

STRATEGIC PLANNING

Council Committee

February 25, 2019

9:00 am

Clearwater County Council Chambers

4340 – 47 Avenue

Rocky Mountain House AB

AGENDA

A. AGENDA ADOPTION

B. MINUTES

1. September 17, 2018 Agenda & Priorities Committee Meeting Minutes
 2. October 5, 2018 Agenda & Priorities Committee Meeting Minutes
-

C. PUBLIC WORKS OPERATIONS

1. Clearwater County Regional Wastewater System Briefing
-






D. AGRICULTURE & COMMUNITY SERVICES

1. Partnership Opportunity with Wild Rose School Division's Leslieville School Project
-

E. ADJOURNMENT



COUNCIL STRATEGIC PLANNING COMMITTEE AGENDA ITEM

SUBJECT: Clearwater County Regional Wastewater System Briefing		
PRESENTATION DATE: February 25 th , 2019		
DEPARTMENT: Public Works	WRITTEN BY: Devin Drozd, Civil Engineering Intern; Kurt Magnus, Director of Public Works Operations	REVIEWED BY: Kurt Magnus, Director of Public Works Operations; Rick Emmons, CAO
BUDGET CONSIDERATIONS: <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Funded by Dept. <input type="checkbox"/> Reallocation		
LEGISLATIVE DIRECTION: <input checked="" type="checkbox"/> None <input type="checkbox"/> Provincial Legislation (cite) <input type="checkbox"/> County Bylaw or Policy (cite)		
COMMUNITY BUILDING PILLAR (check all that apply):		
<input checked="" type="checkbox"/>  Economic Prosperity	<input type="checkbox"/>  Governance Leadership	<input type="checkbox"/>  Fiscal Responsibilities
<input checked="" type="checkbox"/>  Environmental Stewardship	<input checked="" type="checkbox"/>  Community Social Growth	
ATTACHMENT(S): Clearwater County Wastewater Operations Essay, MPE Engineering Ltd. Clearwater County Regional Wastewater Treatment Facility Cost Breakdown.		
STAFF RECOMMENDATION: That the Strategic Planning Committee provide guidance and consensus for Administration pursuing options for a Clearwater County Regional Wastewater Treatment Facility.		

BACKGROUND:

On October 15th, 2013, Clearwater County entered into a ten-year agreement with the Town of Rocky Mountain House to allow Clearwater County residents and businesses to expel their septage at the Town's wastewater lagoon. In exchange, the County contributed \$2.1 million, to the Town of Rocky Mountain House, for lagoon upgrades.

Prior to 2013, and on many occasions thereafter, the idea of Clearwater County, possibly, having a regional wastewater system, for the County's use alone, was brought forward by Council. Consequently, as per Council's direction, on October 10th, 2018, MPE Engineering Ltd. provided Administration with an estimate of what it would cost to build a Wastewater Treatment Facility (WWTF) that would have the capacity to accept, not only external hauling, but also the capacity to take on the hamlets of Withrow, Leslieville, Condor and Alhambra.

It was determined that approximately \$25 million would be needed to design and construct a regional wastewater treatment facility which would accommodate external septage hauling initially, with the potential to tie in the wastewater systems of all four hamlets (see attached MPE Engineering Ltd. cost breakdown). As such, Council approved, within the 2019 to 2023 five-

year capital budget, the \$25 million whereby \$300,000 was allocated to 2019, \$1,300,000 to 2020, \$5,800,000 to 2021, \$12,500,000 to 2022 and \$5,100,000 to 2023. The facility would be operational by October 2023.

To further assist Council, a descriptive essay (see attached '*Clearwater County Wastewater Operations*') has been compiled which summarizes options to each of the wastewater systems within Clearwater County. Whether it be redesigning the wastewater system for the hamlets, adding new technology in Caroline, constructing a Clearwater County Regional WWTF, or assessing the regional septage situation at Rocky Mountain House's lagoon, there are many options and views to consider.

Town of Rocky Mountain House Wastewater System Update

As Council is aware of, currently, the Town of Rocky Mountain House has been aiming to upgrade its lagoon with a pH correction unit utilizing acid removal systems in order to attempt to mitigate the non-compliance that has been consistently occurring due to an increased un-ionized ammonia content. Engineering was done on this project, and a tender put out in the last quarter of 2018. However, no bids were received. Hence, a potentially more bidder-friendly redesign of the project, utilizing CO₂ injection to correct pH, is currently being studied by WSP Engineering. If this proposal is approved by Alberta Environment and Parks (AEP), the Town aims to put out a tender, for the redesigned project, on March 15th, 2019.

