

 **07hr\_SC-ENR\_CRule\_06-121\_pt02b**



(FORM UPDATED: 08/11/2010)

**WISCONSIN STATE LEGISLATURE ...  
PUBLIC HEARING - COMMITTEE RECORDS**

**2007-08**

(session year)

**Senate**

(Assembly, Senate or Joint)

**Committee on ... Environment and Natural  
Resources (SC-ENR)**

**COMMITTEE NOTICES ...**

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

**INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL**

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... **HR ... bills and resolutions** (w/Record of Comm. Proceedings)
  - (**ab** = Assembly Bill)                      (**ar** = Assembly Resolution)                      (**ajr** = Assembly Joint Resolution)
  - (**sb** = Senate Bill)                              (**sr** = Senate Resolution)                              (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

**77. Comment:** Does the term “lake” include flowages and constructed or augmented water bodies?(59)

**Response:** Chapter. NR 820 refers to lakes only in the context of whether the lake is an outstanding or exceptional resource water. Sections NR 102.10 and 102.11, Wis. Adm. Code, identifies the water bodies in the state that have been designated as outstanding resource waters and exceptional resource waters, respectively. The “lakes” identified in ch. NR 102 include natural lakes and flowages.

**78. Comment:** The definition of “high capacity well” in s.NR 820.12(11) should be clarified to reference a well’s pumping capacity. Thus, the draft would state that a high capacity well means “a well, that together with all other wells on the same property, has a pumping capacity of more than 100,000 gallons per day. (60)

**Response:** The definition of “high capacity well” is a statutory definition {s. 281.34(1)(b)}. The department interprets that definition to be referring to the pumping capacity of a given well.

**79. Comment:** “Outstanding and exceptional resource waters” should be defined in the rule and the rule should include a list of such waters, and/or note the DNR website and publications where a list of such waters can be located.(46, 60)

**Response:** A note has been added after s. NR 820.30(1)(a) indicating that a list of outstanding and exceptional resource waters is contained in ch. NR 102, Wis. Adm. Code, and including instructions for obtaining a copy of the rule. In addition, ch. NR 102 is available at the following internet address:

<http://www.legis.state.wi.us/rsb/code/nr/nr102.pdf>

## **Public Notice/Local Involvement**

**80. Comment:** Public notice provisions should be added to sections NR 820.30, 820.31, 820.32, and 820.33 to require the Department to give 30 days public notice and an opportunity for citizens to request a hearing before it approves a high capacity well near a protected lake, river, stream, or spring. At a minimum, the rule should include a process by which a concerned citizen or other party would be able to challenge or appeal the Department’s waiver of the Environmental Assessment process upon a finding of no significant adverse environmental impact. (11, 18, 26, 29, 30, 37, 62, 63, 73, 77, 78, 81, 84, 85, 86)

**Response:** The rule {ss. NR 820.30(4), 820.31(5) and 820.32(3)} includes publication of a news release for those well applications involving preparation of an environmental assessment. The department does not believe that public notice and explicit opportunity to request a hearing are necessary for other well applications. Such a requirement would unnecessarily lengthen the approval time for these wells. Finally, ss. 227.42 and 227.52, Stats., already allow for contested case hearings and judicial review of department decisions, including issuance of high capacity well approvals.

**81. Comment:** DNR should be required to work with the local government and get approval before issuing a high capacity well approval (16)

**Response:** There is no statutory basis for requiring consultation with and concurrence of local units of government as part of the approval process for high capacity wells. Requiring local government consultation and concurrence would be inconsistent with the approval process contemplated in the statutes. Decision-making authority for issuance of high capacity well approvals lies solely with the department while control over land use issues generally rests with local units of government.

## **Pumpage Reporting**

**82. Comment:** Section NR 820.13 should be clarified. It is not clear if it applies to a property with pumping capacity of greater than 100,000 gallons per day or single wells with that capacity. The rule should specify the actual methods of data collection and reporting. (34)

**Response:** Section NR 820.13 applies to all owners of high capacity wells. This would include owners of any wells that are classified as high capacity wells which by definition include any well on a property with a combined pumping capacity of greater than 100,000 gallons per day. The individual pumping capacity of a high capacity well can be less than 100,000 gallons per day. The acceptable methods of collecting and reporting the pumping data will be provided to owners through distribution of program guidance.

**83. Comment:** Current and future high capacity wells should be required to monitor static and pumping water level and also water quality. More detailed monitoring of water usage should be required in addition to monthly pumping data. (39, 50, 53, 55)

**Response:** The statutes {sections 281.34(5)(e)2 and 281.34(6)(a)} only require owners of high capacity wells to submit annual pumping data. The department does not have the authority to broadly require collection and submittal of water level data for each high capacity well. However, under ch. NR 820, the department could require this type of monitoring as a condition of approval for wells within groundwater protection areas, near a spring or involving high water loss if such information were necessary to document stream flow or lake level conditions in the vicinity of the well. In addition to requiring static and pumping water level, which is of limited value in terms of monitoring environmental conditions, the department could also require installation of dedicated observation wells to monitor groundwater conditions.

The department does not have statutory authority to require ongoing water quality monitoring for high capacity wells, other than those wells which are part of a public water supply.

## **General**

**84. Comment:** I think we need a more concerted effort to study water problems in Wisconsin and develop extensive policies and regulations to assure that we have water for years to come. At this point in time massive amounts of water can be pumped from our lakes without obtaining a permit, as was the recent case of water pumped from Twin Lake in Waushara County. We have fertile soil in landbanks that do not need extensive use of high volume water pumps to be productive, this is an issue that needs to be reviewed. Get the sandy soil into the landbanks or plant trees that do not need mass quantities of water to be productive. (8)

**Response:** Comment noted. The department understands the concerns expressed but does not have the authority to act on the suggestions. Further, ch. NR 820 would not apply to withdrawal of water directly from a lake. Such withdrawals are subject to restrictions and requirements imposed under ch. 30, Stats., and related administrative rules.

85. **Comment:** I agree with ch. NR820 and the role that the DNR is taking on this important issue. Even if only a few other states feel it is important, I definitely recommend that Wisconsin addresses this issue. (17)

**Response:** Comment noted.

86. **Comment:** Although the Great Lakes are not specifically covered by NR 820, our concern is that high-volume wells could take water from an aquifer that feeds the lakes and divert it out of the Great Lakes Basin. We urge you to consider this before approving the regulation. We encourage further research into aquifers in the state to determine where their water comes from and goes.(24)

**Response:** Comment noted. The department is fully aware of the issues related to potential diversion of water from the Great Lakes and will continue to place a high priority on protection of the Great Lakes.

87. **Comment:** I am concerned about the waste generated by all of the plastic used in bottled water. I would like all those involved to consider adding the bottled water industry into the soda/beer recycling efforts. With a deposit on these bottles consumers would consider re-use or alternate sources of water thus reducing the waste flow of plastic and providing an additional source of plastic for recycling.(15)

**Response:** Comment noted. Issues related to recycling of plastic water bottles fall outside of the realm of the laws pertaining to regulation of high capacity wells.

