



REPORT

To: Solid Waste Committee

Report Number: ENV-SWC-070

From: Gerritt Lacey, Solid Waste Manager

Date: December 3, 2021

Subject: 2022 Solid Waste Supplemental Requests

RECOMMENDATION #1:

That the Solid Waste Committee recommend that the Regional Board approve the supplementary request of \$2,910,000 payable from a combination of requisition and capital reserve, to be issued to Function 500 – Solid Waste, for the North Peace Regional Landfill Phase 1 Closure – Construction & Engineering QA/QC capital project.

RECOMMENDATION #2:

That the Solid Waste Committee recommend that the Regional Board approve the supplementary request of \$183,952 payable from a combination of requisition and capital reserve, to be issued to Function 500 – Solid Waste, for the Bulky Pit Closure capital project.

RECOMMENDATION #3:

That the Solid Waste Committee recommend that the Regional Board approve the supplementary request of \$140,000 payable from requisition, to be issued to Function 500 – Solid Waste, for the Security Cameras for Manned Transfer Station capital project.

RECOMMENDATION #4:

That the Solid Waste Committee recommend that the Regional Board approve the supplementary request of \$18,000 payable from requisition, to be issued to Function 500 – Solid Waste, for the Landfill Gas Probe Collection Network Installation (Bessborough, Chetwynd, and North Peace landfills) capital project.

RECOMMENDATION #5:

That the Solid Waste Committee recommend that the Regional Board approve the supplementary request of \$55,000 payable from requisition, to be issued to Function 500 – Solid Waste, for the Share Shed Purchase (Bessborough and Chetwynd landfill) capital project.

RECOMMENDATION #6:

That the Solid Waste Committee recommend that the Regional Board approve the supplementary request of \$160,500 payable from a combination of requisition and operational surplus, to be issued to Function 500 – Solid Waste, for the Bulky Pit Closure operational project.

BACKGROUND/RATIONALE:

This report is intended to provide the Solid Waste Committee (SWC) with an outline of the proposed one-time 2022 supplemental requests for solid waste projects. There are 5 capital and 2 operational projects identified and a brief summary of each project has been provided below:

1. North Peace Regional Landfill Phase 1 Closure (attachment #1)

In 2021 staff worked with a consulting engineer to prepare the design and tender documents for the construction of the cover system at the North Peace Regional Landfill (NPRLF). The design has been completed and the tender documents will be ready for issuing in March of 2022 as scheduled. Based on the design and construction estimate provided by the engineer, it is estimated that the construction of the closure system will be \$2,800,000. An additional \$110,000 will be allocated for the consulting engineer who will be performing contract administration, Quality Assurance, and Quality Control on behalf of the Peace River Regional District (PRRD).

The total cost for the 2022 portion of the closure is \$2,910,000 with the proposed funding contributions to include \$2,894,050 from requisition and \$15,950 from capital reserve (carry forward monies from 2021 work).

2. Bulky Pit Closure (attachment #2)

In 2021 staff worked on closure systems for three bulky pit trenches located at the Cecil Lake, Kelly Lake, and Rose Prairie closed landfills. The budget allocated to the project in 2021 was not enough to cover all the construction costs in the bid received. Staff was able to fill all three trenches with clay as per the associated designs, however the sites did not receive topsoil or seeding.

The cost to complete the cover system in 2022 is \$183,952, with the proposed funding contributions to include \$168,548 from requisition and \$13,952 from capital reserve (carry forward monies from 2021 work).

3. Security Cameras for Manned Transfer Stations (attachment #3)

In 2021 the Buick Creek Transfer Station was vandalized and broken into for the third time. The theft resulted in a loss of the \$120 in cash from the site, as well as approximately \$7,000 in damages due to vandal behaviours. All PRRD manned transfer stations have signage indicating they are under video surveillance, however no cameras are currently present on site. This proposed project is to supply three cameras (two outdoor and a single indoor) and all necessary hardware to 12 of 16 manned transfer stations. The only sites that will not receive a camera at this time are the two generator operated sites and the two municipal transfer stations (one currently had cameras installed by the municipality, the other is due to be upgraded to a Tier 1 site, at which time cameras will be included in the design).

The total cost of the project is \$140,000 with the proposed funding contribution to be from requisition.

4. Landfill Gas Probe Collection Network Installation (BBLF,CHLF,NPRLF) (attachment #4)

In 2021 the Design Operating and Closure Plans (DOCPs) for the all three active Peace River Regional District (PRRD) Landfills were updated. DOCPs are a provincial requirement under the landfills operating permit and must be prepared by a qualified professional (QP). A DOCP outlines how the landfill will be operated over the life of the landfill, and they are updated every five years. As part of the environmental

monitoring requirements of the new DOCPs, it is recommended that Landfill Gas (LFG) probes be installed around the sites. These probes will monitor for any unwanted migrating LFG away from the site through channels such as gravel. It is recommended that two probes be installed at the Bessborough Landfill (BBLF), a single probe Chetwynd Landfill (CHLF), and 6 Probes be installed at the North Peace Regional Landfill (NPRLF). Once installed, a quarterly monitoring program is required. If gases are not present in the quarterly samples then the monitoring program can be backed off to tri-annual or semi-annual based on a QP recommendation.

