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April 30, 2019

Zumbro River One Watershed, One Plan Partnership  
C/O Caitlin Brady and Skip Langer, Olmsted County/SWCD  
2122 Campus Drive SE, Suite 200  
Rochester, MN 55904

Dear Zumbro River One Watershed, One Plan Partnership,

Thank you for the opportunity to provide priority issues and plan expectations for the development of the Zumbro River Comprehensive Watershed Management Plan (plan) under Minnesota Statutes section 103B.801.

The Board of Water and Soil Resources (BWSR) has the following overarching expectations for the plan:

### Process

The planning process must follow the requirements outlined in the [One Watershed, One Plan Operating Procedures \(Version 2.0\)](#), adopted by the BWSR Board on March 28, 2018. More specifically, the planning process must:

- Involve a broad range of stakeholders to ensure an integrated approach to watershed management.
- Reassess the agreement established for planning purposes when finalizing the implementation schedule and programs in the plan, in consultation with the Minnesota Counties Intergovernmental Trust and/or legal counsel of the participating organizations, to ensure implementation can occur efficiently and with minimized risk. This step is critical if the plan proposes to share services and/or submit joint grant applications.

### Plan Content

The plan must meet the requirements outlined in [One Watershed, One Plan – Plan Content Requirements \(Version 2.0\)](#), adopted by the BWSR Board on March 28, 2018. More specifically, the plan must have:

- A thorough analysis of issues, using available science and data, in the selection of priority resource concerns.
- Sufficient measurable goals to indicate an intended pace of progress for addressing the priority issues.
- A targeted and comprehensive implementation schedule, sufficient for meeting the identified goals.

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- A thorough description of the programs and activities required to administer, coordinate, and implement the actions in the schedule; including work planning (i.e. shared services, collaborative grant-making, decision making as a watershed group and not separate entities) and evaluation.

### **BWSR has the following specific priority issues:**

- **The Nonpoint Priority Funding Plan (NPPF)** – The [NPPF](#) outlines a criteria-based process to prioritize Clean Water Fund investments. Planning partners intending to pursue Clean Water Fund dollars are strongly encouraged to consider the high-level state priorities, keys to implementation, and criteria for evaluating proposed activities in the NPPF.
- **Drainage** - The drainage authorities within the planning area should be included as stakeholders in the plan development process. This inclusion should ensure that the Chapter 103E processes and proceedings as well as the extent and the limitations of drainage authority responsibility are adequately included in the final plan. Additionally, the planning partners are strongly encouraged to include projects and activities consistent with multipurpose drainage criteria outlined in Minnesota Statutes §103E.011, Subd. 1a and §103E.015, Subd. 1. Refer to the attached document “Chapter 103E Drainage System Consideration for 1W1P” for additional information on 103E Drainage Authority responsibility, authority and opportunity for participating in the planning of conservation practices involving public drainage systems.
- **Wetlands** – Protection and restoration of wetlands provides benefits for water quality, flood damage reduction, and wildlife habitat. The plan should support the continued implementation of the Wetland Conservation Act and look for opportunities to improve coordination across jurisdictional boundaries. The plan should also identify high priority areas for wetland restoration and strategically target restoration projects to those areas. The [Restorable Wetland Prioritization Tool](#) is an example resource that can be used to help identify such areas. The state is embarking on a new wetland prioritization plan that will guide wetland mitigation in the future. Wetland restoration and preservation priorities in this plan may be eligible for inclusion in this plan in the future. Please refer to the attached document “Zumbro River 1W1P Wetland Section Comments” for further information on this program and additional considerations regarding wetlands.
- **Conservation Easements** – The State’s Re-Invest in Minnesota (RIM) Reserve easement program and the Conservation Reserve Enhancement Program (CREP), in partnership with the United States Department of Agriculture (USDA), considers several site specific and landscape scale factors when funding applications. Though it is dependent on specific program terms, the State considers local prioritization of areas for easement enrollment. The plan should take into account areas with a higher risk of contributing to surface and subsurface water degradation, such as highly erosive lands and wellhead protection areas that would benefit from being placed under permanent vegetative cover. Another factor to consider is that in the next 3 years (2019-2021) nearly 6,000 acres of Conservation Reserve Program (CRP) practices are scheduled to expire within the partnership’s counties. The plan should recognize the potential impact these expiring contracts may have in the planning area and consider prioritizing working with producers regarding the management of those acres.
- **GRAPS** - The [Groundwater Restoration and Protection Strategies \(GRAPS\)](#) for the Zumbro River watershed is currently under development and will be available in the near future. This report will help

identify specific groundwater issues in the planning area; therefore, implementation actions to address these issues should be addressed in the plan.

