AGENDA
COUNCIL MEETING
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
March 25, 2025
3:00 pm
Council Chambers

A. ADOPTION OF AGENDA

B. PUBLIC HEARING BYLAW 1356-25 (ROAD CLOSURE)

C. MINUTES/NOTES

1. Council Committee Minutes
   - March 11, 2025
2. Council Meeting Minutes
   - March 11, 2025

D. UNFINISHED BUSINESS

E. BUSINESS ARISING FROM THE MINUTES

a) Maycroft Road Deligations

F. COMMITTEE REPORTS / DIVISIONAL CONCERNS

1. Councillor Tony Bruder – Division 1
   - Crowsnest Pincher Creek Landfill Association Minutes January 2025
2. Reeve Rick Lemire – Division 2
3. Councillor Dave Cox– Division 3
4. Councillor Jim Welsch - Division 4
5. Councillor John MacGarva – Division 5

G. ADMINISTRATION REPORTS

1. Operations

a) Public Works Department Report
   - Report from Public Works dated March 18, 2025
   - Schedule A – Shop/Fleet Report
b) Utilities & Infrastructure Report
   - Report from Utilities & Infrastructure dated March 18, 2025
c) Regional Wastewater System Assessments - Final Reports
   - Report from Utilities & Infrastructure dated March 18, 2025
d) Community Events Board – Procurement
   - Report from Utilities & Infrastructure dated March 18, 2025

2. Finance

3. Planning and Community Services

4. Municipal

a) CAO Report
   - Report from Administration, dated March March 18, 2025
b) Corporate Policy C-CO-005 Municipal Boards, Committees and Appointments
   - Report from Administration dated March 18, 2025
c) Corporate Policy C-CO-007 Pincher Creek & District Hometown Award Committee
   - Report from Administration dated March 18, 2025

H. CORRESPONDENCE

1) For Action

a) FCM Registration
   - Conference May 28 to June 1, 2025
b) Pincher Creek Dolphins Swim Club
   - Request for Support
c) Invitation to Volunteer Appreciation Dinner

2) For Information

a) 2024 Annual Audit of MD of Pincher Creek No. 9
   - Audit performed by Avail
b) Pincher Creek and District Municipal Library
   - Annual Report 2024 Infographic
c) Alberta SouthWest Regional Alliance
   - Minutes February 5, 2025
   - Bulletin March 2025
d) Summary of Questions from Alberta Policing Legislation Information Sessions
   - Recap from RCMP Virtual Sessions in December 2024
e) 2025 Wildfire Reporting Tool
   - Letter from Alberta Forestry and Parks

I. NEW BUSINESS

J. CLOSED MEETING SESSION

a) Cowley Water Facilities – FOIP Sec. 24.1
b) Road Closure and Realignment Request – FOIP Sec. 24.1

K. ADJOURNMENT

PUBLIC HEARING
Municipal District of Pincher Creek No. 9
Bylaw No. 1356-25
Tuesday, March 25, 2025 3:00 pm

1. Public Hearing Called to Order

2. A Public Hearing is Council's opportunity to hear from anyone who is affected by the proposed bylaw. General rules of conduct when a Public Hearing is held are as follows:

   - The developer and/or proponent is given the first opportunity to present to Council and the public. After the public has made their statements, the developer has the opportunity to rebut or answer any questions.
   - Members of the public will be invited to speak to the subject matter. I will ask members of public who wish to speak to state their name for the record. The speaking time limit is 5 minutes per speaker. If you have previously submitted a written response, unless you have new information to present, be assured that Council has read your letter. Please do not come to the podium to read your submitted response.
   - The Reeve will call for any additional speakers to make sure everyone wishing to speak has had the opportunity to do so. As this is not a situation for debate, speakers may come up one time only.
   - Following all presentations from members of public, the developer has the opportunity to rebut or answer any questions, Council may ask questions to Administration and/or developer.
   - Council will then close the Public Hearing. This ends the opportunity for the public or Administration to provide information on the matter.

3. Advertising Requirement

   This Public Hearing has been advertised in accordance with Section 606 of the Municipal Government Act. This Public Hearing was advertised in Shootin the Breeze on March 12 and 19, 2025, as well as the MD website and MD Social Media pages.

4. Purpose of the Hearing

   The purpose of Bylaw No. 1356-25 for the purpose of closing to Public Travel and creating title to and disposing of the following described highways, subject to rights of access granted by other legislation:

   PLAN 5510 AL
   ALL THAT PORTION OF NANTON STREET FORMING PART OF LOT 1, BLOCK C, PLAN
   _____
   CONTAINING 0.381 HECTARES (0.94 ACRES) MORE OR LESS

5. Presentations:

   VERBAL:

   WRITTEN:

6. Closing Comments

7. Adjournment from Public Hearing

MD OF PINCHER CREEK NO 9
BYLAW NO. 1356-25

A BYLAW OF MD OF PINCHER CREEK FOR THE PURPOSE OF CLOSING TO PUBLIC TRAVEL AND CREATING TITLE TO AND DISPOSING OF PORTIONS OF A PUBLIC HIGHWAY IN ACCORDANCE WITH SECTION 22 OF THE MUNICIPAL GOVERNMENT ACT, CHAPTER M26, REVISED STATUTES OF ALBERTA 2000, AS AMENDED.

WHEREAS, the lands hereafter described are no longer required for public travel,

WHEREAS, application has been made to Council to have the roadway closed, and

WHEREAS, the Council of MD OF PINCHER CREEK deems it expedient to provide for a bylaw for the purpose of closing to public travel certain roads or portions thereof, situated in the said municipality and thereafter creating title to and disposing of same, and

WHEREAS, notice of intention of Council to pass a bylaw has been given in accordance with Section 606 of the Municipal Government Act, and

WHEREAS, Council was not petitioned for an opportunity to be heard by any person claiming to be prejudicially affected by the bylaw

NOW THEREFORE BE IT RESOLVED that the Council of MD OF PINCHER CREEK in the Province of Alberta does hereby close to Public Travel and creating title to and disposing of the following described highways, subject to rights of access granted by other legislation.

PLAN 5510 AL
ALL THAT PORTION OF NANTON STREET FORMING PART OF LOT 1, BLOCK C, PLAN _____
CONTAINING 0.381 HECTARES (0.94 ACRES) MORE OR LESS

EXCEPTING THEREOUT ALL MINES AND MINERALS

Received first reading this 25 day of February 2025

_____
Chief Elected Official
Seal

_____
Chief Administrative Officer

Approved this ____ day of _____, 20__

_____
Minister of Transportation and
Economic Corridors

Received second reading this _____ day of _____, 20__.

Received third reading and finally passed this _____ day of _____, 20__.

_____
Chief Elected Official
Seal

_____
Chief Administrative Officer


Bylaw 1356-25 Aerial
N
All information depicted is subject to change, therefore the Municipal District Of Pincher Creek assumes no responsibility for discrepancies at time of use. Please note, average accuracy of the displayed data is: +/- 10m.
1:2256
50 m
200 ft
ROAD
NW13 7-3-
WATERLINE RW
(031 0755)
NW13
NANTON ST.
NANTON ST.
5510 AL
C
HIGHWAY 3

MINUTES
REGULAR COUNCIL COMMITTEE MEETING
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
Tuesday, March 11, 2025, 11:00 am
Council Chambers

Present: Reeve Rick Lemire, Deputy Reeve Tony Bruder, Councillors Dave Cox, John MacGarva and Jim Welsch.

Staff: CAO Roland Milligan, Director of Corporate Services Meghan Dobie, Public Works Manager Alan McRae, Utilities & Infrastructure Manager David Desabrais, Development Officer Laura McKinnon, Financial Services Clerk Sara-Lynn McKenzie, and Executive Assistant Jessica McClelland.

Reeve Rick Lemire called the meeting to order, the time being 11:00 am.

1. Approval of Agenda

Councillor John MacGarva

Moved that the agenda for the March 11, 2025, Committee Meeting be amended to include:

3c) Pincher Creek Emergency Services Letter – FOIP Sec. 24.1;

AND THAT the agenda be accepted as amended.

Carried

2. Delegation

a) Maycroft Road

Heather Smith and Judy Nelson attended the Council meeting with their concerns regarding Maycroft Road. In 2024, dust control was applied early in the spring but only in front of houses. The early application assisted with some of the dust, but the entire road needs to be dust-controlled. The road is approximately 13 km long, and the MD applied 5 km of dust control.

There are 16 residents along the road, but the main concern is the tourism traffic using the road to access forestry in the MD of Ranchland. The dust poses significant safety concerns, as sometimes the dust is so thick you cannot see traffic on the road. MD Council has spoken to the Alberta Government regarding cost recovery for dust control along Maycroft Road, including Tourism and Transportation. MD Council is also working with the MD of Ranchland, as most traffic uses our roads to reach that MD.

Moving forward, the MD will have a Peace Officer who can assist with speed along the road, and the MD can look at locations and amounts for Dust Control.

Currently, they are requesting dust control for the entirety of the road and that Maycroft be made the number one priority when it comes to application time. Council will further discuss at the next Council meeting.

Heather Smith and Judy Nelson left the meeting at this time, the time being 11:30 am.

3. Closed Session

Councillor Jim Welsch

Moved that Council move into closed session to discuss the following, the time being 11:30 am.

a) Public Works Call Log – FOIP Sec. 24.1
b) Tax Discussion – FOIP Sec. 24.1
c) Pincher Creek Emergency Services Letter – FOIP Sec. 24.1

Councillor Jim Welsch

Moved that Council move out of closed session, the time being 12:47 pm.

