



WISCONSIN WELLHEAD PROTECTION NEWS

Fall 2006



HAPPY FALL!

I hope everything is going well for you. It's now been nearly two years since the Wisconsin Department of Natural Resources (WDNR) finished hand-delivering source water assessments to each municipal water supply. Hopefully, you have reviewed the assessment and are working to protect your drinking water supply. This newsletter contains information on some options for you to consider to protect your water supply. You can read about the importance of properly abandoning unused wells that can act as conduits of contamination, efforts to collect unused pharmaceuticals to get them out of the environment, educational resources to promote groundwater protection, the report developed in response to Governor Doyle's Water Conservation Symposium held in May, and an update on implementation of the groundwater quantity law. Enjoy!

Dave Lindorff, Editor

P. S. This issue and past issues of the Wisconsin Wellhead Protection News are available online at dnr.wi.gov/org/water/dwg/gw/whp/news.htm.

CONGRATULATIONS!

Congratulations are in order for a number of municipal systems who are or have been involved in wellhead protection planning to protect their water supply wells. Clear Lake, Hartland and Port Wing Sanitary District (SD) have worked with or are

working with the WDNR or Wisconsin Rural Water Association (WRWA) staff on wellhead protection plans, ordinances or both. You are commended for being proactive in protecting your water supply.

Communities which have developed wellhead protection plans for new wells since the last newsletter include Beaver Dam, Bristol, Forest Junction SD, Hayward, Jackson, Madison, Suring and Wisconsin Dells. Hats off to these communities as well for recognizing the importance of wellhead protection. Good work!

There are now almost 300 communities which, according to WDNR records, have adopted a plan for at least one of their wells. Check out the list at dnr.wi.gov/org/water/dwg/gw/whp/communities.pdf.

If you would like assistance from the WDNR in getting started, contact me by phone (608-266-9265 or 877-268-9355 toll free), by fax (608-267-7650), by email (david.lindorff@dnr.state.wi.us) or regular mail (Wisconsin DNR, P. O. Box 7921, Madison, WI 53707-7921).

You can also contact Ed Morse, Groundwater Specialist for the WRWA, at 920-648-7578 or edmorse@charter.net for assistance with a plan for your community. In addition, Patrick Harrington of WRWA works with local entities on a multi-jurisdictional level to protect public water supplies and to promote coordinated efforts to protect groundwater and surface water. Patrick can be reached by calling 715-498-0383 or emailing him at wrwa-sourcewater@sbcglobal.net.

Another option is to check your yellow pages for an engineering firm or a professional hydrogeologist to help you develop a WHP plan.



DO YOU KNOW WHERE ALL THE WELLS ARE?

One of the potential threats to municipal wells are wells that are no longer used, but haven't been properly abandoned. Some wells may have been constructed before municipal water service was available to a particular property. Some may be industrial or even old municipal wells that are no longer used. Often these wells have been taken out of service and then forgotten. If these wells aren't properly abandoned, they may act as conduits to allow contaminants to enter groundwater and, potentially, water supply wells. It is important that unused wells be properly abandoned by removing any piping and filling the well with an impermeable material such as cement grout. Wells must be abandoned in accordance with s. NR 812.26, Wis. Adm. Code. Check out the requirements at www.legis.state.wi.us/rsb/code/nr/nr812.pdf.

Section NR 811.10, Wis. Adm. Code, directs municipal water systems to require the abandonment of all unused, unsafe or noncomplying private wells located on premises served by their system unless a permit system is established for keeping track of private wells. Make sure your community has a well abandonment requirement and that the water system is proactive in identifying unused wells for abandonment to protect its water supply. For more information about municipal well abandonment ordinances and private well abandonment, go to dnr.wi.gov/org/water/dwg/wellaban.htm.

COLLECTING UNUSED HOUSEHOLD PHARMACEUTICALS

In the past several years, research in the United States and around the world has shown that pharmaceuticals are being found in trace amounts in surface water and groundwater. In the past, the conventional recommendation for getting rid of unused pharmaceuticals was to flush them down the drain or throw them in the garbage. However, conventional wastewater treatment systems cannot remove many of these products. They end up in the environment. If unused pharmaceuticals are thrown in the garbage, they can end up in landfill leachate. The leachate may be collected and taken to a wastewater treatment plant or, in an unlined landfill, may move through the soil to groundwater.

In response to these concerns, three Wisconsin communities recently organized pharmaceutical take back programs to collect these unused drugs as a way of reducing their impact on our water resources. The first take back program, organized by the

Marshfield Area Groundwater Guardians, was held in May in Wood County. About 500 pounds of drugs were collected, including both controlled and uncontrolled substances. Drug collection events were also held in Brown County in June and Milwaukee County in September. Other communities are also planning similar events.

In order to help these and other local efforts, the WDNR Bureau of Waste and Materials Management developed guidance "Collecting Unwanted Household Pharmaceuticals – Regulatory Guidance for Organizers of Household Pharmaceutical Collection Events" for those interested in collecting and properly disposing of these materials to keep them out of the environment. The guidance document discusses the various regulatory requirements, provides advice on who should participate and lists numerous sources for additional information. A copy of the guidance is available at dnr.wi.gov/org/aw/wm/publications/hazard/wa1024-06.pdf.