88. **Comment:** I would like to know who appointed this group (Groundwater Advisory Committee) and why interests representing the tourism or lakes are not represented. It appears that this group is strongly slanted toward agricultural, commercial, industrial and municipal interests. (34)

**Response:** 2003 Wisconsin Act 310 created the Groundwater Advisory Committee and provided explicit direction in regard the composition of the committee and the appointment of its members. Following is the specific language from Act 310:

*(b) There is created a groundwater advisory committee consisting of the following members:*

- 1. Three persons appointed by the governor.*
- 2. Four persons appointed by the speaker of the assembly.*
- 3. Four persons appointed by the majority leader of the senate.*
- 3g. One member appointed by the minority leader of the assembly.*
- 3r. One member appointed by the minority leader of the senate.*
- 4. The secretary of natural resources or the secretary's designee.*

*(c) Each appointing authority under paragraph (b) 2. and 3. shall appoint one member representing each of the following interests:*

- 1. Industrial.*
- 2. Agricultural.*
- 3. Environmental.*

4. *Municipal.*

*(cm) The governor shall appoint one member of the groundwater advisory committee representing well drillers.*

*The governor, the minority leader of the assembly, and the minority leader of the senate shall consult regarding the other 4 appointees under paragraph (b) 1., 3g., and 3r. to ensure that one represents each of the interests under paragraph (c) 1. to 4.*

89. **Comment:** As owners of lakefront property, please know that it is our wish that you do all in your power to protect Wisconsin's lakes from the impact of high-capacity wells. (27)

**Response:** Comment noted.

90. **Comment:** Should our lakes dry up from the environmental changes and very loosely regulated pumping of water, our Counties and the State of Wisconsin will lose: 1) a great deal of revenue from the declining property values 2) a substantial amount of tourism 3) many of its natural resources that bring people to this state and make Wisconsin the wonderful place it is today. (31, 66)

**Response:** Comment noted. The department believes that ch. NR 820 will be effective in minimizing impacts due to high capacity wells on springs, trout streams, outstanding resource waters and exceptional resource waters.

91. **Comment:** Section NR 820.10 – Change the wording in the first sentence to replace “so extreme” with “such” or “great enough”. (42, 77)

**Response:** The rule has been revised as suggested. In addition, a reference to s. 281.34(9)(a), Stats., has been added so it is clear that designation of groundwater management areas is based on the criteria specified in the statutes (i.e., areas where groundwater levels have declined by at least 150 feet due to pumping).

92. **Comment:** Section NR 820.30(2), line 3, seems to be missing some words or have added words; as currently crafted this clause does not make sense. (59)

**Response:** The verbiage in the rule is correct, but the sentence was missing a comma. The rule has been modified.

93. **Comment:** Section NR 820.33 has several repetitions of the word “include” that make interpretation of the meaning of this section difficult at best. Rephrasing the central portion of this section is strongly recommended prior to any proposed adoption. (59)

**Response:** Section NR 820.33 has been modified to improve its clarity.

94. **Comment:** The Department has the statutory authority to provide exemptions from the definition of high capacity wells in order to address inequities created by 2003 Wisconsin Act 310. The rule should develop the concept of “actual capacity” to recognize that some types of wells—although deemed high capacity wells under a narrow reading of the statute—will not function as such or will only be used sparingly. Wisconsin Act 310 includes many wells that would not normally be considered high capacity wells but, through guilt by association, are deemed high capacity wells because they are on property where actual high capacity wells are located. Examples include residential wells and wells to be only used sporadically. In such a manner, the Department would be recognizing that the “actual capacity” of the well is

in reality smaller than the statutory definition. Applications for such wells would only require a \$50 application fee rather than \$500, and the wells would also be exempt from the onerous application requirements associated with groundwater protection areas. (60)

**Response:** The comment is accurate in stating that some wells, such as a residential well on a high capacity property, are considered high capacity wells even though they pump a small quantity of water. Section 281.34(1)(b), Stats., defines high capacity well as “a well that, together with all other wells on the same property, has a capacity of more than 100,000 gallons per day.” It should also be pointed out that the definition of “high capacity well” in 2003 Wisconsin Act 310 originally defined a high capacity well as “a well that, together with all other wells on the same property, has a capacity and rate of withdrawal of more than 100,000 gallons per day” but the underlined phrase was vetoed in the final version of the law. The department does not have the discretion to change that definition by rule. Therefore, the department cannot create the concept of “actual capacity” suggested in the comment.

In regard to the portion of the comment pertaining to fees, s. 281.34(2), Stats., requires that all applicants seeking approval for construction of a high capacity well pay a fee of \$500. As above, the department lacks statutory authority to waive or change the fee that is imposed on applicants for approval of a high capacity well.

95. **Comment:** Sufficient funding must be made available to implement policies to protect water resources from the impacts from high capacity wells. (87)

**Response:** Comment noted.

### **Legislative Council Rules Clearinghouse Comments**

96. **Comment:** Section 281.34 (4) (a), Stats., provides that the Department of Natural Resources must review an application for approval of certain high capacity wells using the environmental review process contained in its rules promulgated under s. 1.11, Stats. Sections NR 820.30 (2) and 820.31 (3) appear to provide for approval of certain high capacity wells without using the environmental review process contained in the department’s rules promulgated under s. 1.11, Stats. If this is the case, what is the statutory authority for the approach taken in the rule provisions? Or, can these rules be categorized as the result of the broad application of the environmental review process, in accordance with the statutes, to situations of minor environmental impact?

**Response:** See the response to Comment 12. The department is committed to reviewing the environmental implications of all high capacity well application near springs and within groundwater protection areas. The review process enumerated in ch. NR 820 is consistent with the environmental review process contained in the department’s rules promulgated under s. 1.11, Stats., Chapter NR 150.

97. **Comment:** In s. NR 820.12, the introductory material should be deleted and replaced with “In this chapter:”. [See s. 1.01 (7) Manual.]

**Response:** The rule has been revised accordingly.

98. **Comment:** In s. NR 820.12 (13) Note, the notation "Stats.," and appropriate surrounding punctuation should be removed from the quoted material in order to accurately reflect the text of the statutes. [See also s. NR 820.12 (22).]

**Response:** The rule has been revised accordingly.

99. **Comment:** In s. NR 820.20 (1) (intro.), the first sentence should conclude with a colon and the second sentence, appropriately redrafted, should be placed in a new sub. (2). Further, in the second sentence, how is a local governmental unit explicitly excluded? If the exclusion is referring to the exceptions provided in sub. (1) (a) 6. and 7., than the phrase is unnecessary. If a local governmental unit is explicitly excluded by some other process, than the rule should state how the exclusion occurs.

**Response:** The rule has been revised accordingly.

100. **Comment:** In s. NR 820.30 (1) (intro.), "all of" should be inserted before "the following." In sub. (1) (a), it appears that "identified under s. 281.15, Stats.," should be inserted after "outstanding resources waters," and "exceptional resource waters." The entire rule should be checked for this problem. In sub. (1) (b), "class 1, 2, or 3" should be inserted before "trout stream." The same problem occurs in sub. (1) (e), and the entire rule should be checked for this problem. In subsections (1) (a) to (d), articles should be inserted at the beginning of the subsections; for example, in sub. (1) (a), "The" should be inserted before "Name." In sub. (3) (a) 5., "could" should be changed to "may."

**Response:** The rule has been revised accordingly.

101. **Comment:** In s. NR 820.30 (2), the introduction should be renumbered as par. (a); the reference to pars. (a) to (d) should be replaced by a reference to pars. (b) to (e); and pars. (a) to (d) should be renumbered pars. (b) to (e). Similar comments apply to s. NR 820.31 (3).

**Response:** The rule has been revised accordingly.

102. **Comment:** Section NR 820.30 (4) should begin with the phrase "all of." A similar comment applies to s. NR 820.31 (5).

**Response:** The rule has been revised accordingly.

103. **Comment:** In s. NR 820.31 (5), the subsection beginning with "Following receipt..." should be numbered as par. "(c)," and the remaining paragraphs should be renumbered accordingly.

**Response:** The rule has been revised accordingly.

104. **Comment:** The entire rule should be reviewed for the use of consistent terminology. For example, although the term “well” is defined in both the statutes and in the rule, it appears that in many cases the rule is referring to another defined term, “high capacity well.” Also, s. 281.34, Stats., in a number of places refers to a “significant environmental impact.” However, the rule in numerous places refers to a “significant adverse environmental impact” and also defines the term. If there is a purpose to making use of the additional word “adverse” the department should explain that purpose.