Carried

4. Newsletter Discussion

Council would like to see the following topics covered in a spring 2025 MD Newsletter:

- Community Peace Officer
- Finalization of Beaver Mines Project
- AES (weeds/weed notices)
- Water security
- Rural Crime Watch
- Property Tax
- Where my tax dollar go
- Projects from Public Works
- Election 2025

5. MD of Willow Creek ICF Discussion

The Council reviewed the Intermunicipal Collaboration Framework (ICF) with MD of Willow Creek and has no issue with extending the review period.

6. Round Table

- Dead Stock Bins/Animal Composting
- Irrigation Districts
- Secondary Homes
- Indoor Sports Court
- Road Concerns
- Living Lakes

7. Adjournment

Councillor Dave Cox

Moved that the Committee Meeting adjourn, the time being 1:45 pm.

Carried

_____
REEVE

_____
CHIEF ADMINISTRATIVE OFFICER

MINUTES
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
REGULAR COUNCIL MEETING
MARCH 11, 2025

The Regular Meeting of Council of the Municipal District of Pincher Creek No. 9 was held on Tuesday, March 11, 2025 at 3:00 pm, in the Council Chambers of the Municipal District Administration Building, Pincher Creek, Alberta.

PRESENT Reeve Rick Lemire, Deputy Reeve Tony Bruder, and Councillors Dave Cox, John MacGarva and Jim Welsch.

STAFF CAO Roland Milligan, Public Works Manager Alan McRae, Director of Corporate Services Meghan Dobie, Utilities & Infrastructure Manager David Desabrais, Development Officer Laura McKinnon and Executive Assistant Jessica McClelland.

Reeve Rick Lemire called the meeting to order at 3:00 pm.

A. ADOPTION OF AGENDA

Councillor Tony Bruder 25/113

Moved that the agenda for March 11, 2025, be approved as presented.

Carried

B. DELIGATION

C. MINUTES

1) Council Committee Meeting Minutes – February 28, 2025

Councillor John MacGarva 25/114

Moved that the minutes of the Council Committee Meeting of February 28, 2025 be amended to change “Grassy Lake” to “Grassy Mountain”,

AND THAT the minutes be approved as amended.

Carried

2) Council Meeting Minutes - February 28, 2025

Councillor Dave Cox 25/115

Moved that the minutes of the Council Meeting of February 28, 2025 be approved as presented.

Carried

D. UNFINISHED BUSINESS

E. BUSINESS ARISING FROM THE MINUTES

a) STARS

Councillor Tony Bruder 25/116

Moved that following the 2025 Election, Council revisit the discussion on an increase to STARS annual donation.

Carried

b) Northback

Councillor John MacGarva 25/117

Moved that the presentation from Northback be received as information.

Carried

Minutes
Council Meeting
Municipal District of Pincher Creek No. 9
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F. COMMITTEE REPORTS / DIVISIONAL CONCERNS

1. Councillor Tony Bruder – Division 1
   - Crowsnest Pincher Creek Landfill Association
   - Agricultural Service Board
2. Reeve Rick Lemire – Division 2
   - Mayors and Reeves
   - Pincher Creek Emergency Services Commission
   - AlbertaSouthwest
3. Councillor Dave Cox– Division 3
   - Pincher Creek and District Municipal Library
   - Pincher Creek Emergency Services Commission
   - Chinook Arch Regional Library System
   - Living Lakes
4. Councillor Jim Welsch - Division 4
   - Irrigation Meeting
   - Agricultural Service Board
5. Councillor John MacGarva – Division 5
   - Lundbreck Citizens Council
   - Living Lakes

Councillor Dave Cox 25/118

Moved to accept the Committee Reports as information.

Carried

G. ADMINISTRATION REPORTS

1. Operations

a) Public Works Operations Report

Councillor Jim Welsch 25/119

Moved that Council receive the Public Works Operations Report, including Schedule A – Shop/Fleet Report, for the period February 16, 2025, to March 1, 2025, as information.

Carried

b) Utilities & Infrastructure Report

Councillor Jim Welsch 25/120

Moved that the Utilities & Infrastructure report for February 20, 2025, through March 5, 2025, be received as information.

Carried

c) Capital - Watercourse Crossing Inspection and Remediation; Proposed Rehabilitation Projects Changes

Councillor Dave Cox 25/121

Moved that Council direct Administration to proceed with the 2025 preliminary capital work required to remediate and upgrade the crossing of Connelly Creek under Connelly Road for fish passage for $25,000 with said funds coming from the Watercourse Crossing Remediation Grant.

Carried

2. Finance

a) Revised C-FIN-538 Procurement Policy

Councillor Tony Bruder 25/122

Moved that Council approve the revised C-FIN-538 Procurement Policy.

Carried

3. Development and Community Services

a) The Range 5 – Cycling Event

Councillor Jim Welsch 25/123

Moved that Council receive the Range 5 – Cycling Event, as information,

AND THAT the MD advertise and post the event on social media.

Carried

b) Notice of Subdivision Application - 2025-0-006 Cardston County - Lot 1, Block 1, Plan 1811670 and NE

Councillor Tony Bruder 25/124

Moved that Council receive the Notice of Application for Subdivision 2025-0-006 as information.

Carried

4. Municipal

a) CAO Report

Councillor Dave Cox 25/125

Moved that Council receive for information, the CAO Report for the period February 21, 2025 to March 7, 2025.

Carried

b) Pincher Creek and District Trade Show

Councillor Tony Bruder 25/126

Moved that the MD of Pincher Creek take part in the Pincher Creek and District Chamber of Commerce Trade Show on April 25 and 26, 2025.

Carried

c) 2025 Municipal Election

Councillor Dave Cox 25/127

Moved Maureen Webster to be appointed as Returning Officer and Laura McKinnon as Substitute Returning Officer for the 2025 Municipal Election.

Carried

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H. CORRESPONDENCE

A. For Action

1) MD Position Request – Coal Mining

Councillor John MacGarva 25/128

Moved that a letter be directed to the Livingstone Landowners Group, stating that at this time MD of Pincher Creek Council is monitoring the Northback Coal Mine development process,

AND THAT MD Council remains committed to the safety and security of water.

Reeve Rick Lemire requested a recorded vote:

For:	Against:
Councillor John MacGarva	Reeve Rick Lemire
Councillor Dave Cox	Councillor Tony Bruder
	Councillor Jim Welsch

Motion Lost

Councillor Tony Bruder 25/129

Moved that a letter be directed to the Livingstone Landowners Group, stating that the MD of Pincher Creek Council reiterates their commitment to our water source's quality, quantity and safety.

Councillor Tony Bruder requested a recorded vote:

For:	Against:
Councillor Tony Bruder	Councillor Jim Welsch
Councillor Dave Cox	Reeve Rick Lemire
Councillor John MacGarva	

Motion Carried

2) Pincher Creek and District Chamber - AGM March 12, 2025

Councillor Dave Cox 25/130

Moved that any interested Councillor be authorized to attend the Pincher Creek and District Chamber AGM on March 12, 2025.

Carried

B. For Information

Councillor John MacGarva 25/131

Moved that the following be received as information:

a) Pincher Creek Community Hall
   - Thank you for funding
b) Launch of Lethbridge Region Economic Resilience Task Force
   - Information from Economic Development Lethbridge
c) Diabetes Canada Donation Bin
d) Community Greenhouse Gas Emissions Inventories
   - Report from QUEST
e) Staying Safe in Wildfire Season

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- AltaLink

f) Local Government Fiscal Framework
- Letter from Alberta Municipal Affairs

Carried

I. NEW BUSINESS

J. CLOSED SESSION

Councillor John MacGarva 25/132

Moved that Council move into closed session to discuss the following, the time being 5:33 pm.

a) Land Purchase Request – Block A, Plan 0814160 – FOIP Sec. 24.1

Councillor Jim Welsch 25/133

Moved that Council move out of closed session, the time being 5:00 pm.

Carried

a) Land Purchase Request – Block A, Plan 0814160

Councillor John MacGarva 25/134

Moved that, at this time, Council has no interest in selling the lands at Block A, Plan 0814160, but will continue a lease agreement with the current lease holder.

Carried

K. ADJOURNMENT

Councillor Dave Cox 25/135

Moved that Council adjourn the meeting, the time being 5:34 pm.

Carried

_____
REEVE

_____
CHIEF ADMINISTRATIVE OFFICER

THE CROWSNEST/PINCHER CREEK LANDFILL ASSOCIATION
MINUTES
JAN 29, 2025

The regular meeting of The Crowsnest/Pincher Creek Landfill Association was held at 9:30 am Wednesday Jan 29, 2025, at the Pincher Creek Landfill.

