AGENDA & PRIORITIES

Council Committee June 18, 2018 9:00 a.m.

AGENDA

A. AGENDA ADOPTION		
B. CONFIRMATION OF MINUTES	April 16, 2018 Agenda & Priorities Council Committee Meeting Minutes	
C. AGRICULTURE & COMMUNITY SERVICES	1. STARS Funding	
D. PUBLIC WORKS OPERATIONS	 Municipal (Condor & Leslieville) Wastewater System Information for Wild Rose School Division Granular Resources Management Review 	
E. DELEGATION	1. 10:00 am Rural Municipalities of Alberta Paul McLauchlin, Director District 2 Al Kemmere, President Gerald Rhodes, Executive Director	
F. ADMINISTRATION	 1:00 pm Broadband Project – Progress Update Broadband Public Engagement Summary Report - Jennifer Massig, Magna Engineering and Craig Dobson, Taylor Warwick Consulting Ltd. 	
G. CLOSED SESSION* VERBAL REPORTS For discussions relating to and in accordance with: a) the Municipal Government Act, Section 197 (2) and b) the Freedom of Information and Protection of Privacy Act	 Broadband Business Plan Update; FOIP s.16 – Disclosure Harmful to Business Interests of a Third Party and s. 24 Advice from Officials Broadband Infrastructure Master Plan Phasing Update; FOIP s.16 – Disclosure Harmful to Business Interests of a Third Party and s. 24 Advice from Officials 	



AGENDA & PRIORITIES COUNCIL COMMITTEE AGENDA ITEM

SUBJECT: Shock Trauma Air Rescue Service Foundation (STARS)						
PRESENTATION DATE: June 18, 2018						
DEPARTMENT: Agriculture and Community Services	WRITTEN BY: Rick Emmons, Chief Administrative Officer	REVIEWED BY: Rick Emmons, Chief Administrative Officer				
BUDGET IMPLICATION: □ N/A ☑ Funded by Dept. □ Reallocation						
LEGISLATIVE DIRECTION: ⊠None □ Provincial Legislation (cite) □ County Bylaw or Policy (cite)						
STRATEGIC PLAN THEME: Community Well-Being PRIORITY AREA: Create a safer community through building a sense of belonging and community nride		STRATEGIES: Evaluate and plan the current public safety and emergency services needs within the broader Rocky/Caroline/Clearwater community.				
ATTACHMENT(S): September 18, 2017 Correspondence						
RECOMMENDATION: That the Committee reviews and receives the information as presented and, that the Committee recommends that Council considers STARS request for increased funding during 2019 budget deliberations.						

BACKGROUND:

Clearwater County has contributed \$6,000 annually to the Shock Trauma Air Rescue Society (STARS) for some time. This was one of the items Lacombe County brought up at Council's joint meeting between Lacombe County and Clearwater County on March 26/18.

With Lacombe County's inquiry, Administration obtained the contributions from some neighbouring municipalities. The following municipalities responded as to what they currently contribute to STARS:

County of Stettler - \$2.20/capita annually (5,322 X \$2.20 = \$11,708)

^{*}In order of highest to lowest on a per capita basis

- Red Deer County \$2/capita annually (19,541 X \$2 = \$39,082)
- Mountain View County \$2/capita annually (13,074 X \$2 = \$26,148)
- Ponoka County \$2/capita annually (9,806 X \$2 = \$19,612)
- Camrose County \$2/capita annually (8,458 X \$2 = \$16,916)
- County of Westaskiwin \$1/capita annually (11,181 X \$1 = \$11,181)
- Wheatland County \$1/capita annually (8,788 X \$1 = \$8,788)
- Kneehill County \$0.60/capita annually (5,001 X \$0.60 = \$3,000)
- Clearwater County \$0.50/capita annually (11,947 X \$0.50 = \$6,000)
- Strathcona County \$0.08/capita annually (98,044 X \$0.077 = \$7,500)

Based on our current population, if Clearwater County was to adopt the \$2/capita annually model, we would pay (11,947 X \$2.00) = \$23,894.00



September 18, 2017

Ted Hickey, Director, Community and Protective Services Clearwater County PO Box 550 Rocky Mountain House, AB T4T 1A4

Dear Mr. Hickey;

Re: Request for STARS Funding

Thank you to Clearwater County and its residents for your ongoing commitment to STARS since 1989. We are truly grateful for your leadership and commitment that ensures the safety and a quality of life for your residents.

STARS is fortunate to receive support from rural municipalities across Alberta (along with urban municipalities and inter-provincially) who value STARS as a protective services option. Thank you for your life-saving partnership to safeguard that the highest level of emergency services is available to Albertans.

These past few years have been difficult for municipalities and STARS alike and the current economic environment still poses many challenges. Within Clearwater County, there is an average of 3-4 STARS missions flown each month, which represents a mission-related cost value of over \$300,000 per year to your residents. We are ALL STARS. Together we will continue saving lives but, we cannot do it alone.

Please accept this letter as a formal request for your kind consideration of STARS funding during Clearwater County's 2018 budget deliberations.

OUR REQUEST

- Continued annual commitment to STARS
- Consideration of an increase to \$2 per capita, joining fellow municipalities
- Consideration of a 4 Year Term (2018, 2019, 2020, 2021) OR
- Consideration of an annual standing motion within your protective services budget

Please do not hesitate to contact me directly @ 780-830-7006 or 780-512-6205 (cell) if I can be of further assistance. I look forward to seeing you and your council in the New Year with an annual update.

Thank you for being our "partners in saving lives."

Sincerely,

Glenda Farnden

Senior Municipal Relations Liaison

STARS Foundation



SUBJECT: Municipal (Condor & Leslieville) Wastewater System Information for Wild Rose

AGENDA & PRIORITIES COUNCIL COMMITTEE AGENDA ITEM

School Division					
PRESENTATION DATE: June 18 th , 2018					
DEPARTMENT: Public Works	WRITTEN BY: Kate Reglin, Project Technologist; Kurt Magnus, Director, Public Works Operations	REVIEWED BY: Kurt Magnus, Director, Public Works Operations; Rick Emmons, CAO			
BUDGET IMPLICATION:	I N/A □ Funded by Dept. ⊠	Reallocation			
LEGISLATIVE DIRECTION: ⊠None □ Provincial Legislation (cite) □ County Bylaw or Policy (cite)					
		STRATEGIES:			
STRATEGIC PLAN THEME:	PRIORITY AREA:	Promote a collaborative regional			
Well Governed and Leading	Advocate in the best interests	services philosophy and enhance			
Organization	of our community and region.	provision of regional services to			
		the greatest extent possible.			
ATTACHMENT(S): Emails from Wild Rose School Division					
Email from MPE					
Aerial view of forcemain through Leslieville School property					
	Agenda & Priorities Council Comi st, from Wild Rose School Division	mittee provides guidance and n, in Clearwater County issuing the			

2.) a second letter regarding the opportunity to build a new Leslieville School on the property, just

BACKGROUND:

increased school population and,

north of the current school.

On May 10th, 2017, Wild Rose School Division (WRSD) contacted Clearwater County and informed Administration to the challenges and setbacks regarding the David Thompson High School (DTHS) modernization, including the current sewage lagoon system. Throughout 2017, Administration met with WRSD and provided assistance and suggestions on options to upgrade the current lagoon system so as to meet Alberta Environment and Parks "Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems."

In April 2018, WRSD contacted Clearwater County informing Administration that WRSD is intending on combining the current students and staff in Leslieville Elementary School, Condor Elementary and DTHS into two schools. Condor Elementary School will accommodate students, kindergarten to grade 6, from the Leslieville and Condor area. In turn, Leslieville School will accommodate students, grade 7 to grade 12. Consequently, David Thompson High School would be shut down.

WRSD requested Clearwater County Administration confirm, through a letter to WRSD, that the current lagoon system, within both Leslieville and Condor, could facilitate the additional students and staff. Presently, the Condor Lagoon System is at its maximum capacity and would not be able to hold additional sanitary flow from the increase in staff and students. The Condor lagoon system is due for upgrades, and, hence, Clearwater County is currently waiting on funding, from the Alberta Municipal Water/Wastewater Partnership Program, to complete these upgrades. The upgrades are to cost an estimated \$1,375,000. Currently, the Condor Lagoon system does not have a facultative cell. However, within the upgrades, the footprint of the new facultative cell would need to be increased compared to the current new design to accommodate the increase in staff and students. There is room on site for the required extra area. This would come at an additional cost of approximately \$15,000.

The current Leslieville lagoon system would be able to facilitate the additional students and staff. After the increase in flows, from the increase of students and staff, the high-water level would be 0.70 metres from the top of the existing berm.

Furthermore, WRSD is looking to build a new school in Leslieville (in lieu of upgrades to the current school) to the north of the existing school. Clearwater County has a forcemain which pumps wastewater from the lift station to the lagoon system which is located approximately one kilometer southeast of the lift station. WRSD is requesting Clearwater County re-direct the forcemain so that it does not impeded the construction of a new school. It is estimated the relocation will cost approximately \$50,000. WRSD would like a letter outlining that Clearwater County will re-direct the forcemain.

From: Brad Volkman < brad.volkman@wrsd.ca Sent: Wednesday, May 9, 2018 7:34 PM

To: Rick Emmons < REmmons@clearwatercounty.ca>

Subject: Request for letter regarding building a new Leslieville School

Rick:

Alberta Education sent me an email today regarding two letters we are hoping to get from Clearwater County. The first letter is similar to the first one you already wrote, but with a bit more specificity. Here is how Alberta Ed put it:

"As mentioned, the critical point at this time is for WRSD to clarify the availability and capacity of the municipal sewer systems. In order to proceed with actions to accommodate corridor's students at Leslieville and Condor Schools, it is critical to obtain clarification from the municipality confirming in writing that the local wastewater system can accommodate an increased school population, according with the jurisdiction's enrolment projections (including staff) for both sites."

As I mentioned in my previous email, we need both sites to be able to service a minimum of 325 students and staff by August 1, 2019.

The 2nd letter we are hoping you will be able to give us is regarding the opportunity to build a new Leslieville School on the property, just north of the current school. I sent the drawings you provided of the site to Alberta Education. After looking at the drawings they replied with the following information:

It is acknowledged that the force main sewer line, cutting across the Leslieville School site from NW to east, offers significant impact to the Leslieville project in case of a new/replacement school, as it would be difficult to fit a new building north of the existing school without a phased build and demolition strategy. The limited area of the remaining site may also impact a modernization project, depending on the adopted design. It would be ideal if Wild Rose could explore with Clearwater County whether the force main sewer line could be relocated by the municipality, clarifying that the school project budget will not be able to fund such scope of work. Please find attached certificate of title and note that there is no Utility Right of Way (URW) related to the force main line. When agreeing on final URW path with the municipality, the jurisdiction will need to follow the Disposition of Property Regulation (attached)

As I mentioned in one of our conversations, it turns out that building a new high school at Leslieville would cost the same as modernizing the existing school into a high school. However, in order to minimize disruption to students, we would need to keep the existing Leslieville School open while building a new high school beside the existing one. I have no idea how much it would cost the County to fulfill the request Alberta Education is making above. Perhaps this is asking too much. On the other hand, to get a brand new state of the art high school in Leslieville would sure be nice for the community.

If we are going to get this project approved, we are going to need answers to these questions as soon as possible, hopefully by the middle of June (if that is even possible).

Please let me know what you think. My next meeting with Alberta Education on this topic is June 6th. I would love to be able to give them some answers regarding the County's views on this ask.

I have attached the documents referred to by Alberta Education.

