



REPORT

To: Solid Waste Committee

Report Number: ENV-SWC-031

From: Gerritt Lacey, Solid Waste Manager

Date: January 7, 2021

Subject: 2021 Solid Waste Supplemental Requests

RECOMMENDATION #1:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item - Charlie Lake Compost Site Development, and that \$1,000,000 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #2:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item – Bessborough Landfill Compost Site Development, and that \$1,000,000 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #3:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item - North Peace Regional Landfill Phase 1 Closure, and that \$70,000 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #4:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item – Chetwynd Landfill Scale Replacement, and that \$279,267 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #5:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item – Prespatou Scale Replacement, and that \$60,000 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #6:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item – Bulky Pit, and that \$155,000 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #7:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item – Manned Transfer Station Builds – Lebell, Lone Prairie, Hazler, and that \$110,000 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #8:

That the Solid Waste Committee recommend that the Regional Board approve the Supplemental Item – Bessborough Landfill Diversion Pad Development, and that \$140,000 is allocated to the project and included in the 2021 Solid Waste Budget.

RECOMMENDATION #9:

That the Solid Waste Committee recommend that the Regional Board allocate \$185,733 to be transferred into the Solid Waste Capital Reserve as part of the 2021 Solid Waste Budget.

BACKGROUND/RATIONALE:

This report is intended to provide the Solid Waste Committee (SWC) with an outline of the proposed 2021 Solid Waste Capital Program. For 2021 there have been 8 new capital projects identified, a brief summary of each project has been provided below:

1. Charlie Lake Compost Infrastructure Development (attachment #1)

The Province recently released the CleanBC Organics Infrastructure and Collection Program. The program intends to create additional organics processing capacity in British Columbia. The program will fund up to 25.7 million dollars of projects where the province will contribute up to two-thirds of eligible project costs, with the remaining 1/3 of the project costs contributed from the successful recipient.

There are two streams of funding available, Organic Processing Infrastructure, or Residential Curbside Collections. The application for the Charlie Lake site will fall under the infrastructure side of the program.

The estimated 1/3 contribution from the PRRD at this time is \$2,016,465 with the proposed funding coming 100% from requisition in 2021 (\$1,000,000) and 2022 (\$1,016,465).

If the grant funding does not pass the project will not proceed. The \$1,000,000 that was allocated for the project will instead be transferred into the Solid Waste capital reserve at the end of the year.

2. Bessborough Landfill Compost Infrastructure Development (attachment #2)

This project falls under the same grant application as the Charlie Lake Compost Infrastructure Development. The estimated 1/3 contribution from the PRRD is \$1,969,160 with the proposed funding coming 100% from requisition in 2021 (\$1,000,000) and 2022 (\$969,160).

If the grant funding does not pass the project will not proceed. The \$1,000,000 that was allocated for the project will instead be transferred into the Solid Waste capital reserve at the end of the year.

3. North Peace Regional Landfill Phase 1 Closure (attachment #3)

All landfills have a requirement to be “closed” when they have been filled to their final design. The closure refers to the final cap of the landfill. This cap helps prevent leachate generation, contains and manages landfill gasses, and helps establish vegetative cover. Today, most landfills use a method of progressive closures, this spreads the cost of the final closure over the years of the landfill’s life so there is not a large single cost.

The North Peace Regional Landfill is ready to receive its first closure works. The area is approximately 24,000m² and is pictured below in red:



In 2021, the design for the final closure will be completed with the construction taking place in 2023 (2022 if the organics grant does not pass). The estimated cost for design is \$70,000 with the proposed funding coming 100% from requisition.

4. Chetwynd Landfill Scale Replacement (attachment #4)

The current foundation for the Chetwynd Landfill (CHLF) scale is failing. In 2020 the design for the scale replacement was awarded to Sperling Hansen and the work will be completed this year with a tender package ready to go out for bid in March of 2021 for the construction.

The total estimated cost for the work in 2021 is \$447,556; the proposed funding for this project is \$168,289 from capital reserves (carried forward for 2020 budget) and \$279,267 from requisition.

5. Prespatou Transfer Station Scale Replacement (attachment #5)

The Prespatou Transfer Station experienced a significant amount of movement in the lock block wall that supports the deck to the attendant building and to the piles of the scale foundation. The problem is believed to be attributed to drainage issues and standing water, however the foundation itself could be compromised. Staff is preparing to investigate the problem in 2021 operationally, but if there are problems with the foundation itself, a consultant will be required to provide alternative options for the site. Keeping the scale operational is important as the site sees a lot of traffic from the agricultural community.