**Response:** The rule has been reviewed and revised as needed.

105. **Comment:** Section NR 820.13 (1) refers to forms provided by the department. The department should ensure that the requirements of s. 227.14 (3), Stats., are met.

**Response:** Comment noted. A note has been added to the rule indicating that reporting forms will be sent to owners of high capacity wells each year and also providing instructions for requesting a copy of the form.

106. **Comment:** In s. NR 820.30 (7), a more specific citation should be used instead of “ch. 280, Stats.”

**Response:** The rule was not changed. This section of the rule is structured after s. 281.34(8)(d), Stats., which also includes this broad reference to ch. 280.

107. **Comment:** In the plain language analysis section of the rule analysis, in the second paragraph, “trout stream” should be changed to “trout streams.” In the effect on small business section of the rule analysis, “Department” should be changed to “department.”

**Response:** The rule has been revised accordingly.

108. **Comment:** In the table of contents for the newly created ch. NR 820, the description of the title for s. NR 820.20 is not consistent with the title in the text of the rule.

**Response:** The rule has been revised accordingly.

109. **Comment:** In s. NR 820.10, it appears that the second sentence should be rewritten to read: “...outstanding resource waters, and exceptional resource waters and involving groundwater withdrawals with high water loss.”

**Response:** The rule has been revised accordingly.

110. **Comment:** In s. NR 820.11, “utility district” should be changed to “utility districts.” In the last sentence, both instances of the word “that” should be changed to “who.”

**Response:** The rule has been revised accordingly.



111. **Comment:** In s. NR 820.12 (2), “is” should be inserted before “classified.” This problem also occurs in subs. (3) and (4). In sub. (3), a comma should be inserted after “next.” In sub. (13), the extra parentheses around “(c)” should be deleted.

**Response:** The rule has been revised accordingly.

112. **Comment:** In s. NR 820.13 (1), “methods and forms provided by the department” is vague. The “methods” the department will use should be clarified, and a note indicating where and how the forms can be obtained should be added. In sub. (3), the “method prescribed by the department” should be clarified in the rule. This problem also occurs in sub. (4). Also in sub. (4), it appears that the terms “individual capacity to withdraw,” “maximum pumping capacity,” and “individual maximum pumping capacity” are intended to refer to different things, but it is unclear what each term means. Can the department clarify this provision?

**Response:** The department clarified the wording of sub. (4). A note has been added to the rule indicating that the methods and forms used for annual reporting of pumping data will be provided to all owners of high capacity wells.

113. **Comment:** In s. NR 820.30 (1) (e), it appears that the first occurrence of the word “and” should be replaced by a comma. Also, in pars. (g) and (h), why are the phrases “or level” and “and level” used in view of the definition of the term “80% exceedance flow” in s. NR 820.12 (7)?

**Response:** The rule has been revised accordingly.

114. **Comment:** In s. NR 820.30 (2) (intro.), can the department clarify what “conditions to ensure that the well will not result in significant adverse environmental impacts” will include? In sub. (4) (d), can the department clarify what “critical resources” and “critical aquatic resources” include?

**Response:** Section NR 820.30(2)(intro) has been revised to indicate the types of conditions that could be incorporated into an approval to ensure that significant environmental impacts will not occur as a result of construction and operation of the proposed well. The department did not revise the rule to clarify “critical resources” and “critical aquatic resources”. The determination of what constitutes a critical resource will be made on a case-by-case basis and is dependent on the specific nature of the water body.

115. **Comment:** In s. NR 820.31 (5) (c), it appears that the phrase “at least” should be inserted before the number “80%.”

**Response:** The rule has been revised accordingly.

## **Individuals/Organizations Providing Comments on Proposed Ch. NR 820**

1. Raymond & Ann Powers, Long Lake, Waushara County
2. Cris van Houten, President, Huron Lake Association, Waushara County
3. Barbara Le Duc, Fall Creek, WI
4. Green Bay Chapter of Trout Unlimited, Paul Kruse, Green Bay, WI
5. Mr. & Mrs. James Pace, Long Lake Association
6. Carol Nichols, Twin Lake, Springwater Township, Waushara County
7. Richard Kronzer, Solon Springs, WI
8. Jim Johnson, Fond du Lac
9. Steve Hoppman, Fond du lac, WI
10. Lynn Markham, Stevens Point
11. Sandy Gillum, Eagle River, WI
12. Eric Andersen, Kaukauna WI
13. Sam Lewis, President, Lake Nancy Protective Association, Washburn County
14. John M. Coughlin, Bass Lake Rehabilitation District in St. Croix County, WI
15. Daniel Medow, Huntington Woods, MI
16. Richard Nowacki, Pewaukee, WI
17. Joseph A. Homel, P.E., President, Anderson Lake Association
18. Terri Lyon, Kiel, WI
19. Scott Schara
20. Charles Webb, Twin Lake Association President, Waushara County
21. Jim & Cheryl Congdon, Solon Springs, WI
22. Dennis Clear, Plainfield, WI
23. Connie Norton and Wendy Billington, Huron Lake , Waushara County
24. Wisconsin Great Lakes Coalition, Jim Te Selle, President,
25. Linda Clear, Long Lake, Waushara County
26. Laura Novak, South Milwaukee, WI
27. William & Maureen Murley, Westfield, WI
28. Ann Berglund, Spooner, WI
29. Wisconsin Association of Lakes, Peter T. Murray, Executive Director,
30. Shawn Nead, Cedarburg, WI
31. Tony Wagner, Twin Lake, Waushara County
32. Russ Romanelli
33. Gary & Karen Kirschke, Plainfield WI
34. Tom Catlin, Waupaca, WI
35. Susan Knight, Boulder Junction, WI
36. Jack Burkart, President Crystal Lake Advancement Assoc., Sheboygan County
37. Marcia Loofboro, Supervisor Town of Sampson, Chippewa County, WI
38. Bruce Paterson, Huron Lake, Waushara County
39. Sierra Club – Chippewa Valley Group, Barbara Thomas, Menomonie, WI
40. Jacob Barnes, Amherst, WI
41. Byron Shaw, Stevens Point, WI
42. George Kraft, UW-Stevens Point
43. Charles Lemke, Fort Atkinson, WI
44. Jim & Darlene Jakusz
45. Golden Sands Resource Conservation & Dev. Area, Amy Thorstensen, Stevens Point, WI
46. Citizens for Safe Water Around Badger, Laura Olah, Merrimac, WI
47. Friends of Milwaukee's Rivers, Cheryl Nenn, Milwaukee, WI
48. Kim McCarthy, Wisconsin Trout Unlimited – Northeast Region, Green Bay, WI
49. Brian Wolf, Kenosha, WI