Sincerely,

Brad

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Brad Volkman Superintendent of Schools Wild Rose School Division (403) 845-3376 (office) (403) 895-2741 (cell)

[&]quot;Improving the life chances of ALL students through Wellness & Learning"

From: Brad Volkman < brad.volkman@wrsd.ca>

Sent: Tuesday, May 29, 2018 8:55 AM

To: Kurt Magnus < KMagnus@clearwatercounty.ca Cc: Mike Lundstrom@wrsd.ca Lundstrom@wrsd.ca Mailto:Lundstrom@wrsd.ca Mailto:Lundstrom@wrsd.ca Mailto:Lundstrom@wrsd.ca Mailto:Lundstrom@wrsd.ca Mailto:Lundstrom@wrsd.ca Mailto:Lundstrom@wrsd.ca Mailto:Lundstrom <a href=

Subject: Re: WRSD Corridor Capital Plan projected timeline

Kurt:

I thought I could summarize the timelines regarding our Corridor plan a bit better as follows:

Option #1 (preferred option):

- Clearwater County provides both letters we have requested.
- In this case our capital plan would include modernizing Condor School and building a new Leslieville School beside the existing one.
- we are hoping the government approves our corridor capital plan in April 2019
- Starting September 2019 we put all k-6 students in the current Leslieville School and all the grade 7-12 students in DTHS. Condor School would not be used starting September 2019
- We start the process of building a new high school beside the existing Leslieville school and at the same time start the modernization of the Condor school which would be empty.
- Our goal would be to move students into the new Leslieville high school and the modernized Condor School by Jan 2022.
- In 2022 the demolition of the old Leslieville school and the remediation of the DTHS lagoon would begin.
- This option requires the Leslieville lagoon to service 325 students and staff starting September 2019
- The Condor lagoon would not need to service 325 students and staff until Jan 2022 when we start using the newly modernized school

Option #2:

- Clearwater County provides us only the letter regarding the lagoons but does not give us a letter saying that they will move the necessary utilities that would allow us to build a new Leslieville school beside the existing one.
- In this case our capital plan would be to modernize both schools and would not include the building of a new school.
- We hope the government approves our capital plan in April 2019
- Starting September 2019, we put all k-6 students in the current Condor School and all the grade 7-12 students in DTHS. Leslieville School would not be used starting September 2019
- We start the process of modernizing Leslieville school into a high school while it is empty.
- We figure out a phased modernization of Condor School while we have students in the school. (This is why we prefer option #1 above as it allows us to modernize Condor School without trying to do the work with students in the school)
- Our goal would be to move students into the modernized Leslieville high school and the modernized Condor School by Jan 2022.
- In 2022 we start the remediation of the DTHS lagoon would begin.
- This option requires the Condor lagoon to service 325 students and staff starting September 2019
- The Leslieville lagoon would not need to service 325 students and staff until Jan 2022 when we start using the newly modernized high school

Hopefully this helps to clear things up a bit.

At the end of the day, it is our hope that we can build a brand new, state of the art, high school for the corridor students in Leslieville. The value management we had in April determined that it was in fact slightly less expensive for the government to build us a new Leslieville high school compared to trying to modernize the existing school into a high school. As such, we would hate to miss this opportunity for our corridor students.

We have a letter from Alberta Municipal affairs that states we must vacate DTHS by Dec 31, 2021. As such, the sooner we can show government that we have the written support of Clearwater County on these matters, the more likely our capital plan could be approved in April 2019 which allows us to maximize our use of DTHS while we are building and modernizing the Leslieville and Condor Schools.

If we cannot get either letter, the government will not risk another DTHS situation where they approve our plan, only to find out later that the Condor and Leslieville lagoons cannot support the increase in students. That would leave us in a situation where after Dec 31, 2021 (at which time we are required to vacate DTHS), we would have to move all of our high school students to Rocky Mountain House and/or Caroline. Although Eckville is not in our school division, due to its proximity to DTHS, we could potentially lose some students to that school as well. That means we lose students out of our district. This would be a lost opportunity for both WRSD and Clearwater County. As such, we are hoping to get the support of Clearwater County in the form of the two letters as soon as possible.

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Thanks,

Brad

From: Chris George <cgeorge@mpe.ca> Sent: Friday, June 8, 2018 1:15 PM

To: Kate Reglin < KReglin@clearwatercounty.ca> **Cc:** Kurt Magnus < KMagnus@clearwatercounty.ca>

Subject: RE: Request for letter regarding building a new Leslieville School

Hi Kate,

1. Condor Lagoon Upgrades

Background

• The school in Condor currently has 165 students. It is proposed to add an additional 160 students, bringing the total to 325.

Impact on Lagoon

- The extra students will contribute an additional 2,240 m3 of volume per year to the Condor lagoon
 - The storage cell berms would have to be raised by a total of 0.40 m to accommodate this. This is 0.1 meters more than the current design, which raises the berms by 0.3 m
 - The facultative cell cannot be made deeper than 1.5 m. It's design inside dimensions would increase from 35.6 m x 71.6 m to 39.5 m x 71.6 m. There is room on site for this extra area.

There will be a small impact on the lagoon, it will be less than if DTHS was added.

Impact on Lift Station

- Peak flow would increase from 12.2 L/s to 12.7 L/s
 - Most of the peak flow comes from inflow and infiltration (i/i), which extra students will not increase. This explains the small effect on peak flow.
 - o 4% increase in peak flow will not have a significant effect on lift station operation.

2.Leslieville Lagoon Upgrades

Background

- The school in Leslieville currently has 120 staff and students. It is proposed to add an additional 205 students, bringing the total to 325.
- It is also proposing to re-route a section of the forcemain to make room for a new building.
- Currently, the liquid level in the lagoon reaches no higher than about 0.9 meters below the top of the berm.

Impact on Lagoon

- The extra students will contribute an additional 2,870 m3 of volume per year to the Leslieville lagoon
- The liquid level in the lagoon will increase by 0.20 m
- The new high water level would be 0.70 m below top of berm

Impact on Lift Station

- The extra students will contribute an additional 0.83 L/s to the instantaneous peak flow
- We would need to know the operating point of the existing pumps to evaluate whether they can accommodate this additional flow

3.Leslieville Forcemain Relocation

- Re-routing the forcemain would increase the total length of the forcemain by 60 meters
- It is proposed to use larger pipe (150 mm vs 100 mm) for the replacement section to ensure no additional head loss from extra length
- The new pipe section will cause less head loss than the existing configuration, due to the increase in pipe diameter
- The cost to re-locate the forcemain will be approximately \$50,000

Chris





AGENDA & PRIORITIES COUNCIL COMMITTEE AGENDA ITEM

SUBJECT: Granular Resources Management Plan Review					
PRESENTATION DATE: June 18, 2018					
DEPARTMENT: Public Works	WRITTEN BY: Kate Reglin, Project Technologist and Kurt Magnus, Director, Public Works Operations	REVIEWED BY: Kurt Magnus, Director, Public Works Operations; Rick Emmons, CAO			
BUDGET IMPLICATION: ☑ N/A ☐ Funded by Dept. ☐ Reallocation					
LEGISLATIVE DIRECTION: ⊠N	lone ☐ Provincial Legislation (cite) □ County Bylaw or Policy (cite)			
STRATEGIC PLAN THEME: Managing Our Growth	PRIORITY AREA: Support a transportation network that connects and moves residents and industry	STRATEGIES: Own, or have access to, strategically located aggregate supply with minimum 100-year gravel supply			
ATTACHMENT(S): Draft Granular Resources Management Plan					
RECOMMENDATION: A & P Council Committee to provide guidance and consensus on any revisions and/or additions to the current draft of the Granular Resources Management Plan.					

BACKGROUND:

The Granular Resources Management Plan is an initiative set out by the Clearwater County 2015 – 2018 Strategic Plan. The management plan is to manage current and projected growth and to respond to the various trends, impacts and demands, within the County, including infrastructure, economic development, financial management and land use planning.

Administration's recommendation is for the A & P Council Committee to provide guidance and consensus on any revisions and additions to the current draft of the Granular Resources Management Plan.



GRANULAR RESOURCES MANAGEMENT PLAN



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A.) INTRODUCTION

a.) Rationale

The Granular Resources Management Plan is an initiative set out by the Clearwater County 2015 – 2018 Strategic Plan to manage current and projected growth and to respond to the various trends, impacts and demands, within the County, including infrastructure, economic development, financial management and land use planning.

Clearwater County recognizes that effective use of its finite gravel resources is crucial in meeting Clearwater County local infrastructure objectives as well as ensuring the sustainable management of all-natural resources. It is the intention of Clearwater County to establish a compliant approach to managing this valuable resource. This will result in more consistent approaches to planning, extraction and reclamation of sites where activity currently exists, or may take place in the future. Reduction of legal liability and enhancement of the efficiencies of the material usage will also occur. The resource will be managed in the most effective manner through an infrastructure prioritization process as identified by Clearwater County. It will also be achieved through the application of current best management practices coupled with environmental terms and conditions applied through associated Federal and Provincial authorizations. It is also realized that, while future projects can help determine demand forecasts, situations will change and that new infrastructure projects may present challenges to established management criteria. Consequently, changes to the Granular Resources Management Plan will need to be explored as and when events unfold.

It is also realized that the search for gravel resources, on both Crown lands and Private lands, will continue. The challenge will be the differentiation between ideal gravel source prioritization versus practicalities of the site in question. As such, Clearwater County will continue to consult on these issues to ensure that the management plan effectively meets current infrastructure objectives while providing the flexibility to adapt to meet changing conditions in the future.

The Clearwater County Granular Resources Management Plan will be a framework from which Clearwater County can draw from to apply current day best management practices related to the planning, extraction and reclamation of granular resources. It lends itself to progressive land stewardship objectives pertaining to pit development. The Granular Resources Management Plan will work in concert with the necessary land use authorizations to ensure adequate mitigation of the potential impacts resulting from the quarrying, and its associated development activities, during development. In addition to terms and conditions, as set out by the Development Permit, Clearwater County also utilizes environmental monitors, wherever possible, throughout the gravel extraction to ensure that the County adheres to the terms and conditions of the municipal permit.



b.) Objective

In 2015, Clearwater County supported, via the 2015 - 2018 Strategic Plan, a transportation network that connects and moves residents and industry. Accordingly, Clearwater County is to own, or have access to, strategically located aggregate supplies with minimum 100-year reserves by 2018. The following management plan provides an overview of all the current and potential granular resources on both public (Crown) and private lands. In addition, the plan outlines the systematic approach to granular resources management under the guidance and authority of both the Federal and Provincial Government.

c.) Limitations

As with all projections and forecasts, a certain amount of uncertainty and assumptions have been incorporated into this management plan. The management plan is based on dated information which may not accurately reflect the quantity of materials remaining in the identified gravel sources, and does not include other possible sources yet to be identified. The existing data discusses current and prospective resources. Projects, and infrastructure maintenance demands, play a key role in this management plan in the speculative allocation of resources from identified sources. As such, the demand for granular resources may change in respect to infrastructure requirements. For example, there are several gravel roadway rehabilitation and roadway construction projects, along with the yearly winter gravel program which may, or may not, come to fruition in the forecasted period.

With respect to the reservation of granular resources within and by Clearwater County, it should be recognized that geology, development costs, existing infrastructure, geotechnical limitations and public input will all affect Clearwater County's decision in the selection of an aggregate source. Future inventory and evaluation of granular resources will improve our strategic approach to resource development.

Finally, there is an existing and substantial price differential with respect to costs in the acquisition of private lands in comparison to costs associated with the leasing of Government of Alberta Crown lands. As a result, it may be difficult to assign specific gravel sources on Private Land, for infrastructure development, if adjacent provincial sources are available at a much lower cost. This issue will be continually reviewed by Clearwater County to ensure that the management plan objectives coincide with the economic realities of infrastructure activities within and conducted by Clearwater County.



d.) Definitions

Activities Plan - A description of the characteristics of the site and the sequential plans for construction, operation and reclamation of gravel pits.

Buffer strip - An area of land used for the erection of a fence and/or the planting and maintaining of a continuous row of coniferous trees or a natural living fence, immediately adjacent to the lot line or portion thereof along which such buffer strip is required.

Class I pits - Cover areas greater than or equal to five hectares on private land and are subject to the requirements of the Code of Practice for Pits under the Environmental Protection and Enhancement Act (EPEA). Class I pits require a registration (or pre-existing provincial approval).

Class II pits - Cover areas less than five hectares on private land and are not currently subject to the provisions of the Code of Practice for Pits. Class II pits are subject to the environmental provisions of the EPEA and specifically the requirements of the Conservation and Reclamation Regulation under the Act.

Code of Practice (COP) – Document which details the information that forms the activities plan, pertaining to an aggregate pit located on private land, which clearly describes the characteristics of the site and the sequential plans for construction, operation and reclamation.

Conservation Reclamation Business Plan (CRBP) - Document which details the information that forms the activities plan, pertaining to an aggregate pit located on public land, which clearly describes the characteristics of the site and the sequential plans for construction, operation and reclamation.

Drift - Is generally referred to as unconsolidated glacial material deposited directly on the land surface. This material usually consists of silty to sand clay.

Extraction - The removal of sand, gravel, and rock for aggregates, which includes drilling, blasting, baling and breaking necessary for extraction and transport. Extraction does not include any crushing, screening or similar activities carried out to make the gravel marketable.

Gravel – Rock / aggregate that is of a specific particle size range.

