



REPORT

To: Electoral Area Directors Committee

Report Number: ENV-EADC-002

From: Paulo Eichelberger, General Manager of Environmental Services

Date: April 1, 2020

Subject: **Area B Water – Rose Prairie Water Station**

RECOMMENDATION#1:

That the Electoral Area Directors Committee authorize conducting a four-six week Granular Activated Carbon (GAC) pilot study at the current Rose Prairie Tankloader location, to determine if the proposed treatment will meet Northern Health water quality parameters as required for public consumption.

RECOMMENDATION#2:

That the Electoral Area Directors Committee authorize well testing at the North Peace Fall Fair Grounds to determine the feasibility of utilizing the well as an alternative water source for the Rose Prairie Tankloader.

BACKGROUND/RATIONALE:

During the February 20, 2020 EDAC meeting the following resolution was made:

That the Electoral Area Directors Committee suggest that Director Goodings approach the North Peace Fall Fair Committee to discuss the possibility of using the well at the fair grounds to supply a public water tanker loading station; and further

That the Environmental Services Manager will attend that meeting to provide information.

The Rose Prairie potable water station remains unopen to the public due to the high levels of turbidity. Minimal operational activities are being conducted at this site to maintain the equipment and prevent bacterial cultures from forming. In order to proceed with the ability to provide potable water to the residents of the Rose Prairie area, certain activities must be conducted to solidify options.

The current resolution states that a meeting is to take place with the North Peace Fall Fair Committee to discuss the possibility of utilizing the well. Due to the situation around the COVID-19 pandemic, the meeting has not taken place. In the meantime, operational activities could be conducted to determine if the GAC system or the alternative well are viable options. Both options will require operational time to test which will further delay the ability to open the station.

Granular Activated Carbon (GAC) Pilot Study Option

The GAC pilot study is intended to determine if the GAC filter can achieve Northern Health's water quality standards at a larger scale and volume, while also determining media sizing, lifespan, and associated capital, operational, and maintenance costs. All of these variables would be unknown without a pilot study. If the GAC system resolves the water quality issue, then the system would be expanded to full scale operations and the station will remain at its current site.

Fair Grounds (Alternative Water Source) Option

The North Peace Fall Fair Grounds (NPFFG) is owned by the PRRD. The well is registered to the PRRD as a domestic water well. In order to determine viability of the well there are numerous aspects that need to be evaluated. Well production rates, re-charge ability, water content, and water reaction results are the main pieces of data required. If successful in this scenario, the treatment facility could move from its current location to the fair grounds for permanent operation.

ALTERNATIVE OPTIONS:

1. That the Electoral Area Directors Committee provide alternative direction.

STRATEGIC PLAN RELEVANCE:

☒ Not Applicable to Strategic Plan.

FINANCIAL CONSIDERATION(S):

Options	Estimated Associated Costs
GAC	\$200,000, which includes a 45% contingency allowance. Half of the cost would be for site preparation, supply and installation of the 5 m by 7 m building, which would be permanent and used for both the pilot study and the full-scale plant. The study costs allow for the pilot plant to be operated by a third party and includes laboratory costs and reporting.
Test the North Peace Fall Fair Grounds Well	\$43,500, which includes a 45% contingency allowance. This includes testing for well production rates, water re-charge, water content, and water reaction results with existing treatment process.

The capital budget line (03-8-8500-8503-702) in the draft 2020 Financial Plan for the Area B Water Function is \$1,008,352 to complete outstanding works. It is expected that a large portion of these funds will be utilized to get the Rose Prairie Water Station completed to public opening, whether the site remains in its current location or is moved.

The original borrow to kick off the capital works for the Area B Water Function was \$4,000,000. Should the entire remaining amount of \$1,008,352 be required to complete the project, annual debenture payments that are scheduled to begin in 2021 will be \$469,000 (\$369,000 principal, \$120,000 interest).

To keep the costs down for all Area B residents and reduce future debenture payments, it may be possible to use PRA reserves to fund the remaining work. Area B uncommitted reserves are currently at \$2,012,339.

Alternative funding through provincial grants have been reviewed but are either fully allocated or are now past the deadline for submission.

COMMUNICATIONS CONSIDERATION(S):

An update on the Rose Prairie water station status was posted on the PRRD website and Facebook prior to March 31, 2020, advising the public of the current situation with COVID-19 and the challenges the PRRD is

facing with increased time to plan meetings. This directly affects the Rose Prairie Water Station as EADC was cancelled in March and the meeting with the North Peace Fall Fair Committee has been delayed.

OTHER CONSIDERATION(S):

None identified.