Present: Tony Bruder, Municipal District of Pincher Creek #9
Dean Ward, Municipality of Crowsnest Pass
Dave Filipuzzi, Municipality of Crowsnest Pass
Doreen Glavin, Municipality of Crowsnest Pass
Mark Barber, Town of Pincher Creek
Dave Slingerland, Village of Cowley
Dean Bennett, Landfill Manager
Chelsie Antoniuk – Landfill Administrator

AGENDA

Mark Barber Moved the agenda be adopted as presented. Carried. 01.29.25-2376

MINUTES

Dave Slingerland
Moved the minutes from Jan 08, 2025, be adopted as circulated. Carried. 01.29.25-2377

MANAGER'S REPORT

-MSW has been busy for this time of year. The wind has been bad, we have been shut down more already this year than we did all last year.
-Industrial cell has also been busy for this time of year.
-A couple of employees have expressed interest in continued training to help with their line of progression. We have also continued training some employees on equipment.
-We have always lined the scale with hay bales for the winter, but this did not help with the wind and freezing so we have tried Styrofoam insulation backed with a 4x4. This should solve the freezing issue we experience through the winter.
-I had a Teams meeting with Alberta Recycling, MD of Pincher and the Town of Pincher on how the new recycling program is going to work with our communities and the Eco Center.
-The contractors have started on the new scale house, they ran into a problem when they had to open the ceiling. The roof must have leaked and there is some water damage, They have now completed that portion and have framed in the new walls and installed the new windows and doors.
-The new scale will be delivered on Jan 29th and put in place. Once its in place we will be able to start on the forming of the cement pilons for the new scale house to sit on as soon as they are complete

-I have acquired a new crew truck. We will add some protective nerf bars and an under deck tool box.
-I was also able to find a snow blade for the 906 as well a blade for the large 950 loader.
-I had a Teams meeting with Alberta Recycling, MD of Pincher and the Town of Pincher on how the new recycling program is going to work with our communities and the Eco Center.
-The Eco center continues to cruise along with no issues.
-I did suggest to the Alberta Recyclers that we do the same Teams meeting with the Crowsnest Pass.

Tony Bruder
Moved the Manager's report be adopted as presented. Carried. 01.29.25-2378

FINANCIAL REPORT

Landfill Administrator provided the Income Statement/Balance Sheet and Budget to Dec 31, 2024
Dave Filipuzzi Moved the financial report be accepted as information Carried. 01.29.25-2379

DONATION REQUEST FROM CNP DANCE FESTIVAL SOCIETY.

A Donation request from CNP Dance Festival Society.
Doreen Glavin Moved that $500.00 be donated. Carried. 01.29.25-2380

DONATION REQUEST FROM U11 CROWSNEST MINOR HOCKEY.

A Donation request from U11 Crowsnest Minor Hockey.
Dave Filipuzzi Moved that $250.00 be matched with paper picking. Carried. 01.29.25-2381

DONATION REQUEST FROM KANANASKIS RODEO ASSOCIATION.

A Donation request from Kananaskis Rodeo Association.
Tony Bruder Moved that $500.00 be donated. Carried. 01.29.25-2382

DONATION REQUEST FROM PINCHER CREEK MUNICIPAL LIBRARY.

A Donation request from Pincher Creek Municipal Library.
Doreen Glavin Moved that $500.00 be donated. Carried. 01.29.25-2383

DONATION REQUEST FROM THE POLE AND SPUR - SKIJORING.

A Donation request from The Pole and Spur-Skijoring.
Doreen Glavin Moved that $500.00 be donated. Carried. 01.29.25-2384

PRESENTATION BY PENINSULA CANADA CONSULTATION.

Dave Slingerland Motion to vote on Peninsula. Carried. 01.29.25-2385

Dave Filipuzzi Motioned that $500,000 move to short term investment. Carried. 01.29.25-2386

CLOSED IN CAMERA SESSIONS WAS CALLED BY THE LANDFILL MANGER

Time In	10:29 AM	Moved by Dave Slingerland	Carried. 01.29.25-2387
Time Out	10:35 AM	Moved by Mark Barber	Carried. 01.29.25-2388

Correspondence:

NEXT MEETING DATES 9:30 AM

Feb 26,2025
Mar 26, 2025
Apr 23, 2025
May 28, 2025
June 25, 2025
July 23, 2025
Aug 27, 2025
Sept 24, 2025

ADJOURNMENT

Mark Barber Moved the meeting adjourn at 10:36 am Carried. 01.29.25-2389

Jean Wood
CHAIRMAN

Chelsie Stalcup
ADMINISTRATION

Recommendation to Council

TITLE: PUBLIC WORKS DEPARTMENT REPORT	
PREPARED BY: Alan McRae	**DATE: March 18, 2025**
DEPARTMENT: PUBLIC WORKS	
ATTACHMENTS: **1.Schedule A – Shop/Fleet Report**	

APPROVALS:

PW MANAGER	**March 18, 2025** **DATE**	**CAO**	2025/03/18 **DATE**

RECOMMENDATION:

THAT Council accept the Public Works Department Report for the period of March 2nd to March 15th as information.

Divisional maintenance- Snow removal and grading

Hamlet maintenance-Snow removal

Hard surface maintenance-Snow removal and sanding

Hamlet of Lundbreck- Sign replacement or repair list made

Permanent snow fence maintenance, removal and rebuild

Temporary snow fence removal (posts) in Div 3

Brushing/Hand slashing in Div 2

Repair of damaged signs in Div 5.

Online Safety Courses

FINANCIAL IMPLICATIONS:
None

PUBLIC WORKS REPORT SCHEDULE "A"

SHOP/FLEET OPERATIONAL REPORT	
PREPARED BY: ALAN MCRAE	**DATE: March 18, 2025**
DEPARTMENT: PUBLIC WORKS	**ATTACHMENTS: N/A**

SHOP/FLEET OPERATIONS SUMMARY:

Graders

Unit #57-Service and circle adjustment
Unit #59- T/S engine hard start and no start
Unit #64- 500hr service and inspection and circle adjustment

Heavy Trucks/Equipment

Unit #16 (grid roller)- Grease, pre-season inspection, test all functions
Unit #36 (skid steer)-Install back-up camera
Unit #37 (skid steer)-Service
Unit #431 (tank truck)- Pre CVIP inspection

Light Duty and Light Trailers

Unit #504 (1/2 Ton)- Tire re-torque
Unit #507 (WTP-1/2Ton)-Service and multi-function switch repair
Unit #600 (AES-3/4Ton)-Service and seasonal inspection
Unit #665 (AES-3/4Ton)- Boost and T/S clicking noise

OTHER

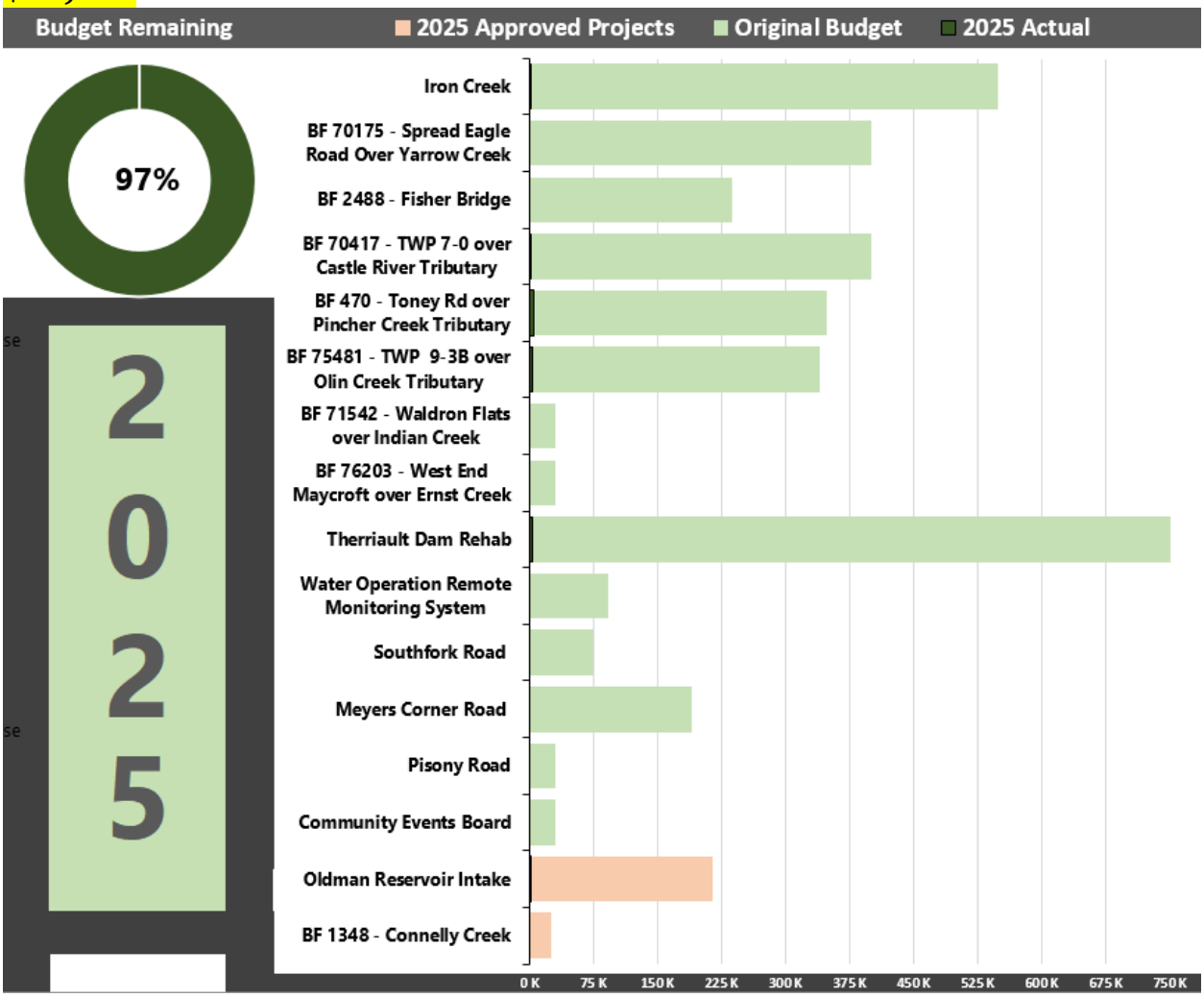
- Fix reel on Hotsy pressure washer
- JHSC meeting March 12th
- R/O updates
- Clean shop and organize