Additionally, on December 14th, 2018, MPE Engineering Ltd. submitted the '*Regional Wastewater Treatment Facility Upgrade Feasibility Study*' to the Town of Rocky Mountain House. This study analyzes the Town's existing lagoon and seeks to provide upgrading strategies to meet regulatory requirements. The Town's proposed "regional system" would be like the one MPE Engineering Ltd. provided to County Administration, in terms of technology, by using an SBR or MBBR (the details of which are described in the descriptive essay). The main difference between the Town's and County's proposed WWTF is that the Town's WWTF system makes no consideration for the County's four hamlets.

The total cost for the Town's "regional system" is approximated at \$27,223,000, with up to 75% of that cost, hopefully, coming from provincial and federal funding. Given Clearwater County, according to the MPE Feasibility Study, utilizes the lagoon to approximately 20% of the volume, the Town expects Clearwater County to provide 20% of the remaining 25% cost, a portion that works out to around \$1.4 million. This feasibility study and cost breakdown was brought in front of and accepted by Town Council on January 8th, 2019, with anticipated discussions, between the Town and County, to negotiate cost sharing, to follow.

Village of Caroline Wastewater System Update

The Village of Caroline has signed a "memorandum of understanding" with *Fogdog Energy* to allow them to pursue handling the Village's solid and liquid waste. At the January 8th, 2019 Village of Caroline Council meeting, Fogdog Energy gave a public presentation describing their technologies to handle the Village's solid and liquid waste. Fogdog's technology eliminates the use of landfills and wastewater lagoons by converting all solid waste to a sterile, dehydrated "fluff." This "fluff" does not produce any greenhouse gases or odours as regular waste management systems would. Once created, this "fluff" can be boiled to a gas and pumped through turbines to produce electricity, or this gas can be further distilled to produce diesel fuel. In turn, the liquid portion of waste is "cleaned" and can be utilized for such tasks as providing additional irrigation.

MPE Engineering Ltd. Clearwater County Regional Wastewater Treatment Facility Cost Breakdown.

TABLE 1

Task	Description	Milestone Date	Cost Allocation
Scoping Study	Desk top study to identify alternatives, land locations, regulatory and stakeholder limitations, treatment requirements, staging options, and cost estimates.	2019	\$100,000
Preliminary Engineering Study	Preliminary engineering design of chosen alternative and location including field investigations such as survey, geotechnical, environmental & historical assessments, receiving body impact assessment, land / easement agreements, etc.	2019 2020	\$200,000 \$100,000
Detailed Design	Detailed design complete with tender ready contract packages, final land and easement acquisition, and regulatory approvals.	2020 / 2021	2020 - \$ 1,200,000 2021 - \$ 800,000
Tendering & Construction	Tendering, construction and commissioning of the various system components (likely 2 tenders).	2021 - 2023	2021 - \$ 5,000,000 2022 - \$ 12,500,000 2023 - \$ 5,000,000
Post Construction Work	Warranty, etc.	2024	\$100,000

Capital Allocation Summary:

2019	-	\$ 300,000
2020	-	\$ 1,300,000
2021	-	\$ 5,800,000
2022	-	\$12,500,000
2023	-	\$ 5,100,000

CLEARWATER COUNTY WASTEWATER OPERATIONS

Devin Drozd/Kurt Magnus
CLEARWATER COUNTY

Alberta has 70 rural municipalities that are branded either as a municipal district, county, regional district, or special area. As of 2016, Clearwater County is tenth largest for population and eighth largest in area. Including the town of Rocky Mountain House and the Village of Caroline, Clearwater County houses a population of just under 20,000, spread out over an area of over 18,000 km². A population of this amount would require a sophisticated disposal system for sewage and other liquid waste. Currently, Clearwater County houses three wastewater lagoons. These consist of two small conventional lagoons at Leslieville and Condor, and, one medium sized aerated lagoon serving Nordegg, The Town of Rocky Mountain House and the Village of Caroline consist of a large and medium sized aerated lagoon, respectively. Each of these lagoons are at various levels of compliance with provincial guidelines and have many different conceptualized options available for upgrades and rejuvenations.