Historical Resource Impact Assessment - If development proponents and/or their agents become aware of historic resources during the course of development activities, they are required, under Section 31 of the *Historical Resources Act*, to report these discoveries to the Heritage Division of Alberta Culture and Tourism. This requirement applies to all activities in the Province of Alberta.



Infrastructure – Any roads, piping, buildings, structures, facilities, equipment, apparatus, mechanism, instruments or machinery belonging to or used in developing or operating a pit including any storage site or facility, disposal site or facility, access road, haul road, railway or telecommunication line.

Pit – Under the Environmental Protection and Enhancement Act, a pit is an excavation in the surface made for the purpose of removing, opening up or proving sand, gravel, clay, marl, peat or any other substance, and includes any associated infrastructure, but does not include a mine or a quarry.

Private land – Deeded or patent land, special areas board land including Métis Settlements and provincial parks.

Processing - Includes drying, stockpiling, crushing, sorting, screening, mixing or washing of sand, gravel and rock to produce aggregate products but does not include manufacturing.

Public land – Land of the Crown in right of Alberta to which the Public Lands Act applies. This may include the bed and shore of water bodies anywhere within the Province.

Rare Species - Any native species that, due to biological characteristics or occurrences in edges of their natural range, or for some other reason, occur in low numbers or in restricted areas.

Restriction Zone - Refers to zones that have been identified as having limitations on their uses which are based on environmental sensitivity and compatibility with neighboring land uses. Gravel pit development and operations may be permitted in these zones; however, these zones are subject to conditions set by the Municipal District prior to the issuance of a Development Permit.

Sand and Gravel Pits – A surface mine or excavation used for the removal of sand or gravel.

Surface Materials Lease (SML) – A long term tenure promoting orderly resource development and management through detailed assessment and planning.



B.) SUPPLY AND DEMAND

a.) Supply

Presently, as of the year 2017, Clearwater County has ownership of eight (8) aggregate pits (including stockpile sites) and has a lease, from the Alberta Provincial Government, on nine (9) aggregate pits. Extensive work has been done to compile information, from engineering geotechnical studies, to determine a generally accurate idea of the quantity of proven reserves of granular resources available, to the County, from the aggregate pits. Based on this compilation of information, it is estimated that the total volume of proven granular reserves, from the current existing Public, Private and Stockpile Gravel Pit sites, in Clearwater County, is 27,624,242 tonnes.

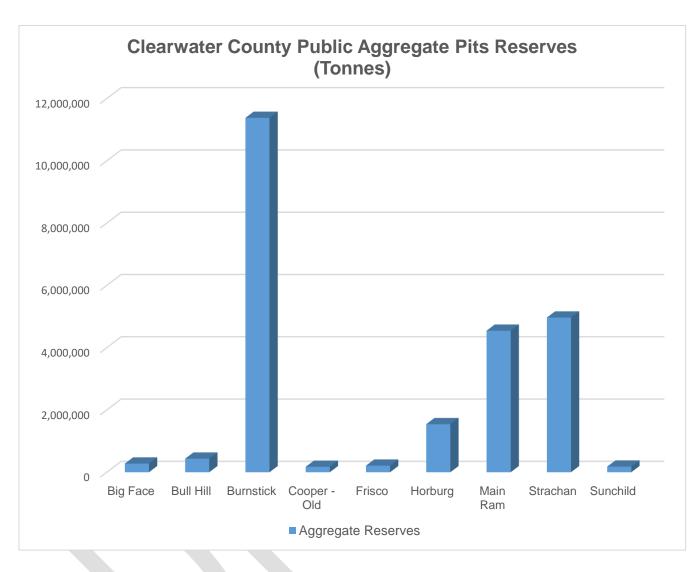
TABLE: Clearwater County Aggregate Pit Reserves

Name of Pit/Stockpile	Legal Land Location	Aggregate Reserves	Additional Notes; Pit Operating Hrs.		
		(tonnes)			
	Public	Pits			
Big Face/Clearwater	NE 32-34-08-W5M	277,701	No restrictions.		
Bull Hill	NE 04-31-05-W5M	435,499	No restrictions.		
Burnstick	NE 10 & SE 15-34-	11,380,434	Pit operations: 7		
	07-W5M		a.m. to 7 p.m. six		
			days per week.		
Cooper – Old	SW 11-37-06-W5M	174,460	No restrictions.		
Frisco	SW 17-41-07-W5M	210,283	No restrictions.		
Horburg	N 36-39-10 & SE	1,543,007	New pit. Currently		
	01-40-10-W5M		no Development		
			Permit.		
Main Ram	NE 19-39-10-W5M	4,543,912	No restrictions.		
Strachan	SE & N ½ 01-38-09	4,966,658	New pit. Currently		
	and SE 11 & SE		no Development		
	12-38-09-W5M		Permit.		
Sunchild	NW 16-42-10-W5M	<u>180,000</u>	No restrictions.		
TOTAL Public Pits:		23,711,954			
Private Pits					
Cooper – Merv	NW 02-37-06-W5M	518,695	New pit. Currently		
			no Development		
			Permit.		
Irwin	SE 01-35-05-W5M	600,000	No restrictions.		

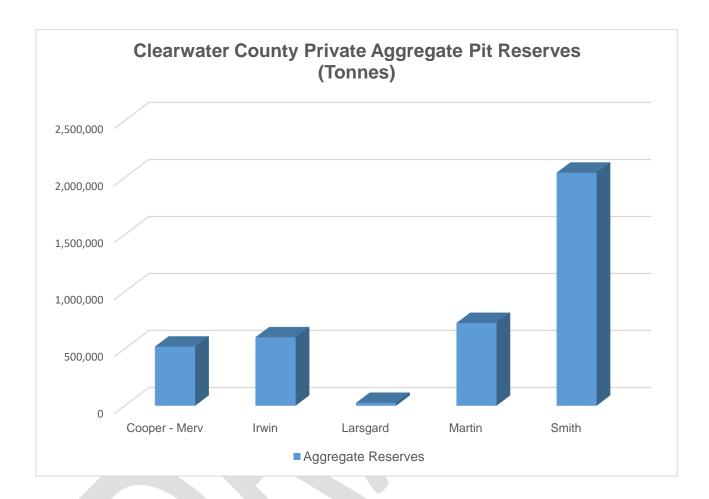


			1
Larsgard	SE 14-40-06-W5M	25,000	No restrictions.
			Currently being used
			as a stockpile site.
Martin	NE 13-39-08-W5M	725,525	No restrictions.
Smith	NE 31-37-08-W5M	<u>1,021,534</u>	Pit operations: 7
			a.m. to 7 p.m. six
			days per week.
TOTAL Private Pits:		3,912,288	
	Stockpile	Sites	
Centerview	SW 02-41-05-W5M	N/A	8:00 a.m. to 4:00
			p.m., Monday to
			Friday, May to
			September; 7:00
			a.m. to 7:00 p.m.
			Monday to Friday
			for summer road
			construction. Two
			weeks during winter
			months.
North Ram	SE 19-38-14-W5M	N/A	Alberta
			Transportation
			managed pit
Varty	SW 08-43-06-W5M	N/A	No restrictions.
TOTAL All Pits:		27,624,242	









b.) Demand

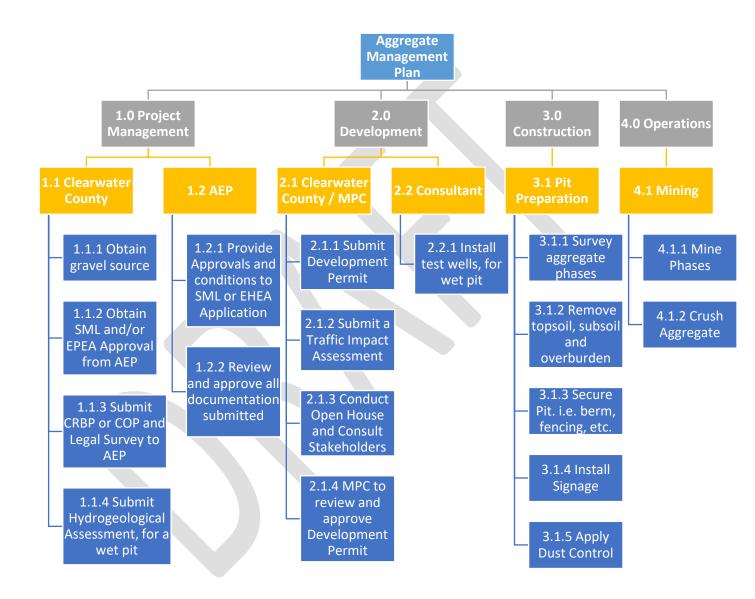
Historically, on average, Clearwater County utilizes 210,000 tonnes of gravel per year. As such, demand for a twenty (20) year period is forecasted to be approximately 4,200,000 tonnes. Based on proven reserves of 27,624,242 tonnes, (assuming no other proven granular resources are found) this will provide Clearwater County with 132 years of supply.

The quantity and location of the reserved materials, within Clearwater County, will be revised, from time to time, to reflect changes in granular resource supply and demand. In addition, the location and quantity of these reserved materials shall be reviewed, at minimum, once per year.



C.) PLANNING PROCESS

a.) Work Breakdown Structure



NOTE:

AEP - Alberta Environment and Parks

EPEA - Environmental Protection and Enhancement Act

COP - Code of Practice

CRBP - Conservation Reclamation Business Plan

MPC - Municipal Planning Commission

SML - Surface Materials Lease

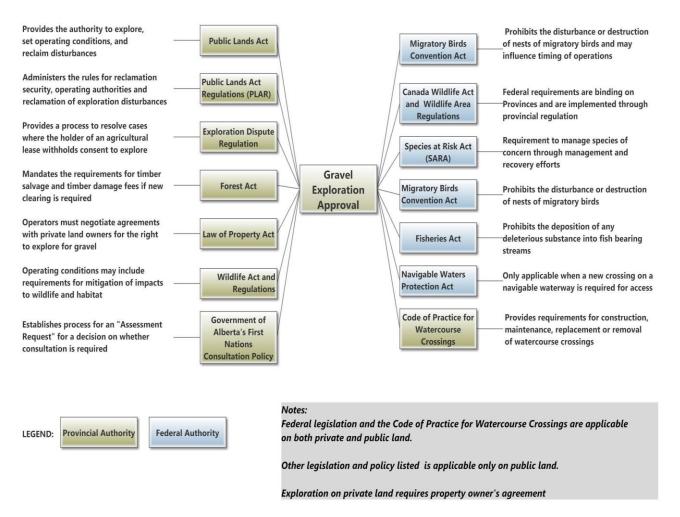


D.) LEGISLATION AND POLICY

a.) Exploration

Clearwater County is continuing to source aggregate, in strategic locations, to supply the County with gravel for the next 100 years. Administration is exploring to secure gravel in the northern and western areas of Clearwater County. Exploration will occur as per federal and provincial legislation and policy.

Legislation and Policy Guiding the Approval of Gravel Exploration - Public Land



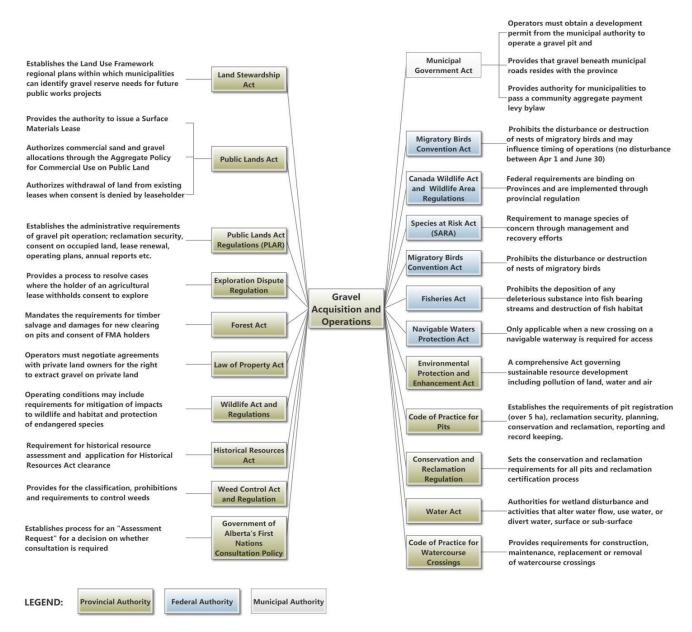
(AAMDC. (2013). Got Gravel? Strategies to Secure Gravel for Rural Municipalities. Part 1 - Summary Report., Pg. 28)



b.) Acquisition and Operations

Aggregate acquisition and operations (including extraction) is an important activity(s) which has the potential to cause significant disruption to local communities, and the environment, over a prolonged period. Consequently, numerous conditions are imposed upon aggregate operations, via Federal, Provincial and Municipal authority, and many of these are valid for the entirety of the development. In addition, gravel from any one pit, will be distributed, as required, throughout Clearwater County, in all directions, within a defined pit radius (see Section F).

