Annualized Fiscal Impact on State Funds from:	
		Increased Costs	Decreased Costs
<b>A. State Costs by Category</b>			
State Operations — Salaries and Fringes		\$	\$ -
(FTE Position Changes)		( FTE )	( FTE )
State Operations — Other Costs			-
Local Assistance			-
Aids to Individuals or Organizations			-
<b>Total State Costs by Category</b>		\$	\$ -
<b>B. State Costs by Source of Funds</b>			
GPR		\$	\$ -
FED			-
PRO/PRS			-
SEG/SEG-S			-
State Revenues	Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	Increased Revenue	Decreased Revenue
GPR Taxes		\$	\$ -
GPR Earned			-
FED			-
PRO/PRS			-
SEG/SEG-S			-
<b>Total State Revenues</b>		\$	\$ -

**Net Annualized Fiscal Impact**

	<u>State</u>	<u>Local</u>
Net Change in Costs	\$ _____	\$ _____
Net Change in Revenues	\$ _____	\$ _____

Prepared By: Joe Polasck	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 10-13-10

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCE BOARD  
CREATING RULES

The Wisconsin Natural Resource Board proposes an order to create Chapter NR 854 relating to a water supply service area planning process for public water supply systems.

DG-39-10

Analysis Prepared by the Department of Natural Resources

1. **Statutes Interpreted:** Section 281.348, Stats.
2. **Statutory Authority:** Sections 227.11(2)(a) and 281.348, Stats.
3. **Explanation of Agency Authority:** Section 227.11 (2)(a), Stats. expressly confers rulemaking authority on the department to promulgate rules interpreting any statute enforced or administered by it, if the agency considers it necessary to effectuate the purpose of the statute. Section 281.348 directs the Department to promulgate and administer rules to develop a continuing water supply service area planning process for persons operating public water supply systems serving populations of 10,000 or more and any person proposing a new or increased diversion from the Great Lakes basin. Section 281.348(3)(a) directs the Department to specify that persons operating a public water supply system that serve a population of 10,000 or more shall have an approved water supply service area plan by December 31, 2025.
4. **Related Statute or Rule:** Wisconsin Statute Section 281.346 and 281.35 and the following rules subject to approval or under development, NR 852 Water Conservation and Water Use Efficiency, NR 856 Water Use Registration and Reporting, NR 850 Water Use Fees, NR 860 Water Use Permitting, Water Use Public Involvement, and Water Loss from Consumptive Uses. Additional related rules include NR 809 Safe Drinking Water, NR 810 Requirements for the Operation and Maintenance of Public Water Systems, and NR 811 Design Requirement for Community Water Systems.
5. **Plain Language Analysis:** This board order creates a new rule under the provisions of s. 281.348, as created in 2007 Wisconsin Act 227, to establish a continuing water supply service area planning process for persons that operate public water supply systems that serve a population of 10,000 or more and any person proposing a new or increased diversion from the Great Lakes basin. The purpose of water supply service area planning is to systematically evaluate alternative means of supplying water to a delineated water supply service area and to identify a cost-effective water supply alternative for a 20-year planning period.
6. **Federal Regulatory Analysis:** There are no comparable federal regulations pertaining to Water Supply Service Area Planning for water withdrawal-related activities regulated under the Great Lakes – St. Lawrence River Basin Water Resources Compact (Compact).
7. **Comparison with Rules in Adjacent States:**  
The following table compares Water Supply Service Area Planning in adjacent states.

Water Supply Service Area Planning Comparison				
Wisconsin	Michigan	Illinois	Iowa	Minnesota
<p>A water supply planning process is established for public water supply systems that serve populations of 10,000 or more or persons proposing a new or increased diversion of Great Lakes water. The planning process includes a cost-effectiveness analysis of water supply and water conservation alternatives that can sustainably supply an adequate and amount of water of sufficient quality. The water supply service area plan must include a delineation of the water supply service area, describe current and projected water demands, and describe plans to meet projected water demand. The plans shall also assess environmental impacts. The rule also establishes a public participation process, timelines for plan submittal by December 31, 2025, and a department plan approval process.</p>	<p>Publicly owned and operated community water suppliers that operate a waterworks system are required to submit a general plan that identifies water system needs for 5-year and 20-year planning periods by January 1, 2016. The general plan may include information about current reliability studies, annual pumpage reports, sample siting plan, water protection plan, water conservation and efficiency program, waterworks operation and maintenance programs, regional planning documents and relevant land use plans for the service area. Administrative rules require a public water supply system to conduct a hydrogeological study of the groundwater source to determine the availability of water and consideration of other hydrogeological conditions and water quality assessments. Administrative code also requires public water systems proposing use of a surface water supply to conduct an assessment of surface water sources including a determination of the availability of an adequate and dependable water supply source.</p>	<p>A water supply planning process is conducted for two regional planning agencies in the state that includes the Northeast Region and the East-Central Region. The establishment of the two water supply planning areas is based on population densities and establishment of priority watersheds in the state. The water supply plans include an evaluation of water use, water demand and future water demand projections through 2050. The water supply plans also evaluate future water supply options based on hydrogeology studies of the area, water conservation, and climate change through 2050.</p>	<p>A Self-Assessment Manual is used to assess Iowa water system viability. The manual is a tool for public water systems to appraise their technical, managerial, and financial capability to provide water supply to their customers. The assessment includes determining the availability and adequacy of water supply sources; treatment requirements; infrastructure needs; operation and maintenance; management and administration; finances; and future planning.</p>	<p>All public water supply systems that serve more than 1,000 people must submit a water supply plan every 10 years for approval. The water supply plans must include a description and evaluation of the water supply system that includes an analysis of water demand, water use trends, treatment and storage capacity, description of water sources, natural resource impacts, resource sustainability, proposed water sources, alternative capital improvement plan, emergency response procedures and a water conservation plan.</p>

**8. Summary of the Factual Data and Analysis that Support the Proposed Rule:** Staff relied on published scientific literature, industry manuals, information from other states and consultation with the Wisconsin Public Service Commission to develop the core elements of the rule. Additionally, the department considered the input from an advisory committee, which included representatives from public water supply systems, municipal and town organizations, urban planners and environmental organizations, in the development of the water supply service area planning process.

