

Memo to the Cannon River Watershed Planning Group

May 21, 2019

After reviewing your responses to the comments provided during the 60-day plan review of your Draft Comprehensive Watershed Management Plan (Plan), BWSR is requesting more information.

Specifically, more detail is needed on your response[^] to BWSR’s comment #1* and MPCA comment #2**, that no data was taken directly from the WRAPS. There is an expectation that the best available data is used when developing a Comprehensive Watershed Management Plan. On page 6 of the One Watershed, One Plan program’s plan content requirements, it states: “Plans that do not demonstrate a thorough analysis of issues, and that do not use available science and data, will not be approved.” This policy was set based on statute language (103B.801, Subd.2(3)) and to ensure that methodology is used that can produce repeatable results.

The 60-Day draft version of the Plan indicated that the existing load numbers and long-term future condition goals in tables 3-2 and 3-5 were from the 2016 Cannon River WRAPS and 2017 Cannon River Watershed TMDL (as noted in the table headers). Had the headers, footnotes or text in Justification for Goals sections indicated that the N/P BMP Spreadsheet tool (BMP tool) were used to establish existing condition numbers, BWSR would have commented on this issue prior to this point in the review process. Since both a TMDL report (approved by EPA 2/16/17) and WRAPS report (approved by MPCA 10/20/16) are available that utilized HSPF/BATHTUB models to establish existing loads and long-term future conditions to the priority impaired lakes and streams in your Plan, those numbers need to be utilized.

Also of related concern are tables 3-8 and 3-9. For both tables, while the BMP tool was noted in the footnote, the second column that indicates existing load is separated by a line which makes it appear to not be included in the table sub-header “Existing Sediment Load and Load Reduction Goals*” which references the footnote. This data should also be updated to reflect WRAPS/TMDL numbers. To match tables 3-2 and 3-5, long-term future condition goals of both 3-8 and 3-9 should utilize WRAPS/TMDL numbers as well.

According to the developer of the BMP tool, it was “intended for use by resource planners evaluating how nitrogen (and phosphorus) loads in the watershed can be reduced by a certain amount.... One use for the spreadsheet might be to help decide the levels of subsidies or other incentives to offer to the producers who would be making such implementation decisions.” The overall purpose of the BMP tool was “to develop a framework for a watershed nitrogen (and phosphorus) planning aid that could be used to compare and optimize selection of “Best Management Practices” (BMPs) for reducing the

nitrogen load from the highest contributing sources and pathways in a watershed.... It compares the effectiveness and cost of potential BMPs that could be implemented to reduce the nitrogen load entering surface waters from cropland in a watershed.” (Lazarus, 2014, *Watershed Nitrogen Reduction Planning Tool (NBMP.xlsm) for Comparing the Economics of Practices to Reduce Watershed Nitrogen Loads*). The intention of the tool was never meant to be one that calculates existing loads and reductions needed to reach goals.

BWSR acknowledges that each tool/model will predict slightly different existing loads and long-term future conditions. However, according to the response to BWSR comment #83, the BMP tool will not be used to track pace of progress, as it shouldn't be, and therefore utilizing WRAPS/TMDL numbers would allow consistent measurement of progress as you work on your plan.

BWSR staff are willing to meet discuss this issue further and determine what changes are needed.

Sincerely,

Shaina Keseley

Jennifer Mocol-Johnson

Clean Water Specialist

Board Conservationist

CC: Ed Lenz
Julie Westerlund

**BWSR Comment #1: Tables utilizing WRAPs data do not match information found within the Table 17 of the WRAPS document. This discrepancy must be examined and corrected or explained/clarified within the document. Table with data from the WRAPS are inconsistent with WRAPS content.*

^Response: No data was directly taken from the WRAPS. The WRAPS scenarios were used to identify reasonable implementation levels, but the existing loads and load reductions were independently calculated as part of this planning effort. Table captions and footnotes have been revised to clarify this.

***MPCA Comment #2: The document notes that the loading information for the protection lakes and waters near thresholds were taken from the WRAPS and Total Maximum Daily Load (TMDLs) respectively, but the numbers for the existing loads in Tables 3-2 and 3-5 do not match those found in Table 17 of the WRAPS (even after adjusting the units to match). This discrepancy should be examined and corrected or clarified in the document if there was a deliberate rationale for deviating from the WRAPS numbers. It does not appear that a uniform adjustment was made to the WRAPS numbers, as Table 3-2 includes existing loads for individual lakes that are both greater than and less than respective loads in WRAPS Table 17. The table below compares the two numbers:*

Lake	Existing loading (lbs/year)		Reduction needed (lb/year)	
	1W1P	WRAPS/TMDL	1W1P	WRAPS/TMDL
Beaver	72	41.89	8.6	4.1
Dudley	116*	321.87	13.9*	39.68
Kelly	116*	401.24	13.9*	48.51
Roemhildts	53	701.07	6.4	83.78
Fish	105	46.3	12.6	6.62
Cedar	1116	2473.58	603	929.64
Fox	2144	2594.84	901	962.06
Hunt	137	899.55	25	739.49

^Response: The existing loads in Tables 3-2 and 3-5 were based on the pollutant yields estimated from the P and N BMP spreadsheet. The existing loads in the WRAPS/TMDL are based on other tools, and we needed to compare apples to apples in terms of existing loads and load reductions achieved from the P BMP spreadsheet BMP reduction scenario. A footnote was added describing the source of these loads. References to the 2016 Cannon River WRAPS were removed from the load tables. Note that all tools would predict a different existing load for each lake drainage area: PTMApp, HSPF, and P BMP spreadsheet. Adding clarification to the Plan regarding which numbers came from which tool is important.