M.D. OF PINCHER CREEK NO. 9

UTILITIES & INFRASTRUCTURE REPORT

General Projects Budget Update

2025 Approved Budget: ~~$3,942,000~~ $3,847,000. Mar. 18th Spend: $17,290



Large Ongoing Projects (Pre-2025 Construction Start)

- **Beaver Mines Water Distribution, Collection System**
  - Construction complete. Awaiting rainstopper installation in a few manholes (warranty)

- **Beaver Mines Waste Facility/System**
  - Final turnover package received, GIS information received Jan 20th

- **Beaver Mines Forcemain & Lift Station**
  - Awaiting minor changes to Record drawings

- **Oldman Reservoir Water Intake Low Level Project**
  - $1.68M grant application finalized Jan 30th, 2024

        - Approval received for $1.8M project, covering up to 75% of costs
    - DFPP (Drought and Flood Protection Program) grant application approval received Aug. 6th to assist with topping up Capital Project and cover 70% of costs for a Drought Projects Assessment
    - One of two (2) new VFD installs went well. Manufacturer issue with the other
        - Manufacturer (Spartan Controls) tech site visit occurred Jan 16th
        - Additional site visit with manufacturer complete Feb 5th, anticipate install near end of April based on manufacturer correspondence

- **Bridge File 2488 – Fisher Bridge**, **NW-26-07-02-W5M**
    - Scour identified under existing abutment. Costed plan included for 2025 budget
    - DFO, Historical Resources, Public Lands Disposition submitted
        - DFO response received Sep 3rd with additional questions on work. Additional response received Nov. 29th indicating DFO is experiencing delays and directing MD to begin work on SARA permit
            - SARA permit submitted Dec. 19th. SARA permit formally requested Jan 9th, previous submission reiterated. DFO confirmed receipt Feb 7th, indicating response by May 7th
        - Public Lands Disposition received Oct 3rd

- **Watercourse Crossing Inspection & Remediation Project – 100% Grant funded**
    - Funding agreement signed Mar. 28th, 2023 for $1.55M
        - Extension requested to March 31st, 2027, anticipate response in March. Funder has indicated extension request ready, "moving through system"
    - Discussion had with funder regarding alternate uses for remaining $600,000 in funds already awarded under the program
        - BF 7080 Dungarvan Creek replacement is no longer recommended due to excess internal funds required for completion
        - Funder confirmed awarding preliminary engineering is acceptable on BF 1348 Connelly Creek

- **WCR #2: S. Todd Creek Trib. under Chapel Rock Road, SE-23-009-03 W5M**
    - 100% grant funded
    - Work complete
    - Reassessment of road leveling required in Spring once thawed

Large Projects Planned for 2025 Implementation

Water Operations Remote Monitoring System Migration – *2025*

SCADA System Migration to VTScada. Includes replacement of main desktop at WTP, full migration programming and HMIs (Human Machine Interfaces), and licensing software

- Awarded Jan 22nd. Desktop computer arrived. Updated and delivered to MPE
- Kickoff meeting complete Feb 5th, anticipate on-site commissioning in June

Meyers Corner Road Culvert Replacement

Replace failed 900mm culvert via boring method

- Sizing and aquatic assessment complete by Roseke in 2024. Design complete for a bored 1.37m x 35m Smooth Walled Welded Pipe
  - Geotechnical work complete, confirmed mostly clay (suitable for drilling)
  - Survey and conceptual design drawing complete
  - Contractor has confirmed unit pricing still stands. However, design length is 10m longer than original quote, increasing boring cost about $35,000
- Proceeding with ROW acquisition. Revised direction underway based on legal advice for land acquisitions. Will require either:
  - Amalgamation into road plan for entire work area
  - Public Works ROW (outside bed + banks), + Provincial Roadway Reservation/Road Plan (bed and banks portion)

Community Events Board, Admin Building

Single sided electric community events board on Admin building to advertise current events and upcoming meetings.

- Project contingent on receiving required permits
- Quotes & comparison models with Council for review

- **Bridge File 70175 – Yarrow Creek Bridge Rehabilitation, NW-22-003-030 W4M**

Perform a pile splice repair on two piles in the west abutment, replace the east pile cap, place fill and riprap at the west headslope, minor wheel guard repairs & repairs to timber span, channel realignment, and west abutment riprap work

- Preliminary Engineering & Design complete
- Sensitive stream habitat, SARA permit required. Construction window of August
  - DFO SARA permit approval received Jan 15th
- Water Survey of Canada notified regarding measurement which needs to be moved
- Land signoff taking longer than anticipated due to environmental easement questions. Information provided regarding environmental easement
    - SALTS approval received Oct 3rd
- Direction given to closeout land acquisition with RDS for bed/banks portion. Refer to Meyers Corner for details

- **WCR #1: Iron Creek under Tapay (Carbondale) Road, LSD SE-15-006-03 W5M**
  Install new 4.7m x 2m x 15m L corrugated steel box culvert to remediate fish passage concerns on Iron Creek under the WCR program (100% funded)

- Tender for install awarded to TA Excavating alongside South Todd Creek Tributary
- Completion: September 30th, 2025
- Permit submissions have begun. DFO has indicated review period for Species At Risk Act (SARA) permit will be 90 days despite delays in processing to date
    - DFO SARA approval received July 16th, 2024
    - Revised application required due to work not occurring in 2024 per DFO request Jan. 2, 2025. Submitted Jan. 6th
    - Revised SARA permit received Mar. 11th

- Land signoff complete

- **Bridge File 70417 – TWN RD 70 over Castle River Trib., SE-05-007-01 W5M**

  6.1m clear span bridge with extensive rot and voids in piles and pile caps. Replace with two (2) 2m x 27m L CSPs

  - Prelim. engineering complete Oct. 8th
  - Design and tender to include staged construction cost (optional), extended detour may be feasible
  - Design work kicked off Oct. 31st, 2025. STIP application submitted Nov. 26th
  - Design complete, under MD review

- **Bridge File 00470 – Toney Rd over Pincher Creek Trib., SE-02-006-01 W5M**

  1.6m x 43m L culvert with significant perforations and minor deflections. Install Steel Wall Pipe Liner (SWPL)

  - Prelim. eng. complete Oct. 7th. Recommendation is installation of a steel wall pipe liner. Level 2 barrel inspection confirmed 1.4m liner is feasible
  - Design work kicked off November 5th, 2024. STIP application submitted Nov. 26th
  - Design complete, under MD review

- **Bridge File 75481 – TWN RD 93B over Olin Creek Trib., SW-23-009-01 W5M**

  1.5m x 24m L culvert with high deflection and corrosion. Replace with two (2) 1.2m x 36m L CSPs

  - Preliminary engineering complete Oct. 11th. STIP application submitted Nov. 26th
  - Design complete, under MD review

- **Therriault Dam – Rehabilitation Work**

  Geotechnical and Hydrogeology study complete in 2023. 2024 preliminary engineering determined most economically viable solution to address undersized spillway/overtop potential. 2025 work includes detailed design work, regulatory submissions, and (pending regulatory approval and grant funding), tender/construction

  - RFP released on ACP Nov. 14th. Due back Dec. 6th for detailed design, regulatory work, tendering, and construction administration
    - High evaluation: MPE Engineering (80% weighted)
  - Design kicked off Jan 8th. Anticipated schedule:
    - Begin regulatory submissions mid March, 2025
    - Design completion mid April – June 2025
    - Timing of further works dependant on grant release timing (anticipated Spring/Summer 2025) as well as regulatory approval timing
  - Design work underway, anticipate preliminary cost options by Mar. 25th followed by preliminary drawings

Large Projects Planned for 2026 Implementation

- **Southfork Hill Road**

  Emergent investigatory and repair work for the Southfork Hill slide issues

  - Geotechnical scope awarded and complete. Final geotech. report received Dec 9th
  - STIP application submitted Nov. 28th, 2024 with letters of support from Campground and nearby farming operation. Revision submitted Dec. 19th with additional letter of support from MLA and final geotech. report
    - Awaiting funding decision
  - Propose assessing need to begin work on detailed design, tender, and regulatory approvals after assessing Spring 2025 runoff effect on road conditions. Any work done prior to a grant decision would not be eligible for external funding

- ~~**WCR #3: Dungarvan Creek under Oil Basin Road, LSD SW-17-003-29 W4M**~~

  ~~*Replace existing 4m x 4.5m x 37m L culvert with a 3 span girder bridge with steel substructure to remediate fish passage concerns on Iron Creek under the WCR program (anticipate 90% funded)*~~

  - ~~A funding amendment was submitted Dec. 5th for additional funds to replace this culvert with a three span girder bridge~~
    - ~~Feb 4th: WCR Program has indicated additional funding asks no longer being considered. BF 7080 was contingent on the success of this application. It is no longer recommended to move forward with the project at this time~~
  - ~~To be formally brought forward to Council for cancellation recommendation regarding alternate use of funds~~

- **WCR #3: Connelly Creek under Connelly Road, LSD SW-03-008-02 W5M**

  Preliminary engineering to replace or remediate the 3m x 49m L (5.6m cover) structural plate corrugated steel pipe (SPCSP) and remediate fish passage under the WCR Program. Structure is #8 on 10 year capital plan.