The total cost of the project is \$18,000 with the proposed funding contribution to be from requisition.

5. Share Shed Purchase (BBLF,CHLF) (attachment #5)

When the manned transfer stations were built in 2013/2014, share sheds were incorporated into the design and layout. As part of the new front entrance build in 2017 at the North Peace Regional Landfill (NPRLF), a share shed was also included. These share sheds are popular amongst residents and are heavily used at all PRRD sites. Currently the Bessborough and Chetwynd landfills, as well as the Dawson Creek Transfer Station, do not have a share shed on site. This project is to supply each site with a 12'x24' shed to be used as a share shed in 2022, which will complete the share shed network.

The total cost of the project is \$80,000 with the proposed funding contributions to be requisition.

6. Closed Landfill Remediation Work (attachment #6)

In 2020 the PRRD began working towards abandoning active permits for 13 closed landfill sites around the region. The work started with a Qualified Professional (QP) compiling closure reports for each of the closed landfills. These closure reports look at many factors of the landfill including current condition and remediation required to keep the site compliant with the BC Landfill Criteria. In 2021, 10 of the closed landfills were able to be remediated by PRRD field services staff and require no further action other than annual inspections. The remaining three sites require additional work beyond what internal staff can perform. For Cecil Lake and Rose Prairie a large amount of cleanup and burial of old waste is needed. The closure report for the Dawson Creek Closed Landfill recommends that an Impact and Risk Assessment be conducted to help determine the level of remediation required for the site. From there, a remediation plan will be built.

The total cost of the project is \$160,500 with the proposed funding contributions to include \$151,100 from requisition and \$9,400 from the 2021 operational surplus.

ALTERNATIVE OPTIONS:

1. That the Solid Waste Committee provide further direction.

STRATEGIC PLAN RELEVANCE:

☒ Not Applicable to Strategic Plan

FINANCIAL CONSIDERATION(S):

In 2021 the Solid Waste department had \$3,005,556 allocated to capital projects.

- \$812,556 new projects and \$2,193,000 carry forward projects.

The Proposed Capital program as presented is a \$4,145,898 program for 2022.

- \$3,331,952 new projects and \$813,946 in carry forward projects.

A table illustrating the funding sources is provided below:

Table 1: Proposed 2022 New Capital Project Funding

Project	Requisition	Capital Reserve	Carry Forward	Total
NPRLF Phase 1 Closure	\$2,894,050	\$0	\$15,950	\$2,910,000
Bulky Pit Closure	\$170,000	\$0	\$13,952	\$183,952
Security Cameras for Manned Transfer Stations	\$140,000	\$0	\$0	\$140,000
Landfill Gas Probe Collection Network Expansion	\$18,000	\$0	\$0	\$18,000
Share Shed Purchase	\$80,000	\$0	\$0	\$55,000
TOTALS	\$3,302,050	\$0	\$29,902	\$3,331,952

Table 2: 2021 Capital funding vs Proposed 2022 Capital funding.

	Requisition	Capital Reserve	Carry Forward	Total
2021	\$644,267	\$168,289	\$2,193,000	\$3,005,556
2022	\$3,302,050	\$29,902	\$812,556	\$4,145,898

The anticipated Solid Waste Capital Reserve balance at the end of 2021 is \$2,750,000. At this time it is recommended that we continue with building the Capital Reserve and do not use it for funding 2022 new capital projects.

COMMUNICATIONS CONSIDERATION(S):

None at this time.

OTHER CONSIDERATION(S):

Prespatou Scale

The decking of the Prespatou scale is beginning to deteriorate. Staff is waiting on quotes for the costs of rough lumber and metal plating to replace the current decking, as well as a quote for replacing the whole scale.

Staff will bring forward more information as well as a supplementary requests to the January 2022 Solid Waste Committee meeting for funding considerations.

Attachments:

1. 2022_500_Cap_NPRLF Phase 1 Closure – Construction & Engineering QAQC
2. 2022_500_Cap_Bulky Pit Closure
3. 2022_500_Cap_Security Cameras for Manned TS
4. 2022_500_Cap_LFG Probe Collection Network Installation (BBLF,CHLF,NPRLF)
5. 2022_500_Cap_Share Shed Purchase (BBLF,CHLF,DCTS)
6. 2022_500_Ops_Closed Landfill Remediation Work