Condor and Leslieville are the two most populous hamlets in Clearwater County, with approximately 150 and 250 residents, respectively. During the school year, the populations effectively double with the student population of Condor School and Leslieville School. The wastewater lagoons at Condor (NW-06-39-04-W5M) and at Leslieville (SE-25-39-05-W5M) are conventional gravity-fed lagoons with an operational capacity of 20,000 m³ each. Currently, both lagoons do not meet the Alberta Environment & Parks' (AEP) standards for optimal operation but are allowed to be grandfathered into the system. However, AEP may decide, at any time in the future, that grandfathered systems must be upgraded, or, an increase in population would also necessitate an upgrade to either of these lagoons. Because of this, MPE Engineering Ltd. submitted the 'Clearwater County Regional Wastewater Study', to the county, on June 3rd, 2013, outlining four alternatives to consider applying to the wastewater needs of the county's hamlets only to meet a 25-year lifecycle of operation. They are as follows;

Hamlets Only

Alternative	Description
1A	<i>Status Quo</i> - Condor and Leslieville lift stations and lagoons are upgraded to accommodate 25-year flow and meet current standards. The Alhambra and Withrow hamlets remain as private septic systems.
1B	<i>Individual Hamlet Systems</i> - Alternative 1A plus constructing new lift stations and lagoons at Alhambra and Withrow.
1C	<i>Semi-regional Hamlet System</i> - This alternative provides a wastewater treatment facility (conventional lagoon) at Leslieville and Condor to service the four hamlets. Involves installing collection systems at each lot in Alhambra and Withrow as well as installing a force main to pump waste from Alhambra to Condor and from Withrow to Leslieville.
1D	<i>Regional Hamlet System</i> - Condor, Withrow and Alhambra flows are pumped to a regional sewage lagoon at Leslieville. Only upgrade lagoon at Leslieville and have waste pumped from Alhambra, Withrow, and Condor through new force mains and lift stations.

Figure 1: Table of wastewater alternatives

The hamlets of Alhambra and Withrow currently do not have any communal wastewater system. Each lot simply has their own septic field.

With Alternative 1A,

- There would be no changes at Alhambra and Withrow, which may cause issues if future population growths occur in the hamlets.

- It is the most cost effective though, with no additional land needing to be purchased, and, no brand-new facilities needing to be constructed.
- Less land footprint which would also mean less chance of environmental hazards due to leakages, pipe bursts, etc.

With Alternative 1B,

- Would not require long force mains to pump from Alhambra to Condor and from Withrow to Leslieville. Consequently, energy costs to pump this great distance would be reduced considerably.
- Would necessitate the construction of four new lift stations and lagoons rather than two. Potential for more mechanical “mishaps”.

The cons of Alternative 1B are mitigated in Alternative 1C by,

- Not having to construct two new lagoons.
- Having the only costs being,
 - The construction of two lift stations.
 - The installation of a 6 km force-main from Withrow to Leslieville.
 - The installation of an 8 km force-main from Alhambra to Condor.

Alternative 1D is a similar story to 1C with the lagoon at Condor being decommissioned and having a 6 km force-main installed from Condor to Leslieville, and a 6 km force main from Alhambra, and Withrow, to Leslieville. Alternatives 1C and 1D would have a higher degree of environmental concerns due to the total length of pipe needed to tie into the treatment facility at Condor and/or Leslieville. Also, with more distance to pump, the higher the energy costs would be.

Regarding Alternative 1C, and the hamlets without direct wastewater lagoon access, MPE Engineering Ltd. submitted the *Withrow Waste Water Study* on February 25th, 2014. This report focused on the options of tying Withrow into the wastewater system at Leslieville. The ideas of this report can easily be adapted to Alhambra and Condor. The requirements to tie Withrow to Leslieville would be,

- A septic tank, filter and pump unit at each residential lot,
- A 6 km force-main from Withrow to Leslieville,
- An upgraded lagoon at Leslieville.

To feed the force-main, from each lot, two options are available: A **gravity sewer system**, and a **pressured sewer system**. A pressured sewer system would require a tank and a pump, at each lot, which would add to the maintenance costs, but would need less excavation and disturbances to the land, as there would be no worry of having the flows move uphill, as it is all pumped. A gravity sewer system relies only on gravity to get the sewage moving. Excavation costs would increase as a proper grade would be needed in order to have good flowage throughout the system, and, a lift station would have to be constructed to have some power to

pump down the force-main to Leslieville. According to MPE's report, the gravity system would come at a cost of \$2.5 million, and the pressured system at \$1.3 million.