- **WRAPS** - The Watershed Restoration and Protection Strategies (WRAPS) for the Zumbro River watershed identified total suspended solids, lack of habitat, and nitrate as the primary stressors; therefore implementation actions to address these stressors should be prioritized in the plan. The WRAPS for the Mississippi River – Lake Pepin watershed identified physical habitat and bedded sediment as stressors for Gilbert Creek. These stressors should also be addressed within the plan.
- **Landscape Resiliency and Climate Adaption** – BWSR strongly encourages your planning partnership to consider the potential for more extreme weather events and their implications for the water and land resources of the watershed in the analysis and prioritization of issues. The weather record for the Zumbro River planning area shows increased frequency and severity of extreme weather events, which has a direct effect on local water management. Adjustments involving conservation and fieldwork planning and implementation should be explored; for instance, the use of an updated precipitation frequency chart such as the [NOAA Atlas 14](#) when designing conservation projects. An additional source of information for use in the planning process is the [BWSR Landscape Resiliency Toolbox](#). Finally, a new white paper from the Minnesota Interagency Climate Adaptation Team titled “[Building Resiliency to Extreme Precipitation in Minnesota](#)” also provides resiliency strategies related to this topic.
- **Local Controls** - Gaps or inconsistencies in local ordinances, policies, or enforcement could affect the success of your plan’s implementation. Redetermination of benefits on drainage systems, SSTS compliance inspection requirements (property transfer, variance, etc.), level 3 feedlot inventories, and shoreland regulations are some examples that should be explored during plan development.
- **Soil Health** – The majority of the land use in the Zumbro River planning area is agriculture. The concept and the associated practices of soil health have the potential to positively change the interaction of agriculture and the natural system at the soil level. Common soil health practices include the use of reduce or no tillage, the use of cover crops, increased areas of continuous living cover, and extended crop rotations. Improving soil health can help decreased soil erosion, increase water infiltration, provide nutrient scavenging, and increase soil organic matter. In addition, there seems to be increased interest from landowners and operators about soil health. It is recommended that these soil health practices be prioritized for implementation in the plan.
- **Restoration/Protection** – Although surface water degradation is prevalent in the planning area and restoration is often the primary focus, there are waters that are barely impaired, nearly impaired, or meeting water quality standards, particularly in the Lower Zumbro River lobe and the Mississippi River – Lake Pepin watershed. Special focus should be paid to these areas for implementation of BMPs that will aid in the delisting and/or protection of these waters. This would also align with the high-level state priorities of the NPPF. The Nature Conservancy has completed protection planning analysis in both watersheds, which should be utilized in plan development.
- **Altered Hydrology/Flooding/Water Quantity** – The hydrologic conditions of the watersheds in this planning area have changed over time. In recent decades more precipitation, more runoff, and more runoff per unit of precipitation has been observed as well as more frequent periods of extremely low flow in some watercourses. These hydrologic changes as well as others have contributed to instability of natural and artificial watercourses, degradation of wetland habitats, loss of agricultural productivity, and

increased the risk of flood damages. Recognizing altered hydrology as a priority issue in the plan will help ensure that a driving factor behind many related issues is directly addressed.

- **Urban Stormwater/MS4s** – Urban stormwater runoff frequently contains pollutants such as pesticides, fertilizers, sediment, salt, and other debris, which can contribute to excess algae growth and poor water clarity/quality in our water resources. Poorly managed urban stormwater can also drastically alter the natural flow and infiltration of water, scour stream banks and harm or eliminate aquatic organisms and ecosystems. Municipal Separate Storm Sewer System (MS4) General Permits are owned/operated by the cities of Rochester, Red Wing, and Lake City within the planning area. These MS4s should be engaged throughout the planning process to ensure that their Stormwater Pollution Prevention Programs are incorporated into the plan.

We commend the partners for their participation in the planning effort. We look forward to working with you through the rest of the plan development process. If you have any questions, please feel free to contact me ([Adam.Beilke@state.mn.us](mailto:Adam.Beilke@state.mn.us), 507-206-2892).

Sincerely,



Adam Beilke  
Board Conservationist



Shaina Keseley  
Clean Water Specialist

Attachments: Chapter 103E Drainage Systems Considerations For One Watershed, One Plan  
Zumbro River 1W1P Wetland Section Comments

cc: Greg Williams and Karen Chandler, Barr Engineering Company (via email)  
Zumbro River One Watershed, One Plan Partnership (via email)  
Ed Lenz, BWSR (via email)  
Barbara Weisman, Dan Lais and Jeff Weiss, DNR (via email)  
Margaret Wagner and Aicam Laacouri, MDA (via email)  
Carrie Raber and Jennifer Ronnenberg, MDH (via email)  
Juline Holleran, Justin Watkins and Emily Bartusek, MPCA (via email)

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## Chapter 103E Drainage Systems Considerations

For

### One Watershed, One Plan

As the 1W1P plan is formulated, BWSR suggests the following:

- Chapter 103E drainage authorities (who are also water planning authorities) be fully engaged from the early stages of the planning process. Use Section 103E.015 *CONSIDERATIONS BEFORE DRAINAGE WORK IS DONE* and other provisions of drainage law identified below to capture both the extent and limitations of drainage authority responsibility, authority and opportunity for participating in the planning and implementation of conservation practices involving public drainage systems and their associated drainage areas.
- Prioritization within the watershed include identification of Chapter 103E drainage systems and their drainage areas.
- Multipurpose drainage management be included in the approach for targeting best management practices (BMPs) within the drainage area of Chapter 103E drainage systems, considering the five purposes outlined in Section 103E.015, Subdivision 1. *Environmental, land use, and multipurpose water management criteria*, clause (2).
- Measurable outcomes for erosion and sediment reduction, nutrient reduction, improved instream biology, and detention storage to assist those outcomes, should include correlation to Chapter 103E drainage systems.
- Lay out a coordinated approach for how implementation of multipurpose drainage management practices identified in the plan can be coordinated with, and/or integrated early into Chapter 103E processes and proceedings. When projecting funding needs for BMP implementation along, or within the drainage area of, public drainage systems, incorporate use of the following Sections of Chapter 103E.
  - 103E.011, Subd. 5. *Use of external sources of funding.*;
  - 103E.015, Subd. 1a. *Investigating potential use of external sources of funding and technical assistance.*;
  - 103E.227 *Impounding, rerouting and diverting drainage system waters.*;
  - 103E.701, Subd. 6. *Wetland restoration and replacement; water quality protection and improvement.*; and
  - 103E.715, Subd. 6. *Repair by re-sloping ditches, incorporating multistage ditch cross-section, leveling spoil banks, installing erosion control, or removing trees.*

These provisions enable public-private funding partnerships involving Chapter 103E drainage systems.

- Drainage authorities consider the permissive authority in Section 103E.021 Subd. 6 *Incremental implementation of vegetated ditch buffer strips and side inlet controls*. To establish permanent buffer strips of perennial vegetation and/or side inlet controls, where necessary to control erosion and sedimentation, improve water quality, or maintain the efficiency of the drainage system.
- Note that in accordance with Section 103E.021, Subdivision 1. *Spoil banks must be spread and permanent vegetation established.*, a drainage authority shall order minimum 16-1/2 ft. wide ditch buffer strip(s) of perennial vegetation approved by drainage authority for any proceeding to establish, construct, improve or do any work affecting a public drainage system under any law that appoints viewers to assess benefits and damages.

**Date:** 4/30/2019

**To:** A. Beilke, Board Conservationist

**From:** T. Smith, Wetland Section

### **RE: Zumbro River 1W1P Wetland Section Comments**

The Wetlands Section at BWSR is initiating a process to develop compensation planning frameworks (CPF) for each bank service area (BSA) in Minnesota. Work on the plan for BSA 8, which the Zumbro River is part of, has not begun and is not scheduled to begin until 2021 at the earliest. When completed, the CPF will assess baseline conditions and cumulative impacts to wetlands, identify watershed scale trends, and, utilizing stakeholder input and other watershed information, formulate a strategy for identifying and prioritizing wetland restoration opportunities. For the baseline condition section we typically include the following watershed characteristics: pre-settlement vegetation, wetlands, lakes, watercourses, water quality, land cover, perennial cover and impervious surface, sensitive species and plant communities, Clean Water Act Section 404 permitting analysis, and aquatic resource loss. To the extent that these characteristics are assessed in the 1W1P process they will benefit our CPF development in the future. The Wetland Section may also be able to assist with compiling information on the current extent of wetlands in the watershed and assessing the amount of cumulative loss if the planning team is interested in this information. Our specific comments on the planning process for the Zumbro River 1W1P are provided below.

- If wetland restoration projects become part of a local implementation plan they should be focused on restoring, to the greatest extent practicable, pre-disturbance conditions with respect to hydrology and vegetation. Restoration projects that are focused on a single function or service should be less of a priority than those that focus on the suite of functions provided by these resources. Also, restoration efforts should attempt to restore self-sustaining systems that are not reliant on structures and/or routine management and operation.
- The Zumbro River watershed, and the larger BSA 8, currently have a low supply of wetland bank credits. This is true both for the general public and the Local Government Road Wetland Replacement Program (LGRWRP). The low balance of credits could result in replacement for wetland impacts being exported out of the watershed which further reduces the ability of the landscape, and wetlands in particular, to perform functions at even a basic level. Through the CPF development process BWSR intends to identify priority areas where future wetland restorations would have the highest potential for success and also the greatest potential benefit to the watershed. This process could work closely with the 1W1P process to take advantage of these comprehensive planning efforts and identify wetland restoration priority areas that address multiple watershed management objectives.

In summary, the 1W1P participants, through their planning process, have the opportunity to contribute to, and benefit from, the CPF development. If there is interest in discussing opportunities to share data, coordinate

baseline condition assessments, and take advantage of stakeholder input processes please do not hesitate to contact me or Mr. Dennis Rodacker of my staff.