Project update: Groundwater project advisory team met in Belgrade, Sept. 24

The Project Advisory Team (PAT) for the Bonanza Valley Groundwater Management Area (GWMA) met on Wednesday, Sept. 24 at the VFW Saboe Leverson Post in Belgrade.

Project Background:

Groundwater is vital to Minnesota's prosperity. In places across Minnesota, groundwater is at risk of overuse and contamination. The Minnesota Department of Natural Resources (DNR) is establishing a Groundwater Management Area in the Bonanza Valley area in central Minnesota to support sustainable groundwater use. The DNR plans to do this by enhancing its ability to make better decisions on groundwater appropriation permits. The DNR shares responsibility for managing groundwater resources with public sector partners, as well as with individuals and businesses that use groundwater. The DNR is responsible for permitting high volume groundwater users, for collecting information on groundwater resources, and for providing technical assistance that supports groundwater conservation.

The DNR formed a project advisory team (PAT) to provide advice and feedback during the GWMA planning process. The project advisory team includes cities, counties, permitted users, private businesses, conservation districts, and other state agencies. Project advisory team meetings are also open to the public.

To find out more about the July meeting of the Bonanza Valley Project Advisory Team, follow this link (http://content.govdelivery.com/accounts/MNDNR/bulletins/cadb0e). More information about the GWMA is posted on the DNR project website (https://www.dnr.state.mn.us/gwmp/area-bv.html).

Agenda Topics:

1. Project Advisory Team Welcomes New Members

The DNR welcomed additional water appropriation permit holders to the Project Advisory Team.

They include cropland irrigators, Charles Ampe, Ronald Fiedler, Robert Lange, Earl Hauge, Greg Noland, Clifford Patrick, Jon Reichman and Michael Stamer. Also added were James Solheid (City of New London) and David Perryman (City of Glenwood).

Pope County Commissioner Paul Gerde stepped forward to replace Amanda Strommer and Tara Ostendorf of the North Fork of the Crow River Watershed District stepped forward to replace Josh Reed.

A complete list of Project Advisory Team Members can be found at: http://files.dnr.state.mn.us/waters/gwmp/area-bv/advisory-team.pdf

2. MPCA's Role in Water Resource Management

Maggie Leach explained that the Minnesota Pollution Control Agency deals mostly with chemical and industrial chemical releases. They also have a regulatory function for feedlots, waste water treatment facilities, landfills, petroleum contamination (spills) and emergency response. They have an ambient groundwater monitoring network with about 230 statewide monitors that are collecting data in developed and undeveloped areas.

3. MDA's Nitrogen Fertilizer Management Plan (NFMP)

Luke Stuewe outlined the Minnesota Department of Agriculture's Nitrogen Fertilizer Management Plan, which is the state's blueprint for minimizing groundwater impacts from the use of nitrogen fertilizer. The plan was prompted by increasing irrigation and nitrogen fertilizer

use. The plan recognizes the limits of Best Management Practices (BMPs) in highly vulnerable areas. For example, in row crop production there will always be some background loss of fertilizer even with BMPs. Suggested Alternative Management Tools (AMT) go beyond BMPs in terms of reduction of nitrate leaching losses. Examples of AMTs include planting perennials, introduction of lower nitrogen use varieties, land swapping, or installing easements in sensitive areas. The proposed timeline for implementation is three years or a typical crop rotation.

4. MDH's Role in Water Resource Management

Jim Lundy told the group that the Minnesota Department of Health has responsibility for state well code and the federal Safe Drinking Water Act requirements. The well code is a construction standard to protect the aquifer and ensure that wells operate efficiently. They do compliance sampling, sanitary survey (public water supplies inspection), plan reviews, financial assistance, and operator training and certification. He also described the Source Water Protection Program (SWP) that works with public drinking water suppliers to enact source water protection plans. These SWP plans: 1) define Drinking Water Supply Management Areas, which contain areas around public drinking water supply wells where ground water flow modeling indicates water falling as rain will flow to the well within 10 years (the "ten year travel time"); and 2) implement land use controls within the DWSMA to preserve adequate drinking water quality at the public drinking water supply wells.

Advisory Team Discussion

The team considered the following questions:

How should DNR include water quality in its permitting process?

How should DNR assure that groundwater contamination is not pulled to deeper aquifers or aquifers that are adjacent to permitted groundwater pumping?

The PAT offered the following sample responses through small group discussions and feedback sheets:

- DNR should collaborate with agencies that have water quality authority.
- Consider requiring water quality Best Management Practices as a condition on water appropriation permits.
- Work with Minnesota Department of Health and others to seal unused wells and improve well construction to reduce likelihood of contamination entering deeper aquifers.
- Regular water quality testing should be considered as a permit condition in areas where there is known nitrate-Nitrogen contamination.
- Increase efforts to prevent water contamination rather than treating it.
- Continue and improve the monitoring of water quality in the Bonanza Valley.

Next meeting

November 19, 9 a.m. – noon at the Central Square Cultural & Civic Center Gymnasium, 105 2nd Ave. NE, Glenwood.

Topic: Review draft version of Section 5 (description of DNR actions) of the Bonanza Valley GWMA Plan.

Contact Information

Questions about this project may be directed to Mark Hauck, DNR project manager at 320-223-7846 or at mark.hauck@state.mn.us. For more information on all GWMAs, visit www.mndnr.gov/gwmp/index.html.