



August 9, 2016

Donna Rasmussen
Jennifer Ronnenberg
Fillmore Soil and Water Conservation District
900 Washington St. SW
Preston, MN 55965

RE: MDA Comments on Root River Watershed 1W1P Draft Report

Dear Ms. Rasmussen and Ms. Ronnenberg,

The Minnesota Department of Agriculture (MDA) appreciates the opportunity to comment on the Draft Root River Watershed One Watershed One Plan (1W1P) report. The MDA is interested in the report because we participated on the Advisory Committee and understand that successful implementation of recommended activities involves coordination of state agencies with individual producers, local government agencies, organizations, and agribusinesses located in the watershed.

Comments suggested by the MDA for consideration during the report review are summarized below.

General Comments

The report covers an extensive amount of information without clearly stating watershed specific needs; it is suggested that a plain-language outcome summary be incorporated at the beginning of the report to clearly identify action items, goals and focus areas. This summary should include an approach for accomplishing the Level A resource concerns. The intent of this summary would be to brief a new user on the 1W1P report value. The current Executive Summary does not provide this information.

In the future it is suggested that prior to the public comment period, an internal review process take place amongst the members of the technical advisory committee. It is suggested that each member has an opportunity to provide feedback.

2.4 Priority Resource Concerns and Issues

Map figures are included throughout this section; however, the information provided is often not clearly explained in the graphic. Figures should be able to stand alone without text so it is important that all data sources be labeled. For example, Figure 2-1 does not include a source for the Private Well Nitrate data. The explanation boxes generally state "readily accessible public data" without much clarification. The source should be explicitly stated. Additionally, the period of data should be included. For example, Figure 2-4 summarizes the Total Nitrogen Yield, without a source citation or a period of record. Figure 2-11 includes the 10-year, 24-hour event runoff volume without stating where it is from (TP-40 or Atlas 14?). These are just a few examples; it is suggested that each figure be reviewed and edited to ensure that sufficient details are provided. This should apply to the entire report (Figures 3-1 through 3-3 should also include data citations).

Additionally, since this is a watershed dominated by agricultural production, figures should be included summarizing livestock and septic system locations.

2.6.2 Policy and Funding Emerging Issues

Page 2-37, fifth paragraph discusses water movement challenges within karst systems. Clarification should be added to the sentence stating that “the presence of karst also affects the fate and transport particularly of dissolved substances like nitrate-nitrogen.” It is important to be clear about practices to address surface losses versus sub-surface leaching losses. Cropping rotation and proper nitrogen rate, timing, form and placement are key practices for reducing sub-surface losses.

Similarly, when looking at Table 4-6 and Section 3.3, when describing BMPs or alternative management practices that are applied to reduce sub-surface dissolved nutrient losses, avoid using the phrase “surface runoff”. For example, Action GW-1.1 “implement BMPs that manage surface runoff within Drinking Water Source Management Areas.....” It is suggested that the list on pages 3-13 through 3-23 (and Table 4-6) be reviewed for surface and sub-surface distinction.

The plan does provide any detail on how high priority areas will be systematically addressed and how farmers and landowners will be engaged in a way that results in high participation and removal of participation barriers. It is suggested that additional text be devoted to the ‘how’. The current business model for SWCDs and NRCS offices is to engage landowners who walk through the door asking for assistance. To address water quality issues at the watershed scale, a consistent and successful conservation planning process is necessary to engage producers who may not be seeking assistance. This could be further developed in section 2.6.2.4 on page 2-40. This same section could incorporate text mentioning how private crop advisors, seed dealers and crop retailers can be involved in the implementation process.

4.0 Targeted Implementation Schedule

Measureable goals are summarized in Table 4-4. It is suggested that the goals from pollutants that are associated with surface runoff and those with groundwater be separated. For instance, a 45% reduction goal is included for nitrate in the groundwater sections. This reduction should only apply to surface water reductions to address the statewide Nutrient Reduction Strategy (NRS). For groundwater, it is suggested that the goals set forth in the MDA Nitrogen Fertilizer Management Plan be used (i.e. no more than 10% of wells exceed 10 mg/L). For additional information please see: <http://www.mda.state.mn.us/chemicals/fertilizers/nutrient-mgmt/nitrogenplan.aspx> (Additionally, goals for groundwater resources on Page 3.4, in item #3 are not consistent with the MDA NFMP.)

Quantifiable measurable goals for sediment, nutrients in surface runoff may not be appropriate or consistent with other plans and need further justification and refinement. For example, a 45% reduction goal for sediment and phosphorus may not be appropriate. The NRS states a 12% reduction goal for TP. For sediment, current standards are based on TSS concentrations and turbidity. Perhaps a table could be included which states the current load and what period of load record the 45% reduction applies to: perhaps this is attempted in Table 4-5?

On page 4-12, it is unclear how the 46% value was derived in the first paragraph. It appears based on Table 4-1 that this value should be 21%?

The heading for Table 4-7 should be clarified. The table shows PTMApp estimated reductions over the 10 year life of this plan and the percent progress towards the overall reduction goals. It is critical that a

reader be able to clearly review this table and understand the plan and what is intended to be accomplished on the ground. What time period are the existing conditions derived?

4.8 Practical Considerations for Achieving the Measurable Goals

It is suggested that completed NFMP be mentioned as a process to help address the plans Priority A drinking water protection goal and help avoid duplication. This could also be included in the Executive Summary.

5.4.2.2 Collaboration with Others and 5.4.3 Work Planning

The now completed Root River Watershed Restoration and Protection Strategies (WRAPS) should specifically be referenced in this plan. Additionally, the MDA Clean Water Fund Research Root River Watershed Sediment Budget project (PI: Patrick Belmont), and data and future reports being generated from the Field to Stream Partnership (both field/stream water quality and conservation delivery lessons learned) should be referenced as new data and information to be incorporated into the plan through the Five-Year Evaluation.

PTMApp General Comments

The plan should clarify that the PTMApp cannot estimate nitrate losses through groundwater. The model can only address total nitrogen losses in surface runoff.

The South Fork example shows the highest amount of sediment derived near the outlet. This makes sense if it is a cumulative routing routine, however, this does not aid in prioritization of sub-watersheds.

The PTMApp uses 100k stream resolution vs. 24k resolution. How much variability does this add to the planning process or is this negligible?

Thank you for the opportunity to provide comments and feedback; please consider the MDA's suggestions in the development of the final 1W1P report. If you have any questions about the comments, I can be reached at 651-201-6014.

Sincerely,



Heidi M. Peterson, Ph.D.

Impaired Waters Technical Coordinator