



STAFF REPORT

Date: 8 September 2021
To: **Chair Langman and Board of Directors**
From: Janine Dougall, General Manager of Environmental Services
Re: Borrowing for Capital Projects for Regional Solid Waste Services

File ES – Solid Waste

Issue Introduction

A staff report from Janine Dougall, General Manager of Environmental Services, which provides ranking of pending capital projects for regional solid waste services to be considered for Alternative Approval Process to achieve long-term borrowing capabilities.

History/Background Factors

At the August 26, 2021 Board meeting a staff report outlining a number of significant capital projects for the regional solid waste service and the options associated with achieving long term borrowing was presented.

At the Board meeting the following recommendation was adopted:

"That the RDKB Board of Directors receive the staff report dated August 26, 2021 from Janine Dougall, General Manager of Environmental Services titled "Borrowing for Capital Projects for Regional Solid Waste Services"; further, that the RDKB Board of Directors direct staff to pursue the Alternative Approval Process to obtain elector assent; and further still, that staff bring back a report that prioritizes the capital projects."

Over the next number of years, the Regional District of Kootenay Boundary (RDKB) is embarking on a number of solid waste projects that have significant capital expenditures associated. These projects are as follows:

Organics Diversion Expansion Projects

1. McKelvey Creek Landfill Upgrade Project
 - Project scope includes construction of transfer station for green bin waste transfer, water, sewer and fibre optic utilities, two new weigh scales and relocation/upgrade of recycling areas.
 - Project cost estimated at \$2.1 Million at preliminary design.

- Infrastructure grant applied for with grant funding at 90%.
- Grant application unsuccessful.
- Detailed design work to be completed in 2021 with actual construction proposed for 2022.

2. McKelvey Creek Wasteshed – Implementation of Residential Curbside Green Bin Collection

- Project scope includes purchase and distribution of green bins and associated collection bags, education programs, waste audit for approximately 8,300 residential households.
- Project cost estimated at \$1.1 Million.
- Organics and Collection Infrastructure grant applied for with grant funding at 67%.
- Project is anticipated for rollout in the fall of 2022 once the green bin transfer station at the McKelvey Creek Landfill is completed construction.

3. Replacement of Wood Grinder

- The wood grinder is an essential piece of equipment that is used in organics composting operations at solid waste facilities in the Boundary as well as the McKelvey Creek Landfill.
- This existing piece of equipment will require replacement within a 5-year period or by the end of 2027. The current cost for a wood grinder is approximately \$1.2 million.

Other Potential Solid Waste Projects

1. McKelvey Creek Landfill Operations

- The current McKelvey Creek Landfill Operations and Maintenance contract is set to expire on July 1, 2023. There has been some discussion at the RDKB staff level regarding the benefits and disadvantages of potentially taking over operations of the site and utilizing RDKB employees similar to what is happening at the solid waste facilities in the Boundary.
- To allow the RDKB to assume operations at the McKelvey Creek Landfill a significant amount of capital would be required primarily associated with equipment:
 - Landfill Compactor – New \$1.2 Million, Used \$400,000
 - Roll-off Truck – New \$200,000, Used \$100,000
 - Loader – New \$500,000, Used not recommended
 - Water Tank – New \$50,000, Used \$10,000
 - Storage for Equipment and Supplies - \$50,000
 - Miscellaneous Equipment - \$8,000
 - Sander and Plow on Used 1-Tonne Truck - \$50,000

Advantages

- Better control and buy-in of staff at landfill operations;
- Easier to change operations without challenges/costs associated with contract administration and scope changes;
- Build in-house capacity with respect to landfill operations and solid waste management services. Knowledge of landfill operations is not common and

having and retaining qualified operators can have significant implications to landfill lifespan;

- Provide good paying long-term local employment opportunities vs potential change in landfill contractor every 5 years (typical length of contract);
- Depending on long term borrowing capabilities for capital equipment, overall costs of RDKB vs contractor can be comparable. Further financial evaluation is required to confirm.
- Economies of scale can be achieved when operating multiple sites. For example, can share equipment between sites (excluding landfill compactors), backup-capabilities.

Disadvantages

- Need to hire and retain skilled equipment operators to maximize equipment longevity and minimize repair costs;
- Additional human resources/staffing/training requirements;
- Additional health and safety considerations.

Implications

Having the ability for long-term borrowing for large capital projects will give greater flexibility in managing costs for solid waste management services.

The table below summarizes the potential capital costs that could be incurred by the RDKB over the next 5 years and ranks them in priority for inclusion in an AAP process:

Project	Estimated Cost	Priority
McKelvey Creek Landfill Upgrade Project (2022)	\$2,100,000 - \$3,000,000	High
McKelvey Creek Wasteshed Residential Green Bin Program (2022)	\$1,100,000	High
Wood Grinder (before 2027)	\$1,200,000 - \$1,500,000	High/Medium
McKelvey Creek Landfill Operations (2023)	\$1,200,000 - \$2,058,000	Medium
Total	\$5,600,000 - \$7,658,000	

For the McKelvey Creek Landfill Upgrade Project and the McKelvey Creek Wasteshed Residential Green Bin Program an AAP process would be recommended to be initiated as soon as possible given the timelines for completion of the projects. The need to include the McKelvey Creek Wasteshed Residential Green Bin Program may not be required depending on grant success.

For the replacement of the wood grinder, this could wait and be included in an updated solid waste management plan, however depending on the timing of plan completion, this could result in extra costs associated with machine repairs and maintenance due to the age of the equipment. It would be advisable to move forward with an AAP process to allow for more timely replacement.

The transition of operations of the McKelvey Creek Landfill is not considered as a priority project and therefore is recommended for inclusion in an update of the solid waste management plan.

Advancement of Strategic Planning Goals



Having the ability to borrow required capital funding over a term longer than 5 years gives flexibility to the Regional District in optimizing operations and contributes to the provision of cost effective and efficient services associated with solid waste management.

Background Information Provided

None

Alternatives

1. That the RDKB Board of Directors authorize staff to pursue an Alternative Approval Process to achieve elector assent for the following regional solid waste projects:
 - McKelvey Creek Upgrade Project
 - McKelvey Creek Wasteshed Residential Green Bin Program (assuming grant application is unsuccessful)
 - Replacement of Wood Grinder
2. That the RDKB Board of Directors request additional information from staff.

Recommendation(s)

That the RDKB Board of Directors authorize staff to pursue an Alternative Approval Process to achieve elector assent for the following regional solid waste projects:

- McKelvey Creek Upgrade Project
- McKelvey Creek Wasteshed Residential Green Bin Program (assuming grant application is unsuccessful)
- Replacement of Wood Grinder