Legislation and Policy Guiding the Acquisition of Gravel and Operation of a Pit



(AAMDC. (2013). Got Gravel? Strategies to Secure Gravel for Rural Municipalities. Part 1 - Summary Report., Pg. 42)



Furthermore, for Clearwater County to obtain an SML, on public lands, Clearwater County will require a 'withdrawal from lands' in the Forest Management Agreement (FMA) area (within the SML), particularly if there is a current FMA holder (i.e.: Sundre Forest Products Inc., etc.). A FMA provides companies with the right to harvest trees on crown (public) land and ensures activities are carried out in a sustainable manner. Forested areas which do not have a FMA holder are managed by the Alberta Agriculture and Forestry Forest Management Unit. Clearwater County is, presently, working with the FMA holder(s), such as Sundre Forest Products Inc., to harvest trees, and thereby withdrawal, from only the phase currently planned to be mined rather than harvesting trees within the entire SML boundary.



c.) Reclamation

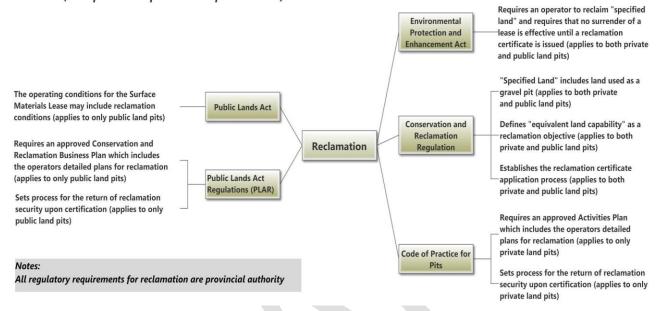
Reclamation will follow provincial legislation and policy. Furthermore, reclamation of the aggregate pits will occur progressively throughout the development of each pit. Once an area has been depleted of aggregate the area will be reclaimed. In effect, Clearwater County performs sequential reclamation; meaning prior to opening a new phase to be mined, the greatest amount of reclamation possible shall be completed on the previous mined phase. During the development of the aggregate pit, the topsoil, subsoil and overburden will be stockpiled separately within the pit. Within the depleted areas, reclamation will include spreading the overburden, subsoil, topsoil and, if required, planting trees. The replaced material shall be contoured to facilitate proper surface water drainage and to leave any pit faces with a 3:1 slope. During replacement, inferior quality materials will be directly placed into the pit.

- Poor-quality overburden (very stony), rejected material and fine sediments will be replaced first and covered by roughly 0.5m of better quality material so as to not impact the rooting zone.
- Coarse materials will be buried at the bottom of the pit or used for slope reconstruction.
- Overburden will be spread evenly across the site or placed where it is needed for site grading and re-contouring.
- Overburden will be directly replaced into depleted portions of the pit. The direct placement of this material will be done so that it supports the final land use for the site. Salvaged subsoil will be replaced evenly over the overburden or reject material and can be used for minor re-contouring. Topsoil will be replaced onto the subsoil at the same depth as obtained in the exploratory testing.

To sustain, when needed, ongoing reclamation requirements, Clearwater County has established a reserve whereby \$300,000 is available per year.



Legislation and Policy Guiding the Reclamation of a Gravel Pit (both public and private land pits as noted)



AAMDC. (2013). Got Gravel? Strategies to Secure Gravel for Rural Municipalities. Part 1 - Summary Report., Pg. 63)



E.) ALBERTA ENVIRONMENT AND PARKS REGULATORY PROCESS

a.) Public Pits

Prior to obtaining a Surface Material Lease (SML), Clearwater County is required to follow Alberta Environment and Parks (AEP), *Guidelines for Acquiring Surface Material Dispositions on Public Land, 2008.* This manual provides guidelines for obtaining approvals to extract surface materials from public land in accordance with the regulatory and policy regime. From the *Guidelines for Acquiring Surface Material Dispositions on Public Land, 2008,* SMLs are issued based on the geological information substantiating the extent and quality of the surface material resources as well as the size and environmental sensitivity of the lease.

A SML expires every ten years from the AEP approval date. A notification is required to be sent in, by Clearwater County, to AEP before the SML expires. After AEP receives the notice, which will outline whether the operator will be renewing the lease or not, they will send a letter with the conditions required for the approval. Typically, a new Conservation Reclamation Business Plan (CRBP) will be required.

For all public pits, an *Annual Return* and *Accrual Report* is required to be submitted to AEP by January 31st of each year. The annual return outlines the amount of aggregate that was crushed and removed from the pit. It also includes information on any clearing, excavation or reclamation that has taken place within the SML throughout the year. An annual return is required even if no activity has taken place within the SML. The accrual report is an estimated quantity of gravel that the operator intends to remove from the SML within the first 3 months of the new year.

There are six steps required to obtain a SML.

- Step 1 Surface Material Exploration (SME) Application
- Step 2 SME Approval from Alberta Environment and Parks (AEP)
- Step 3 Surface Material Lease (SML) Application
- Step 4 SML Approval in Principal
- Step 5 Conservation and Reclamation Business Plan (CRBP)
- Step 6 Final Approval Letter/Lease Agreement
- If it is a wet pit, a water division permit will also be required

Step 1 - Surface Material Exploration (SME)

The SME application must be accompanied by a sketch showing the limits of the proposed SME and approximate test locations. SMEs are issued for up to 180 days, with no extensions, and the maximum area of the approval is 320 acres. The SME



approval authorizes the use of mechanical equipment during the exploration program that may result in a physical disturbance to public land. This could include, test pit digging with a hoe and test hole drilling with a drill rig. The holder of the SME has exclusive rights to any surface material applied for and found within the lands listed in the SME approval.

If the applicant does not proceed with an SML application, the applicant is responsible for reclaiming all disturbed areas. A *letter of clearance application* is to be submitted for the approved SME area that has been disturbed.

Step 2 – Surface Material Exploration Approval

If the SME is approved, an approval letter is provided, from AEP, along with the requirements to undertake the work.

Step 3 – Surface Materials Lease Application

SML applications must include the exploration data including adequate mapping and test data that illustrates test hole locations, horizon profile, and any other data that depict the volume and degree of the gravel deposit; an acceptable plan showing the proposed lease boundary, as outlined in the guidelines; a statutory declaration; and required fees.

<u>Step 4 – Surface Material Lease Approved in Principal</u>

If the SML application is accepted, AEP will issue a letter requesting a Conservation and Reclamation Business Plan (CRBP) along with other application requirements.

Step 5 - Conservation and Reclamation Business Plan (CRBP)

The CRBP must be submitted within 6 months of receiving the *Approval in Principal* letter. If the CRBP is not received, within the required timeframe, AEP may cancel the approval. If a Historical Resources Impact Assessment is required, Clearwater County can apply for an extension for the CRBP submission.

The CRBP is a detailed plan describing how the applicant proposes to develop the aggregate resource and resolve any related environmental and/or land issues. The plan must also clearly define the end-land use of the SML.

The CRBP must provide, at a minimum, the following information:

- A brief history of the project operator and the market conditions;
- A description of the aggregate resource and proposed site operations;
- Potential regulatory and planning policy requirements that may be triggered by the project;
- Analysis of biophysical/land use conditions that may be affected by the project and a description of proposed mitigation measures;



- Sequential plans for site development, operation and reclamation of the pit.

The content requirements, including report format and appendices, can be found in the *Guidelines for Acquiring Surface Material Dispositions on Public Land, 2008.*

b.) Private Pits

To develop a private aggregate pit, Clearwater County is required to obtain an approval under the *Environmental Protection and Enhancement Act* (EPEA). The application will include information about the applicant, location and size of pit, characteristics of the existing land, with topsoil, subsoil, overburden and aggregate depths.

There are two classifications of private pits. Class I pits, are five hectares or more in area. Class II pits are less than five hectares, or any size on public land.

Upon Clearwater County receiving an EPEA approval, the County is required to submit a *Code of Practice* (COP). The COP details the information that form the activities plan. The activities plan is to clearly describe the characteristics of the site and the sequential plans for construction, operation and reclamation of the pit. In addition to the COP, Clearwater County must comply with all the requirements of the EPEA and its associated regulations and Codes of Practice, the *Water Act* and its associated regulations and Codes of Practice, and all other applicable Federal and Provincial laws.

The COP is, at minimum, to provide the following information:

- Current Pit Size
 - Pit size includes the excavation where aggregate is being removed, any areas where reclamation material has been salvaged and stockpiled. The pit size is to be determined by survey drawings.
- Thickness of Topsoil, Subsoil, Overburden and Aggregate
 - This information assists in planning pit sequence and storage needs.
- Topsoil Texture
- Erosion and Dust Control
 - Erosion Control include all necessary techniques to prevent erosion, especially the loss of topsoil and subsoil, during construction, operation and reclamation. Vegetation is one of the most widely used and acceptable methods to control both water and wind erosion.
 - Dust Control Dust becomes more of a concern as pit development encroaches on urban and residential areas.
- Local and Regional Air Monitoring Initiatives
 - Actively search out and participate in local and regional air shed monitoring initiatives. Particularly in areas where the local stakeholders consider dust or emissions from equipment or vehicles an issue.



- Inactive Pit Plan
 - A plan must be developed for the pit, or portions of the pit, that will be inactive for more than two years.

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- Ensure the site is safe (e.g. slopes, water bodies, equipment, structures)
- Ensure that soil reclamation materials will continue to be conserved
- Control weeds
- Scale Drawings of Existing Pit Conditions and Proposed Sequence of Activity
 - Drawings to reflect current conditions and planned operations. The planned operations are to include the sequence of excavation and reclamation for the life of the pit. Each drawing should show major activities such as:
 - New salvage areas
 - New excavations
 - New stockpile areas
 - New pit water discharge locations
 - New water diversion infrastructure
 - New groundwater discharge and recharge areas
 - Existing and new infrastructure and recent reclamation areas.
- Cross-section Drawings of Existing Pit Site Conditions
- Maximum Pit Size
- Depth to Groundwater
 - To depth of groundwater in any test holes
- Pit Activities
 - Wet Pit Excavation
 - Asphalt Mixing and Truck Box Spraying Sites
 - Aggregate Washing
 - Use of Alternative Reclamation Materials
- Mitigative Measures
 - Description of the mitigative measures that will be employed to prevent any adverse effects from the pit activities
- Proposed Land Uses
 - The end land use for the pit should be decided during the planning stage.
 - Agricultural Land
 - Forestry
 - Wildlife Habitat
 - Subdivision Development
 - Surface Water Body
- Release of Pit Water
 - Where water is retained on-site, the COP/Activities Plan should include a description of the water movement plan.
- Soil Replacement Depths



 Topsoil and subsoil replacement depths must be described. These depths may vary depending on the land use.

Scale Drawings of Site Conditions After Reclamation

- Cross-Section Drawings of Site Conditions After Reclamation
- Surface Water Bodies in Reclaimed Landscape
 - If Applicable

The Code of Practice requires several types of reporting that Clearwater County must comply with. The reporting includes, Contravention Report, Five Year Report and Final Reclamation Report.

Contravention Report

Contraventions of the COP must be immediately reported to the Director using Alberta Environment's industrial reporting. The reporting provides an opportunity for Clearwater County to indicate what happened and why, and what will be done in the future to prevent similar problems.

Five Year Report

Clearwater County must submit a report to AEP, starting five years after the registration then every five years after that until the final reclamation report. The report provides information on the disturbance and reclamation status of the pit. This report will be used by AEP to collect and report province wide data.