In Caroline and Nordegg, larger aerated lagoons are currently being used. Although the permanent population of Nordegg is under 100, future developments planned for the townsites hope to push the population to around 2500. The lagoon, located at NE-08-40-15-W5M and NW-09-40-15-W5M, has been built to accommodate a population of 2500. With a total operational capacity of 126,000 m³ throughout five aerated storage cells, Nordegg's lagoon does meet AEP's guidelines for a 25-year lifespan. The Village of Caroline, with a population of around 500, has a lagoon located at NE-11-36-06-W5M, consisting of two aerated storage cells with a total operational capacity of around 30,000 m³. As of right now, Caroline's wastewater lagoon does meet AEP's guidelines. However, with the development on the north-east side of Caroline, the wastewater lagoon was cited as a piece of infrastructure that would require upgrades to accommodate this growth. As such, on April 25th, 2018, Stantec Consulting Ltd. provided the Village of Caroline with the '*Village of Caroline Lagoon Upgrade Feasibility Study*'. This report summarizes four options available to upgrade this lagoon:

- Sequencing Batch Reactor (SBR).
- Submerged Attached Growth Reactor (SAGR).
- Moving Bed Biological Reactor (MBBR).
- Remove the aeration totally, making this a conventional lagoon system.

An SBR plant uses an activated sludge process to treat wastewater. Right now, both lagoons at Caroline are aerated, allowing the aeration bubbles to react with the influent as soon as it enters the lagoon cell. The SBR option would only need one aerated cell and would use the unaerated cell to settle the wastewater to produce the activated sludge. The sludge would then be pumped to the second cell, which would allow wastewater and sludge to be aerated. The sludge is then filtered out and collected. This system allows for faster treatment, as aerating sludge rather than pure wastewater helps when organic contents are high, but does require more attention and maintenance, as sludge is produced every day and must be collected, rather than not being produced at all.

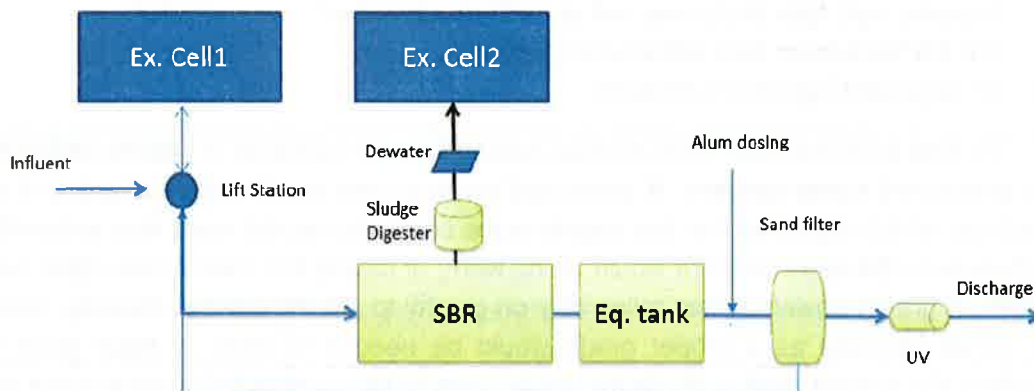


Figure 2: Stantec Consulting Ltd. SBR Process Flow Diagram

With the increase in population, the existing aerated system could, theoretically, handle the toxicity levels of Carbonaceous Biochemical Oxygen Demand (CBOD) and Total Suspended Solids (TSS), but not ammonia levels. The SAGR or the MBBR would assist in mitigating these increased ammonia concentrations. The SAGR is simply a box full of washed gravel where air is pumped in to allow bacteria to grow and assist with the nitrification of the ammonia and other biological treatments. It allows for easy installation, as the SAGR box would just have to be installed somewhere downstream from the lagoons. However, according to Stantec, the existing aeration system should be replaced upon installation of the SAGR, adding to the cost. The MBBR is similar to the SAGR in that it is just a box that would need to be installed downstream from the lagoons. Rather than using washed gravel as the surface to grow bacteria, the MBBR uses polyurethane foam cubes. This technology has less installation costs than the SAGR and is shown to be more efficient in post-lagoon nitrification. The MBBR is relatively new on the scene and its long-term issues, if any, have yet to be realized by its handful of users. Again, the existing aeration system should be replaced upon installation of the MBBR.

The final option provided to the Village of Caroline from Stantec was the installation of a conventional lagoon system. The latest AEP standards state that the configuration of a conventional wastewater lagoon system should consist of at least three cells: an anaerobic, a facultative, and a storage cell. The cell size requirements are summarized in the following table.