**9. Analysis and Supporting Documentation in Support of the Determination of the Rule's Effect on Small Business:** The proposed rule is estimated to affect approximately 75 public water supply systems serving populations of 10,000 or more

throughout the state. The rule will affect public water supply systems owned or operated primarily by a city, village, town, utility district or municipal water district.

**10. Effect on Small Business:** The persons responsible for submitting a water supply service area plan are owners or operators of public water supply systems. Costs associated with the water supply service area planning process will be managed by the operator of a public water supply system. The costs may be passed on to the customers of the public water supply system through utility rate increases subject to PSC approval and those customers would include small businesses. Costs are likely to be very case specific; however, the department anticipates that any individual utility rate increase resulting from costs imposed by this rule would be relatively small since the costs would be distributed among all customers that the public water supply system serves (residential, commercial and industrial) and due to the 20-year planning period over which the costs could be distributed.

**11. Agency Contact Person:**

Dino Tsoris DG/5  
Wisconsin Department of Natural Resources  
Bureau of Drinking Water & Groundwater  
Water Use Section  
(608) 267-4581  
Email: Constantine.Tsoris@wisconsin.gov

**12. Place where comments are to be submitted and deadline for submission:** To be determined.

**SECTION 1.** Chapter NR 854 is created to read:

**CHAPTER NR 854**  
**WATER SUPPLY SERVICE AREA PLANS**

**Draft – September 24, 2010**

- NR 854.01 Purpose
- NR 854.02 Applicability and Planning Period
- NR 854.03 Definitions
- NR 854.04 Plan Submittal Timelines
- NR 854.05 Responsible Parties
- NR 854.06 Content of a Water Supply Service Area Plan
- NR 854.07 Cost-Effectiveness Analyses of Water Supply Alternatives
- NR 854.08 Assessment of Environmental Impacts
- NR 854.09 Public Participation Process for Water Supply Service Area Plans
- NR 854.10 Open Records Requests
- NR 854.11 Requirements for Water Supply Service Area Plans in the  
Great Lakes Basin
- NR 854.12 Department Review and Approval Process for a Water Supply  
Service Area Plan
- NR 854.13 Conditional Approval of a Water Supply Service Area Plan Providing for  
New or Increased Withdrawals Subject to State or Compact Decision-making  
Standards
- NR 854.14 Revision of a Water Supply Service Area Plan
- NR 854.15 Enforcement

**NR 854.01 Purpose.** This chapter establishes procedures and requirements for a continuing water supply service area planning process for the preparation of water supply plans for persons operating public water supply systems. A water supply service area plan shall document long-term planning to demonstrate that a public water supply system can supply an adequate and sustainable amount of water in a cost-effective manner that meets Safe Drinking Water Act standards. Persons operating a public water supply system shall ensure that the plans are consistent with applicable comprehensive plans and include an analysis of public water supply infrastructure, water supply, and capital improvements necessary to meet projected water demands.

**NR 854.02 Applicability and Planning Period.** The provisions of this chapter apply to any person operating a public water supply system that serves a population of 10,000 or more and that withdraws water from the waters of the state and any person that operates a consecutive water system that receives water from a public water supply

system required to prepare a plan under this chapter. The provisions of this chapter also apply to any person proposing a new or increased diversion of water from the Great Lakes basin, regardless of the size of the population proposed to be served by the diversion. The planning period of the water supply service area plan shall be 20 years.

**NR 854.03 Definitions.** In this chapter:

(1) "Areawide water quality planning agency" means an areawide water quality planning agency designated by the governor under ch. NR 121.

(2) "Commercial use" means water use by public water supply system customers that are business entities and non-governmental institutions that provide goods and services. Commercial customers also include multi-unit dwellings housing three or more units, such as apartments or condominiums, churches and private schools.

(3) "Consecutive water system" means a public water supply system that receives some or all of its finished water from one or more public water supply systems through a master metering system. Consecutive water systems are connected to public water supply systems that withdraw water and that are required to prepare a water supply service area plan.

(4) "Cost-effectiveness analysis" has the meaning specified in s. 281.348(1)(b), Stats.

**Note:** Section 281.348(1)(b), Stats., defines "cost-effectiveness analysis" to mean "a systematic comparison of alternative means of providing a water supply in order to identify alternatives that will minimize total resources costs and maximize environmental benefits over a planning period."

(5) "Customer" means the party responsible for payment of bills issued for the use of public water supply system service at given premises or a public water supply system that purchases water from a public water supply system. Customers include residential, commercial, industrial, and public authority parties and consecutive water systems that purchase water from other public water supply systems.

(6) "Department" means the department of natural resources.

(7) "Diversion" has the meaning specified in s. 281.346(1)(h), Stats.

**Note:** Section 281.346(1)(h), Stats., defines "diversion" to mean "a transfer of water from the Great Lakes basin into a watershed outside the Great Lakes basin, or from the watershed of one of the Great Lakes into that of another, by any means of transfer, including a pipeline, canal, tunnel, aqueduct, channel, modification of the direction of a water course, tanker ship, tanker truck, or rail tanker except that "diversion" does not include any of the following:

1. The transfer of a product produced in the Great Lakes basin or in the watershed of one of the Great Lakes, using waters of the Great Lakes basin, out of the Great Lakes basin or out of that watershed.

2. The transmission of water within a line that extends outside the Great Lakes basin as it conveys water from one point to another within the Great Lakes basin if no water is used outside the Great Lakes basin.
3. The transfer of bottled water from the Great Lakes basin in containers of 5.7 gallons or less."

**(8)** "Existing service area" means the area in which the public water supply system provides water to the public or has accepted an obligation to provide water to the public.

**(9)** "Firm supply capacity" means pumping equipment and treatment capacity when the largest pumping or treatment unit is out of service.

**(10)** "Great Lakes basin" has the meaning specified in s. 281.348(1)(c), Stats.

**Note:** Section 281.346(1)(je), Stats., defines "Great Lakes basin" to mean "the watershed of the Great Lakes and the St. Lawrence River upstream from Trois—Rivieres, Quebec.