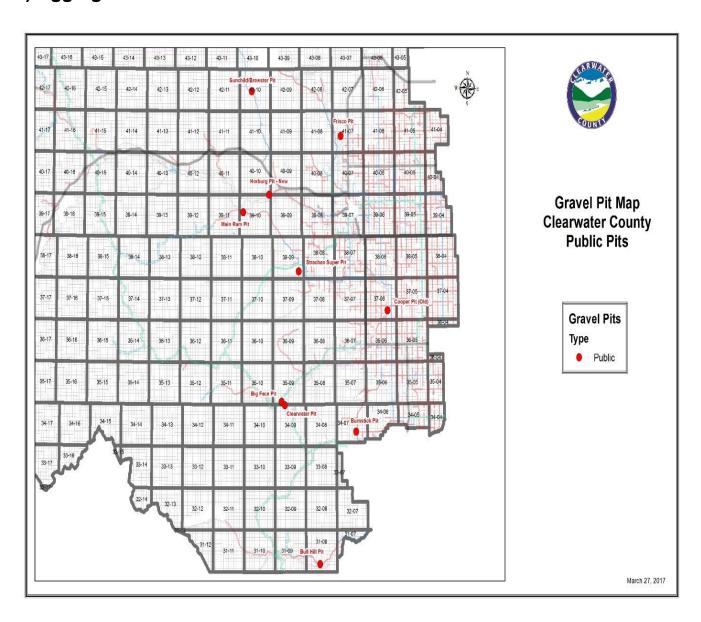
Final Reclamation Report

Clearwater County must submit a Final Reclamation Report no later than three years after the entire pit has been revegetated unless a reclamation certificate for the whole pit has been received. The drawings are to follow the same format as the drawings in the activities plan.



F.) CLEARWATER COUNTY AGGREGATE PITS

a.) Aggregate Pits - Public





Big Face (Clearwater) - NE 32-34-09-W5M

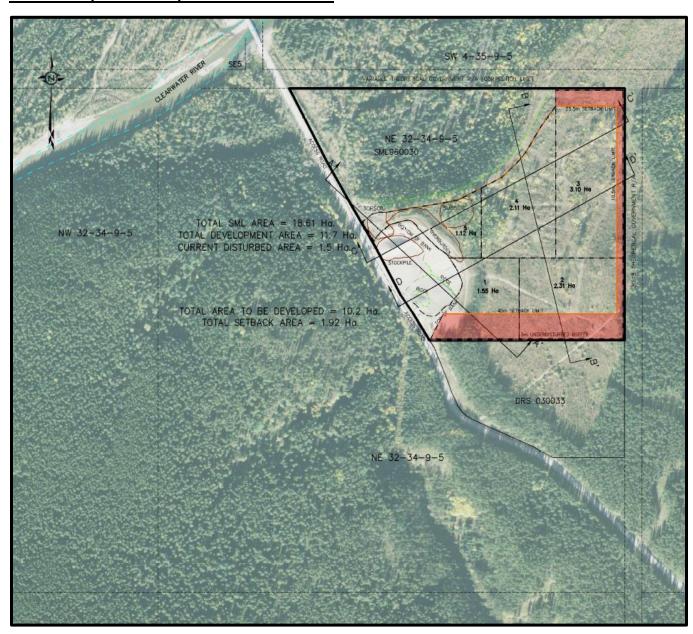
The Big Face aggregate pit is located at NE 32-34-09-W5M on Highway 734, approximately 43 km west of the town of Caroline. The pit is located on crown land and a Surface Materials Lease (SML) was approved in 1996. Clearwater County acquired the SML from Alberta Transportation, who had operated the site since 1963. The lease area of the aggregate pit is 18.61 hectares with a current disturbed area of 1.5 hectares. The estimated remaining amount of recoverable gravel is 277,701 tonnes.

The remaining area to be developed is 10.2 hectares. The area will be divided into five operational phases. Once one phase is depleted of aggregate, the stripping of the topsoil, subsoil, and overburden will commence on the second phase. Once operations have commenced in the second phase the first phase will be reclaimed. This will continue by each phase until the five areas, within the pit, are depleted of the aggregate supply.

The reclamation objective is to restore the gravel pit to natural forest.



BIG FACE (Clearwater) - NE 32-34-09-W5M





Bull Hill - N 1/2 04 and S 1/2 09-31-08-W5M

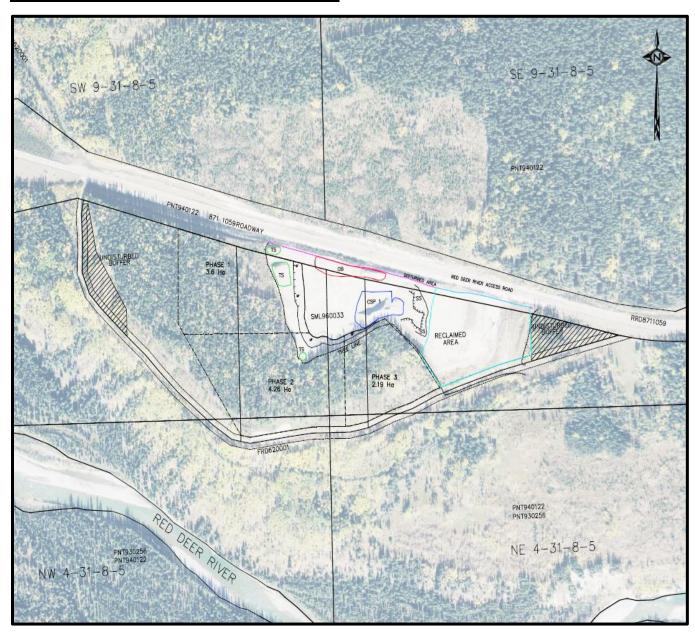
The Bull Hill aggregate pit is located at N $\frac{1}{2}$ 04 and S $\frac{1}{2}$ 09-31-08-W5M, on local road Red Deer River Access. The pit is located on crown land and a Surface Materials Lease was approved in 1996. The total lease area of the gravel pit is 21.08 hectares with a current disturbed area of 4.01 hectares. A total of 2.53 hectares was reclaimed in 2015. The estimated remaining amount of recoverable gravel for this pit is approximately 435,499 tonnes.

The aggregate area is divided into three operational phases. Aggregate will be extracted, to the full depth of the deposit, from one phase before mining commences on another phase. Once one phase is depleted of aggregate, the stripping of the topsoil, subsoil, and overburden will commence on the second phase. Once operations have commenced in the second phase the first phase will be reclaimed. This will continue by each phase until the three phases, within the pit, are depleted of the aggregate supply.

The end land use for the Bull Hill pit will be returned to a forested area.



BULL HILL - N ½ 04 and S ½ 09-31-08-W5M





Burnstick - NE 10 & SE 15-34-07-W5M

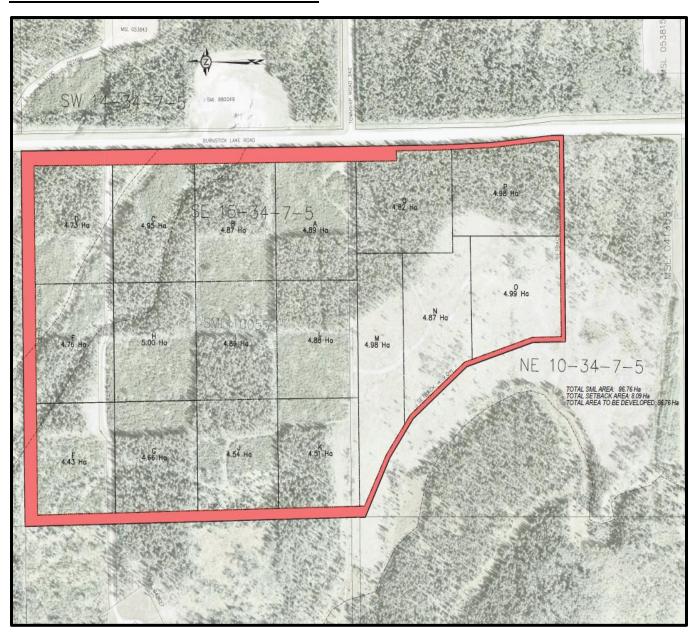
The Burnstick aggregate pit is located at NE 10 & SE 15-34-07-W5M, on local road, Burnstick Lake Road. The pit is located 600m north of the James River and 7 km south of Burnstick Lake. The Burnstick gravel pit is located on crown land and a Surface Materials Lease was approved in 2011. Development of the gravel pit occurred in 2016. The lease area of the gravel pit is 86.76 hectares. The total amount of recoverable gravel for the pit is estimated at approximately 11,380,434 tonnes.

The aggregate area will be divided into 17 operational phases. Once one phase is depleted of aggregate, the stripping of the topsoil, subsoil, and overburden will commence on the second phase. Once operations have commenced in the second phase the first phase will be reclaimed. This will continue by each phase until the 17 phases, within the pit, are depleted of the aggregate supply.

The end reclamation of Burnstick aggregate pit will be grazing.



BURNSTICK - NE 10 & SE 15-34-07-W5M





Old Cooper - SW 11-37-06-W5M

The Old Cooper aggregate pit is located at SW 11-37-06-W5M, on local road Range Road 6-1A, approximately 23 km southwest of the town Rocky Mountain House. The pit is located on crown land and a Surface Materials Lease was approved in 1995. The Old Cooper pit has a total area of 36.6 hectares with a current disturbed area of 29 hectares. The total amount of recoverable gravel remaining in the pit is estimated at approximately 174,460 tonnes.

The remaining aggregate area will be divided into four operational phases, Phase A through Phase D. Operations will commence in Phase A. The aggregate will be mined to the full depth of the deposit. The aggregate will be stockpiled and crushed in Phase B and C. When mining commences in Phase B, the stockpiling and processing will occur within Phase C and D. Stockpiling and processing of the aggregate material in Phase C and D will be moved offsite to another County pit located at NW 02-37-06-W5M.

The end use of the Old Cooper pit is a day use recreation area with watchable wildlife and a waterbody. The waterbody is estimated to be 20.85 hectares and the total reclaimed area will be 29.0 hectares.



COOPER (Old) - SW 11-37-06-W5M





Frisco - SW 17-41-07-W5M

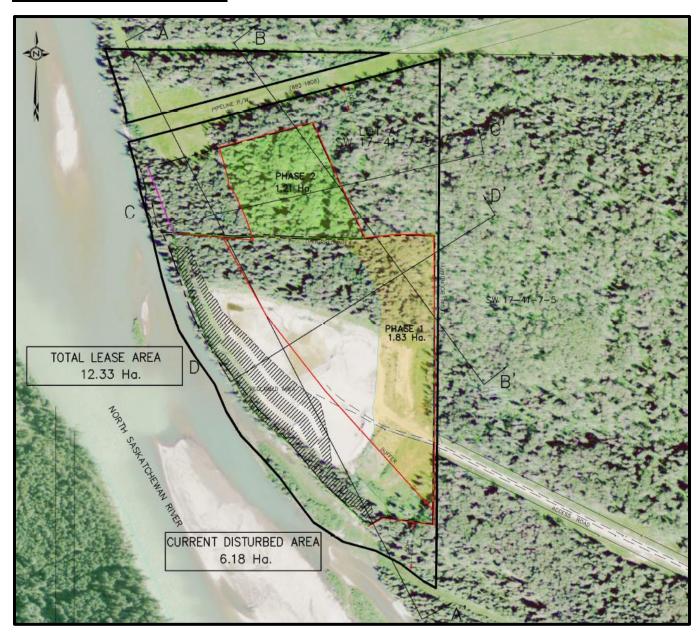
The Frisco aggregate pit is located at SW 17-41-07-W5M, on local road Township Road 41-2, approximately 14 km north of the town Rocky Mountain House. The pit is located on crown land and a Surface Materials Lease was approved in 1997. Frisco pit is 12.33 hectares with a current disturbed area of 6.18 hectares. The total amount of recoverable gravel remaining in the gravel pit is 210,283 tonnes.

The undisturbed area will be divided into two operational phases, Phase 1 and Phase 2. Due to the shape and access point of the Frisco Pit, progressive development is not practical so reclamation of the pit is to occur in stages. Reclamation of Phase 2 will be implemented prior to mining the east edge of Phase 1. Phase 1 will be reclaimed when aggregate is depleted in this area.

The end reclamation goal of the Frisco Pit is to incorporate the area into the adjacent grazing lease. The total area of reclaimed land within the pit, will be approximately 7.39 hectares.