Cell	Retention Time	Required Cell Volume	Existing Cell Volume	New Cell Volume	Water Depth
Anaerobic	2 days	560 m ³	0 m ³	560 m ³	Min. 3 m
Facultative	60 days	16791 m ³	17498 m ³	0 m ³	Max. 1.5 m
Storage	365 days	102147 m ³	0 m ³	102147 m ³	Max. 3 m

Figure 3: Cell Volumes for Proposed Caroline Lagoon System from Stantec

As stated in Figure 3, the two existing cells at Caroline could be combined to form one facultative cell. The anaerobic cell could easily be placed near the existing lagoon. But due to space limitations at the site, the storage cell would not fit here without some land acquisitions, and even so, it would be a challenge to place this cell and satisfy AEP's setback standards of being 300 m away from any occupied building.

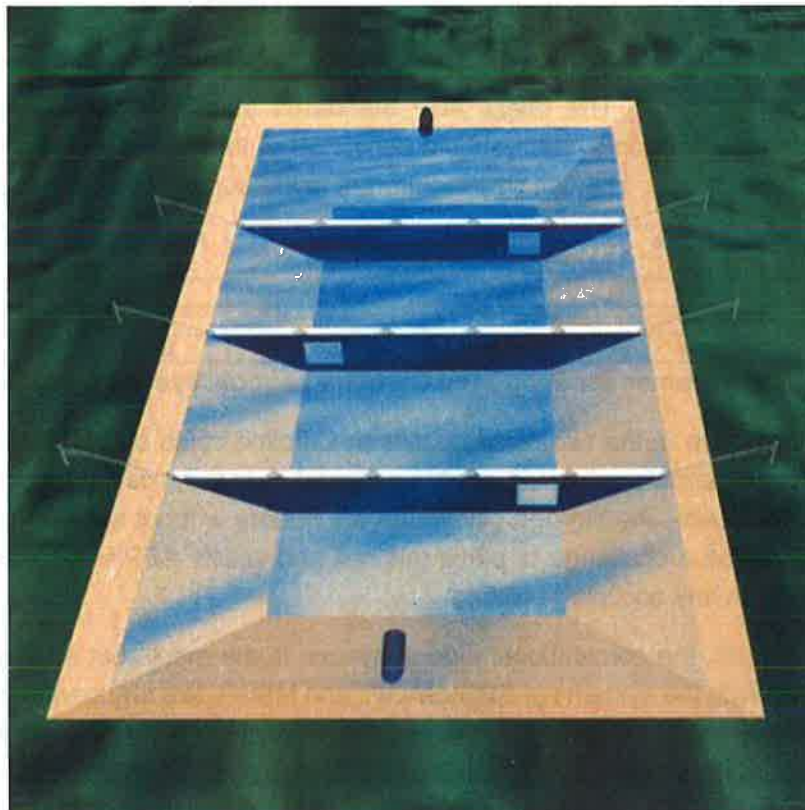
In terms of costs, the conventional lagoon system is the most cost effective, both short term and long term. With the systems of SBR, SAGR, and MBBR, like any new technology, more persistent surveillance would be required to make sure everything is running smoothly, and the glitches that do occur would be tougher to mitigate. Although the conventional lagoon system would be a higher capital cost initially, the operation and maintenance costs would be greatly reduced over the years, from the usage of a tried and true method.

The Leslieville and Condor lagoons are able, to a certain degree, to accommodate external haulage. However, for all intents and purposes, it is minimal. Due to Nordegg's geographical isolation, it sees little utilization in this regard. To accommodate this external haulage, Clearwater County has entered into an agreement with the Town of Rocky Mountain House to use their lagoon at SW-34-39-07-W5M. The Town's lagoon has a total capacity of 245,200 m³ spread out over three cells. The County's main usage is for external hauling. The

months with the highest haulage are June to September. This lagoon does satisfy AEP's guidelines, but with any guidelines, are subject to change.

On April 23rd, 2018, WSP Engineering Ltd. submitted the '*Wastewater Upgrading Options*' report to the Town of Rocky Mountain House. This report outlines various preliminary options that could be done to this lagoon. The options included the installation of a SAGR or an MBBR for post-lagoon nitrification, but also mentioned the development of natural wetlands to provide nitrification using natural processes. The constructed wetlands would be advantageous due to the ample space but does not have the same efficiency in winter operations as the SAGR or MBBR, as vegetative growth typically does not thrive in winter. Another option was to include baffles, in the cells, to improve hydraulics and oxygen control to increase the nitrification processes.