The total estimated cost for the design work in 2021 is \$60,000; the proposed funding for this project is 100% from requisition.

If it is found that the consultant is not needed, the dollars that were requisitioned would move into the Solid Waste capital reserve at the end of the year.

6. Bulky Pit Closure (attachment #6)

In 2020, the Cecil Lake, Rose Prairie, and Kelley Lake Transfer Stations (CLTS, RPTS, and KLTS) had ramps and tipping rails constructed to support the use of 40 yard bins for the collection of bulky and wood waste. Previously, bulky and wood waste was disposed of in a Bulky Waste Pit; however, concerns by the BC Ministry of Environment were raised back in 2018 leading staff to move away from collection in that same manner as costs would be prohibitive. The proposed project for 2021 for these sites is to provide the cover system to the previously used Bulky Waste Pits and place them at their end of life.

The total estimated cost of the project is \$155,000; the proposed funding for this project is 100% requisition.

7. Manned Transfer Station - (Lebell, Lone Prairie, Hazler) (attachment #7)

This project is to provide designs for three new manned transfer stations to be built in 2022. The designs would be for the Lebell, Lone Prairie, and Hazler areas. These sites would replace the current unmanned sites at Mt. Lemoray, Hasler Flats, Sukunka, Lone Prairie, and Lebell.

The total estimated cost of the project is \$110,000; the proposed funding for this project is 100% requisition.

8. Bessborough Diversion Pad (attachment #8)

This capital upgrade is to expand the designated divertible materials area and provide a gravel pad at the Bessborough Landfill. Currently, the divertible material area is mainly used for metals and white goods, with a separate area for concrete and is located mostly on a clay base. This project would clear approximately 0.6 acres of trees and connect the two diversion areas and add gravel to the pad. The total size of the diversion pad would be 1.5 acres. A picture outlining the area to be clearing is provided below:



The total estimated cost of the project is \$140,000; the proposed funding for this project is 100% requisition.

9. Transfer to Reserve

To keep the new capital works at \$3,000,000 for 2021 a transfer to reserve the capital reserve of \$185,733 is proposed.

If all of the new capital projects are approved, the Capital Program for the Solid Waste Department in 2021 would be 8 new projects, and 6 carry forward projects.

Staff has been working on developing a Solid Waste 5 Year Capital Plan, which helps guide the department in the upcoming years to help provide financial stability. A table of the plan has been provided in attachment #9 for reference.

ALTERNATIVE OPTIONS:

1. That the Solid Waste Committee provide further direction.

STRATEGIC PLAN RELEVANCE:

- ☒ Not Applicable to Strategic Plan.

FINANCIAL CONSIDERATION(S):

Project	Requisition	Reserve
Charlie Lake Compost Pad Development	\$1,000,000	
Bessborough Landfill Compost Pad Development	\$1,000,000	
North Peace Regional Landfill Phase 1 Closure - Design	\$70,000	
Chetwynd Landfill Scale Replacement – Tender, Construction, QA/QC	\$279,267	\$168,289
Prespatou Scale Replacement – Design	\$60,000	
Bulky Waste Pit Closure (CLTS,RPTS, KLTS) – Design, Tender, Construction	\$155,000	
Manned Transfer Station (Lebell, Lone Prairie, Hazler) - Design	\$110,000	
Bessborough Landfill Diversion Pad Development	\$140,000	
Transfer to Reserve	\$185,733	
TOTALS	\$3,000,000	\$168,289

COMMUNICATIONS CONSIDERATION(S):

N/A

OTHER CONSIDERATION(S):

A proposed 5 year Capital plan outlining anticipated upcoming projects is provided in attachment #9.

Attachments:

1. 2021 Budget - Supplemental Item – Charlie Lake Compost Site Development
2. 2021 Budget - Supplemental Item – Bessborough Landfill Compost Site Development
3. 2021 Budget - Supplemental Item – North Peace Regional Landfill Phase 1 Closure
4. 2021 Budget - Supplemental Item – Chetwynd Landfill Scale Replacement
5. 2021 Budget - Supplemental Item – Prespatou Scale Replacement
6. 2021 Budget - Supplemental Item – Bulky Pit Closure
7. 2021 Budget - Supplemental Item – Manned Transfer Station
8. 2021 Budget - Supplemental Item – Bessborough Landfill Diversion Pad Development
9. Solid Waste 5 Year Capital Plan