  - Received funder guidance/approval to proceed with preliminary engineering under WCR program
  - Council approval received Mar. 11th, 2025
  - Preliminary engineering to be kicked off by Council (Mar. 25th)

- **Pisony Road over Cow Creek Tributary Culvert, LSD NE-01-009-03 W5M**

  Non-bridge sized culvert failing on dead end road. 2024 funds to assess appropriate replacement sizing and design. Stream flows all year and culvert is likely undersized

  - Preliminary engineering and basic aquatic assessment kicked off Jan. 31st, 2025 with Roseke. Reduced prelim. engine. scope compared to Bridge Files
  - Anticipated construction 2026

- **Bridge File 71542 – Waldron Flats over Indian Creek, SE-07-010-01 W5M**

  2m x 2.2m x 32m L culvert with isolated perforations in the roof of 3 rings and 1 ring on the foot. Minor roof and sidewall deflection

  - Preliminary engineering and aquatic assessment kicked off Jan. 31st, 2025 with Roseke to determine appropriate replacement design or maintenance (liner). Currently, it is anticipated replacement will be required
  - Anticipate construction 2026

- **Bridge File 76203 – West End Maycroft over Ernst Creek, NW-26-010-03 W5M**

  2.5m x 1.8m x 20m L culvert with 3 cracked rings in sidewall with 85mm remaining. Deflection and corrosion also present

  - Preliminary engineering and aquatic assessment kicked off Jan. 31st, 2025 with Roseke to determine if maintenance of cracked seams is feasible via weld, shotcrete beam, etc. or if replacement has a better lifecycle value
  - Anticipate construction 2026
  - Surveyor site visit complete

Studies and Planning Work

Lundbreck Lagoon Resiliency Analysis & Regionalization – *Engineering 2023/24*

Review Lagoons ability to take on more flow (both regular and high strength). Review Cowley Lagoons ability to do the same, and options for regionalization

- Notice of successful grant received Mar. 21st, 2023
- Lundbreck, Cowley, and regional report drafts received and reviewed. Once actual flow data is measured in 2024 the three (3) studies can be finalized
  - Draft final reports received Dec. 18th
  - Final reports received Mar. 12th. Presented to Council for Information

Regional Drought Strategic Implementation Strategy & Raw Water Storage Project

- Grant application for a Drought Projects Assessment under DFPP
  - Approval received to cover up to 70% of costs
- Grant application for 3 month (25-year) forecasted volumes
  - Approval received for $3.4M project, up to 75% of costs. Signed and sent to ATEC
  - ATEC has confirmed stacking of AMMWP Raw Water Storage grant funds acceptable for the Drought Projects Assessment (Phase 2)
- Scope of work drafted for Drought Projects Assessment. Pricing received and reviewed
- Notice of Award posted to Alberta Purchasing Connection Mar. 14th, closing Mar. 26th. Pending no inquiries/concerns, intend to award Mar. 26th

Transportation Master Plan

$200,000 grant received from ACP to complete a Transportation Master Plan, consisting of a paved, gravel road condition assessment, culvert (non Bridge File) condition assessment, gravel pit analysis, airport runway assessment

- Gravel pit surveying complete, data was received and reviewed late December
  - Draft report received Mar. 7th, comments sent back for MPE review Mar. 12th
- Maycroft Road assessment pending information from our team
  - Reviewing cold mix areas and depth in detail internally to better inform prelim. assessment
- Gravel road, and culvert assessment methodology reviewed with MPE for Spring 2025 start along with paved road assessment. Anticipate completion Fall 2025
  - Ready pending acceptable weather
- Airport load assessment work complete, data imports issue resolved. Draft report underway
- Sapeta pit plan cost estimates received, reviewed

Cridland Dam

Geotechnical work as recommended in 2021 Dam Safety Review due to observed seepage and unknown soil properties

- Site visit complete Mar. 19th

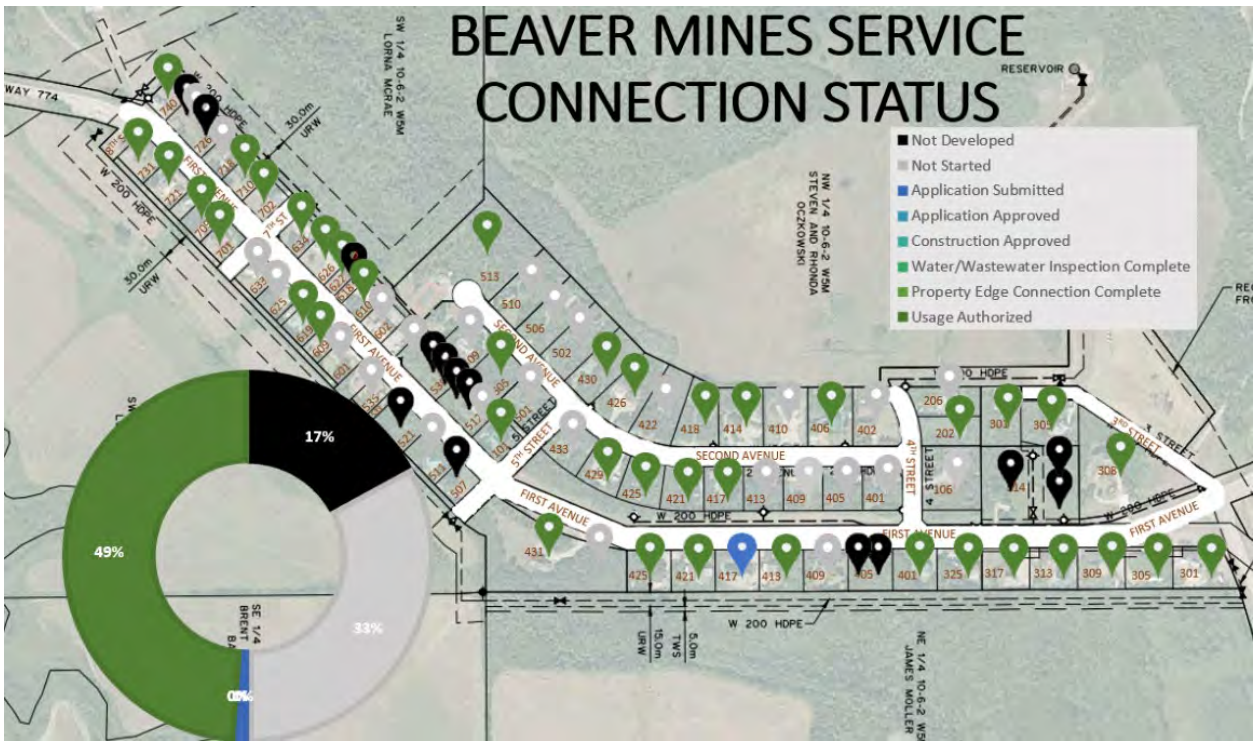
Miscellaneous

- 10 yr. bridge study interim update kicked off Jan. 27th, 2025 with Roseke

Operations Updates

Beaver Mines Lot Servicing

- 41/68 developed applications received, 40 approved, 40 connected (59 %)
  - Fifteen (15) undeveloped fully serviced locations
- Hydrant flow testing in BM was completed by PCES and passed for fire flow. Fire Underwriters Survey requested more info Mar. 3rd, sent system details Mar. 12th



Standpipes

- Last known issue: Jan 10th, 2025 (global software cellular outage)

General Water Operations Updates Mar. 19th, 2025:

- Backflow preventer inspections awarded, to be complete in April
- Investigating source of meter read discrepancy between Beaver Mines and CMR
- Smoke detector in Raw Water Station causing false alarms, investigating
- WWTP GW quarterly samples TBC by end of March
- Pricing out options for Lundbreck Lagoon sludge survey. Targeting early Spring completion, pending availability
- WWTP Generator having issues with level switch, waiting on service test to investigate
- Drafting water crisis report + related overhaul of Water Shortage Response Plan (WSRP)
    - Plan to submit to AEPA along with revised operations plan by end of March
    - Received email approval for an additional 1 yr. extension on WTP approval license, pending changes from Drought Projects Assessment
- Installed weight on reservoir low level trip to prevent false trip
  Plant header upgrades awarded to DMT, materials 4-5 weeks away
- Pricing out Cowley reservoir hatch modifications to reduce safety hazard of opening fridge sized hatch on top of reservoir
- Investigating cause of small amounts of CO in Lift Station generator room and dry well
- Hydrant on Wood Ave. not holding seals. Shut off/isolated until Spring, PCES notified
- Significant operations related work planned for 2025:
    - Plant health check for main treatment trains, obsolete instrumentation replacement, WWTP protection system for cows/vehicles, sewer flushing in select BM areas, Utility Services Guidelines Update for Lundbreck and Rural Users, Reservoir inspections/cleaning (Lundbreck, Cowley)
- In discussions with Cowley regarding coverage for their water distribution system
    - Revised contract sent to Cowley Jan 28th, awaiting response

- Private water line inspection complete South of Lundbreck. Initiating transfer of ownership for UROWS to MD

General Energy Related Updates March 18th, 2025:

- QUEST net zero accelerator
  - Second consultation on implementation strategy planned for May 2025
  - Meeting with Administration to discuss structure Mar. 20th
- Clean Energy Improvement Program
  - 21 pre-qualifications received (6 MD, 15 Town). Six (6) applications fully submitted, three (3) for MD, three (3) for Town
  - 1 project completed
  - Social media advertisement to be sent out end of Mar. 2025
  - 2 deposit payments sent out
  - ABMunis transitioning to online approval portal

Recommendation:

That the Utilities & Infrastructure report for March 6th – March 19th is received as information.