Figure 4: Lagoon with baffles (environeticsinc.com/floating-baffles)



Clearwater County's use of the town's lagoon will always be a viable option to accommodate regional external hauling. However, other options have been considered, by Clearwater County, to conceptualize a regional wastewater system of their own. In MPE's 2013 '*Clearwater County Regional Waste Water Study*', four alternatives were outlined to accommodate regional septage.

Hamlets and Regional Septage (Alternative 2A & 2B) and Regional System with a Municipal Partner (Alternative 3A & 3B)

Alternative	Description
2A	<i>Separate System for Hamlets and Regional Septage - Alternative 1D (regional hamlet system), plus a separate stand-alone facility to treat the regional septage.</i>
2B	<i>Combined Regional System for Hamlets and Regional Septage – This alternative upgrades the regional hamlet system (Alternative 1D) to be able to accommodate the regional septage. Essentially upgrading Leslieville to a WWTF to accommodate regional septage.</i>
3A	<i>Partnering with Town of Rocky Mountain House – This alternative involves construction of a mechanical wastewater treatment plant near RMH which accommodates wastewater flows from the Town of RMH, regional septage, as well as the four hamlets.</i>
3B	<i>Partnering with Village of Caroline - Alternative 2B with a connection to accept flows from Caroline. A regional wastewater facility at Leslieville accepts piped sewage from the four hamlets and the village of Caroline, as well as regional septage.</i>

Figure 5: Table of wastewater alternatives

Concerning **Alternative 2A**, several possible sites have been considered. On July 27th, 2011, Paragon Soil & Environmental Consulting submitted the '*Phase I Environmental Site Assessment for Proposed Septage Lagoon*' to Clearwater County. This report summarized pros and cons for five proposed quarter sections located approximately 10 km west of Rocky Mountain House:

- NW-34-39-08-W5M
- SW-34-39-08-W5M
- NW-27-39-08-W5M
- NE-33-39-08-W5M
- SE-33-39-08-W5M

Due to the presence of various industrial and residential refuse on these sites, Paragon concluded, with its recommendation, that Clearwater County should not pursue further investigation or action at these sites. Even so, on May 25th, 2012, the Government of Alberta issued a license of occupation to Clearwater County on the four quarter sections of 34-39-08-W5M. This license would allow Clearwater County to "...enter upon, possess, and occupy the land...". This course of events was met with considerable backlash by the residents of Ferrier and area, who created a petition against the development of a sewage lagoon near their neighbourhood. Additionally, a site, on some county-owned land at the end of Gateway Dr. at SE-01-39-07-W5M, or, a site between Caroline and Rocky Mountain House, have been conceptualized to house a regional wastewater facility.

Alternative 2B is virtually identical to 2A in that an entirely new Wastewater Treatment Plant would be constructed in Leslieville. The capital costs of these two alternatives would be very similar as well. Alternative 2B would be easier to implement as the land, near Leslieville, is already in place. Alternative 2A would be more difficult, both in terms of acquiring land and the negative public perception that such a facility would generate.

Alternative 3A has the highest cost compared to any of the previous alternatives. However, if funding from grants are achieved, this alternative may be more feasible. The primary

driver behind this option is both the town of Rocky Mountain House and County's willingness to participate in this alternative particularly if either think that their existing facility(s)/system(s) can or cannot meet their own long-term needs. A similar story is told in **Alternative 3B**, but this alternative may be a bit harder to justify since Caroline's system appears to be more capable of meeting their long-term needs.

Additionally, the idea to combine everything into one wastewater system has been considered. A model system to base off would be the Central Alberta Wastewater System (CAWWS). The CAWWS consists of,

- The 26 km north leg, opened on May 4th, 2018 at a cost of \$71 million, serving
 - Lacombe
 - Blackfalds
- The 96 km south leg, opened on October 16th, 2015 at a cost of \$140 million, serving
 - Olds
 - Bowden
 - Innisfail
 - Penhold
 - Springbrook
- The 34 km west leg, which has been tendered out but has yet to begin construction (Scheduled to be completed in 2021 at a projected cost of \$61 million), which will serve
 - Sylvan Lake
 - Norglenwold
 - Half Moon Bay
 - Sunbreaker Cove
 - Birchcliff
 - Jarvis Bay
 - Poplar Ridge

The Red Deer wastewater treatment plant also was upgraded from 2012 to 2016 at a cost of \$56 million in order to handle the increased capacity of 72,500 m³/d from the original 47,500 m³/d.