**(11)** "Increased withdrawal" means a withdrawal that exceeds the baseline established in accordance with s. 281.346(2)(e), Stats., or the withdrawal amount established under s. 281.346(4g), (4s), or (5), Stats.

**(12)** "Industrial use" means water use by public water supply system customers that engage in the manufacture or production of goods.

**(13)** "Intrabasin transfer" has the meaning specified in s. 281.346(1)(jm), Stats.

**Note:** Section 281.346(1)(jm), Stats., defines "Intrabasin transfer" to mean "the transfer of water from the watershed of one of the Great Lakes into the watershed of another of the Great Lakes."

**(14)** "New withdrawal" means a withdrawal that started on or after December 8, 2008, and averages 100,000 gallons per day or more in any 30-day period, and a withdrawal that was occurring before December 8, 2008 but was not eligible for a baseline, and that has increased so that it averages 100,000 gallons per day or more in any 30-day period.

**Note:** Withdrawals not eligible for a baseline include those that were withdrawing less than the minimum regulated amount of an average of 100,000 gallons per day in any 30-day period.

**(15)** "Owner" has the meaning specified in s. NR 811.02(27), Wis. Adm. Code.

**Note:** Section s. NR 811.02(27), Wis. Adm. Code, defines "Supplier of water" or "owner" to mean "any person who owns or operates a public water system."

**(16)** "Peak day withdrawal" means a public water system's highest daily water withdrawal in a year.

**(17)** "Person" has the meaning specified in s. 281.346(1)(nm) Stats.

**Note:** Section 281.346(1)(nm), Stats., defines "person" to mean "an individual or other entity, including a government or nongovernmental organization, including any scientific, professional, business, nonprofit, or public interest organization or association that is neither affiliated with nor under the direction of a government."

**(18)** "Population" means the population of a specified area as shown by the last federal census or by any subsequent population estimate under s. 16.96, Stats.

**(19)** "Projected growth area" means the area in which the public water supply system is anticipated to provide water to the public during the 20-year period covered by the water supply service area plan.

**(20)** "Public authority use" means water use by public water system customers of a local, state or federal agency or entity, including public schools.

**(21)** "Public water supply" has the meaning specified in s. 281.348(1)(d), Stats.

**Note:** Section 281.348(1)(d), Stats., defines "public water supply" to mean "water distributed to the public through a physically connected system of treatment, storage, and distribution facilities that serve a group of largely residential customers and that may also serve industrial, commercial, and other institutional customers."

**(22)** "Public water supply system" means piped water for human consumption distributed to the public through a physically connected system of treatment, storage, and distribution facilities that serve a group of largely residential customers and that may also serve commercial, industrial or public authority customers, and other consecutive water systems. A public water supply system is owned by a city, village, county, town, town sanitary district, utility district, public inland lake and rehabilitation district, municipal water district, or a privately owned water utility serving the foregoing.

**(23)** "Regionalization" means the physical combination or coordinated management of two or more public water supply systems for improved planning, operation and management in providing water to customers.

**(24)** "Residential use" means water use by public water supply system customers for residential or domestic purposes, except multi-family buildings, such as apartments or condominiums, that house three or more dwelling units and that are served by a single meter.

**(25)** "Schematic" means a diagram that represents the elements of a public water supply system using general locations and graphic symbols rather than scaled maps.

**(26)** "Source" means an individual location where water is withdrawn from groundwater or surface water, including wells, springs, lakes, rivers and ponds.

**(27)** "Supplier of water" or "owner" has the meaning specified in s. NR 811.02(27), Wis. Adm. Code.

**Note:** Section s. NR 811.02(27), Wis. Adm. Code defines "Supplier of water" or "owner" to mean "any person who owns or operates a public water system."

**(28)** "System losses" means the difference between the volume of water entering the distribution system and the volume of water that is sold or otherwise authorized for system uses.

**(29)** "Total resources costs" has the meaning specified in s. 281.348(1)(e), Stats.

**Note:** Section 281.348(1)(e), Stats., defines "total resources costs" as "includes monetary costs and direct and indirect environmental as well as other nonmonetary costs."

**(30)** "Water loss" has the meaning specified in s. 281.346(1)(wm), Stats.

**Note:** Section 281.346(1)(wm), Stats., defines "water loss" to mean "the amount of water that is withheld from or not returned to the basin from which it is withdrawn as a result of a diversion or consumptive use or both."

**(31)** "Water supply service area" means a delineated area in which the public water supply system provides water or anticipates providing water to the public during the 20-year period covered by the water supply service area plan. A water supply service area includes existing service areas and projected growth areas. The water supply service area may be limited as provided by s. 66.0813(3)(a), Stats.

**(32)** "Water supply service area plan" or "plan" means a document developed and approved in compliance with this chapter.

**(33)** "Water supply system" has the meaning specified in s. 281.346(1)(wp), Stats.

**Note:** Section 281.346(1)(wp), Stats., defines "water supply system" to mean "when not preceded by 'public,' means one of the following: 1. Except as provided in subd. 2., the equipment handling water from the point of intake of the water to the first point at which the water is used. 2. For a system for providing a public water supply, the equipment from the point of intake of the water to the first point at which the water is distributed."

**(34)** "Waters of the state" has the meaning specified in s. 281.01(18), Stats.

**Note:** Section 281.01(18), Stats., defines "waters of the state" to include "those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction."

**(35)** "Waterworks" or "water system" has the meaning specified in s. 281.01(20), Stats.

**Note:** Section 281.01(20), Stats., defines "waterworks" or "water system" to mean "all structures, conduits and appurtenances by means of which water is delivered to consumers except piping and fixtures inside buildings served, and service pipes from buildings to street mains."

**(36)** "Well" has the meaning specified in s. 281.34(1)(h), Stats.

**Note:** Section 281.34(1)(h), Stats., defines "well" to mean "any drillhole or other excavation or opening deeper than it is wide and extends more than 10 feet below the ground surface and is constructed for the purpose of obtaining groundwater."

