April 4, 2017

Ashley Gallagher
Dakota SWCD Resource Conservationist
4100 220th St W
Farmington, MN 55024

RE: Priority Concerns for the Cannon River One Watershed, One Plan

Dear Ms. Gallagher:

Thank you for the opportunity to submit our priority concerns for inclusion in the Cannon River One Watershed, One Plan (1W1P), as well as Council expectations for the 1W1P outcomes. I have also included a list of Council resources that may be of use in the 1W1P preparation, including data, load calculations, and assessment reports.

The Cannon River 1W1P is an inter-jurisdictional comprehensive management plan that will guide 10-year water management activities for the county and Soil & Water Conservation District (SWCD) boards in Dakota, Goodhue, Le Sueur, Rice, Steele and Waseca counties, the North Cannon Watershed Management Organization, and Belle Creek Watershed District. Dakota County is within the seven-county metropolitan area (the Council’s official jurisdiction). Council concerns, comments, and suggestions should be viewed with the most weigh in the Dakota County portion of the watershed.

Council Expectations and Priorities for 1W1P Preparation and Review

Council staff will review the plan, especially for that portion of the watershed within the metropolitan area, through the lens of the Council’s Thrive MSP 2040 Regional Development Framework and the 2040 Water Resources Policy Plan, both of which can be found on the Council’s web page (www.metrocouncil.org).

In particular, the 2040 Water Resources Policy Plan (Policy Plan) includes policies and strategies to achieve the following goal:

To protect, conserve, and utilize the region’s groundwater and surface water in ways that protect public health, support economic growth and development, maintain habitat and ecosystem health, and provide for recreational opportunities, which are essential to our region’s quality of life.

The Policy Plan takes an integrated approach to water supply, water quality, and wastewater issues. This approach moves beyond managing wastewater and stormwater only to meet regulatory requirements by viewing wastewater and stormwater as resources, with the goal of protecting the quantity and quality of water our region’s needs now and for future generations.
The Policy Plan includes policies and strategies to:

- Maximize regional benefits from regional investments in the areas of wastewater, water supply and surface water management and protection.
- Pursue reuse of wastewater and stormwater to offset demands on groundwater supplies.
- Promote greater collaboration, financial support, and technical support in working with partners to address wastewater, water quality, water quantity and water supply issues.
- Promote the concept of sustainable water resources through collaboration and cooperation, with the region taking steps to manage its water resources in a sustainable way with goals of:
  - Providing an adequate water supply for the region
  - Promoting and implementing best management practices aimed at protecting the quality and quantity of our resources
  - Providing efficient and cost effective wastewater services to the region
  - Efficiently addressing nonpoint and point sources pollution issues and solutions, and
  - Assessment and monitoring of lakes, rivers, and streams to direct adequate management, protection, and restoration of the region’s valued water resources.

In addition to being consistent with the Council’s new policy plans, Council staff will be looking for the plan to address the issues and problems in the watershed and to include projects or actions and funding to address them. Minnesota Statutes, Section 103B.801, subdivision 4 should be used as a guide. At a minimum, the 1W1P should address:

1. Any problems with lake and stream water quality and quantity, including information contained in the Cannon River Watershed Restoration and Protection Strategy (WRAPS).
2. Flooding issues in the watershed.
3. Storm water rate control issues in the watershed.
4. Impacts of water management on the recreation opportunities.
5. Impact of soil erosion problems on water quantity and quality.
6. The general impact of land use practices on water quantity and quality.
7. Policies and strategies related to monitoring of area water resources.
9. Issues concerning the interaction of surface water and groundwater in the watershed
10. Erosion and sediment control standards and requirements.
11. Volume reduction goals at least as restrictive as requirements in the NPDES construction general permit.
12. Capital improvement plan with itemized list of actions, estimated costs, and timeline.
13. Specifics on long-term maintenance of projects identified in the capital improvement plan, including identification of entities responsible for funding and conducting maintenance, as well as how long-term maintenance will be documented.