FRISCO - SW 17-41-07-W5M





Horburg (New) - N ½ 36-39-10-W5M and SE 01-40-10-W5M

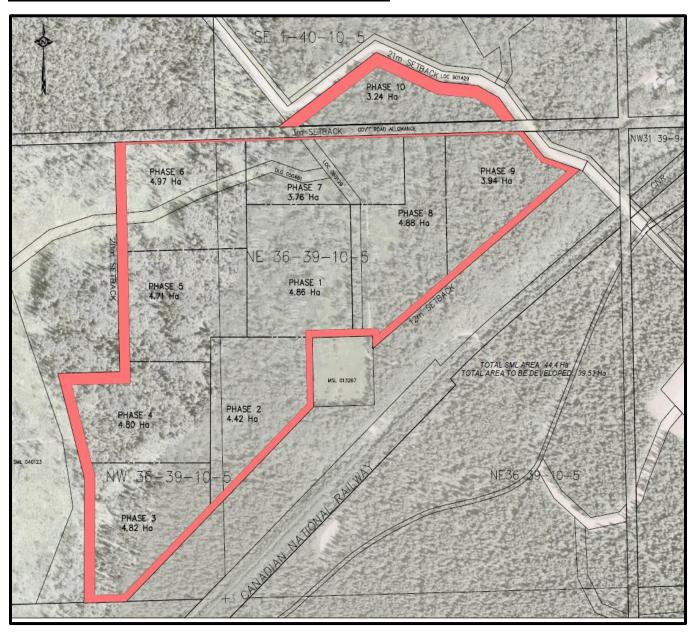
The Horburg aggregate pit is located at SE 01-40-10-W5M and N ½ 36-39-10-W5M, approximately 24 km west of the town of Rocky Mountain House. The pit is located on crown land and a Surface Materials Lease was approved in 2016. Horburg pit is 44.40 hectares, and, at this time, with no disturbed area. The total amount of recoverable gravel, within the pit, is 1,543,007 tonnes.

The pit will be divided into ten operational phases, Phase 1 through Phase 10. Operations will commence in Phase 1. The topsoil, subsoil and overburden will be stripped in Phase 1 and stockpiled into the west corner of this phase. The aggregate will be mined to the full depth of the deposit. Afterwards, the stripping of topsoil, subsoil and overburden will commence in Phase 2. The topsoil, subsoil and overburden will be stockpiled with the material from Phase 1. Phase 1 will remain the aggregate stockpile location throughout the life of the pit. Once Phase 2 is depleted of aggregate the stripping of topsoil, subsoil and overburden will commence in Phase 3. The topsoil, subsoil and overburden from Phase 3 will be used to reclaim Phase 2. This sequence will continue for Phase 4 through Phase 10. An access road will remain along the east boundary of Phase 2 and Phase 3. The road will be reclaimed after the reclamation of Phase 8. The access road along Phase 7 and 10 will be reclaimed with the reclamation of phase 9.

Tree planting will be required to meet the reclamation guidelines for forested areas. Some of the revegetation goals will be achieved through natural succession with the placement of topsoil and subsoil through progressive reclamation. The sequential reclamation of the site will have minimal stockpiling times thereby reducing the loss of viable plant remnants and seeds. The end reclamation objective is to restore the aggregate pit to natural forest.



HORBURG (New) - N 36-39-10 & SE 01-40-10-W5M





Main Ram - N 1/2 19-39-10-W5M

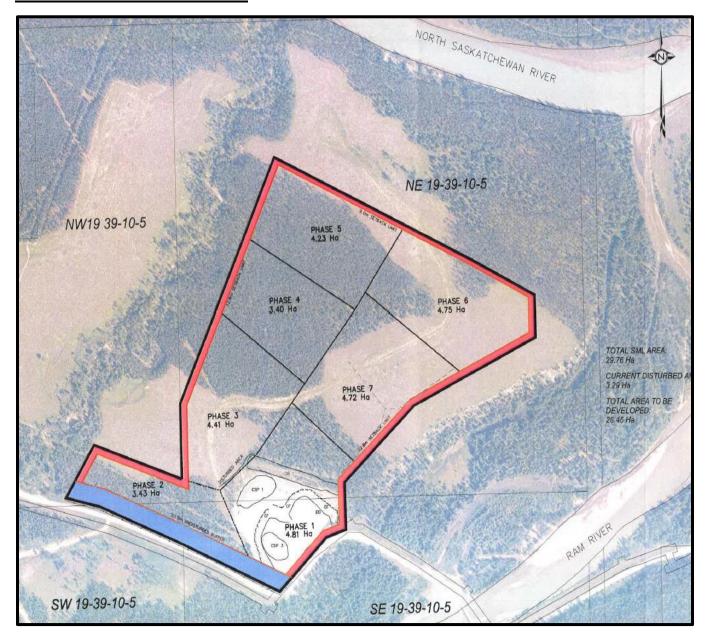
The Main Ram aggregate pit is located at N ½ 19-39-10-W5M, on local road North Fork Road, approximately 45 km west of the town Rocky Mountain House. The pit is located on crown land and a Surface Materials Lease was approved in 1995. The current Surface Material Lease area is 29.76 hectares with a current disturbed area of 3.29 hectares. The total amount of recoverable gravel in the undeveloped portion of the pit is approximately 4,543,912 tonnes.

The remaining aggregate area will be divided into seven operational phases. The aggregate will be mined to the total depth of the deposit. All gravel operations will be on the ridge above the valley. All topsoil, subsoil, and overburden have been stripped from Phase 1. Phase 1 will remain open as a staging area and stockpile area for crushed gravel to allow for winter access of the aggregate. Once one phase is depleted of aggregate, the stripping of the topsoil, subsoil, and overburden will commence on the next phase. Once operations have commenced in the second phase, the previous phase will be reclaimed, excluding Phase 1. This will continue by each phase until the seven phases, within the pit, are depleted of the aggregate supply.

The reclamation objective is to restore the aggregate pit to natural forest.



MAIN RAM - NE 19-39-10-W5M





Strachan - SE & N ½ 01-38-09-W5M and SE 11 & SW 12-38-09-W5M

The Strachan aggregate pit is located at SE & N ½ 01-38-09-W5M and SE 11 & SW 12-38-09-W5M, approximately 19 km southwest of the town of Rocky Mountain House. The pit is located on crown land and the Surface Materials Lease was approved in 2016. The total area of the pit is 114.95 hectares. The pit has approximately 4,966,658 tonnes of recoverable aggregate.

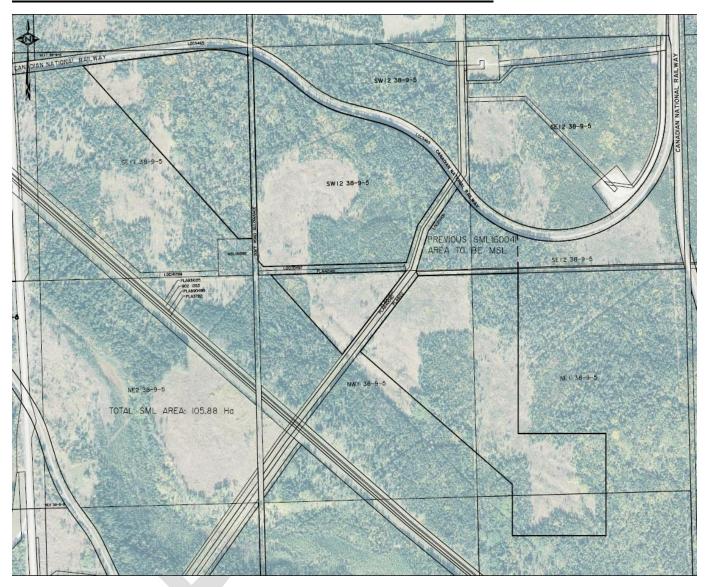
Strachan pit will be divided into eighteen operational phases. The aggregate will be mined to the total depth of the deposit. All gravel operations will have a buffer of 30 meters from the pipeline corridor. Operations will commence in Phase 1. The topsoil, subsoil and overburden will be stripped in Phase 1 and stockpiled in the west boundary of this Phase. Once Phase 1 is depleted of aggregate, the stripping of topsoil, subsoil and overburden will commence in Phase 2. Overburden from Phase 2 will be used to recontour the east half of Phase 1. The west half of Phase 1 will be used as a staging area during aggregate extraction of Phase 1 through Phase 9. The aggregate extraction will continue in Phase 2 until the aggregate supply is depleted. Once Phase 2 is depleted of aggregate, the stripping of topsoil, subsoil and overburden will commence on Phase 3 and stockpiled in the southwest corner of Phase 3. The stripped overburden from Phase 3 will be directly placed into Phase 2, followed by subsoil and topsoil. This will reduce the loss of viable plant remnants and seeds which will assist in the reclamation of each phase. This sequence will continue for Phase 4 through Phase 9.

A detailed development plan for Phase 10 though Phase 18 will be forth coming.

The reclamation objective is to restore the aggregate pit back to natural forest.



STRACHAN - SE & N ½ 01-38-09 and SE 11 & SE 12-38-09-W5M





Sunchild (Brewster) - NW 16-42-10-

W5M

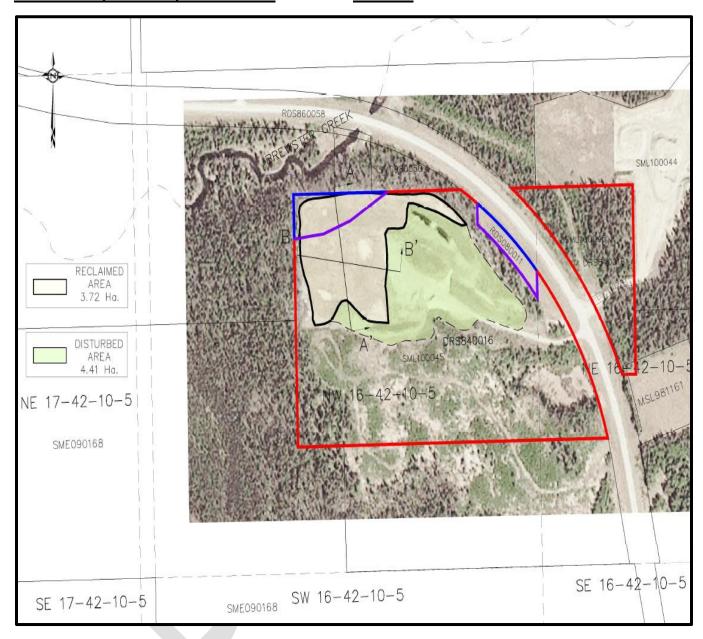
The Sunchild aggregate pit is located at NW 16-42-10-W5M, on local road, Sunchild Road, approximately 52 km northwest of the town of Rocky Mountain House. The pit is located on crown land and a Surface Materials Lease was obtained in 2010. Alberta Transportation initiated development in this area, west of the road, prior to Clearwater County. Clearwater County has since taken over the aggregate pit from Alberta Transportation. The Sunchild pit is an area of 24.28 hectares. Twenty (20) hectares are on the west side of Sunchild road and 4.6 hectares are to the east of the road. The estimated gravel reserves are 120,000 tonnes to the west of the road and 60,000 tonnes to the east of the road.

The reclamation goal for the Sunchild pit is to return the lands to their previous forested condition and use.



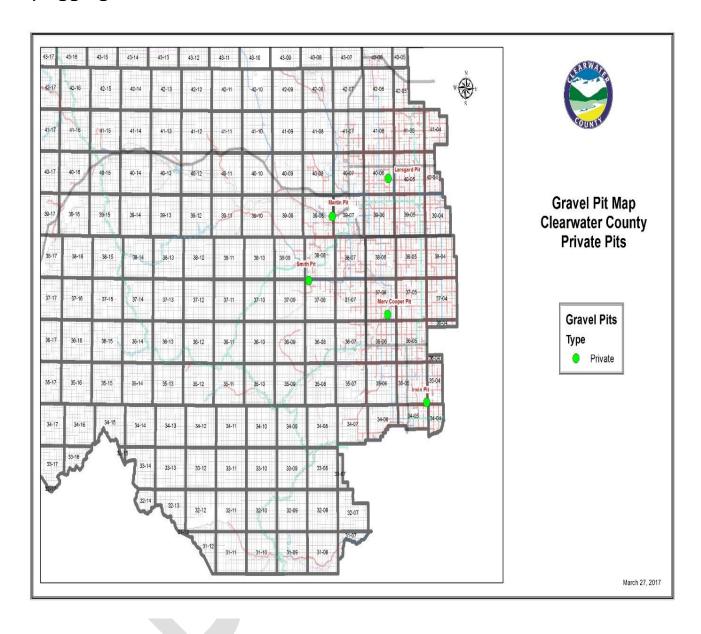
SUNCHILD (Brewster) - NW 16-42-

<u>10-W5M</u>





b.) Aggregate Pits - Private





Merv (New) Cooper - NW 02-37-06-

W5M

The Merv Cooper aggregate pit is located at NW 02-37-06-W5M, on local road Range Road 6-1A. The pit is located on private land and has been owned by Clearwater County since 2011. The total area of the gravel pit is 21.64 hectares. The total amount of recoverable aggregate is estimated at approximately 518,695 tonnes.