**(37)** "Withdraw" has the meaning specified in s. 281.348(1)(f), Stats.

**Note:** Section 281.348(1)(f), Stats., defines "withdraw" to mean "to take water from surface water or groundwater."

**(38)** "Withdrawal" has the meaning specified in s. 281.348(1)(g), Stats.

**Note:** Section 281.348(1)(g), Stats., defines “withdrawal” to mean “the taking of water from surface water or groundwater, including the taking of surface water or groundwater for the purpose of bottling the water.”

**Note:** Section. 281.348(2)(b), Stats., specifies that for the purposes of water supply service area planning under this section, the withdrawal of water from more than one source within the Great Lakes basin to supply a common distribution system is considered one withdrawal.

**NR 854.04 Plan Submittal Timelines.** (1) Unless otherwise specified in subs. (2) and (3), a person operating a public water supply system that serves a population of 10,000 or more, or is projected to serve a population of 10,000 or more by December 31, 2025, and that withdraws water from the waters of the state shall obtain department approval for a water supply service area plan on or before December 31, 2025. A person subject to this subsection shall submit a complete water supply service area plan to the department for approval according to the following requirements:

(a) A person that owns or operates a public water supply system with a peak day withdrawal that has reached 90 percent of its system’s firm supply capacity shall submit a plan by December 31, 2023;

(b) A person that owns or operates a public water supply system that proposes a change in the source of water supply shall submit a plan by December 31, 2023;

(c) A person operating a public water supply system that serves a population greater than 50,000 shall submit a plan by December 31, 2023;

(d) A person operating a public water supply system that serves a population of 10,000 to 50,000, but which is not subject to par. (a) or (b), shall submit a plan by December 31, 2024.

(2) A person operating a public water supply system that serves a population of 10,000 or more shall obtain department approval for a water supply service area plan before the department will grant approval to the public water supply for a new or increased withdrawal from a Great Lakes basin source.

(3) A person operating a public water supply system and requesting a new or increased diversion of Great Lakes water under s. 281.346(4), Stats., shall obtain department approval for a water supply service area plan before the department will grant approval of any new or increased diversion, regardless of the size of the population served by the public water system.

(4) A person operating a consecutive water supply system shall submit a water supply service area plan concurrently with the connected public water supply system

that serves water to the consecutive water system. A consecutive water system shall follow the time limits for application as specified in this section.

(5) Persons operating a public water supply system that have an approved water supply service area plan shall submit a new complete public water supply service area plan at least 180 calendar days before the existing approval expires.

(6) After December 31, 2025, any person operating a public water supply system that serves a population of less than 10,000, but is projected to serve a population of 10,000 or more in the future, based on federal census data or any subsequent population estimate under s. 16.96, Stats., shall submit a complete application for approval of a water supply service area plan at least 180 calendar days before the date when the public water supply system is projected to serve a population of 10,000 or more.

**NR 854.05 Responsible Parties.** (1) Except as provided under sub. (2), the person responsible for preparing a water supply service area plan under this chapter is the owner of a public water system that withdraws water.

(2) An owner of a consecutive water system is responsible for preparing a water supply service area plan under this chapter that includes the delineation of the consecutive water system's water supply service area. An owner of a consecutive water system shall include the content of a water supply plan specified in s. NR 854.06, with the exception of s. NR 854.06(10) and (11), if the public water supply system's plan proposes a consecutive water supply source.

**NR 854.06 Content of a Water Supply Service Area Plan.** The proposed water supply service area plan shall be submitted in the form and manner prescribed by the department and shall include all of the items in this section:

(1) **DELINEATION OF THE WATER SUPPLY SERVICE AREA.** The water supply service area plan shall include a delineation of the water supply service area, which shall include all areas to which the public water supply system may provide water over the 20-year planning period, including the water supply service areas of consecutive water systems.

(a) An areawide water quality planning agency designated by the governor under ch. NR 121, Wis. Adm. Code, shall delineate the water supply service area for all public water supply systems in the planning area for which the agency is designated.

(b) For areas where no planning agency is designated, the owner shall delineate

the water supply service area.

(c) A water supply service area plan shall include a map showing the existing water supply service area, projected growth area, and the water supply service area including consecutive water systems served. Identifying an area as a projected growth area for planning purposes does not extend the public water supply system's obligation to provide water to the projected growth area.

**(2) DESCRIPTION OF WATER SUPPLY SYSTEM.** A water supply service area plan shall include a description of the complete public water supply system using schematics as appropriate. The description shall include all of the following:

(a) A description and schematic of the existing water supply storage and distribution facilities, including the location of water mains and any water pressure booster stations, water pressure reducing stations, metering stations, storage reservoirs, and any connections with other water utilities.

(b) A schematic identifying the general location of the existing water withdrawal facilities, including all wells and surface water intakes.

(c) A description and schematic identifying the general location of existing water treatment facilities, including chemical feed equipment. A description of the type and size of the treatment facilities and related equipment shall be included. The description shall also indicate the final disposition of the wastewater and sludge from the treatment processes.

(d) For water supply service area plans that include a diversion, a schematic showing the location of the Great Lakes basin surface water divide in relation to the existing and planned water withdrawal facilities.

Note: A map of the Great Lakes Basin surface water divide can be found by using the department's Internet site available at [http://dnr.wi.gov/org/water/data\\_viewer.htm](http://dnr.wi.gov/org/water/data_viewer.htm)

**(3) DESCRIPTION OF WATER SOURCES AND WITHDRAWALS.** A water supply service area plan shall describe the existing water sources and withdrawals used by the public water supply system. The description of the water source and withdrawals shall include all of the following:

(a) An inventory of the sources and quantities of the existing water supply described and presented in a table that includes all of the following:

1. The number, identification and general location of wells used in supplying water.
2. The average daily withdrawal of each well for each of the last ten years.
3. The maximum withdrawal capacity of each well.