Prepared by: David Desabrais Date: March 19th, 2025

Council Meeting Date: March 25th, 2025

Recommendation to Council

TITLE: Regional Wastewater System Assessments – Final Reports			
PREPARED BY: David Desabrais		**DATE: March 18th, 2025**	
DEPARTMENT: Utilities & Infrastructure			
		March 18th, 2025	**ATTACHMENTS:** 1. **Final Lundbreck Wastewater System Assessment** 2. **Final Cowley Wastewater System Assessment** 3. **Final Regional Wastewater System Assessment**
Department Supervisor		**Date**	

APPROVALS:

David Desabrais	03/18/25		2025/03/19
Department Director	**Date**	**CAO**	**Date**

RECOMMENDATION:

That Council receive the Wastewater System Assessments for Information.

BACKGROUND:

- The MD kicked off a Regional Wastewater Treatment Assessment Study in the Summer of 2023
- The assessment was 100% grant funded under the Alberta Community Partnership (ACP) grant
- A draft copy of the Lundbreck report was reviewed by Council April, 2025 to assist with decision making related to high strength wastewater discharge
- All three (3) reports (Regional, Lundbreck, Cowley) have been finalized after measuring actual wastewater flows for Lundbreck & Cowley during Summer/Fall 2024

KEY FINDINGS

Review document conclusions & recommendations for full details on key findings

Lundbreck

- **Wastewater Treatment Capacity:** The Lundbreck Lagoon system has adequate capacity to handle current and projected wastewater flows, including potential additional flows from neighboring areas like Beaver Mines (up to 110 m^3/d in emergent scenarios)
- **Collection System Condition:** Approximately 55% of the wastewater mains are in good condition, 43% in fair condition, and 2% in poor condition, requiring short-term repairs
- **Recommended Upgrades:** Improve cleaning and flushing programs (*underway*), use CIPP lining for trenchless rehabilitation of a non-PVC main, install a flow meter at the Brewery (*complete*), and relocate/upgrade the sanitary dump station to a location (*if desired*)

Recommendation to Council

- **Sludge Management:** Conduct a new sludge survey with laboratory analysis to determine chemical qualities and assess if desludging is required (*planned for 2025*); explore chemical/algae control options for the lagoons based on analysis

Cowley

- **Wastewater Treatment Capacity:** The Cowley Lagoon system has sufficient capacity to handle current and projected wastewater flows, including potential additional flows from neighboring areas like Beaver Mines (up to 225 m^3/d in an emergent scenario, 71 m^3/d triggers additional reporting)
- **Condition of Infrastructure:** The lagoon transfer structures are in poor condition and require replacement to ensure proper functioning
- **Recommended Upgrades:** Replace the lagoon transfer structures

Regional

Summarizes above conclusions

- **Regional Treatment:** Not recommended as existing lagoons have capacity for growth well into 25-year horizon and cost of a regional wastewater pumping system is estimated at $7,000,000
- Recommend investing into infrastructure health of existing systems as opposed to regionalization

FINANCIAL IMPLICATIONS:

N/A

a division of Englobe

REPORT FOR:

MUNICIPAL DISTRICT OF PINCHER CREEK NO.9

REGIONAL WASTEWATER TREATMENT ASSESSMENT

Technical Memorandum No.1 – Hamlet of Lundbreck Wastewater System Assessment

March 10, 2025
Project #: 1770-025-00

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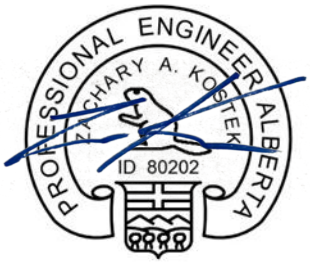
CORPORATE AUTHORIZATION

This report has been prepared by MPE a division of Englobe under authorization of Municipal District of Pincher Creek, No. 9. The material in this report represents the best judgment of MPE a division of Englobe given the available information. Any use that a third party makes of this report, or reliance on or decisions made based upon it is the responsibility of the third party. MPE a division of Englobe accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions taken based upon this report.

Should any questions arise regarding content of this report, please contact the undersigned.

MPE a division of Englobe



March 10, 2025

PERMIT TO PRACTICE
MPE, a division of Englobe Corp.
Signature _____
APEGA ID 77901
Date March 10, 2025
PERMIT NUMBER: P 7841
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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1 INTRODUCTION

1.1 BACKGROUND

The Municipal District of Pincher Creek (the MD) retained MPE a division of Englobe to complete an assessment on the feasibility of regional wastewater collection and treatment. Both the Hamlet of Lundbreck and the Village of Cowley operate conventional lagoon systems. The proposed work would include a review of the capacity and general condition of wastewater treatment infrastructure, to establish a baseline of available treatment capacity to support future growth within each community.

This report focuses on the assessment of the Lundbreck Wastewater Lagoon system. This study will review the capacity of the Lundbreck lagoon and the ability to accept industrial/commercial wastewater and the possibility of temporarily accepting untreated wastewater from the Hamlet of Beaver Mines. Where necessary, upgrade alternatives will be developed and presented including relevant drawings and cost estimates.

1.2 PROJECT LOCATION

The Hamlet of Lundbreck is situated in the Municipal District of Pincher Creek, No. 9, approximately 60 km southwest of Fort Macleod, Alberta, and 20 km northwest of the Town of Pincher Creek. The legal land description for Lundbreck is Section 1, Township 26, Range 7, and West of the Fourth Meridian.

1.3 SCOPE OF WORK

The scope of this study includes the following:

- Data collection and analysis:
  - Review of lagoon record drawings.
  - Review of flow data (if available), or provide estimates based on water usage where required.
  - Review of historical discharge records (flow and effluent quality).
  - Review of historical wastewater reporting documentation, as available.
- Wastewater sample collection and laboratory analysis.
- Wastewater flow projections and characterization.
- Lagoon assessment and review of relevant regulatory requirements.
- Assessment of impact of industrial/commercial discharge (specifically Lundbreck Brewery).
- Findings of potential impacts on the Lundbreck collection system and Lagoon from industrial and commercial discharge.
- Identification of available capacity for accepting untreated wastewater from the Hamlet of Beaver Mines temporarily.
- Collection system condition assessment based on video inspections provided by the MD.
- Identification of any potential required upgrades and estimated costs.
- Conclusions and Recommendations based on findings.

2 WASTEWATER PRODUCTION

2.1 HISTORICAL DATA REVIEW

2.1.1 Data Collection

The Hamlet of Lundbreck is not required to record wastewater treatment system information on a daily, weekly, or monthly basis, therefore only limited wastewater data was available for the lagoon system. Evaporation and precipitation data was obtained from Environment Canada and population data was obtained from Statistics Canada.

2.1.2 Historical Wastewater Flows

No historical flow records are available for the Lundbreck wastewater lagoons as there is currently no flow meter in the system to measure flow entering the lagoon. Current and projected wastewater flows were determined using potable water flows from the past 5 years (2018-2022), then comparing the water usage during dry periods (October to April) with the annual average day usage.

It is recommended that a flow monitoring study be performed on the lagoon influent to get a better understanding of the Hamlet's wastewater production. A detailed record of the inflow to the facility would provide data to determine a more accurate average day flow, average dry weather flow, peak dry weather flow and peak wet weather flow (assuming a significant storm event occurs). This would provide some indication of the effects of inflow and infiltration on the wastewater collection system upstream of the lagoons by correlating the wet weather flow data with precipitation records.

2.2 POPULATION PROJECTIONS

Historical population figures were obtained from Statistics Canada (www.statcan.ca) and factored in with estimates. The growth rate was determined to be 1% per year. Table 2.2 provides the historical and projected populations for the 25-year design horizon for the Hamlet of Lundbreck.

Table 2.2 – Hamlet of Lundbreck Population Projections

Growth Rate Projection	Historical Population			Projected Population					
%/Year	2011	2016	2021	2023	2028	2033	2038	2043	2048
1.0%	244	236	289	295	310	326	342	360	378

2.3 CURRENT AND PROJECTED WASTEWATER FLOWS

No historical flow records were available for the wastewater system as there is no flow meter in the system to measure flows entering the wastewater lagoons. Water usage for the dry period was found to be approximately 80.6% of the average day water demand. Therefore, the Hamlet's per capita wastewater generation was assumed to be 80.6% of the determined water usage rate. The water usage rate was determined to be 480 Litres per capita per day (Lpcd) which correlates to a wastewater generation rate of 387 Lpcd.

2.3.1 Wastewater Production

Future sewage flows were calculated based on the population projection noted above. To account for the diurnal fluctuations in sewage flows, maximum daily flows are calculated based on the peaking factor derived from the Harmon equation.

$$\text{Harmon's Peaking Factor} = 1 + 14 / (4 + P^{1/2})$$

where: P = design contributing population in thousands

Assuming that Lundbreck's population in 2048 is 378, Harmon's peaking factor will be equal to 4.03. Table 2.3 illustrates the current and projected sewage flows in 2048.