The gravel area is divided into four operational phases. Gravel will be extracted, to the full depth of the deposit, from one phase before mining commences on another phase. Once one phase is depleted of aggregate, the stripping of the topsoil, subsoil, and overburden will commence on the second phase. Once operations have commenced in the second phase the first phase will be reclaimed. This will continue by each phase until the four phases within the pit are depleted of the aggregate supply.

The end reclamation plan for the Merv Cooper aggregate pit is to have a 12.75-hectare pond which will be utilized for recreational purposes. This will take up approximately 75% of the reclamation area. There will also be an island on the northern end of the pond.



MERV (New) COOPER - NW 02-37-

<u>06-W5M</u>

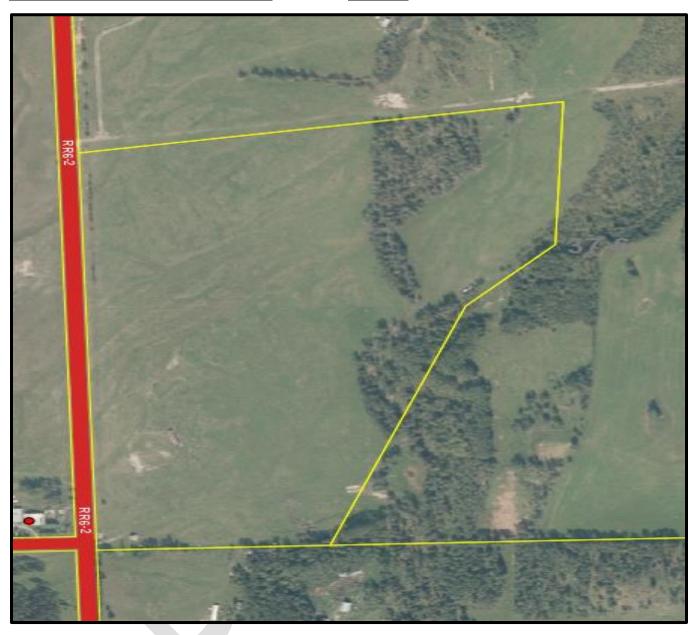


Photo from 2014



<u>Irwin - SE 01-35-05-W5M</u>

The Irwin aggregate pit is located at SE 01-35-05-W5M, on a local road Range Road 5-0. The pit is located on private land which is owned by Clearwater County. The pit approval was obtained in 1989. The total area is 20.2 hectares with 7.5 hectares of active operations. The total recoverable gravel remaining in the gravel pit is approximately 600,000 tonnes.

Due to the age of the pit, there are no defined phases for excavation. Clearwater County intends to excavate the additional area in phases no larger than 5 hectares.

The end reclamation of the Irwin aggregate pit is natural forest.



<u>IRWIN - SE 01-35-05-W5M</u>



Photo from 2014



Larsgard - SE 14-40-06-W5M

The Larsgard aggregate pit is located at SE 14-40-06-W5M, on a local road Range Road 6-1 approximately 11 km east of the town of Rocky Mountain House. The pit is on private land and has been owned by Clearwater County since 1989. The total pit area is 36.47 hectares with a current disturbed area of 3.15 hectares. The remaining hectares have been reclaimed to pasture land.

The Larsgard aggregate pit is currently being used as a stockpile site. There is approximately 25,000 tonnes of aggregate deposit remaining within the pit. The aggregate is located beneath the overburden stockpile and the road right-of-way. Once the County has begun to reclaim the stockpile area, they will be able to access the remaining aggregate deposit.

The end reclamation goal of the Larsgard aggregate pit is pasture land.



<u>LARSGARD - SE 14-40-06-W5M</u>





Martin - NE 13-39-08-W5M

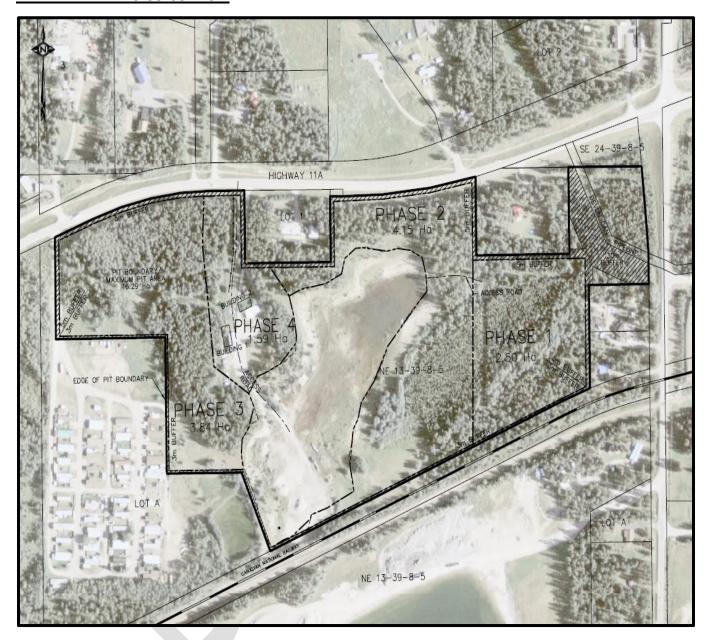
The Martin aggregate pit is located at NE 13-39-08-W5M, on local road Old Highway 11A, approximately 6 km west of the town of Rocky Mountain House. The pit is located on private land and is owned by Clearwater County. The pit area is 16.29 hectares with a current disturbed area of four hectares. The remaining estimated quantity of recoverable aggregate is 725,525 tonnes.

The remaining area of the aggregate pit will be mined in four phases. Initially, the gravel will be mined down to the water table for the entire lease area. After the entire area is mined down to the water table, mining below the water table will occur and continue to the full depth of the aggregate deposit. The aggregate will be extracted from one phase until that phase is depleted before mining commences on another phase. Topsoil and overburden will be salvaged and stockpiled separately and used for reclamation.

The reclamation plan is to have a 6.9-hectare pond. This will take up approximately 42% of the reclaimed area. The remaining 58% of the lease will be reclaimed as pasture.



MARTIN - NE 13-39-08-W5M





Smith Pit - NE 31-37-08-W5M

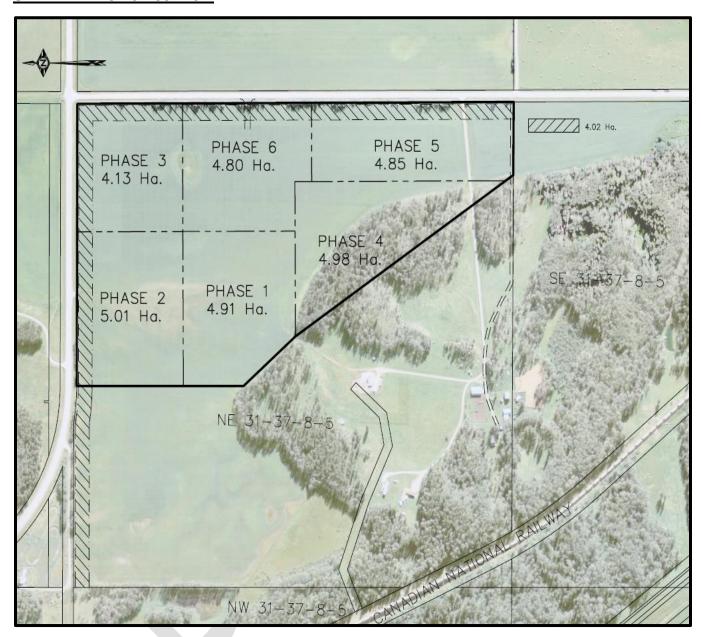
The Smith aggregate pit is located at NE 31-37-08-W5M, on local road Prairie Creek Road. The pit is located on private land and is owned by Clearwater County and Lacombe County in which each county's proportionate interest is 50%. The pit was developed in 2015 and the total area is 28.67 hectares. The pit has approximately 4,086,136 tonnes of recoverable aggregate.

The pit will be divided into six operational phases. Initially, the aggregate will be mined to one meter above the water table. When mining below the water table, the aggregate will be bailed to surface. No dewatering of the pit will occur. Once a phase is depleted of aggregate, the stripping of topsoil, subsoil and overburden will commence on the next operational phase. The topsoil will be stockpiled in a phase not intended to be mined, and the overburden, instead of being stockpiled, will be placed in the depleted phase. A progressive reclamation method will be used, starting in Phase 2, where the stripped overburden will be placed in the depleted areas of Phase 1. This method of progressive reclamation will continue through the mining of the pit. In this manner, it should not be necessary to move the overburden again for reclamation purposes.

The final land use for the Smith Pit will be a natural water body. The area of the end pit pond will be 12.01 hectares.

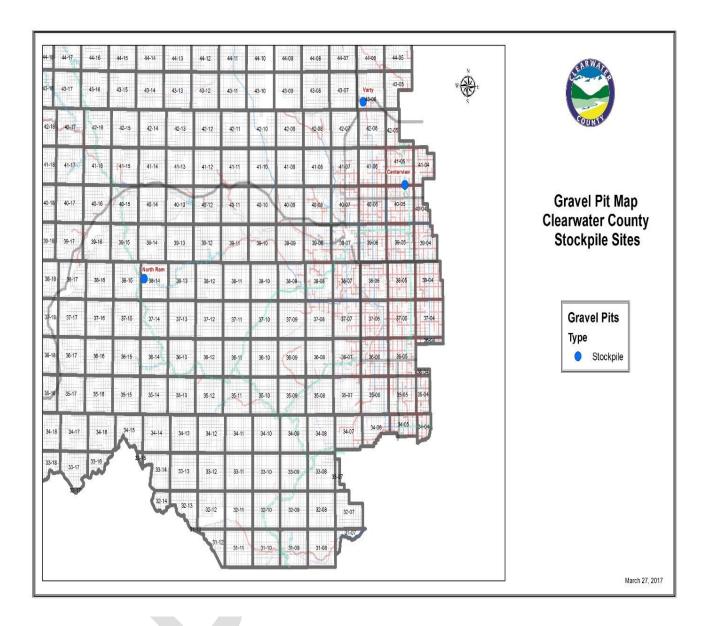


SMITH - NE 31-37-08-W5M





c.) Aggregate Pits - Stockpiles





Centerview Stockpile - NE 32-34-09-

<u>W5M</u>

The Centerview stockpile is located at NE 32-34-09-W5M, on local road Township Road 41-0. The stockpile site had gravel piled at the site in 2015. The site is on private land owned by Clearwater County. The site is 4.82 acres in total area. Currently, the site is used to service the northeast portion of Clearwater County.



CENTERVIEW - SW 02-41-05-W5M



Photo from 2014



North Ram - SE 19-38-14-W5M

The North Ram stockpile site is located at SE 19-38-14-W5M, on local road North Fork Road. The stockpile site is located on crown land and Clearwater County utilizes the site to service the west, southwest portion of the County.



NORTH RAM - SE 19-38-14-W5M

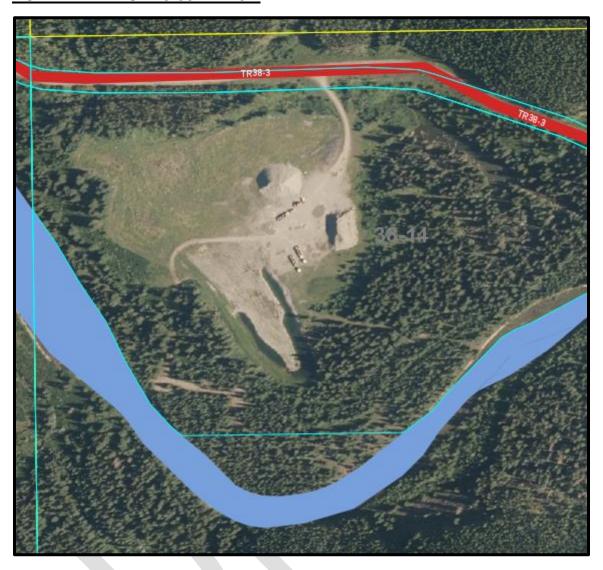


Photo from 2014



Varty - SW 08-43-06-W5M

The Varty stockpile site is located at SW 08-43-06-W5M, off Highway 53. The stockpile is located on private property and the County obtained a rental, from the landowner, in 2005. The site is utilized to maintain infrastructure and roads within the northern part of Clearwater County.