Getting ready for collecting unused household pharmaceuticals takes some planning because of the wide variety of materials and the various legal or regulatory requirements that may be applicable. Since some of the materials may be controlled substances, it's necessary to involve law enforcement and follow the requirements of the U. S. Drug Enforcement Administration (DEA).

Arrangements need to be made for handling and proper disposal of both the controlled and uncontrolled substances collected. Besides having law enforcement officers to handle the controlled substances, Marshfield had pharmacists present to collect and sort the drugs and a contractor present to take the uncontrolled substances away for incineration.

If you'd like more information about organizing a pharmaceutical collection program for your community, check out the guidance document noted above.

GROUNDWATER EDUCATIONAL RESOURCES

One of the ways to promote groundwater protection is through the use of educational materials. The WDNR with help from other state agencies recently revised two widely used groundwater publications. "Groundwater: Wisconsin's Buried Treasure", a popular WDNR publication has been updated. The glossy 32-page color publication has a

new look with updated photos and graphics. Information on Wisconsin aquifers, the water cycle and groundwater protection programs has been updated. New sections include: how a well works, groundwater quantity, and the Great Lakes Charter. To see the web version visit: www.wnrmag.com/supps/2006/apr06/intro.htm. Contact Dave Lindorff if you'd like paper copies for your office or a meeting.

The **Groundwater Study Guide** booklet and activity sheets were recently revised and replace versions last updated in 1990. The booklet contains 13 groundwater exercises for students in grades 6-9 plus introductory information, a glossary, more groundwater activity ideas and Department of Public Instruction Wisconsin Model Academic Standards. Activity sheets correspond to the exercises. The 2006 version of these 2 documents has been added to the WDNR Environmental Education for Kids (EEK!) website at dnr.wi.gov/org/caer/ce/eeek/teacher/groundwaterguide.htm and the groundwater education website (dnr.wi.gov/org/water/dwg/gw/educate.htm). The booklet and activity sheets are contained in a folder of groundwater education materials available for educators; contact Dave Lindorff for a copy.

GOVERNOR DOYLE'S 2006 CONSERVE WISCONSIN INITIATIVE

Over 125 people gathered in Sheboygan on May 23, 2006, to learn about and discuss the opportunities and challenges faced by water utilities to manage and reduce water use. More than two-thirds of the attendees represented public water utilities, while the rest were from state government, private industry, and environmental and conservation organizations. The Symposium was organized as part of Governor Doyle's Conserve Wisconsin agenda. This initiative calls for the Public Service Commission (PSC) and the WDNR, with stakeholder input, to draft a report on initiatives that water utilities may implement to manage and reduce water use. The Symposium brought together leading experts from around the United States on water conservation, utility rate structures, and the implementation of conservation programs at utilities.

The Symposium and the Conserve Wisconsin Initiative were spurred by the 2003 Wisconsin groundwater legislation and the recently signed regional Great Lakes Annex Implementing Agreement developed to manage water use. The legislation and agreement emphasize that, as a state, we need to protect the environment by protecting

groundwater and surface water quantity and quality while we continue to ensure the safety of our drinking water supply.

The final report on opportunities for water utilities to reduce water was presented to Governor Doyle in September. A key conclusion is that many of Wisconsin's water utilities are already working on conservation and efficiency through their metering and water loss prevention programs. The report identifies further efforts that water utilities can take with a menu of water conservation and efficiency measures in the following areas: water conservation education, water use accountability, water-saving hardware, water conservation rates, and water reuse and recycling.

In addition, stakeholders recommended several next steps for the PSC and WDNR on water conservation and efficiency: to disseminate the report and further evaluate menu options for cost effectiveness, to collect baseline data on water use and conservation efforts in Wisconsin, and to expand a statewide water conservation education program. To read the report, view a webcast of the Symposium presentation or learn more about Conserve Wisconsin visit <http://psc.wi.gov/conservationWater/index-waterConservation.htm>. You can also check the website regarding progress in implementation of the initiative.

GROUNDWATER QUANTITY LAW UPDATE

Progress continues on implementation of the comprehensive groundwater quantity law (2003 Wisconsin Act 310) passed and signed into law in 2004. The Groundwater Advisory Committee (GAC) was appointed by the Governor and Legislature in the spring of 2005. The GAC has met ten times to (1) develop recommendations for managing water resources in two Groundwater Management Areas (areas including and surrounding Brown and Waukesha Counties) by the end of this year and (2) issue a second report by the end of 2007 assessing how the law is working. To keep track of the activities of the GAC, go to dnr.wi.gov/org/water/dwg/gac/index.htm.

Act 310 requires the WDNR to administer a notification and fee structure for new wells, review high capacity well applications for possible environmental impacts, collect groundwater use information, increase inspection of private well construction and staff the GAC.

Besides supporting the GAC, the WDNR staff are preparing draft rules to implement the law. GAC members are advising WDNR on the draft rule package. Next steps will be presenting the draft rule to the Natural Resources Board for public hearing authorization.

For a summary of the legislation, go to www.legis.state.wi.us/lc/act_memo/2003/act310-ab926.pdf. The text of Act 310 is at www.legis.state.wi.us/2003/data/acts/03Act310.pdf.

THANKS!

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