Figure 6: CAWWS Map

(<http://www.srdw.com/documents/CARRW%20Overall%20Concept%20Summary%20Master%20Plan%20040308.pdf>)

Clearwater County's system need not be quite this expansive or expensive. An overview, sent from MPE Engineering Ltd., on October 4th, 2018, consisted of the following components:

- A Wastewater Treatment Plant (WWTP) capable of treating sewage from the four hamlets (Leslieville, Withrow, Condor and Alhambra); the towns of Rocky Mountain House and Caroline; as well as the potential to receive sewage from several future subdivisions (equiv. population of 1000) and regional septage from the County. Estimated capacity equal to a population of 13,000 – 14,000.
- A series of force-mains and lift stations from each of the four hamlets and two towns, to deliver sewage to the WWTP. Includes 7 to 8 lift stations and 90 to 100 km of force-main.
- An outfall line from the WWTP to the North Saskatchewan River or other.
- Decommissioning of existing sewage lagoons at Leslieville, Condor, Caroline and Rocky Mountain House.
- New gravity collection systems for the hamlets of Alhambra and Withrow.

Three options on the placement of the WWTP were provided:

- Option A: located 10-15 km southeast of Rocky Mountain House,
- Option B: located north of Rocky Mountain House, near the existing lagoon,
- Option C: located in the Leslieville area near existing lagoon.

With any early cost estimates in a project, there are countless numbers of unknowns that would affect the cost of the system. Based on MPE's experience and recent tenders from other projects, they provided an initial estimate of \$115 million for Option A, \$95 million for Option B and \$62 million for Option C.

A final consideration, in the placement of any type of WWTF/system, is the point of septage discharge. As such,






- If Clearwater County septage was treated at Leslieville, you would have farther to haul from the Rocky Mountain House area (i.e.: Wilderness Village, Pidherney's Subdivision, etc.) than now. Hence, may need to consider public perception and convenience.
 - The discharge location options considered for Leslieville are,
 - Lobstick Creek – current outfall
 - Lasthill Creek.
 - Medicine River.
 - Medicine River was based on a WWTP and continuous discharge. The other option is the North Saskatchewan River. Typically, for continuous discharge, a "larger" river is required.
 - Lobstick Creek is the current outfall, for Leslieville, and only enough for flows in the order of two times what is currently being discharged. As such, Lobstick Creek probably could not handle all four hamlets and the regional septage.
 - Lasthill Creek has potential and might be able to handle the septage, all four hamlets, and, possibly, a bit more septage if the WWTF had additional storage. Equally, a receiving stream assessment would need to be done. Indeed, a

seven-month storage could work with several discharges per year, or, even continuous discharge for a portion of the year with storage occurring over the winter.

In conclusion, this essay sought to provide a scope of what is currently possible for options, within Clearwater County, for wastewater management. This hopefully allows for a greater visualization of what is to come for Clearwater County in the future.



COUNCIL STRATEGIC PLANNING COMMITTEE AGENDA ITEM

SUBJECT: Partnership Opportunity with Wild Rose School Division (WRSD) Leslieville School Project		
PRESENTATION DATE: February 25th 2019		
DEPARTMENT: Ag and Community Services	WRITTEN BY: Matt Martinson, Director Ag and Community Services	REVIEWED BY: Rick Emmons, CAO
BUDGET CONSIDERATIONS: <input type="checkbox"/> N/A <input type="checkbox"/> Funded by Dept. <input type="checkbox"/> Reallocation		
LEGISLATIVE DIRECTION: <input type="checkbox"/> None <input type="checkbox"/> Provincial Legislation (cite) <input type="checkbox"/> County Bylaw or Policy (cite)		
COMMUNITY BUILDING PILLAR (check all that apply):		
<input checked="" type="checkbox"/>  Economic Prosperity <input type="checkbox"/>  Governance Leadership <input type="checkbox"/>  Fiscal Responsibilities <input type="checkbox"/>  Environmental Stewardship <input checked="" type="checkbox"/>  Community Social Growth		
ATTACHMENT(S): 1) David Thompson Recreation Board letter of support for community partnerships.		

STAFF RECOMMENDATION:

That the Committee discuss potential partnership opportunities with WRSD and make recommendations to Council should the committee wish to pursue one or more opportunities.

BACKGROUND:

At its January 8th 2018 meeting Council received a presentation from WRSD regarding their Wild Rose School Division Corridor Schools Capital Plan.