50. Charles Nichols, Fond du Lac, WI
51. Steve Barber, Phantom Lake Management District, Waukesha, WI
52. Paul Didier, Lake Beulah Protective & Improvement Assn., Middleton, WI
53. Dan Trudell, Huron Lake Association, Oregon, WI
54. River Alliance of Wisconsin, Michael Engleson, Madison, WI
55. Neil Koch, Menomonie, WI
56. Jacob Koivisto, Trout Unlimited – Green Bay Chapter, Green Bay, WI
57. Kathy Powell, Portage County
58. Michael Hinrichs, Friends of Tomorrow River, Portage County
59. Jeffrey A. Thornton, Waukesha, WI
60. Wisconsin Water Well Association, Curt Pawlisch
61. John Jansen, Waukesha, WI
62. John Lammers, Mukwonago, WI
63. Midwest Environmental Advocates, Jodi Habush Sinykin, Milwaukee, WI
64. Alan Drum, Presque Isle, WI
65. Michael Mather, Trout Unlimited – Frank Hornberg Chapter
66. Meg Marshall, Eau Claire, WI
67. Kristin Charlton, Lake Eau Claire
68. Tim Fox, Brooklyn, WI
69. Jerry & Kathryn Lester, Slinger, WI
70. Polk County (Land and Water Resources Dept. and Land Information Department)
71. St. Croix County (Land Water Conservation Committee, Planning and Zoning Committee, Land and Water Conservation Dept., Planning and Zoning Dept.)
72. Virginia Laughrin, Hilbert, WI
73. Paul Schumacher, Clark Lake Advancement Association
74. John Council, Appleton, WI
75. Wendell Kumlien, Mukwonago, WI
76. Ronald Roberts, Long Lake District, Neenah, WI
77. Clean Wisconsin, Will Hoyer, Madison, WI
78. Sawyer County Lakes Forum, Chris Jeffords, Hayward, WI
79. Lars Graf, Kohler, WI
80. Jessica Rice, Summit, WI
81. Ed Kissinger, Wautoma, WI
82. Spencer Schroeder, Wood Lake (Marquette County)
83. Wisconsin Realtors Association, Thomas Larson, Madison, WI
84. Lake Beulah Management District, William Scott, Milwaukee, WI
85. Sierra Club – John Muir Chapter, Carla Klein, Madison, WI
86. Nate Rice, Oconomowoc, WI
87. Barb Follett Schweger, Coloma, WI
88. Mary Luhman, Eau Claire, WI
89. Nancy Turyk, Amherst, WI
90. Barb Feltz, Stevens Point, WI
91. Jo Seiser, Stevens Point, WI
92. Adams County Planning & Development Committee, Al Sebastiani, Adams, WI



**Fiscal Estimate — 2007 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 Ch. NR 820

Subject  
 Proposed Ch. NR 820, Groundwater Quantity Protection

**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"/> Increase Costs — May be possible to absorb within agency's budget. <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Decrease Existing Appropriation	<input type="checkbox"/> Decrease Existing Revenues	
<input type="checkbox"/> Create New Appropriation	<input type="checkbox"/> Decrease Costs	

Local:  No Local Government Costs  
 Indeterminate

1. <input type="checkbox"/> Increase Costs <input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory	3. <input type="checkbox"/> Increase Revenues <input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory	5. Types of Local Governmental Units Affected: <input type="checkbox"/> Towns <input type="checkbox"/> Villages <input type="checkbox"/> Cities <input type="checkbox"/> Counties <input type="checkbox"/> Others _____ <input type="checkbox"/> School Districts <input type="checkbox"/> WTCS Districts
2. <input type="checkbox"/> Decrease Costs <input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory	4. <input type="checkbox"/> Decrease Revenues <input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory	

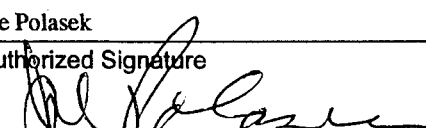
Fund Sources Affected <input type="checkbox"/> GPR <input type="checkbox"/> FED <input checked="" type="checkbox"/> PRO <input type="checkbox"/> PRS <input type="checkbox"/> SEG <input type="checkbox"/> SEG-S	Affected Chapter 20 Appropriations
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**Assumptions Used in Arriving at Fiscal Estimate**

2003 Wisconsin Act 310, enacted in April 2004, substantially expands the Department's authority over proposed high capacity wells. Act 310: authorizes the Department to include consideration of impacts to certain sensitive water resources; requires annual reporting of groundwater pumping from high capacity wells; and directs the Department to designate two groundwater management areas. The proposed rule implements those provisions of 2003 Wisconsin Act 310.

The proposed rule does not create any processes or requirements that were not contemplated and evaluated at the time that Act 310 was enacted. The fiscal impacts associated with Act 310 were recognized by the Legislature; there are no additional state or local government fiscal impacts associated with this proposed rule.

Long-Range Fiscal Implications  
 None

Prepared By: Joe Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 02/14/2007

**Fiscal Estimate — 2007 Session**

**Page 2 Assumptions Narrative  
Continued**

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number

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Assumptions Used in Arriving at Fiscal Estimate - Continued

**Fiscal Estimate Worksheet — 2007 Session**  
 Detailed Estimate of Annual Fiscal Effect

- Original       Updated  
 Corrected     Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number

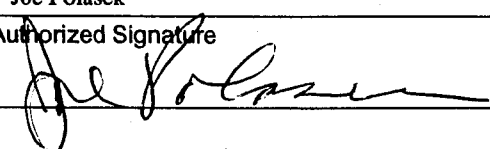
Subject  
 Proposed Ch. NR 820, Groundwater Quantity Protection

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):  
 None.

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:	Telephone No.	Agency
Joe Polasek	266-2794	Department of Natural Resources
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
	266-2794	02/14/2007

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCE BOARD  
CREATING RULES

The Wisconsin Natural Resource Board proposes an order to create ch.NR 820 pertaining to annual reporting of groundwater pumping information from high capacity wells, designation of groundwater management areas, environmental review of high capacity well applications for impacts on groundwater protection areas and springs and evaluation of wells with greater than 95% water loss.

DG-37-06

Analysis Prepared by the Department of Natural Resources

**Statutes Interpreted:** Section 281.34, Stats.

**Statutory Authority:** Sections 281.12, 281.34 and 227.11 (2) (a), Stats.

**Explanation of Agency Authority:** The Department of Natural Resources has been designated as the state agency with general supervision and control over the waters of the state, including groundwater. 2003 Wisconsin Act 310, enacted in April 2004, expands the Department's authority over high capacity wells to include consideration of impacts to certain sensitive water resources, explicitly requires annual reporting of groundwater pumping and directs the department to designate two groundwater management areas. The proposed rule implements the provisions of 2003 Wisconsin Act 310.

**Related Statute or Rule:** Chapters NR 812, 102 and 150.

**Plain Language Analysis:** Under the proposed code, all owners of high capacity wells will be required to submit annual pumping reports to the department. The rule also establishes the areal extent of two groundwater management areas, one in the southeast part of the state and another in the northeast part of the state. The two areas include the entire area of each city, village and town in which the level of the underlying groundwater has dropped by at least 150 feet as a result of groundwater pumping.

Proposed Ch. NR 820 establishes processes and criteria to guide the review of proposed high capacity wells near springs, trout streams, outstanding resource waters (ORW) and exceptional resource waters (ERW). The rule includes screening criteria that will be used to determine the necessary level of environmental review for wells that are proposed to be located near springs or within a groundwater protection area (within 1200 feet of a trout stream, ORW or ERW). Applicants for high capacity wells near springs or in groundwater protection areas will be required to submit information to demonstrate that the proposed well will not result in significant adverse environmental impact to the surface water resource. When it is determined that a proposed high capacity well could result in a significant adverse environmental impact, the applicant may be required to submit an environmental impact report and the department will prepare an environmental assessment prior to approving or denying the proposed well. Any approval issued for a high capacity well near a spring or within a groundwater protection area must include conditions to ensure that significant adverse environmental impact does not result from construction and operation of the well. Similarly, the proposed rule requires that the department prepare an environmental assessment for any high capacity well that has a water loss of greater than 95%. In addition, the department must include conditions in its approvals to ensure that wells with high water loss do not result in significant adverse environmental impact to nearby water resources.

**Federal Regulatory Analysis:** There are no comparable federal regulations pertaining to groundwater withdrawals.

**Analysis of Similar Regulations in Adjacent States:** Iowa, Michigan and Minnesota all require their larger quantity groundwater users to submit annual summaries of the volume of groundwater used. In addition to requiring pumping information, Minnesota and Michigan each also assess an annual reporting fee.



