



WISCONSIN ASSOCIATION OF LAKES, INC.

*is a nonprofit group of citizens,
organizations, and businesses working for clean, safe, healthy lakes for everyone.*

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To: Mr. Lawrence Lynch
Bureau of Drinking Water and Groundwater
P.O. Box 7921
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From: Peter Murray, Executive Director
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Re: The Wisconsin Association of Lakes' comments on proposed ch. NR 820 (UPDATED 1/4)

Thank you for the opportunity to comment on this proposed rule and for your efforts to encourage public input through hearings held around the state.

The Wisconsin Association of Lakes (WAL) is a non-profit group of citizens, organizations and businesses working for clean, safe, healthy lakes for everyone. Representing more than 100,000 riparian property owners as members of our approximately 350 member lake organizations from across the state, WAL recognizes the importance of groundwater as a source of drinking water and industrial and agricultural water supply in Wisconsin. At the same time, we encourage sound and sustainable stewardship of that resource and an acknowledgment in the law that groundwater, groundwater pumping, and surface water resources are all intricately connected. 2003 Act 310 took Wisconsin one solid step in that direction, and yet there is much more to be done to fully implement the twin goals of sustainable groundwater and surface water management in this state.

WAL's overarching concerns regarding statutory changes brought about by 2003 Act 310

Our first concern with the framework for high capacity well regulation established by Act 310 is the limited set of surface water resources covered by the law. In the context of lakes, where only those designated as Outstanding Resource Waters (ORWs) are covered, less than 1% of all the lakes in the state are offered the layer of protection afforded to surface waters in so-called Groundwater Protection Areas. Far more than the 100 to 110 lakes designated as ORWs face the threat of environmental degradation from nearby high-volume groundwater pumping, yet these lakes are not covered by the law.

We are also concerned that the definition of a Groundwater Protection Area as an area within 1,200 feet of any protected lake, river, stream, or spring lacks a solid scientific basis. Clearly there are

instances where high-volume groundwater pumping from a well set back more than 1,200 feet can impact the adjacent surface water.

Our analysis of the proposed ch. NR 820 elicited a concern on our part that perhaps it would take a statutory change in order to fully address the critical need for assessment of *cumulative impacts* from multiple wells on groundwater quantity and the quantity and quality of connected surface waters, both in Groundwater Protection Areas and in Groundwater Management Areas. We have suggested changes to the proposed rule that we hope would allow it to better address cumulative impacts from multiple wells owned by multiple owners in our comments below.

We understand that the Department can not change the Statutes, but we mention these overarching statutory concerns as important background to our comments on the proposed rule, which follow below.

WAL's detailed comments on the proposed ch. NR 820:

1. NR 820.12(20)

The proposed rule's definition of "significant adverse environmental impact" is critically important, as that term in essence defines the purpose of the enhanced scrutiny of certain high capacity wells intended by 2003 Act 310 and the legislature that made the law. We feel the proposed definition goes a long way toward meaningfully defining this important term, but we would like to suggest that it could go even further.

Groundwater and surface water quantity considerations and other environmental factors proposed for consideration, such as water temperature and chemistry, are critically important components of a full definition of this term, and we applaud their inclusion in the proposed definition. But, we feel that this definition must also make mention of the kinds of *biological* and *ecological* factors that can be impacted by modifications to natural hydrology through high capacity well pumping from groundwater aquifers.

These factors include – but are not limited to – plant, fish and wildlife habitats and specific conditions suitable to support plants and animals reliant on groundwater or groundwater-influenced surface waters and/or the attendant temperatures and chemistries. Alteration of these biological and ecological factors -- just like alterations to water levels, temperature, and/or chemistry – can indeed cause "significant degradation of environmental quality" and therefore must also be assessed as part of a determination as to whether there is significant adverse environmental impact.

2. NR 820.30(1)

i. To help the applicant and the Department better understand the nature of the groundwater aquifer from which pumping is proposed and the potential hydrologic connection between that aquifer and the surface water body (or bodies) of concern in the Groundwater Protection Area in question, we would like to suggest that the rule could be improved by the addition of two bullet points between (b) and (c) in this subsection, along the lines of the following, with required re-numbering of the remaining bullets:

“(c) General character of the aquifer in which the proposed well is to be completed, including an assessment of the degree to which it is unconfined or confined in the area

between the well and the class 1, 2, or 3 trout stream, outstanding resource water or exceptional resource water within 1,200 feet of the proposed well location and the elevations of the groundwater table at the proposed well location, the nearest point on the edge of the surface water body of concern, and at least one point in between.”

“(d) General direction of groundwater flow in the aquifer in which the proposed well is to be completed in the area between the proposed well location and the 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, and the projected change in direction and quantity of groundwater flow due to the drawdown vortex produced by the proposed well.”

ii. To help the applicant and the Department better understand and quantify the potential well pumping impacts already facing the surface water body (or bodies) of concern in the Groundwater Protection Area in question, and to help ensure the full consideration of the cumulative impacts of multiple wells and not only the potential impacts of the specific well in question, we would like to suggest that perhaps the rule could be improved by the addition of an additional bullet point to follow (e) in the proposed rule, along the lines of the following, with required re-numbering of the remaining bullets:

“(f) An enumeration of the locations, maximum pumping capacity and estimated actual pumping rate and frequency of pumping for each high capacity well located within the Groundwater Protection Area in question to determine the overall dynamics of groundwater pumping in that area.”