4. The number, identification and general location of any surface water intake sources.
  5. The average daily withdrawal of each surface water intake for each of the last ten years.
  6. The maximum withdrawal capacity of each intake.
    - (b) A table showing the public water supply system's existing total water withdrawal rates and amounts, system loss amounts, diversion amounts, and return flow amounts, if applicable, including a list of approved or permitted withdrawals, water losses, and diversions.
    - (c) A description of the methods used to measure and report the withdrawal rates and the amounts of withdrawal, system loss, diversion and return flow as identified under par. (b).
    - (d) A description and schematic of the location and method of return flow to the Great Lakes basin, for any plan that includes a diversion of water out of the Great Lakes basin.
    - (e) Identification and description of water quality treatment required or expected to be required to meet Safe Drinking Water Act standards relating to existing water supply sources.
    - (f) A description and schematic showing the location of any potential significant known or documented sources of contamination relative to sources of water.
- (4) DESCRIPTION OF WATER USE BY CUSTOMERS.** A water supply service area plan shall describe the water use of its existing customers, and shall include all of the following:
- (a) The population and population density of the public water supply system's existing service area.
  - (b) A table and summary of the number of customers purchasing water for residential use, commercial use, industrial use, and public authority use for each of the last ten years.
  - (c) A table and summary of sales of water for residential use, commercial use, industrial use, and public authority use for each of the last ten years.
  - (d) A list of the public water supply system's ten largest customers, other than consecutive water systems, and their water use for each of the last ten years.
  - (e) An estimate or actual amount of water loss from consumptive use for each of the last ten years.
  - (f) A table and summary of sales of water to consecutive water systems and the

names of the consecutive water systems to which the water is sold, if applicable.

**(5) PROJECTED WATER DEMAND.** The water supply service area plan shall project water demands in the proposed water supply service area. The plan shall include all of the following:

(a) Forecasts of the expected population in the water supply service area during the 20-year planning period based on population projections for the water supply service area and municipally planned population densities. Population projections for purposes of water supply service area planning shall be in conformance with those pursuant to s. 16.96, Stats., and shall consider any applicable approved regional or areawide water supply plans or regional water needs assessments, and other regional water supply information. If such projections are not available, the owner shall project future population growth based on trends in the recent past. The plan shall include a description of the methods used to derive the population forecasts.

(b) A water demand forecast in the water supply service area over the 20-year planning period. The forecast shall be divided into 5-year increments. The plan must address the water supply sources needed to meet the forecasted water use for the 20-year planning period. The forecast shall be reflective of any future water supply needs or proposed water supply alternatives. The forecast shall include all of the following:

1. A table showing the projection of total annual daily average and total peak daily water needs, including total pumpage, for the public water supply system and categorized by residential, commercial, industrial, and public authority uses.

2. An estimate of the water loss from consumptive use over the planning period. Water loss or consumptive use calculations shall follow the procedures set forth in ch. NR 142.

3. A table and summary of projected sales of water to consecutive water systems consistent with the consecutive water systems plans and the names of the systems to which the water is sold, if applicable.

(c) The water demand forecast in the water supply service area, as determined under par. (b), shall be estimated assuming the implementation of the public water system's water conservation alternatives and, if applicable, implementation of the water conservation plan adopted under ch. NR 852.

**(6) PLAN TO MEET PROJECTED WATER DEMAND WITH NEW OR ENLARGED WATER SUPPLY FACILITIES.** The water supply service area plan shall determine the public water supply system's capacity to meet the water demands in the water supply service area for the 20-year planning period. A public water supply system unable to

meet the forecasted water use for the 20-year planning period using existing water supply system facilities and available water supply shall include all of the following in the plan, as applicable:

(a) An identification of the need for new or enlarged facilities and a description and schematic of the following:

1. The proposed water withdrawal facilities including the number of wells and surface water intakes, general locations and capacity.
2. The water supply transmission facilities including the general locations of transmission mains, and any water pressure booster stations, water pressure reducing stations, metering stations and storage reservoirs needed as a result of new or enlarged water withdrawal facilities.
3. Any connections with other water utilities.

(b) A description and schematic identifying the general location of any proposed water treatment facilities, including chemical feed equipment. The designed or anticipated type and size of the treatment facilities and equipment shall be included in the description. The description shall also indicate the final disposition of the wastewater and sludge from the treatment processes.

(c) A list of current approved or permitted withdrawals, water losses, and diversions, and the additional approvals or permits required to construct the facilities described in par. (a) and (b).

(d) A table showing the public water supply system's anticipated water withdrawal rates and the applicable amounts for water withdrawal, system loss, diversion, and return flow, if applicable, if the facilities described in par. (a) and (b) are built.

(e) A description of the methods to be used to measure and report the withdrawal rates and the amounts identified under par. (d).

(f) A demonstration that the plan will effectively utilize the existing water supply system including storage, treatment, transmission facilities and wastewater infrastructure, to the extent practicable.

(g) A description and schematic of the location and method of return flow to the Great Lakes basin, if the plan includes an approved or proposed diversion of water out of the Great Lakes basin.

(h) A description and schematic of known sources of contamination relative to any new sources of water.

**(7) PLAN TO MEET PROJECTED WATER DEMAND WITH EXISTING WATER SUPPLY FACILITIES.** The water supply service area plan shall provide a description of

the public water supply system's ability to meet the forecasted water demand for the 20-year planning period using existing water supply system storage and distribution facilities, wastewater infrastructure and available water supply. A public water supply system proposing to meet the forecasted water demand over the 20-year planning period using solely existing water supply facilities and available water supply as described in subs. (2) and (3) shall include all of the following as applicable:

(a) A demonstration that the water supply will be sustainable over the 20-year planning period. The demonstration shall include an evaluation of all of the following, as applicable:

1. Aquifer storage, drawdown and water quality conditions, and surface water quality and quantity conditions, as applicable.
2. The ability of existing wells or intakes to sustain projected withdrawal rates.
3. Consistency or compliance with conditions of any groundwater management areas.

(b) A statement on current approved or permitted withdrawals, water losses, and diversions.

(c) A table showing the public water supply system's anticipated water withdrawal rates and the applicable amounts for water withdrawal, system loss, diversion, and return flow.

(d) A description of the methods to be used to measure and report the withdrawal rates and the amounts identified under par. (c).

