



February 11, 2020

International Joint Commission
U.S. Section
1717 H Street Northwest, Suite 835
Washington, DC 20006

121 Center Street East
Suite 202; PO Box 307
Roseau, Minnesota 56751

218.463.1542
218.463.1252 FAX
cityclerk@mncable.net

RE: Preliminary assessment of potential cost impact for the City of Roseau.

Dear Commissioners:

I am Todd Peterson, the Community Development Coordinator for the City of Roseau ("City"). The City owns and operates a wastewater treatment plant that is regulated pursuant to a National Pollutant Discharge Elimination System (NPDES) permit and discharges to the Roseau River that ultimately discharges into the Red River of the North near Dominion City, Manitoba, Canada. The proposed nutrient concentration objective and load targets, if enforced by the Minnesota Pollution Control Agency ("MPCA") or U.S. EPA, could require the City to make costly investments in process changes and/or infrastructure upgrades at our wastewater treatment plant ("WWTP").

Cities like Roseau are on the forefront of protecting the Red River of the North and we take water quality concerns about the Red River and downstream Lake Winnipeg very seriously. Over the last several years, the City has made significant measurable efforts to reduce our phosphorus contribution to the Red River. We are also currently participating in the stakeholder process facilitated by the Basin Commission to work with other cities, agricultural groups and the state to develop strategies to protect water quality in the Red River. We support the IRRB's effort to develop a phosphorus load target designed to protect Lake Winnipeg and we urge the IJC to focus its effort on building consensus around the appropriate phosphorus load target for the Red River.

The potential financial costs of complying with the proposed phosphorus and nitrogen concentration objectives for the City and similarly situated communities are stark. The City currently owns and operates a pond wastewater treatment facility. We requested a preliminary analysis from our consultants about what it would cost for our facility to meet the proposed phosphorus concentration objectives, and depending upon the final target the City is estimating a minimum of \$50,000 per year in additional operating costs to further reduce the City's phosphorus discharge. The City could not determine a potential cost of reducing our nitrogen discharge at this time as we do not currently even measure our nitrogen discharge levels. Given the uncertainty related to how the concentration objective would apply to our specific facility, we assumed that our facility would be required to comply with both a total phosphorus limit of 1 milligram per liter ("mg/L) and total nitrogen permit limit ranging between 15 mg/l to 10 mg/L.

Based on a preliminary evaluation, the cost to comply with a total phosphorus

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limit of 1 milligram per liter (“mg/L”) would likely be a minimum additional cost of \$50,000 per year for the City, assuming the application of alum to our ponds is an effective method of treatment. However, changes to our TP limit may force our City into a multi-million dollar mechanical treatment system if alum applications to control TP concentrations prove to be an unreliable or ineffective treatment method. The cost to comply with a TN limit ranging between 15 mg/L to 10 mg/L is unknown at this time as the City does not currently measure our TN discharge. This is a potentially significant cost for a very small load reduction to the system. An additional concern for the City is that the technology the City would employ within our pond system to reduce our TP is the application of alum to settle out the phosphorus prior to discharge, which is a process is fraught with issues in being effective due to the need for ideal weather and pond conditions. So the uncertainty around our ability to further reduce TP or TN without the construction of a new mechanical treatment system makes the end results in Lake Winnipeg paramount to any implementation of a TP or TN strategy by the IJC, EPA and MPCA.

This is a potentially significant cost for a very small load reduction to the system and it would be in addition to the cost for the City to meet its other infrastructure priorities important to protecting public health and the environment. The City has made significant strides in reducing our TP contributions to the eutrophication of Lake Winnipeg, further reductions should be based upon a comprehensive and achievable solution to the problems within Lake Winnipeg.

Given the significant concerns identified by Minnesota cities and municipal groups and the potential economic consequences for municipal WWTPs, we believe that it is unreasonable for the IJC to accept the IRRB’s proposed concentration objectives for phosphorus and nitrogen and the load target for nitrogen at this time. Instead, we urge the IJC and IRRB to focus its efforts on the development of a phosphorus load target for the Red River designed to protect Lake Winnipeg, and to work with all stakeholders to develop a strategy to meet that target.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd Peterson', written in a cursive style.

Todd Peterson
Roseau Community Development Coordinator