The states vary in terms of how they evaluate impacts to surface waters as result of groundwater withdrawals. Illinois does not have specific requirements in place to consider such impacts.

Iowa places conditions on groundwater withdrawals to minimize impacts to surface water. Specifically, for withdrawals from unconfined aquifers adjacent to a stream with a drainage basin less than 50 square miles, withdrawals within ¼ mile of a stream cannot exceed 200 gallons per minute. In addition, any withdrawals within 1/8 of a mile from any stream shall cease when the stream flow is below the designated "protected flow". Finally, for streams with a drainage basin greater than 50 square miles, withdrawals between 1/8 and ¼ mile from the stream shall cease when the stream flow is at or below the 7Q10 flow (the lowest 7-day average flow that occurs (on average) once every 10 years).

Michigan may not approve a large quantity groundwater withdrawal if the withdrawal would cause an "adverse resource impact" to a designated trout stream and beginning in the spring of 2008 may not approve a large quantity withdrawal if the withdrawal would cause an adverse resource impact to any stream. The recently enacted statute directs the Michigan regulatory agencies to develop a water withdrawal assessment screening tool by July 2007 which will be used to determine whether or not proposed wells can go forward without further review by the agency. The screening tool will consider the fishery value of the stream, the proposed pumping rate and schedule, the low flow characteristics of the stream and the nature of the groundwater flow system near the stream. In the absence of the assessment tool, it is presumed that a withdrawal will not cause adverse resource impacts if the well is located more than 1,320 feet from a stream or the well is at least 150 feet in depth.

Minnesota conducts an environmental review of proposed commercial and industrial groundwater appropriations that average 30 million gallons per month (~700 gallons per minute) and proposed appropriations that will be used to irrigate 540 or more acres. This review would include an assessment of the possible impacts to surface waters as a result of groundwater withdrawal and could lead to limitations being placed on the appropriation. Minnesota does not have definitive quantitative criteria to judge when an impact is significant, rather it is a subjective assessment based on the professional judgment of the review staff. Minnesota also has the ability to limit existing groundwater appropriations if it is determined that there is a direct relationship between the ground and surface water such that adverse impacts would result. The decision to suspend a groundwater appropriation would be made on a case-by-case basis taking into consideration site-specific information and concerns. To date few, if any, such suspensions have been issued.

**Summary of the Factual Data and Analysis that Support the Proposed Rule:** 2003 Wisconsin Act 310 recognizes the interrelation between groundwater and surface waters and contemplates a process through which the department can evaluate proposed high capacity wells to identify, evaluate and minimize the impacts of such wells on important surface water resources. The proposed rule includes screening criteria to assist the department in identifying those high capacity wells that can be approved without conducting a detailed review of the potential impacts to related water resources. Generally, the screening criteria consider the relative ratio of the proposed pumping capacity to the low flow or level conditions of the nearby water body or spring. The department believes that a comparison of the proposed pumping rate with the low flow conditions of the water body provides for a conservative assessment of the potential impacts from the well. When the proposed pumping capacity constitutes a relatively small percentage of the water balance of the water body, the proposed high capacity well can proceed through the approval process without a detailed assessment of potential impacts to surface waters. Otherwise, a more detailed review will be required and in some cases an environmental assessment will be prepared.

The areas making up the groundwater management areas are based on results of modeling by the U.S. Geological Survey and other researchers that evaluate the extent of drawdown and related impacts from groundwater pumping that have developed since the settlement of the eastern portion of the state. The models depict portions of the state that have experienced lowering of regional groundwater levels of several hundred feet. The department used the model results to determine those areas in which

groundwater levels have been reduced by at least 150 feet and, as required under Act 310, has designated those areas as two separate groundwater management areas.

**Analysis and Supporting Documentation in Support of the Determination of the Rule's Effect on Small Business:** High capacity wells are owned by a wide range of entities including individuals, municipalities, other units of government, large corporations and small businesses. The review and approval processes specified in the proposed rule for high capacity well applications submitted by small businesses are the same as those for applications submitted by any other applicant. While the proposed rule creates a screening process to identify those high capacity wells that will be subject to more comprehensive evaluation, the criteria are related to the characteristics of the proposed well rather than the nature of the owner. The potential impacts on small businesses will be the same as the impacts experienced by other applicants. It is anticipated that only a small number of high capacity well applications will require an extensive environmental review and only a few of those will involve small businesses. Therefore, the proposed rule will not have a significant impact on a substantial number of small businesses.

**Effect on Small Business:** Any entity, including small businesses, proposing to construct a high capacity well must receive approval from the department prior to beginning construction. If the proposed high capacity well is located in a groundwater protection area, near a spring, or involves an activity with high water loss additional information must be submitted with the application. In addition, the proposal may be subject to an extensive environmental review to determine whether placement of the well would cause significant adverse environmental impact. The environmental review will result in a longer review period and may result in increased review and approval costs, potential alteration of well construction and operation plans, or in some cases, approval being denied for the construction of high capacity wells. However, these requirements are necessary to ensure protection of springs, trout streams and other valuable surface water resources.

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**SECTION 1. Chapter NR 820 is created to read:**

**Chapter NR 820  
GROUNDWATER QUANTITY PROTECTION**

**Subchapter I – General Provisions**

- NR 820.10 Purpose
- NR 820.11 Applicability
- NR 820.12 Definitions
- NR 820.13 High Capacity Wells Annual Pumping Reports

**Subchapter II – Groundwater Management Areas**

- NR 820.20 Groundwater Management Area Designation

**Subchapter III – Environmental Review of High Capacity Well Applications**

- NR 820.29 Review Periods
- NR 820.30 High Capacity Wells in Groundwater Protection Areas
- NR 820.31 High Capacity Wells near Springs
- NR 820.32 Projects with High Water Loss
- NR 820.33 Public Utility Wells

## **Subchapter I - General Provisions**

**NR 820.10 Purpose.** The purpose of this chapter is to designate areas of the state, consistent with s. 281.34(9)(a), Stats., in which impacts from groundwater drawdown and pumpage are such that regional planning and management is necessary to avoid, minimize and manage future impacts. This chapter also establishes review criteria applicable to high capacity well applications involving wells situated near springs, trout streams, outstanding resource waters, and exceptional resources waters, and involving groundwater withdrawals with high water loss.

**NR 820.11 Applicability.** This chapter applies to all counties, cities, towns, villages, utility districts under s. 66.0827, Stats., that provide water, public inland lake protection and rehabilitation districts that have town sanitary district powers under s. 33.22(3), Stats., joint water authorities created under s. 66.0823, Stats., and municipal water districts under s. 198.22, Stats. This chapter also applies to persons who are owners of high capacity wells and high capacity well systems including persons that propose to construct a high capacity well.

**NR 820.12 Definitions.** In this chapter:

(1) "Approval" means an approval issued by the department under s. 281.17(1), 2001 Stats., s. 281.34(2) or 281.41, Stats., prior to construction of a high capacity well.

(2) "Class 1 trout stream" means a stream, portion of a stream or a farm drainage ditch with a prior stream history that contains a self-sustaining population of trout and is classified as such in Wisconsin Department of Natural Resources publication PUB-FH-806 2002, Wisconsin Trout Streams. Farm drainage ditches that support self-sustaining populations of trout but do not have a prior stream history are not trout streams for purposes of this chapter.

Note: Copies of this document may be obtained from the Department of Natural Resources, Bureau of Fisheries Management and Habitat Protection, 101 South Webster Street, Natural Resources Building, PO Box 7921, Madison, Wisconsin 53707-7921.