**(8) CONSISTENCY WITH OTHER PLANS.** The water supply service area plan shall be consistent with applicable approved areawide water quality management plans and applicable comprehensive plans. In addition, the water supply service area plan shall identify groundwater management areas, as designated in s. 281.34(9), Stats., and wellhead protection areas as referenced in ch. NR 811. The water supply service area plan shall include all of the following, as applicable:

(a) A description and analysis of the consistency of the water supply service area plan with approved comprehensive plans. The analysis shall demonstrate how the water supply service area plan supports and is consistent with any applicable comprehensive planning, as defined in s. 66.1001 (1) (a), Stats. At a minimum, the analysis shall document that the water supply service area plan is consistent with the following elements of the applicable approved comprehensive plans:

1. Utilities and community facilities.
2. Housing.

3. Natural resources.
4. Economic development.
5. Land use.
6. Implementation.

(b) A description and analysis of the consistency of the water supply service area plan with any applicable approved areawide water quality management plans under s. 283.83, Stats., and ch. NR 121. A letter or similar documentation from the areawide water quality planning agency is required to document that the water supply service area plan is consistent with an applicable approved areawide water quality management plan.

(c) A description and analysis of the consistency of the water supply service area plan with all of the following, if applicable:

1. Wellhead protection plans.
2. Existing stormwater plans.
3. Existing wastewater facilities plans.
4. Approved regional or areawide water quality planning agency water supply plans or regional water needs assessments.
5. Other existing applicable planning efforts.
6. Any integral planning objectives associated with a municipality designated as a Green Tier participant under ch. 299, Stats., if a Green Tier municipality is addressed in the plan.

**(9) DESCRIPTION OF WATER CONSERVATION ALTERNATIVES.** A water supply service area plan shall include an evaluation of water conservation alternatives. The plan shall also provide an analysis that identifies how future water demands may be offset by implementing the water conservation alternatives. The plan shall include a description of water conservation and water use efficiency measures to be implemented during the term of the plan including implementation timelines. Owners of public water supply systems that are required to have a water conservation and water use efficiency plan under ch. NR 852 shall include the approved plan as part of the water supply service area plan.

**(10) COST-EFFECTIVENESS ANALYSES OF WATER SUPPLY ALTERNATIVES.** If a public water supply system will be unable to meet the forecasted water use for the 20-year planning period using existing water supply system facilities, the water supply service area plan shall include a cost-effectiveness analysis of water supply alternatives, specified in s. NR 854.07 and a description of the selected water supply alternative.

**(11) ASSESSMENT OF ENVIRONMENTAL IMPACTS OF WATER SUPPLY ALTERNATIVES.** If a public water supply system will be unable to meet the forecasted water use for the 20-year planning period using existing water supply system facilities, the water supply service area plan shall include an assessment of the environmental impacts of implementing the water supply alternatives as specified in s. NR 854.08.

**(12) INTERGOVERNMENTAL AGREEMENTS AND APPROVALS.** The water supply service area plan shall reflect intergovernmental cooperation and contain applicable intergovernmental agreements and approvals with supporting documentation and shall include all of the following:

(a) Approvals of the plan by the governing body of each city, village, and town whose public water supply is addressed by the plan as it applies to its jurisdictional boundaries.

(b) Existing land use agreements between the owner of a public water supply system and any city, village and town addressed by the water supply service area plan.

(c) Existing wholesale or retail sales agreements between the owner of the public water supply system and any city, village and town addressed by the water supply service area plan.

(d) Any other existing approvals obtained to implement the water supply service area plan.

(e) Plans proposing a new or increased diversion under s. 281.346(4), Stats., shall include documentation specified under s. 281.346(4)(b)4m, Stats., and s. 281.346(4)(b)4p., Stats.

Note: Section 281.246(4), Stats., regulates diversions to a straddling community, intrabasin transfers within a straddling community and diversions to a community in a straddling county. Section 281.346(4)(b)4m, Stats., refers to letters or resolutions that provide evidence of support from entities that may withdraw water from the Great Lakes basin that is proposed to be diverted to a straddling community or to a community in a straddling county. Section 281.346(4)(b)4p, Stats., refers to letters or resolutions to a straddling community or community within a straddling county from entities that may return water to the Great Lakes basin as part of a new or increased diversion.

**(13) PUBLIC PARTICIPATION.** The plan shall include a description of the public participation process implemented in accordance with s. NR 854.09 including a summary of the comments received.

**(14) PROCEDURES FOR IMPLEMENTING AND ENFORCING THE PLAN.** The plan shall identify procedures to be used to implement and enforce the plan and a commitment to using those procedures

**NR 854.07 Cost-effectiveness Analyses of Water Supply Alternatives.** (1) If a public water supply system will be unable to meet the forecasted water demand within the system's water supply service area for the 20-year planning period using existing water supply facilities and available water supply, the water supply service area plan shall include an analysis of alternative means for meeting the water demand in the water supply service area for the planning period with the requirements specified under sub. (2).

(2) A water supply service area plan shall provide for a water supply based on a cost-effectiveness analysis and an evaluation of regional and individual water supply and water conservation alternatives, including all of the following:

(a) The analyses of water supply alternatives shall consider existing regional water needs assessments, pertinent studies, and other regional water supply planning information.

(b) The evaluation of water supply alternatives shall include a cost-effectiveness analysis that includes an assessment of economic and environmental impacts related to implementation of each alternative.

(c) Water conservation alternatives shall be evaluated for each water supply alternative. The public water supply system owner or operator shall identify available water conservation alternatives and estimate the water demand reduction and cost savings by implementing water conservation alternatives including at a minimum the water conservation and efficiency measures specified in ss. NR 852.04(2) and NR 852.05(2).

(d) An identification of available water supply alternatives necessary to meet the projected water demand and needs of the public water supply system.

1. The alternatives analysis shall include joint efforts with neighboring communities to develop or obtain water supplies.

2. The owner or operator of the public water supply system shall analyze the dependability of each water supply alternative and the extent to which each water supply alternative is consistent with existing plans specified in s. NR 854.06(8).

3. A comparative analysis shall be performed of each water supply alternative with existing water supply sources and system capacities as identified in s. NR 854.06(2) and (3).

(e) The water supply alternatives analysis shall evaluate existing and anticipated costs associated with construction and maintenance of wells, surface water intakes,

treatment plants, chemical feed equipment, pumping facilities, water mains, storage facilities, and purchase of water from an existing supplier.

