

Title: Centralizing Access to Ground-Water Information for Use in Comprehensive Planning

Project I.D.: DNR project # 190

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Background/Need: In order for communities to plan for the future, it is essential that both the quantity and quality of groundwater be protected. Wisconsin law requires that by January 1, 2010 all communities that make specified land-use decisions must do so consistent with their comprehensive plan. Groundwater is a recognized factor in all nine required elements of comprehensive plans, and much information and data exist to address the role of groundwater in those nine elements. However, many communities, particularly smaller communities, do not have the resources or expertise to locate, evaluate, and incorporate appropriate groundwater information and data in their comprehensive plans. In many instances it is difficult for a community to know where to begin. If, however, Wisconsin groundwater information and data is made accessible and user-friendly, it is much more likely that it will be used in the comprehensive-planning process.

Objectives: The objectives of this project are to 1) identify the range of ground-water information and data useful for addressing groundwater in comprehensive planning, 2) identify means of centralizing world-wide web access to ground-water information and data, 3) establish the chosen centralized access, 4) incorporate characteristics or features believed important for the centralized site, 5) include on the centralized site results of ongoing evaluations of groundwater in adopted comprehensive plans, and 6) ensure that the existence and capabilities of the site are advertised to the broad range of potential users.

Methods: With the assistance of the project advisory group, we 1) surveyed existing websites in Wisconsin that are providing groundwater information relevant to comprehensive planning, 2) assisted three pilot counties in incorporating groundwater information, goals and policies in their comprehensive plans, with the objective of learning what information and layout they found most valuable, 3) spoke with multiple agencies to determine the optimal home for the new website, 4) conducted a survey of intended website users which provided the basis for our design of a user-friendly web structure for displaying groundwater data, maps, and other information, 5) incorporated on centralized web site an outlet for results of current (and future) assessment of groundwater in comprehensive plans, and 6) investigated means of long-term support of the web site to allow for maintenance and updating of information, data, and results from analysis of groundwater in comprehensive plans.

Results and Discussion: Based on results from a survey we conducted of private consultants, regional planning commission staff, government staff and others who have assisted 113 communities in developing their comprehensive plans we learned that 1) the main barriers to including groundwater information in comprehensive plans are that the groundwater information is not readily accessible and there is little community interest in groundwater (not a priority), 2) the preferred method for receiving on-line groundwater information was when the name of a municipality is entered a short report is generated by staff summarizing groundwater info, and 3) data types included in comprehensive plans by less than half of the respondents included: groundwater susceptibility to contaminants, atrazine prohibition areas, private well water quality, well levels in monitoring wells, groundwater retrieval network data and new wells drilled because previous well dried up. The primary reason data were not included was because plan writers were not aware of the data.

We also assisted three pilot counties (Portage, Lafayette and Oconto) in incorporating groundwater information, goals and policies in their comprehensive plans to learn what information and layout they found most valuable. For each pilot county, we prepared a graphic-rich report summarizing groundwater information in the county, and gave well-received presentations to a total of 200 local government officials about our findings.

The website is housed by the USGS at <http://wi.water.usgs.gov/gwcomp> and organized into four sections:

- **Learn** more about how groundwater is used in Wisconsin and what scientific researchers have found about how groundwater moves and how it can be contaminated.
- **Integrate** groundwater into your community plans using groundwater-specific recommendations and Wisconsin examples for each step of the planning process.
- **Find** data and policies about groundwater in each of Wisconsin's 72 counties including sources of drinking water, groundwater protection policies, money spent on cleanup, groundwater use, susceptibility of groundwater to pollutants, groundwater quality, and potential sources of contaminants.
- **Browse** additional resources.

Conclusions/Implications/Recommendations: Based on our survey results, pilot county projects and discussions with our wide-ranging project advisory group, we learned that professional planners, citizen plan commissioners and communities were “thirsty” (pardon the pun) for groundwater information relevant to their communities. A couple of measures of this were the eight counties that expressed interest in becoming pilot counties and the 200 plan commissioners in three counties who attended well-received local groundwater presentations. While the website has been on-line only a few months, initial feedback is very positive including:

- “I've started looking through the website you put together and am very impressed! You've done a nice job pulling tons of groundwater information together.” WDNR groundwater staff
- “I've been looking through the new groundwater planning website. I'm really learning a lot and enjoying how nicely laid out the site is. It's very easy to navigate...Thanks very much!” UW-Extension Educator
- “Thank you for the opportunity to review the groundwater planning website. I thought it was beautifully organized, very clear, and easy to build on information and resources. This will be an enormously helpful resource!” Professional planner

Users of our website have also stated that they want additional information available in this centralized location. Specifically they have requested 1) expanding the groundwater quantity information, 2) expanding the information available for each county about money spent on groundwater clean-up, 3) providing additional case studies about water conservation efforts and about groundwater efforts in other states, 5) enhancing the information about private wells and 6) updating the WGNHS publications written over 15 years ago about local governments' legal authority in adopting groundwater policies.

Related Publications:

Is Your Community Planning to Protect Its Drinking Water? *Land Use Tracker*, Fall 2007

Is Your Community Planning to Protect Your Drinking Water? A New Website Can Help, *Wisconsin Counties Association Magazine*, November or December 2007.

Key Words: community, groundwater, planning, process, protection, remediation

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