Table 2.3 – Hamlet of Lundbreck Current & Projected Wastewater Flows

	Population	Harmon Peaking Factor	Avg Day Flow	Avg Dry Weather Flow	Peak Dry Weather Flow	Infiltration / Inflow	Peak Wet Weather Flow
			(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)
Current (2023)	295	4.08	114	92	375	737	1,113
Projected (2048)	378	4.03	146	118	476	779	1,255

Notes:

1. Avg Day Flow =	387	lpcd
2. Dry Weather Flow =	312	lpcd
3. Wet Weather Flow =	1,547	lpcd
4. Inflow/Infiltration =	2,500	lpcd

Based on the information in Table 2.3, the average day flow (ADF) in 2048 is estimated to be 146 m^3/day, the average dry weather flow (ADWF) is estimated to be 118 m^3/day, the peak dry weather flow (PDWF) is estimated to be 476 m^3/day and the peak wet weather flow (PWWF) is estimated to be 1,255 m^3/day. These estimations are intended to assist in the preparation of budgets and are considered to be conservative.

2.3.2 Estimation of Inflow/Infiltration

Inflow and infiltration (I/I) are generally attributed to leaky wastewater pipes, sags in roads, the assumption that many homes have their weeping tile foundation drains or sump pumps connected directly to the sanitary system, downspouts connected to the weeping tile, and lot grades do not always provide positive drainage away from the building's foundation. This is a common problem shared by many municipalities in southern Alberta. As a result, many communities have passed bylaws prohibiting this practice in new developments.

The flow data during the months of high precipitation are useful in determining the amount of inflow and infiltration (I/I), which occurs in the collection system. Since there is no flow data available, the 2021 City of Lethbridge design standards were used. The design standards use a value of 2,000 Lpcd. An

additional I/I allowance of 500 Lpcd was added, as the Hamlet's sanitary collection system is believed to have a high influx of groundwater. Inflow and infiltration values in Table 2.3 are reflective of these published reference values.

2.3.3 Evaporation and Precipitation

Evaporation and precipitation rates for Lundbreck were determined by using data compiled by Environment Canada from 1981 – 2010 for the Connelly Creek region.

Table 2.3.3 – Evaporation and Precipitation Data for Connelly Creek Area

Month	Avg. Vap. Pres. (kPa)	Avg Temp (°C)	Wind Speed (km/hr)	Evaporation (mm/Month)	Precipitation (mm/Year)	Net Change (mm/Year)
January	0.3	-5.3	18.3	25.6	34.3	8.7
February	0.3	-3.9	21.5	36.9	35.7	-1.2
March	0.4	-0.5	17.6	49.4	44.5	-4.9
April	0.5	4.4	15.7	99.6	47.0	-52.6
May	0.7	9.0	16.9	143.2	74.3	-68.9
June	1.0	12.7	13.8	151.9	88.8	-63.1
July	1.2	15.7	10.6	167.9	46.8	-121.1
August	1.1	15.3	10.6	173.9	40.3	-133.6
September	0.8	10.9	11.3	125.7	47.2	-78.5
October	0.6	5.5	14.6	82.0	34.9	-47.1
November	0.4	-4.9	15.7	39.0	43.8	4.8
December	0.3	4.8	14.0	22.4	30.2	7.8
Annual				**1117.3**	**567.8**	**-549.5**

Table 2.3.3 illustrates monthly average precipitation and evaporation rates for the years 1981 – 2010. The 30-year average net evaporation is approximately 549.5 mm, which is accounted for in adjusting the amount of effective storage available in the lagoon treatment system. According to the Alberta Environment and Protected Areas *Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems*, lagoon volume adjustment using net evaporation is allowed where historical climatology data shows that average evaporation exceeds the average precipitation. The minimum freeboard under this scenario, however, must be increased to accommodate lower net evaporation during wet years. The required freeboard for the facultative and storage cells is one metre above the full supply level.

2.3.4 Wastewater Monitoring Program

In June 2024, MPE installed equipment downstream of the Lundbreck lagoons as part of a 90-day wastewater monitoring program. Measurements were collected using a VEGAPULS C 21 radar level sensor, which was calibrated to transmit data points every 15 to 20 seconds throughout a 5-minute period programmed to begin at intervals of 15 minutes. The Manning equation was used to derive a series of flow rates from level data. A parabolic channel flow was assumed within the manhole due to the condition of the manhole interior. The peaks and averages of these calculated flow rates were then used to verify the estimated 2023 flows in this report.

Table 2.3.4 – Hamlet of Lundbreck Measured Wastewater Flows

Source	Parameter	Units		Percent Difference
		m^3/d	lpcd	
Measured	Avg Day Flow	36	122	
	Peak Day Flow	198	671	
Estimated (2023)	Avg Day Flow	114	386	-68%
	Avg Dry Weather Flow	92	312	-61%
	Peak Dry Weather Flow	375	1271	-47%
	Peak Wet Weather Flow	1113	3773	-82%

Table 2.3.4 compares the results of this program with the estimated values. The closest points of comparison are the estimated ADWF and PDWF. The measured average day flow is 36 m^3/d, which is 61% less than the estimated ADWF. The measured peak flow is 198 m^3/d, which was 47% less than the estimated PDWF. The lack of a high flow events during the monitoring period may have affected accuracy of the metering program. However, the data in Table 2.3.4 is far lower than any of the estimated values. Therefore, the flows used in this report should generally be considered conservative.

3 REGULATORY REVIEW

Alberta Environment and Protected Areas (AEPA) has established standards and guidelines for the design of wastewater treatment systems, lift stations, and wastewater collection systems under the *Environmental Protection and Enhancement Act*. Furthermore, wastewater treatment systems should also be designed with consideration of the federal Wastewater Systems Effluent Regulations (WSER) under the *Fisheries Act* which came into force in 2015. The federal WSER apply to systems which are designed to collect an average daily volume of 100 m^3 or more of influent. Since the current and therefore, projected average daily flow volume are over this threshold, the WSER will apply.

3.1 STANDARDS AND GUIDELINES

3.1.1 Wastewater Lagoons

The Alberta *Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems* (March 2013) outlines acceptable methods for the design and operation of conventional wastewater lagoons. For systems with a design average day flow of less than 250 m^3/d, treatment may be accomplished with a combination of a facultative and storage cell. Conditions such as rainfall and evaporation are to be considered while defining the design volume of the storage cell.

Disposal of effluent from wastewater lagoons is regulated under the AEPA *Code of Practice for Wastewater Systems Using a Wastewater Lagoon* (September 2003) and the *Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems* (March 2013). Effluent from lagoons may be discharged to a receiving water body between April 1st and November 30th over a period of no longer than three consecutive weeks unless otherwise permitted by the Director. The seasonal discharges to a receiving watercourse from wastewater lagoons are exempt from receiving water assessments.

3.1.2 Facultative Cells

The facultative cell precedes long-term detention storage and is a requirement for all wastewater lagoon systems in Alberta. The facultative cell must retain influent wastewater for at least 60 days based on the average daily design flow and operate at a maximum depth of 1.5 m.

3.1.3 Storage Cell

The storage cell's purpose is to provide additional wastewater treatment (including nutrient removal) under facultative conditions. It serves to reduce the environmental impact on the receiving drainage course by facilitating the annual discharge of high quality effluent wastewater.

The storage cell must retain influent wastewater for a minimum retention period of 12 months based on the average daily design flow and operate at a maximum depth of 3.0 m. For systems utilizing wastewater irrigation as the method of treated effluent disposal, the minimum retention period is 7 months (210 days). In the case where historical climatology data shows that average evaporation exceeds the average precipitation, then the net evaporation may be taken into account in sizing the

storage cell(s). Thus, the minimum "free-board" shall be increased to accommodate additional flows in an anomalous precipitation year.

3.1.4 Lagoon Siting

Setback distances from wastewater lagoons are required to buffer the effect of potential odors and provide a margin of public safety. Setbacks also serve to protect the physical integrity of nearby buildings and roads.

Consideration should also be given to the direction of prevailing winds and future municipal expansion. AEPA specifies that wastewater lagoons cannot be located within:

- 30 m of the facility property line
- 30 m of the designated right-of-way of a rural road or railway
- 100 m of the designated right-of-way of a primary or secondary highway
- 300 m of a building site for school, hospital, food establishment, or residential use

3.2 Federal Standards and Guidelines

The *Wastewater Systems Effluent Regulations* (WSER) were developed under the *Fisheries Act* and are intended to set consistent federal effluent quality standards for wastewater prior to discharge to receiving water bodies. These regulations apply to any wastewater system that collects or is designed to collect an ADF of 100 m^3/day or more and deposit specified harmful substances into water frequented by fish. Table 3.2 below provides the Federal WSER guideline limits applicable to the Hamlet of Lundbreck wastewater system. Effluent quality results for BOD, TSS, and un-ionized ammonia are required to be submitted annually to Environment Canada as per the Federal WSER.

Table 3.2 – Federal WSER Guidelines for Effluent Limits

Discharge Type[1]	Average Daily Flow	CBOD	TSS	NH_3-N
Intermittent	100 to 2,500 m^3	< 25 mg/L	< 25 mg/L	< 1.25 mg/L

1. Sample to be collected once per discharge period.

CBOD - Carbonaceous Biochemical Oxygen Demand
TSS - Total Suspended Solids
NH3-N - Un-ionized Ammonia

The MD should ensure they are submitting effluent quality results for BOD, TSS, and un-ionized ammonia to Environment Canada as per the Federal WSER Guidelines and that annual WSER reporting requirements are satisfied.

