

MDA Comment 9-15-2020

Comment received via email from MDA and presented at Watonwan public hearing by Watonwan staff.

MDA feels that some information in the draft plan is incorrect and offered suggested correction.

Email content and suggested correction below:

From: Berg, Jeffrey (MDA) <jeffrey.berg@state.mn.us>
Sent: Monday, September 14, 2020 3:00 PM
To: David Haler <David.Haler@co.watonwan.mn.us>
Cc: Sackett Eberhart, Jill (BWSR) <jill.sackett.eberhart@state.mn.us>
Subject: RE: Watonwan 60 day comment response

Hi Dave,

Thanks for incorporating MDA comments in the revised Watonwan 1W1P.

I noticed that some of the narrative on page 3-9 and associated title and legend on Figure 3.8 are incorrect.

I can provide some suggested corrections, but I'm not sure who these should go to and when?

Let me know if you want details.

Jeff

Water Policy Specialist

[Minnesota Department of Agriculture](#)

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Dave,

This information related to areas vulnerable to nitrate contamination, and township testing in private wells was in MDA's comment letter and was noted in the 'Response to Comments' spreadsheet.

I did some quick editing of the narrative in the plan to show how this could be corrected. (See attached)

Let me know questions/comments.

Jeff

Sept 14 notes

Watowan Plan review:

Fig. 3.8 (page 3-11; 39) header is incorrect

Page 3-9 – some nitrate narrative is incorrect

Groundwater Issues and Concerns Groundwater contamination, both naturally occurring and from human activity, is present in parts of the WRW, specifically:

Arsenic – 47% of tested drinking water wells have elevated levels of arsenic with approximately 16% exceeding the Safe Drinking Water Act (SDWA) standard of 10 µg/L. Nitrate (Figure 3-7) – o h one of the tested drinking water wells had levels at or above the SDWA standard of 10 mg/L, although shallow wells, less than 50 feet deep, had approximately 73% of samples exceeding the natural background levels of 3 mg/L, meaning groundwater quality is influenced by land use activities.

Commented [BJ(1)]: This is not true for Figure 3.8 (some of the private wells in township testing were >10mg/l. (MDH needs to determine if this sentence is correct for Fig. 3-7)

o In 2016, an ambient Minnesota Department of Agriculture (MDA) monitoring well in Watonwan County recorded a nitrate result of 91.6 mg/L (GRAPS, p. 31). This exceedance observed once, has not recorded similar results since.

o It is worthy to note that the WRW in part contributes water to the City of Mankato Ranney Wells which have seen higher levels of nitrates. These two wells are officially designated as “groundwater under the direct influence” of surface water. Due to the nitrate concentrations, the wells require blending with deeper groundwater. Highest concentrations occur in early spring and late fall.

o The MDA has completed vulnerability mapping for nitrate reaching groundwater. This information is included in Figure 3-8 and is based upon soils information and geological information (purple), and DWSMA with ≥ 5.4 mg/l (green). This map information will be used for the Groundwater Protection Rule.

Pesticides detected in both MDA monitoring wells, but not at concentrations above human-health based drinking water standards or reference values. In addition, the MDA pesticide testing of private well results are available for select townships on a County basis and should be released in 2021.

Radionuclides - Elevated concentrations of naturally occurring radioactive radium occur within the bedrock Mt. Simon and Sioux Quartzite aquifers.

Figure 3-8: MDA townships with private wells test for nitrate nitrate (crosshatching). Fall and frozen soil nitrogen fertilizer restrictions in vulnerable areas (purple)_ and DWSMAs with Nitrate levels above 5.4 mg/L (green).

The legend below needs associated updating too.

= - crosshatching = private wells in townships tested by MDA

Header above purple and green: “Fall and frozen soil nitrogen fertilizer restricted areas