(f) An evaluation of whether each water supply alternative will meet the water quality, operation, and design requirements of chs. NR 809, NR 810 and NR 811. The evaluation shall include an assessment of any known sources of contamination for existing or new sources of water and an assessment of any requirements for water treatment due to the quality of the water supply source. If water treatment is required or anticipated, the cost to treat, handle, and dispose of water treatment plant residuals, including sludge, shall be evaluated to determine the most cost-effective option for each water supply alternative.

(g) An evaluation of any wastewater treatment and disposal system modifications required as a result of each proposed water supply alternative system design or expansion.

(h) An assessment of the expected costs associated with environmental impacts resulting from the use of each water supply alternative prepared in accordance with s. NR 854.08.

(i) An evaluation of the present value for the capital and costs, operation and maintenance costs for each water supply alternative.

(j) A description of the selected water supply alternative based on a comparative analysis of the water supply alternatives considering economic impacts including fiscal costs and total resource costs, environmental impacts, physical, legal or institutional constraints, and compliance with regulatory requirements.

**NR 854.08 Assessment of Environmental Impacts.** (1) An assessment of the environmental impacts of each water supply alternative under s. NR 854.07 shall be part of the water supply service area plan submitted to the department. The information submitted in the assessment of environmental impacts will be used by the department to determine whether an environmental analysis specified under ch. NR 150 is necessary. The assessment shall include all of the following:

(a) A description of the existing environmental conditions for the delineated planning area and environmental conditions relevant to the analysis of environmental impacts of each water supply alternative. This description shall include, at a minimum, descriptions of all of the following, as applicable:

1. Surface and groundwater quality.
2. Water supply and use.

3. Aquifer storage or drawdown conditions.
4. Water treatment residual and waste disposal.
5. Geologic setting, including any unique geologic formations or conditions.
6. Energy production and consumption.
7. Land use trends.
8. Population projections.
9. Wetlands.
10. Floodplains.
11. Coastal zones.
12. Environmentally sensitive areas.
13. Historic and archeological sites.
14. Plant and animal communities that may be affected.

(b) A description of the environmental impacts of the proposed water supply alternatives. Primary and secondary impacts of the proposed water supply alternatives shall be described giving special attention to all of the following:

1. Unavoidable impacts.
2. Steps to mitigate adverse impacts.
3. Any irreversible or irretrievable commitments of resources resulting from implementation of the water supply alternative.
4. An evaluation of the significance of land use impacts based on the existing population of the planning area population for the service area at the end of the planning period, percentage of the existing service area undeveloped or unoccupied, and plans for constructing the facilities.

(c) A description of the steps to minimize adverse environmental effects. The description shall include physical and regulatory measures, if any, to mitigate or eliminate significant adverse effects on the human and natural environments. Physical measures include changes in facility design, size, and location. Regulatory measures include developing and enforcing land use regulations and environmentally protective regulations including implementation of water conservation and efficiency measures.

(d) Documentation of the information used to describe the existing and anticipated environmental conditions and to assess future environmental impacts. These sources should include regional, state and federal agencies with responsibilities or interests in the types of impacts listed in paragraph (a).

**NR 854.09 Public Participation Process for Water Supply Service Area Plans. (1)**

Owners of a public water supply system preparing a water supply service area plan shall hold at least one public hearing prior to approval of the plan by the governing body of each city, village, and town whose public water supply is addressed by the plan before the plan is submitted to the department for approval.

(2) The owner of the public water supply system shall provide notice of the public hearing at least 14 calendar days before the scheduled date of the hearing. The notice shall be published in a newspaper of general circulation in the area affected by the water supply service area plan and shall contain all of the following information:

(a) The date, time and location of the hearing.

(b) The name of the entity responsible for developing the water supply service area plan.

(c) A summary of the contents of the water supply service area plan.

(d) A location where the proposed plan is available for review or the manner in which a copy of the plan may be obtained.

(e) Procedures for commenting on the water supply service area plan.

(f) A description of the procedures for finalizing the water supply plan before it is submitted to the department for approval.

(3) The owner of the public water supply system shall hold a public informational hearing at the date, time and place designated in the notice of hearing. The person conducting the hearing shall do all of the following:

(a) Explain the purpose of the hearing and describe how testimony will be received.

(b) At the beginning of the hearing, present a summary of the factual information pertaining to development of the water supply service area plan.

(c) Afford each interested person or representative the opportunity to present facts, opinions or arguments either orally in written form.

(d) Keep a record of the hearing in a manner the owner of the public water supply system considers desirable and feasible.

(4) The owner of the public water supply system in the Great Lakes basin shall make the record of decision regarding the water supply service area plan available for public inspection, including comments, objections responses and approvals, approvals with conditions and disapprovals.

**NR 854.10 Open Records Requests.** (1) The locations of withdrawals, diversions and infrastructure provided as part of a water supply service area plan are sensitive information that may impact domestic security.

(2) Open records requests received by the department under ss. 19.21 to 19.39, Stats., that request information on the locations of withdrawals, diversions and other infrastructure may be subject to greater scrutiny by the department because of domestic security concerns, as allowed under s. 281.346(3)(cm), Stats. The department may request any of the following with respect to open records requests seeking information on the locations of withdrawals, diversions, and infrastructure in order to address domestic security concerns:

(a) That the request be put in writing.

(b) The name, mailing address, telephone number, and email address of the party requesting information and the name of the company or organization that the party represents.

(c) The specific information requested.

(d) The reason the information is requested and how it will be used.

(3) In considering the public's interest in domestic security when reviewing requests submitted under sub. (2), the department may consider guidance and information from state and federal agencies and organizations with responsibility for domestic security and may place conditions on the use of the information, or may provide the requested information in a different format, when necessary to protect the public's interest in domestic security. The department shall explain its reasons for why conditions or special formats are necessary to protect the public's interest in domestic security in its response to the requester.

(4) Information provided by the department shall not include information at a scale more specific than the public land survey section level.

