

Groundwater Advisory Committee
Options Paper
for
November 15 Ballot

Date: November 14, 2007

From: M. Carol McCartney, Bob Nauta, Jodi Habush-Sinykin

Topic: Recommended Revisions to NR 820

DISCUSSION: The approval process for high capacity wells must have adaptive management as its underpinning to ensure that both our resources and our economic growth can be protected and, where they are in conflict, informed choices can be made.

Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of operating programs. In the case of the process for evaluating the impact of high capacity wells, this means the applicant must provide data about water levels, stream flows, ecological quality, as well as the currently requested basics of pump capacity and well depth. The data and evaluation provided by the applicants should be used by the Department to approve, deny, or revise the application.

This information would also be used to update a database, which applicants could access to find the best locations for high capacity wells and which the DNR could use for the continued management of the resource. Open access by the regulated community and regulators to this information will allow the best decisions to be made with the least delays, encouraging our economy, protecting our resources and facilitating informed choices where resources and economic decisions are in conflict.

RECOMMENDATION:

We recommend that the Legislature direct the DNR to revise NR 820 as follows:

- To specify a transparent and rational process for the regulated community to follow in determining the environmental impact of a proposed high-capacity well on a GPA or spring.
- Applicants should be required to complete the analysis, with DNR oversight, review and independent verification, as necessary;
- At a minimum, the application must consider the proposed rate and timing of pumping, cumulative annual extraction, fate of extracted water, ecological impacts (including changes to water chemistry and temperature), what springs or reaches of GPAs might be affected, and the cumulative effects of other groundwater extractors.
- The revised rule should require quantitative analyses, beginning with screening by rudimentary hydrogeologic methods that are widely used and generally available and, if necessary, proceeding to more rigorous methods including models with increased levels of sophistication.
- DNR should compile a database of input parameters for the quantitative analyses required for the process of determining environmental impact so that default

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parameters are available for applicants. This database should be readily available to applicants and the public.

- The database should be continuously updated from applications as they are received and reviewed so that the approval process can adapt to the accumulation of more site-specific data and, if necessary, to changing hydrogeologic conditions.