VARTY - SW 08-43-06-W5M

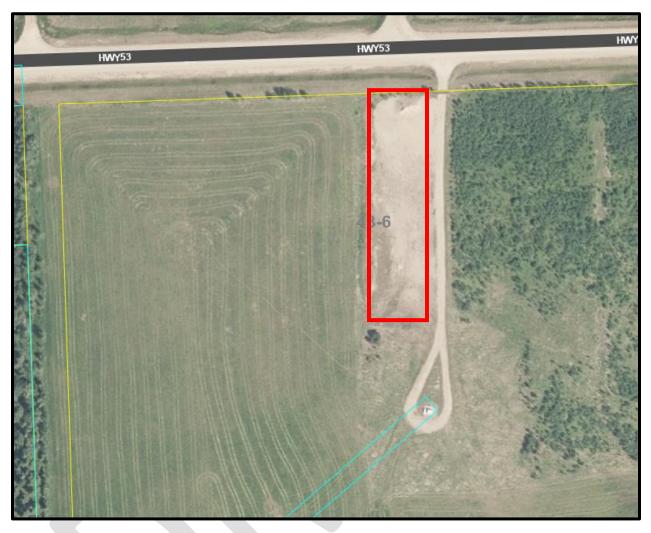


Photo from 2014



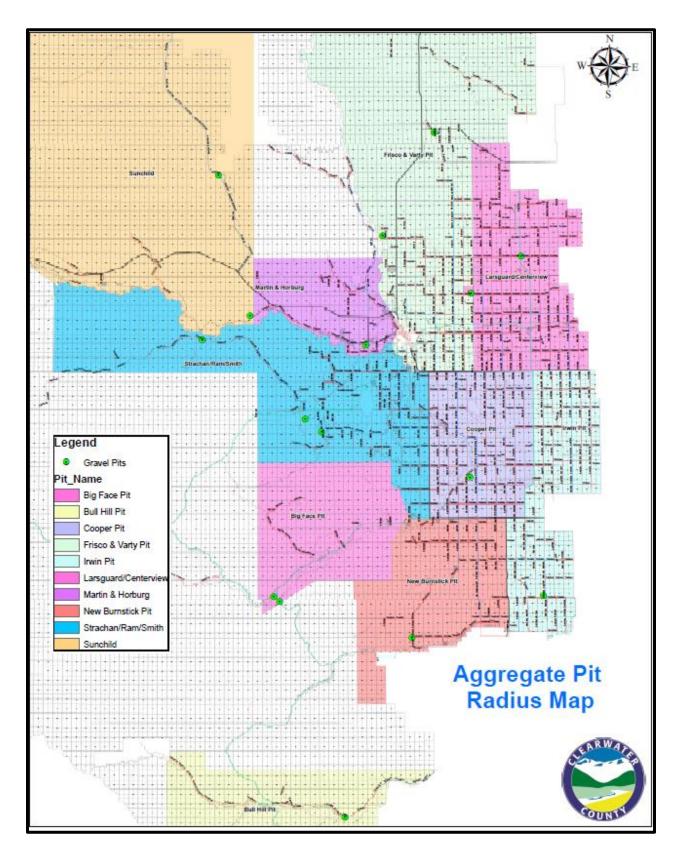
d.) Aggregate Pits - Pit Radius

It is the intention of Clearwater County, whenever feasibly possible, to strategically locate and establish aggregate pits and stockpile sites. In doing so, this allows the County to minimize the trucking, of crushed aggregate, for the purpose of maintaining Clearwater County's infrastructure. Hence, to assist in this endeavor, Clearwater County has implemented an aggregate pit/stockpile site hauling radius map.

The pit radius map shows the area to which each pit(s) is assigned. Consequently, there are ten (10) separate defined hauling areas. Infrastructure which does not reside in any of the ten defined areas and, therefore, cannot be economically supplied with Clearwater County aggregate, will be supplied with aggregate purchased from a third party.

Also, during a haul from a Clearwater County gravel pit, the County adheres to their 'Road Use for Industrial/Commercial Truck Hauls' Policy. Namely, the policy outlines the use of dust suppression during high traffic hauls. Hence, to minimize the dust, Clearwater County will apply a dust suppressant on the gravel roads in front of their gravel pits.







References

References used in the preparation and delivery of this management plan include:

AAMDC. (2013). <u>Got Gravel? Strategies to Secure Gravel for Rural Municipalities. Part 1 – Summary Report.</u> Prepared for the Alberta Association of Municipal Districts & Counties by CharettePellPoscente Environmental Corp.

AAMDC. (2007). A Municipal Guide to Sand and Gravel Operations in Alberta.

Alberta Environment. (2004). <u>A Guide to the Code of Practice for Pits</u>. Retrieved from, http://aep.alberta.ca/lands-forests/land-industrial/documents/CodePracticePits-Apr27-2015.pdf on March 29, 2017.

Alberta Environment. (2010). <u>Alberta Water Well Information Database</u>. Retrieved from, http://environment.alberta.ca/01314.html on March 29, 2017.

Alberta Sustainable Resource Development (2008). <u>Guidelines for Acquiring Surface Material Dispositions on Public Land.</u> Government of Alberta.

Clearwater County. (2015). Clearwater County 2015 – 2018 Strategic Plan.

Indian and Northern Affairs Canada (2009). <u>Granular Resources Management Plan - Inuvialuit Land Administration</u>. Retrieved from, <u>www.inuvialuitland.com/resources/ISR_GRMP.pdf</u> on March 29, 2017.



AGENDA & PRIORITIES COUNCIL COMMITTEE AGENDA ITEM

DELEGATION: Rural Municipalities of Alberta (RMA)				
PRESENTATION DATE: June 18, 2018				
DEPARTMENT: Delegation	WRITTEN BY: Tracy Haight, Executive Assistant	REVIEWED BY: Rick Emmons, Chief Administrative Officer		
BUDGET IMPLICATION: □ N/A □ Funded by Dept. □ Reallocation				
LEGISLATIVE DIRECTION: ⊠None □ Provincial Legislation (cite) □ County Bylaw or Policy (cite)				
STRATEGIC PLAN THEME: Well Governed and Leading Organization		STRATEGIES: 2.5.3		
ATTACHMENT: Resolution 11-17F Off-Highway Vehicle (OHV) Fees				

BACKGROUND:

RMA (formerly Alberta Association of Municipal Districts and Counties) regularly visits with its membership on a three-year rotation to connect with municipal representatives and learn about specific issues of importance to the municipality.

RMA President, Al Kemmere; District 2 (Central) Director, Paul McLauchlin; and Executive Director, Gerald Rhodes will attend the Committee meeting to talk about issues identified in Motion #016/18 at the January 9, 2018 regular council meeting, as follows:

- Lack of member support for Resolution 11-17F Off-Highway Vehicle (OHV) Fees (attached);
- Reduction of rural crime in Central Alberta;
- Provincial/Federal funding for capital infrastructure and municipal internet projects;
- Templates and best practices for developing Intermunicipal Collaborative Frameworks and Development Plans; and,
- Alternative bridge structures



Resolution 11-17F

Off-Highway Vehicle (OHV) Fees

Date: October 20, 2017 Expiry Date: December 1, 2020 Active Status: Active Sponsors: **Parkland County** District: 3 - Pembina River Year: 2017 Convention: Fall Category: Other Status: **Archived** Vote Results: Defeated Preamble: WHEREAS the use of off-highway vehicles (OHVs) for recreational use on public and private lands pose complex management challenges; and WHEREAS OHV use impacts the triple bottom line of social, economic and environmental outcomes; and WHEREAS the Government of Alberta does not have effective legislation, programs or management strategies to address the issues arising from recreational OHV use; Operative Clause: THEREFORE, BE IT RESOLVED that the Alberta Association of Municipal Districts and Counties request that the Government of Alberta introduce an annual motorized off-highway vehicles (OHV) permitting process and fee structure with all revenues dedicated solely for the creation of OHV areas, maintenance of OHV areas, enforcement and educational programs; and

FURTHER BE IT RESOLVED that the Government of Alberta identify non-recreational OHV users that would be exempt from the licensing fee; and

FURTHER BE IT RESOLVED that the Government of Alberta amend current legislation to enable the consolidation of recreation management oversight and responsibility to a department and/or agency to better address OHV issues; and

E1

FURTHER BE IT RESOLVED that the Government of Alberta develop and introduce enhanced liability protections into legislation that better safeguard the interest of the Crown and private land owners where OHV activities occur.

Member Background:

With the number of OHVs increasing in Alberta, there is a corresponding increase in pressures and challenges associated with their use. As OHV ownership has increased, greater activity has been witnessed in areas where OHV use is permitted; there has not been a corresponding increase in infrastructure supporting or enabling OHV activity.

In Alberta, there is relatively little public funding available for recreation management programs and, in particular, those dealing specially with OHVs. Any available revenue sources are from general revenues and departmental budgets. As a result, the management and control of OHVs must compete for limited funds with other provincial priorities. In contrast, other jurisdictions have taken proactive measures to deal with OHV use and have established programs that create dedicated revenue streams for specific programs. These revenue sources include user fees and permits, regulatory charges such as vehicle registrations, operator licensing and fines. In the absence of a reliable, dedicated funding source, it will be difficult to address the issues surrounding OHV recreational use. A recreation management strategy is required to tackle environmental impacts, reduce user conflict and increase public safety while addressing liability issues.

The impacts of OHV use on lands throughout the province, particularly from an environmental perspective, have been receiving increased attention. From the adverse impact on fish habitat, disruption and displacement of wildlife breeding and nesting habitats to the impact on flora and the potential loss of a food source or wildlife, the need for a recreation management plan is crucial to balance the interests of OHV users, other recreational pursuits and the environment.

OHV use has also resulted in conflict between users and private land owners, most notably, agricultural producers. Illegal access to private agricultural lands has resulted in damage to fencing, escape of livestock, damage to crops and agricultural lands as well as vandalism of private property and equipment. These activities result in a direct financial loss to farmers and ranchers.

Currently in Alberta, the roles and responsibilities associated with recreation management are somewhat fragmented. The environment, parks, recreation, conservation, access to public lands, motor vehicles, roads, and liability for injuries related to recreational use of public land are often dealt with by different department or agencies. This fragmentation contributes to ambiguous rules, a lack of developed recreational amenities and difficulty in mitigating the negative impacts of recreation activities. The existing legislation fails to provide clear direction or enabling authority. Consequently, many recreation management decisions such as OHV use require the involvement of ministers or Cabinet. Due to the politicization of OHV recreation management, both previous and current governments have failed to move forward on this matter.

Another crucial subject that needs to be addressed is liability. In Alberta, the legal protection from lawsuits arising from trail-related injuries has evolved and provides better protection than in the past. The provincial *Occupiers Liability Act* lessens the duty of care owed to recreational users in some situations, however, the legislation is complex and does not provide adequate assurance potentially affected parties. While it addresses and enables access to recreational opportunities, it fails to provide protection and the certainty that would advance actions or initiatives such as trail development or implementing user fees.

Inaction will further perpetuate the issues, challenges and conflicts surrounding OHV use as the province recognizes continued population growth and increased OHV activity.

AAMDC Background:

The AAMDC has no active resolutions directly related to this issue.

Provincial Ministries:

none



AGENDA & PRIORITIES COUNCIL COMMITTEE AGENDA ITEM

SUBJECT: Broadband Project – Progress Update				
PRESENTATION DATE: June 18, 2018				
DEPARTMENT: Administration	WRITTEN BY: Christine Heggart, Mgr Intergovernmental and Legislative Services		REVIEWED BY: Rick Emmons, Chief Administrative Officer	
BUDGET IMPLICATION: □ N/A ☑ Funded by Dept. □ Reallocation				
LEGISLATIVE DIRECTION: ⊠None □ Provincial Legislation (cite) □ County Bylaw or Policy (cite)				
STRATEGIC PLAN THEME: Managing Our Growth	PRIORITY AREA: Objective 1.3 Generate innovative local economy that stimulates opportunities for investment, business and training.	STRATEGIES: 1.3.4 Initiate programs, which may include installation of communication towers and/or fiber optic cable, to support "Final Mile" connectivity for residents, business, and industry within Clearwater County.		
ATTACHMENT: N/A				

BACKGROUND:

Jennifer Massig, Magna Engineering, and Craig Dobson, Taylor Warwick, will be on hand to provide the Committee a summary of recent broadband public engagement program activities including the three public open house meetings in May 2018 and related feedback, as well as additional feedback received through the online feedback form or by email.

In closed session, Ms. Massig and Mr. Dobson will provide the Committee an update of the broadband project business plan development process and the County-wide broadband infrastructure master plan (CBIMP) phasing plan update.