**NR 854.11 Requirements for Water Supply Service Area Plans in the Great Lakes Basin.**

(1) Beginning on December 8, 2011, the department may not approve a water supply service area plan under this chapter that provides for a new or increased withdrawal from the Great Lakes basin of at least 1,000,000 gallons per day for any 30 consecutive days or for any modification of an existing withdrawal not covered by a general permit under s. 281.346(4s) that equals at least 1,000,000 gallons per day for any 30 consecutive days unless the withdrawal meets state decision-making standard under s. 281.346(5m).

(2) Beginning on December 8, 2011, the department may not approve a water supply service area plan under this chapter that provides for a new or increased withdrawal from the Great Lakes basin of at least 10,000,000 gallons per day in any 30 consecutive days or for modification of an existing withdrawal that is not covered by a general permit under s. 281.346(4s) that equals at least 10,000,000 gallons per day for any 30 consecutive days unless the withdrawal meets compact decision-making standard under s. 281.346(6).

(3) A person who submits a water supply service area plan under this chapter that proposes a new withdrawal to which sub. (2) applies shall quantify the water loss from consumptive use using the procedures specified in ch. NR 142. If the person demonstrates that the water loss would average less than 5,000,000 gallons in every 90-day period, the state decision-making standard applies under s. 281.346(5m) rather than the compact decision-making standard under s. 281.346(6).

**NR 854.12 Department Review and Approval Process for a Water Supply Service Area Plan.** (1) The department shall issue a decision on a plan within 90 calendar days of receipt of a complete plan.

(2) The department may not approve a water supply service area plan unless all of the following apply:

(a) The plan is approvable under this chapter and other applicable statutes and rules based on the completeness of any of the following:

1. A cost-effectiveness analysis of regional and individual water supply and water conservation alternatives.

2. A demonstration that the plan will meet the water demand over the 20-year planning period with existing public water supply facilities.

(b) The plan includes the required contents of a plan as specified in s. NR 854.06.

(c) For plans that will be unable to meet the forecasted water demand within the public water supply service area for the 20-year planning period using existing water supply facilities and water supply, the plan shall include a cost-effective analysis and an assessment of environmental impacts of the water supply alternatives and include the selected alternative as specified in ss. NR 854.07 and NR 854.08.

(d) The plan is consistent with applicable comprehensive plans as defined in s. 66.1001(1)(a), any applicable areawide water quality management plans and any other plan specified under s. NR 854.06(8).

(e) A public participation process has been conducted as specified in s. NR 854.09.

(3) If the department determines that a plan is incomplete and additional information is necessary, the department shall provide the person submitting the plan with written notification of the additional information necessary for a complete plan. The person shall submit a revised plan no later than 90 calendar days after receiving the notification from the department.

(4) If a plan includes a withdrawal from the Great Lakes basin, the department shall specify a withdrawal amount for the public water supply system that is equal to the greater of the following:

(a) The amount needed to provide a public water supply in the water supply service area during the period of the plan, as determined using population and related service projections in the plan.

(b) If the withdrawal is covered by an individual permit issued under s. 281.346(5), Stats., the withdrawal amount in that permit when the department approves the plan, or if the withdrawal is covered by a general permit under s. 281.346(4s), Stats., the withdrawal amount in the permit when the department approves the plan.

(5) The department may not limit water supply service areas based on jurisdictional boundaries, except as necessary to prevent waters of the Great Lakes basin from being transferred from a county that lies completely or partly within the Great Lakes basin into a county that lies entirely outside the Great Lakes basin.

(6) The department's approval of a water supply service area plan shall not constitute department approval of the final design of new or enlarged water withdrawal facilities, water supply treatment facilities, or water supply distribution system facilities, including any water pressure booster stations, water pressure reducing stations, or storage reservoirs, identified or discussed in the plan. Department approval of new or enlarged facilities must be obtained in accordance with other applicable statutes and regulations. The plan shall comply with applicable requirements in statutes and rules for withdrawals of water from the waters of the state including ss. 281.34, 281.346, and 281.35., Stats., before the department can approve the plan, except for persons submitting plans that propose withdrawals specified in s. NR 854.09, who may receive a conditional plan approval as specified in s. NR 854.13.

**NR 854.13 Conditional Approval of a Water Supply Service Area Plan Providing for New or Increased Withdrawals Subject to State or Compact Decision-making Standards.** The department may only issue a conditional approval to an owner of a public water supply system who submits a water supply service area plan that proposes a new or increased withdrawal subject to the state or compact decision-making standard. The owner shall comply with the state or compact decision-making standard, public participation, and permitting processes specified in ch. NR 860. Following a public water supply system's compliance with the state or compact decision-making standard, the department may approve the water supply service area plan.

**NR 854.14 Revision of a Water Supply Service Area Plan.** (1) Revisions to a water supply service area plan shall be submitted in an application for review and approval by the department. Revisions that require department approval include modifications to the delineated water supply service area, water source alternatives, water demand projections, and environmental assessments. The department shall review and approve the revisions based on new information or amendments to the water supply service area plan. Proposed plan revisions are subject to the public participation process under s. NR 854.09.

(2) The department may reopen or reconsider a previously approved water supply service area plan or plan element if such action is deemed necessary to reflect state law or rules or changes therein; or when the department finds the plan or plan element conflicts with the department's responsibility to protect, maintain, and improve the quality and management of the waters of the state, ground or surface, public and private; or where the plan or plan element is found otherwise not to be in the public interest.

**NR 854.15 Enforcement** (1) Violations of this chapter may be prosecuted by the department under Ch. 281, Stats., and other applicable department authorities.

(2) Any violation of this chapter shall be treated as a violation of the statutes they interpret or under which they are promulgated.

(3) Violations may result in forfeitures, abatement of nuisance, and restoration.

(4) Failure to comply with the conditions of a permit or approval issued in accordance with this chapter may result in cancellation of the permit or approval.

**SECTION 2. EFFECTIVE DATE.** This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2) (intro.), Stats.

**SECTION 3. BOARD ADOPTION.** This rule was approved and adopted by the State of Wisconsin Natural Resources Board on

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Dated in Madison, Wisconsin \_\_\_\_\_

RESOURCES

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL

By

\_\_\_\_\_

Matthew J. Frank, Secretary

(SEAL)