(3) "Class 2 trout stream" means a stream, portion of a stream or a farm drainage ditch with a prior stream history that contains a population of trout made up of one or more age groups, above the age one year, in sufficient numbers to indicate substantial survival from one year to the next, but in which stocking is necessary to fully utilize the available trout habitat or to sustain the fishery and is classified as such in Wisconsin Department of Natural Resources publication PUB-FH-806 2002, Wisconsin Trout Streams. Farm drainage ditches that meet these criteria but do not have a prior stream history are not trout streams for purposes of this chapter.

(4) "Class 3 trout stream" means a stream or portion of a stream that has marginal trout habitat with no natural reproduction of trout occurring, requiring annual stocking of trout to provide trout fishing, and generally without carryover of trout from one year to the next and is classified as such in Wisconsin Department of Natural Resources publication PUB-FH-806 2002, Wisconsin Trout Streams. Farm

drainage ditches that meet these criteria but do not have a prior stream history are not trout streams for the purpose of this chapter.

(5) "Consumptive use coefficient" has the meaning specified in s. NR 142.02(4).

Note: s. NR 142.02(4), Stats., defines "consumptive use coefficient" to mean "a constant numerical measure, as determined under s. NR 142.04(1) to (4) which is used to determine the consumptive use portion of a facility's withdrawal".

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

(7) "80% exceedance flow" means the flow in a stream that, based on statistical probability, will be exceeded 80% of the time on an annual basis.

(8) "Groundwater management area" means a multi-jurisdictional area including towns, cities, villages and counties within which the level of the groundwater potentiometric surface in any of its underlying aquifers has been reduced by 150 feet or more from the level at which the potentiometric surface would be if no groundwater withdrawals had occurred.

(9) "Groundwater protection area" has the meaning specified in s. 281.34(1)(a), Stats.

Note: s. 281.34(1)(a), Stats., defines "groundwater protection area" to mean "an area within 1,200 feet of any of the following:

- (a) An outstanding resource water identified under s. 281.15 that is not a trout stream.
- (b) An exceptional resource water identified under s. 281.15 that is not a trout stream.
- (c) A class 1, class 2, or class 3 trout stream, other than a class 1, class 2, or class 3 trout stream that is a farm drainage ditch with no prior stream history as identified under sub. (8)(a).

(10) "High capacity property" has the meaning specified in s. NR 812.07(52).

Note: s. NR 812.07(52) defines "high capacity property" to mean "one property on which a high capacity well system exists or is to be constructed."

(11) "High capacity well" has the meaning specified in s. 281.34(1)(b), Stats.

Note: s. 281.34(1)(b), Stats., defines "high capacity well" to mean "a well that, together with all other wells on the same property, has a capacity of more than 100,000 gallons per day."

(12) "High capacity well system" has the meaning specified in s. NR 812.07(53).

Note: s. NR 812.07(53) defines "high capacity well system" to mean "one or more wells, drillholes, or mine shafts used or to be used to withdraw water for any purpose on one property, if the total pumping or flowing capacity of all wells, drillholes or mine shafts on one property is 70 or more gallons per minute based on the pump curve at the lowest system pressure setting, or based on the flow rate."

(13) "Local governmental unit" has the meaning specified in s. 281.34(1)(c), Stats.

Note: s. 281.34(1)(c), Stats., defines "local governmental unit" to mean a "city, village, town, county, town sanitary district, utility district under s. 66.0827 that provides water, public inland lake protection and rehabilitation district that has town sanitary district powers under s. 33.22(3), joint local water authority created under s. 66.0823 or municipal water district under s. 198.22.

(14) "One property" has the meaning specified in s. NR 812.07(68).

Note: s. NR 812.07(68) defines "one property" to mean "all contiguous land controlled by one owner, lessee, or any other person having a possessory interest. Lands under single ownership bisected by highways or railroad right-of-ways are considered contiguous."

(15) "Owner" has the meaning specified in s. 281.34(1)(d), Stats.

Note: s. 281.34(1)(d), Stats., defines "owner" to mean "a person who owns property on which a well is located or proposed to be located or the designated representative of that person."

(16) "Potentiometric surface" has the meaning specified in s. 281.34(1)(e), Stats.

Note: s. 281.34(1)(e), Stats., defines "potentiometric surface" to mean "a measure of pressure of groundwater in an aquifer based on the level to which groundwater will rise in a well placed in the aquifer."

(17) "Prior stream history" means a determination made by the department that an artificial waterway or a portion of such waterway was originally a navigable stream before it was ditched or channelized.

(18) "Reconstruction" has the meaning specified in s. NR 812.07(85).

Note: s. NR 812.07(85) defines "reconstruction" to mean "modifying the original construction of a well. Reconstruction includes, but is not limited to deepening, lining, installing or replacing a screen, underreaming, hydrofracturing and blasting."

(19) "Significant adverse environmental impact" means alteration of groundwater levels, groundwater discharge, surface water levels, surface water discharge, groundwater temperature, surface water temperature, groundwater chemistry, surface water chemistry, or other factors to the extent such alterations cause significant degradation of environmental quality including biological and ecological aspects of the affected water resource.

(20) "Spring" has the meaning specified in s. 281.34(1)(f), Stats.

Note: s. 281.34(1)(f), Stats., defines "spring" to mean "an area of concentrated groundwater discharge occurring at the surface of the land that results in a flow of at least one cubic foot per second at least 80% of the time."

(21) "Water loss" has the meaning specified in s. 281.34(1)(g), Stats.

Note: s. 281.34(1)(g), Stats., defines "water loss" to mean "a loss of water from the basin from which it is withdrawn as a result of interbasin diversion, as defined in s. 281.35(1)(g) or consumptive use or both."

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

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

**NR 820.13 High capacity wells annual pumping reports.** (1) Owners of high capacity wells shall record pumpage data on a monthly basis and shall report the information to the department at no less than an annual frequency using methods and forms provided by the department. Reports of annual pumpage for a given calendar year shall be submitted to the department no later than the first day of March in the following calendar year.

Note: Appropriate forms, description of acceptable estimation methodology and reporting procedures will be sent to owners of each high capacity well each year by the department. Copies of these documents may be obtained from the Department of Natural Resources, Bureau of Drinking Water and Groundwater, 101 South Webster Street, Natural Resources Building, PO Box 7921, Madison, Wisconsin 53707-7921.

(2) Individual reports shall be prepared for any high capacity wells with the capacity to withdraw water at a rate of 100,000 gallons per day or more.

(3) If one high capacity property does not contain any single high capacity well with an individual capacity to withdraw water at a rate of 100,000 gallons per day or more, the annual pumpage may be

reported as a composite volume for the entire property based on estimated water usage using a method prescribed by the department.

(4) If one high capacity property contains high capacity wells with individual capacity to withdraw water at a rate of at least 100,000 gallons per day and high capacity wells with maximum pumping capacity less than 100,000 gallons per day, a composite pumpage volume based on estimated water usage using a method prescribed by the department may be reported for those wells with individual maximum pumping capacity less than 100,000 gallons per day.

### **Subchapter II – Groundwater Management Areas**

**NR 820.20 Groundwater management area designation.** The areas specified in subs. (1) and (2) are designated as groundwater management areas. Any local governmental unit contained within these areas shall be considered to be part of the groundwater management area unless it is explicitly excluded in sub. (1) or (2).

(1) Southeast Wisconsin Groundwater Management Area consisting of the following:

- (a) All of Kenosha county.
- (b) All of Milwaukee county.
- (c) All of Ozaukee county.
- (d) All of Racine county
- (e) All of Waukesha county.

(f) The portions of Walworth county consisting of the U.S. Public Land Survey townships of East Troy, Spring Prairie, Lyons, Bloomfield, Linn and Geneva, with the exception of the village of Williams Bay and city of Elkhorn, and including the portion of the U.S. Public Land Survey township of Troy that includes part of the Village of East Troy.