3. We feel the proposed rule generally overlooks seepage lakes and spring lakes, while focusing on lakes with surface water outlets (drainage lakes), particularly the seepage lakes with levels that are groundwater controlled and spring lakes which are dependent upon a local groundwater source to maintain their lake levels and characteristic water chemistries. Thus, we feel that it would improve the rule to add language in several places to better address seepage lakes and spring lakes as distinct from drainage lakes and other lakes with outlets.

NR 820.30(1)(d) We suggest adding language here changing the subsection to read along the lines of the following:

“If the potentially affected water body is a lake or flowage, description of the lake or flowage including its landscape position in the drainage basin, characterization as a drainage or seepage lake, identification and approximate flows of major inlets and outlets, approximate annual groundwater inflow and outflow, analysis of historic lake level fluctuations, current lake stage, and nature of the lake bed.

NR 820.30(1) Perhaps a new subsection (i) could be added here (and the proposed subsection (i) renumbered accordingly) to address lakes *without* surface water outlets. A new subsection might read something along the lines of the following:

“(i) If the affected water body is a lake without an outlet, a determination by the Department of Natural Resources of the elevation of the ordinary high water mark or the public rights stage on the lake.”

4. **NR 820.30(3)(a)**

Overall, we are not entirely comfortable with the general concept proposed here of allowing the Department to waive the Environmental Assessment process for a proposed well based solely on the information provided in the application and on one or more of the five proposed conditions in this subsection being met. Would/could the Department truly have sufficient information in such cases as to be able to determine no significant adverse environmental impact *without* performing an Environmental Assessment designed precisely to bring to bear sufficient information to make that determination?

Given the relatively small proportion of the surface water bodies of the state that would trigger the Environmental Assessment process outlined in the rule, we tend to favor an approach that would not pre-screen applications and further reduce the number of surface water bodies near which well applications would be assessed for the potential of significant adverse environmental impact.

Perhaps it would be appropriate to offer the proposed waiver of environmental review only for a high capacity well that is the first and only such well near the potentially affected water body in question, by way of modified language in NR 820.30(3)(a) along the lines of the following:

“(3)(a) The department may approve the proposed well without completing an environmental assessment under ch. NR 150 if the well would, upon approval, be the first and only high capacity well within the Groundwater Protection Area surrounding the potentially affected surface water body and if the Department ~~it~~ determines ... [as proposed].”

If the proposed process here is to be the chosen way (with the modification we suggest above), then we feel that the rule ought to describe a (or the) legal process by which a concerned citizen or other party (e.g., a lake association or district) could appeal the Department’s waiver of the Environmental Assessment process were they to disagree with the Department’s finding of no significant adverse environmental impact without an Environmental Assessment.

Also, if the proposed process is to be the chosen way (with the modifications we suggest above), then we would suggest that the detailed language of the criteria (specifically, those that would apply in cases where wells were proposed near protected lakes) ought to be modified in order to help avoid improper findings of no significant adverse environmental impact without an Environmental Assessment.

- i. NR 820.30(3)(a)3 ought to be modified to read as suggested below so that it is clear that this condition only applies to those protected lakes that have a surface water outlet.

“3. The potentially affected water body is an outstanding or exceptional resource water that is a lake with a surface water outlet and ... [as proposed].”

- ii. NR 820.30(3)(a)4 ought to be eliminated. The surface area of a lake does not necessarily correspond to its connection with groundwater, nor with the potential for nearby high-volume well pumping to cause adverse environmental impact. Thus, we feel that the proposed condition, based solely on lake surface area, is inappropriate here.

Also, it is important to point out that roughly one-third of the lakes in Wisconsin that would by definition enjoy the greater level of protection offered by this rule (those that are classified as outstanding resource waters) are over 400 acres in surface area and thus could very easily escape enhanced scrutiny by way of the proposed conditions in this subsection. We see that as problematic. Our feeling is that all of the protected surface waters designated in the Statutes ought to fully enjoy the protection of an Environmental Assessment when a high capacity well is proposed nearby.

- iii. NR 820.30(3)(a)5 also ought to be eliminated, or at the very least the threshold to meet this condition ought to be set at 1% (rather than 10%) of the volume of the lake.

5. NR 820.30(3)(b)

Further in the interest of codifying the essential consideration of cumulative impacts from multiple wells as part of the assessment of adverse environmental impact from a proposed well, we wonder if language ought to be added here to allow for the Department's modifying existing well approvals – for other wells in the same Groundwater Protection Area as the proposed well – at the same time that it (the Department) includes conditions in the approval of the proposed well to ensure that there will be no significant adverse environmental impact. The statutory changes brought about by 2003 Act 310 seem to grant this authority to the Department, and logically such authority would be necessary in order to allow the Department a means to equitably apportion limitations on pumping and other conditions designed to avoid significant adverse environmental impact across all those wells contributing to the adverse impacts.

6. NR 820.30 (and 820.31, 820.32, and 820.33)

We would like to suggest that a provision be added in each of the subsections listed above that would require the Department to give 30 days public notice and an opportunity for citizens to request a hearing before it would issue any approval under 820.30, 820.31, 820.32, or 820.33. This kind of public notice and an opportunity for the public to bring information to bear that may influence the Department's decision-making on any specific high capacity well approval is critically important from our perspective.

Again, we thank you for your consideration of our comments on this proposed rule.

Sincerely,



Peter Murray, Executive Director