Specific Priority Issues for the Cannon River watershed

Long-term monitoring data collected by the Council for the Cannon River was assessed in the Council’s 2014 report Comprehensive Water Quality Assessment of Select Metropolitan Area Streams (available at www.metrocouncil.org/streams/). Results of the report indicate the flow-weighted mean concentrations at the monitoring station at the Welch for total phosphorus, total suspended solids, nitrate, and chloride were higher than those measured at the Council monitoring station on the
Mississippi River at St. Paul; thus Cannon River discharge has likely caused a decline in water quality in the Mississippi River. Yet trend analysis of the Cannon River data indicated improving water quality, and thus declining concentration, for total phosphorus and total suspended solids. Trend analysis indicates declining water quality, and thus increasing concentration, for nitrate. Based on the results of the study and Council policies, the following issues are specific to the Cannon River and are viewed as priorities by the Council for inclusion in the 1W1P:

- Impacts and mitigation of row crop agriculture. Phosphorus source control would reduce eutrophication issues in watershed lakes, and nitrate source control would protect human health and reduce potential for drinking water well contamination.

- Downstream impacts from the Cannon River watershed: The majority of the 1W1P will be focused on waterbodies and practices within the watershed. However, the Cannon River watershed is a major contributor of sediment and nutrients to the Mississippi River and has downstream impacts on water supplies, Lake Pepin, and ultimately the Gulf of Mexico. The 1W1P should explicitly address the context of the Cannon River within the greater Mississippi River watershed.

- WWTP (wastewater treatment plant) upgrades: Council trend analysis suggests that WWTP upgrades and installation of phosphorus-removal technologies has resulted in measurable reductions in total phosphorus in the Cannon River. While it may be beyond the scope of the 1W1P, identification of WWTPs needing upgrades may help with reductions in phosphorus, nitrogen, and bacteria.

- Regional parks: The Cannon River watershed includes two regional parks in Dakota County: Lake Bynesby Regional Park Miesville Ravine Park Preserve, both of which the Council has made a substantial investment in through its park implementing powers. These parks offer opportunities for public recreation on the Cannon River and its tributaries. Improvement of water quality in the watershed would likely have a positive impact on the parks, whether by improving fisheries and wildlife, by reducing risks to public health, and by improving river aesthetics.

**Available Council Resources**

The Council has collected monitoring data for the following sites in the Cannon River watershed:

<table>
<thead>
<tr>
<th>Site</th>
<th>Years data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannon River at Welch (mile 11.9)</td>
<td>1999-present</td>
</tr>
<tr>
<td>Cannon River near Harliss (Mile 4)</td>
<td>1996-2007</td>
</tr>
</tbody>
</table>

*Included on the Council’s Priority Lakes List.

River and lake data can be downloaded by visiting the Council’s EIMS website: [https://eims.metc.state.mn.us/](https://eims.metc.state.mn.us/).

Of specific note is the Council’s monitoring site at Welch. The Council has monitored the Cannon River at Welch continuously from 1999 through present along with the Dakota county SWCD as part of its Watershed Outlet Monitoring Program (WOMP). This monitoring site is collocated with the USGS monitoring station (gage 05355200) and includes continuous temperature, conductivity, and stage, as well as regular baseflow and event samples. We have calculated monthly and annual loads for this site as well. This site is a natural location to assess impacts of this 1W1P on the Cannon River over time.
The Council compiled monitoring data, flow, annual loads, and trend analyses for the Cannon River at Welch as part of our 2014 Comprehensive Water Quality Assessment of Select Metropolitan Area Streams, available at www.metrocouncil.orgSTREAMS/. During preparation of the report, Council staff collected geospatial data from multiple sources. The data includes land cover, topography, soils, crop information, and estimates of drain-tiled areas. I will be happy to direct you to load spreadsheets and any other data and analyses in the report, as well as any spatial data. I would also be happy to give a presentation to the 1W1P committees on this information. Please contact me at emily.resseger@metc.state.mn.us.

Please feel free to me call at 651-602-1033 with questions about my comments or for any assistance during the plan preparation.

Sincerely,

[Signature]

Emily Resseger
Principal Environmental Scientist
Metropolitan Council – Environmental Services
651-602-1033
emily.resseger@metc.state.mn.us

cc: Jennifer Mocol-Johnson, Board of Soil and Water Resources