(g) All of Washington county with the exception of the U.S. Public Land Survey townships of Wayne and Kewaskum.

(2) Northeast Wisconsin Groundwater Management Area consisting of the following:

(a) All of Brown county.

(b) The portions of Calumet county consisting of the U.S. Public Land Survey townships of Woodville and Harrison and the village of Sherwood.

(c) The portions of Outagamie county consisting of the U.S. Public Land Survey townships of Grand Chute, Van den Broek, Buchanan, Freedom and Kaukauna, including the cities of Appleton and Kaukauna and the villages of Kimberly, Combined Locks and Little Chute.

### **Subchapter III – Environmental Review of High Capacity Well Applications**

**NR 820.29 Review periods.** (1) HIGH CAPACITY WELLS IN GROUNDWATER PROTECTION AREAS. Unless another time period is specified by law, the department shall complete its review and make a determination on all applications for approval of proposed high capacity wells in groundwater protection

areas within 65 business days after receipt of a complete application unless the department notifies the applicant under s. NR 820.30(4)(a) or (b) that additional information is needed in order for the department to prepare an environmental assessment for the proposed high capacity well.

(2) HIGH CAPACITY WELLS NEAR SPRINGS. Unless another time period is specified by law, the department shall complete its review and make a determination on all applications for approval of proposed high capacity wells near springs within 65 business days after receipt of a complete application unless the department notifies the applicant under s. NR 820.31(4)(a) or (b) that additional information is needed in order for the department to prepare an environmental assessment for the proposed high capacity well.

**NR 820.30 High capacity wells in groundwater protection areas.** (1) Except as provided in sub. (2), an application for approval of a high capacity well within a groundwater protection area shall be supplemented to include all of the following information:

(a) The name of each class 1, 2 or 3 trout stream, outstanding resource water or exceptional resource water that is located within 1,200 feet of the proposed well location.

Note: Outstanding resource waters and exceptional resource waters are identified in ss. NR 102.10 and 102.11. Chapter NR 102 is available for viewing and printing at the internet site for the Wisconsin Legislature, Revisor of Statutes Bureau: <http://www.legis.state.wi.us/rsb/code/nr/nr102.pdf>. Paper copies of ch. NR 102 may be obtained from the Department of Natural Resources, Bureau of Watershed Management, 101 South Webster Street, Natural Resources Building, PO Box 7921, Madison, Wisconsin 53707-7921.

(b) The distance from each proposed high capacity well to the class 1, 2 or 3 trout stream, outstanding resource water or exceptional resource water.

(c) If the potentially affected water body is a stream, a description of the stream channel at the point nearest to the proposed well location including stream width, depth of water, publicly available information regarding seasonal flow and nature of the substrate.

(d) If the potentially affected water body is a lake or flowage, a description of the lake or flowage including identification and approximate flows of major inlets and outlets, surface area of the lake or flowage, approximate elevation of the current lake or flowage level, analysis of publicly available information pertaining to historic lake level fluctuations, and nature of the lake bed.

(e) A description of all other wells on the high capacity property including location relative to the class 1, 2 or 3 trout stream, or outstanding or exceptional resource water, maximum pumping capacity, estimated actual annual pumpage for each well and frequency of pumping for each well.

(f) A description of the hydrogeologic conditions in the vicinity of the proposed well including flow direction, groundwater elevation, depth to groundwater, and a description of the aquifer characteristics including approximate thickness of each aquifer.

(g) A discussion and analysis of alternative well locations and feasibility of siting the high capacity well outside of the groundwater protection area.

(h) A determination by a registered professional engineer, registered professional geologist or registered professional hydrologist of the 80% exceedance flow for the stream and associated water level at the location closest to the proposed well location.

(i) If the affected water body is a lake, a determination by a registered professional engineer, registered professional geologist or registered professional hydrologist of the 80% exceedance flow and associated water level for the primary surface water outlet and the invert elevation of the primary surface water outlet.

(j) The appropriate consumptive use coefficient.

(2)(a) The department may approve a high capacity well as described in pars. (b) to (e) within a groundwater protection area without preparing an environmental assessment if it determines that construction and operation of the proposed well will not result in significant adverse environmental impact. The information specified under sub. (1)(h) to (j) is not required for a proposed well if any of the conditions in pars. (b) to (e) apply. Based on information submitted by the applicant under sub. (1) and other available information, the department may determine that supplemental information and review is needed in order to issue or deny the necessary approval. The department shall include in any approval issued using the standards under s. 281.34, Stats., conditions to ensure that the high capacity well will not result in significant adverse environmental impacts to trout streams, outstanding resource waters and exceptional resource waters. The conditions may include but are not limited to conditions as to location, depth of lower drillhole, depth interval of well screen, pumping capacity, pumpage schedule, months of operation, rate of flow and conservation measures.

(b) The proposed high capacity well is a well that does not have a pump capacity of greater than 20 gallons per minute and the well is to be used solely for domestic purposes for a single residence.

(c) The proposed high capacity well is intended to be used for purposes such as fire suppression and similar non-commercial, non-industrial and non-agricultural irrigation purposes, and the well will only be used on a sporadic basis averaging less than 30 days each year and will generally operate for no more than 2 consecutive days.

(d) The high capacity well application is for reconstruction of an existing high capacity well and the application does not seek an increase in the approved pumping capacity of the well.

(e) The high capacity well application is for temporary dewatering of a single construction site in unconsolidated deposits and the duration of the project will not extend more than one construction season.

(3)(a) The department may approve a proposed high capacity well without completing an environmental assessment under ch. NR 150 if the proposed well is not a well described in sub. (2)(b) to (e) and the department determines that construction and operation of the proposed well will not result in significant adverse environmental impacts to the stream or lake and at least one of the conditions in subd. 1. to 5. is satisfied. In making this determination, the department shall consider impacts caused by other



wells on the high capacity property and take into account actual or current conditions of the Class 1, 2 or 3 trout stream, outstanding resource water or exceptional resource water.

1. The potentially affected water body is a trout stream and the proposed pumping capacity of the high capacity well is less than 10% of the value for the 80% exceedance flow for the stream.

2. The potentially affected water body is an outstanding or exceptional resource water that is a stream and the proposed pumping capacity of the high capacity well is less than 10% of the value for the 80% exceedance flow for the stream.

3. The potentially affected water body is an outstanding or exceptional resource water that is a lake with a surface outlet and the proposed pumping capacity of the high capacity well is less than 10% of the value for the 80% exceedance flow for the primary surface outlet from the lake.

4. The potentially affected water body is an outstanding or exceptional resource water that is a lake with a surface water outlet and a surface area of at least 600 acres.

5. The potentially affected water body is an outstanding or exceptional resource water that is a lake with a surface water outlet, a surface area of less than 600 acres and the volume of water that would be pumped from the well in 30 days of continuous pumping at maximum capacity is less than 5% of the volume of the lake.

(b) The department shall include in any approval issued using the standards under s. 281.34, Stats., conditions to ensure that the high capacity well will not result in significant adverse environmental impacts to trout streams, outstanding resource waters and exceptional resource waters. The conditions may include but are not limited to conditions as to location, depth of lower drillhole, depth interval of well screen, pumping capacity, pumpage schedule, months of operation, rate of flow and conservation measures. The department may also modify the approvals or place additional conditions on the approvals of other previously approved wells on the high capacity property to prevent significant adverse environmental impacts.

(4) All of the following provisions shall apply to proposed high capacity wells that are not included under sub. (3)(a)1. to 5. and proposed wells that satisfy the conditions under sub. (3)(a)1. to 5. but for which the department has determined that the proposed well may have a significant adverse environmental impact on the trout stream, outstanding resource water or exceptional resource water:

(a) The department shall notify the applicant that the proposed high capacity well may have a significant impact on the stream or lake and may require additional information concerning flow characteristics of the affected stream or lake, site-specific geologic and hydrogeologic information and pertinent regional information.