During the presentation WRSD informed Council that within the plan there are opportunities for partnership between WRSD and the County to add additional amenities or improved amenities within the proposed school facility. The potential augmented or improved amenities capital and maintenance cost would be the responsibility of the County, but the entire community / general public could use and benefit from the facility.

Administration has worked closely with WRSD to establish estimates for the capital and

Leslieville School Partnership Opportunities with Wild Rose School Division										
Project	Capital Cost	Area of addition in sq. meters	Estimated Capital Cost	Average Utility Cost of Corridor Schools/Sq M.	School Facility Maintenance Costs - Avg. of Last Two Years/Sq. M.	WRSD Average Caretaking Cost from 2015/Sq M.	WRSD PM Event Cost Avg. Last Two Years/Sq M.	Total Cost of Utilities, PO&M Caretaking and PM per Sq. M.	Estimated Combined Caretaking and Maintenance Costs of Additional Space	
						\$8.54	\$16.50	\$3.39	\$41.46	
Community Library	\$90,000.00	23	\$86,940.00	\$13.02	\$98.25	\$379.50	\$78.05		\$568.83	
Larger Gym	\$720,000.00	190	\$718,200.00	\$13.02	\$811.67	\$3,135.00	\$644.75		\$4,604.44	*Does not include refinishing expenses of the floor
Fitness Area	\$75,000.00	19.5	\$73,710.00	\$13.02	\$83.30	\$321.75	\$66.17		\$484.25	
Raised Stage	\$302,000.00	80	\$302,400.00	\$13.02	\$341.75	\$1,320.00	\$271.47		\$1,946.25	
Community Kitchen	\$340,000.00	90	\$340,200.00	\$13.02	\$384.47	\$1,485.00	\$305.41		\$2,187.90	*Commercial Kitchens are above normal costs due to inspection and utility consumption. This cost does not reflect this variance.
Community Storage	\$130,000.00	34	\$128,520.00	\$13.02	\$145.25	\$561.00	\$115.38		\$834.64	
Larger Gathering Space	\$76,000.00	20	\$75,600.00		\$85.44	\$330.00	\$67.87		\$496.33	
Sports Field Track	\$500,000.00									

maintenance costs of potential augmented or improved facility amenities.

WRSD has stated that the above list may not be the only projects that they would be willing to partner on but tend to be projects that have been developed in other communities and that are complimentary to traditional school facilities.

Administration is aware of discussion from the community concerned about the future of the playground currently located on the Leslieville School Property.

If Council wishes to consider the redevelopment / relocation of the play ground it may consider two options. Council may choose to discuss re-locating the play ground within the School division property with WRSD or Council may choose to redevelop the playground at a different possibly more appropriate location within the Hamlet of Leslieville. Council may want to consider safety related to crossing the highway and appropriateness of the interface between young children and high school students should it wish to discuss a future playground location.

WRSD has stated that should Council choose to enter into a partnership on one or more projects that a letter of support with a formal Council Resolution would be needed soon. Funding for the project would need to be available in 2020.

January 14, 2019

Re: David Thompson, Leslieville, Condor School

To Whom it May Concern,

The David Thompson Recreation Board is a volunteer organization charged with the responsibility of distributing funds to recreational and cultural activities within our defined boundaries. The board is a representation of the seven smaller communities whose children would typically attend the 3 schools in our area as well as members from the three schools. Our organization has been active for nearly 50 years and some of the biggest changes we have ever discussed appear to be in the near future as the David Thompson, Leslieville, and Condor schools anticipate major news regarding reconfiguration and construction.

We would like to officially acknowledge our support for the proposed school changes and hope that our community partnership with Wild Rose School Division and Clearwater County, both of which have representatives on our board, will assist in a common vision and a future school setting that our entire community can be proud of. Our organization also works to advocate for community use of these school facilities which provide options unlike any other in our area and therefore have a vested interest in making these buildings as functional as possible.

Sincerely,

The David Thompson Recreation Board

Ryan Smith	President	Leslieville School	ryan.smith@wrsd.ca
Dave Clough	Vice-President	Gimlet	
Kassie Whitecotton	Secretary/Treasurer	Leslieville Comm.	kassie.whitecotton@wrsd.ca
Alanna Hoeksema		Alhambra	
Sheila Pike		Aurora	
Fred Blair		Condor Community	
Shannon Valentine		Condor School	
Darryl Lougheed		Clearwater County	
Alana Merklin		David Thompson School	
Mandy Mercia		Evergreen	
Laureen Bolin		Withrow	
Gary Thompson		Wild Rose School Division	