(b) Within 65 business days of receipt of a complete application, the department shall identify additional informational requirements necessary to evaluate the proposed well and may determine that the applicant shall develop and submit an environmental impact report in accordance with s. NR 150.25.

(c) Following receipt of the requested information, the department shall prepare an environmental assessment in accordance with the procedures of s. NR 150.22 and shall develop and publish a news release in accordance with s. NR 150.21.

(d) If the department determines that operation of the proposed high capacity well will not result in significant adverse environmental impact on critical resources within the stream or lake and other uses of the stream or lake, the department shall approve the well and include in any approval issued using the standards under s. 281.34, Stats., conditions to ensure that operation of the proposed well will not cause significant adverse environmental impact to critical aquatic resources or other existing uses of the stream or lake. The conditions may include but are not limited to conditions as to location, depth of casing, depth of lower drillhole, depth interval of well screen, pumping capacity, pumpage schedule, months of operation, rate of flow, ultimate use and conservation measures. In the case of Class 1, 2 and 3 trout streams and outstanding or exceptional resource waters that contain warm water sport fisheries, flow conditions in the stream shall be maintained such that the fish populations and critical habitat are not adversely affected.

(5) As part of an approval issued using the standards under s. 281.34, Stats., the department may require the owner of the high capacity well to implement a monitoring plan to document stream flow or lake level conditions in the vicinity of any well located within a groundwater protection area and based on results of the monitoring program may revise the approval.

(6) The department may not issue an approval using the standards under s. 281.34, Stats., for a high capacity well within a groundwater protection area unless it is able to include and includes conditions that ensure that the well does not cause significant adverse environmental impact.

(7) The department may order the owner of a high capacity well constructed prior to May 7, 2004 that is located in a groundwater protection area to mitigate the effects of the well. Mitigation may include abandonment of the well, replacement of the well, if necessary, and management strategies. If mitigation is ordered, the department shall provide funding for the full cost of the mitigation, except that full funding is not required if the department is authorized under ch. 280, Stats., to require the well to be abandoned because of issues regarding public health.

**NR 820.31 High capacity wells near springs.** (1) For any application for approval of a high capacity well under s. 281.34, Stats., the department shall determine if there is a spring, as defined in this chapter, located in the vicinity of the proposed well.

(2) If the department determines that a proposed high capacity well is located near a spring the department shall assess the proposed well to determine whether construction and operation of the well will result in substantially reduced flow from the spring and significant adverse environmental impact to the spring. The department shall consider the location of the well relative to the spring, well construction details, information regarding construction and operation of all other wells on the property, available information concerning the geology and hydrogeology of the area, historical flow data for the spring and other pertinent information.

(3) If the department determines that construction and operation of the proposed high capacity well will not result in a substantial reduction in flow from the spring or result in significant adverse environmental impact to the spring, the department may approve the proposed well and shall include in any approval issued using the standards under s. 281.34, Stats., conditions to ensure that the well will not result in significant adverse environmental impact to the spring. The conditions may include but are not limited to conditions as to location, depth of casing, depth of lower drillhole, depth interval of well screen, pumping capacity, pumpage schedule, months of operation, rate of flow, ultimate use and conservation measures.

(4) All of the following provisions shall apply to proposed high capacity wells that are determined to reduce flow in a spring such that significant adverse environmental impact to the spring or related aquatic and terrestrial resources may result:

(a) The department shall notify the applicant that the proposed high capacity well may have a significant adverse environmental impact on a spring and may require additional information concerning flow characteristics of the affected spring, site-specific geologic and hydrogeologic information, a discussion and analysis of alternative well locations, and pertinent regional information.

(b) Within 65 business days of receipt of a complete application, the department shall identify additional informational requirements necessary to evaluate the proposed well and may determine that the applicant shall develop and submit an environmental impact report in accordance with s. NR 150.25.

(c) Following receipt of the requested information, the department shall prepare an environmental assessment in accordance with the procedures of s. NR 150.22 and shall develop and publish a news release in accordance with s. NR 150.21.

(d) If the department determines that operation of the proposed high capacity well will not result in significant adverse environmental impact to the spring and related resources, the department shall approve the well and include in any approval issued under s. 281.34, Stats., conditions to ensure that operation of the proposed well will not cause significant adverse environmental impacts to the spring or critical resources related to the spring. The conditions may include but are not limited to conditions as to location, depth of casing, depth of lower drillhole, depth interval of well screen, pumping capacity, pumpage schedule, months of operation, rate of flow, ultimate use and conservation measures. The department may approve a proposed high capacity well that is predicted to result in a reduction of flow in a spring only if the predicted reduction would not cause permanent and irreversible impacts to the spring and related resources. The department may not approve a proposed high capacity well that is predicted to result in a reduction in flow from a spring such that the spring does not flow at one cubic foot per second or greater at least 80% of the time or that will reduce the average annual flow from a spring by greater than 20%.

(5) As part of an approval issued using the standards under s. 281.34, Stats., the department may require the owner of the high capacity well to implement a monitoring plan to document conditions of

the spring and related resources and based on results of the monitoring program may revise the approval.

**NR 820.32 Projects with high water loss.** (1) For any application for approval of a high capacity well under s. 281.34, Stats., the applicant shall identify and the department shall verify whether the proposed use of the well will result in an annual water loss of greater than 95%. The department may require submittal of a detailed water balance as part of the application in order to determine the approximate water loss.

(2) If the department determines that a proposed high capacity well will result in an annual water loss of greater than 95%, the department shall notify the applicant that the proposed well may result in a water loss of greater than 95%. Within 65 business days of receipt of a complete application, the department shall identify additional informational requirements necessary to evaluate the proposed well and may determine that the applicant shall develop and submit an environmental impact report in accordance with s. NR 150.25.

(3) Following receipt of all requested information, the department shall prepare an environmental assessment in accordance with the procedures of s. NR 150.22, and shall develop and publish a news release in accordance with s. NR 150.21.

(4) If the department determines that construction and operation of the proposed high capacity well will not result in significant environmental impact to surface and groundwater resources, the department shall approve the well and include in any approval issued using the standards under s. 281.34, Stats., conditions to ensure that operation of the proposed well will not cause significant adverse environmental impact to surface water or groundwater resources. The conditions may include but are not limited to conditions as to location, depth of casing, depth of lower drillhole, depth interval of well screen, pumping capacity, pumpage schedule, months of operation, rate of flow, ultimate use and conservation measures.

(5) As part of an approval issued using the standards under s. 281.34, Stats., the department may require the owner of the high capacity well to develop and implement a water conservation and management plan that minimizes, to the extent technically and economically feasible, the degree of water loss related to operation of the high capacity well system.

(6) As part of an approval issued using the standards under s. 281.34, Stats., the department may require the owner of the high capacity well system to implement a monitoring plan to evaluate environmental impacts caused by operation of the high capacity well system and based on results of the monitoring program may revise the approval.

**NR 820.33. Public utility wells.** Sections NR 820.30 to 820.32 do not apply to proposed high capacity wells that are water supplies for public water systems operated by a public utility, as defined by s. 196.01, Stats., engaged in supplying water to or for the public, if the department determines that there is no other reasonable alternative location for the well and includes in the approval conditions that ensure

that the environmental impact of the well is balanced by the public benefit of the well related to public health and safety. Conditions of the approval for the well may include, but are not limited to, conditions as to location, depth, pumping capacity, rate of flow, and ultimate use.

**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 \_\_\_\_\_.

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

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
Scott Hassett, Secretary

(SEAL)