4 EXISTING WASTEWATER INFRASTRUCTURE

4.1 WASTEWATER TREATMENT

4.1.1 Treatment Process & Infrastructure

Wastewater stabilization ponds (lagoons) are utilized for treatment of sewage in the Hamlet of Lundbreck. The first two sewage lagoons were built in 1975 and a third storage lagoon was added more recently. The lagoons are located east of the Hamlet and south of the Crowsnest Highway. The wastewater treatment system consists of two (2) facultative cells, one utilizing a surface aeration system, as well as one (1) storage cell which are all operated in series. The lagoons have been designed to discharge annually, although the Hamlet has not always required an annual discharge due to evaporation of the wastewater.

The existing wastewater treatment system site overview is illustrated by Figure 1 on the following page.

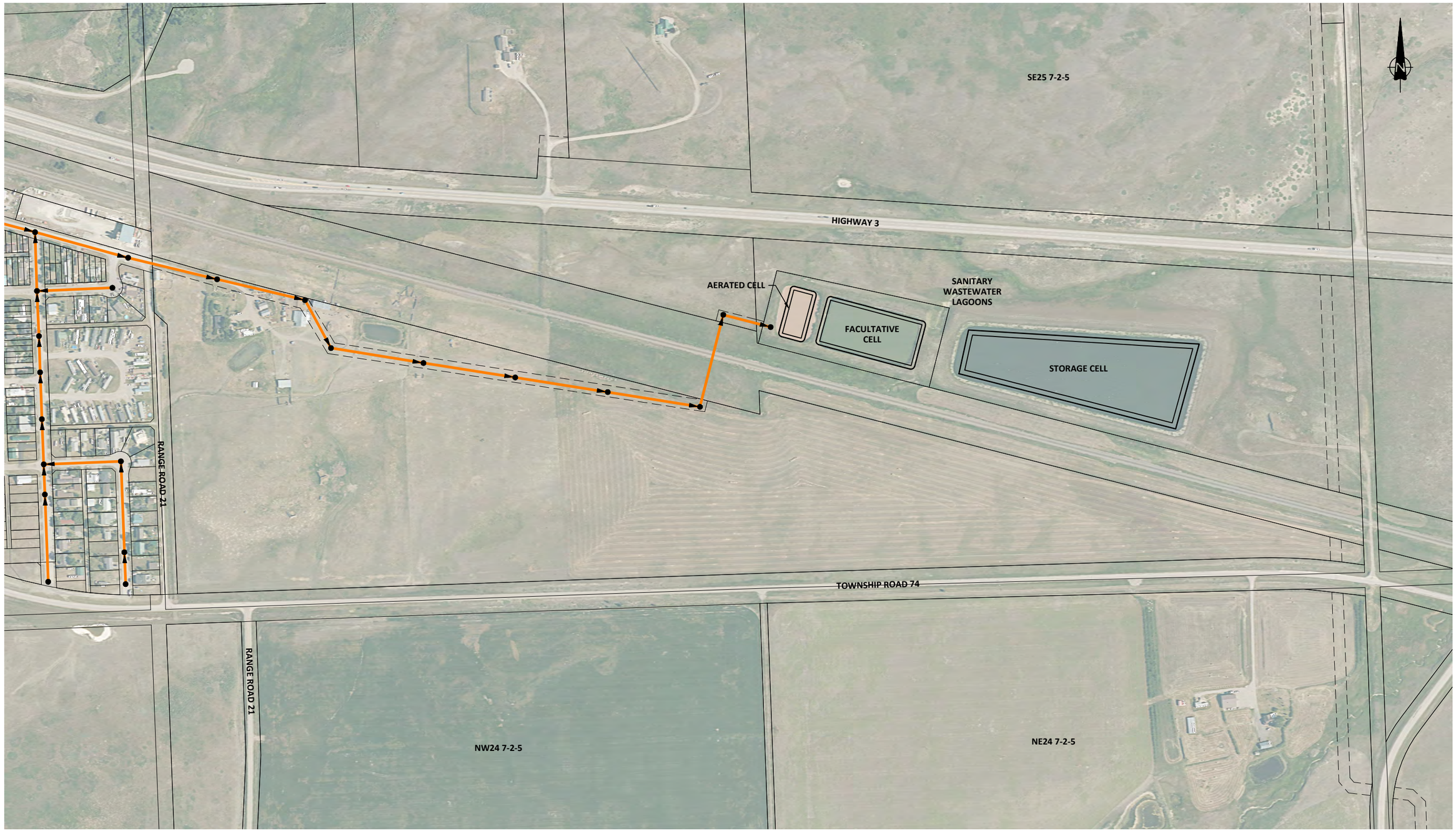
4.1.2 Facultative Cells

The treatment system utilizes two (2) facultative cells, one containing a surface aeration system. The cells were constructed with 4:1 internal side slopes and a maximum water depth of 2 m. This results in approximate volumes of 2,400 m^3 and 9,780 m^3 for the aerated and facultative cells respectively. The two cells are connected by a 200 mm diameter pipe through a manhole. The facultative cell meets the requirements of the Alberta Environment and Protected Areas design guidelines for capacity and retention time at the current wastewater flow.

An assessment was done by Banner Environmental in 2020 to identify the cause of strong odors from the facultative cells. The report identified the cause being a type of bacteria that thrives in anaerobic environments with high concentrations of sulfates. The recommendation from the report was aerating the first facultative cell to prevent the bacteria's growth. In 2021, a surface aeration system was added to the first facultative cell in order to combat the strong odor issues. Since the addition of this surface aeration system, the Hamlet has noticed a positive change in odor from the lagoon cells.

4.1.3 Storage Cell

A single storage cell follows the two facultative cells. The storage cell is constructed with 3:1 internal side slopes and a maximum water depth of 3 m, resulting in a volume of approximately 53,560 m^3. The Hamlet of Lundbreck annually discharges from the storage cell, The storage cell meets the Alberta Environment and Protected Areas design guidelines for capacity and is in compliance with the current wastewater flows.



LEGEND

- SANITARY MANHOLE
- EXISTING SANITARY MAIN - 200mm PVC

CELL 1 - AERATED CELL
VOLUME = 2395 m^3
CELL 2 - FACULTATIVE CELL
VOLUME = 9776 m^3
CELL 3 - STORAGE CELL
VOLUME = 53 555 m^3

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MUNICIPAL DISTRICT OF PINCHER CREEK

LUNDBRECK LAGOON ASSESSMENT
SITE OVERVIEW

SCALE: 1:5000	DATE: JANUARY 2025	JOB: 1770-025-00	FIGURE: 1

4.1.4 Treatment Capacity

The cell volumes of the existing sewage lagoon treatment system were calculated using Autodesk Civil 3D® software based on record drawings provided by the MD of Pincher Creek and aerial views. Net evaporation/precipitation has been included in the calculation of the storage cell volume. The cell retention time was calculated using the average daily flow (ADF). The retention times were determined for the current flow of 114 m^3/day, the measured flow of 36 m^3/day, and the 25-year projected flow of 146 m^3/day. Table 4.2.4 summarizes the lagoon cell volumes and respective retention times.

Table 4.2.4 – Sewage Lagoon Treatment Volumes & Retention Times

Treatment Cell	Volume	Net E/P Change	Adjusted Cell Volume	Retention Time (Days)			
				Estimated Current (2023)	Measured Current (2024)	25 Year (2048)	Alberta Environment Requirement
	(m^3)	(m^3)	(m^3)				
Cell 1 - Aerated	2,395	0	2,395	21	66	16	0
Cell 2 - Facultative	9,776	0	9,776	86	271	67	60
Cell 3 - Storage	53,555	-19,514	73,069	640	1,487	499	365
Total	**65,725**	**-19,514**	**85,240**	**747**	**1,824**	**583**	**425**

When analyzing the lagoon treatment system compartments, the capacity for the facultative cell currently meets the required retention time of 60 days and will continue to meet the requirements for the projected 25-year sewage flow. The storage cell meets the required retention time of 365 days for the current and the projected 25-year sewage flows.

4.1.5 Review of the Acceptance of Hauled Wastewater from Beaver Mines or Other Sources

As part of this study, the MD has requested a brief analysis of the Lundbreck lagoon system's ability to accept wastewater from the neighboring Hamlet of Beaver Mines or other nearby sources. In 2016, MPE completed the *Beaver Mines Wastewater Options Study*. For the purposes of this study, the projected the average day flow (ADF) of 63 m^3/day in 2016 was updated to a current (2023) flow of 67 m^3/day using census population data. Combining Beaver Mines' sanitary flows with Lundbreck's estimated and measured sanitary flows, a current combined flow rate of 103 m^3/day (181 m^3/d based on estimated flows) was used to calculate the retention times. Table 4.2.5 summarizes the combined flow retention times.

Table 4.2.5 – Additional Sewage Lagoon Treatment Volumes & Retention Times

Treatment Cell	Volume	Net E/P Change	Adjusted Cell Volume	Retention Time (Days)		
				Estimated Flow Including Beaver Mines (2023)	Measured Flow Including Beaver Mines (2024)	Alberta Environment Requirement
	(m^3)	(m^3)	(m^3)			
Cell 1 - Aerated	2,395	0	2,395	13	23	0
Cell 2 - Facultative	9,776	0	9,776	54	94	60
Cell 3 - Storage	53,555	-14,671	68,226	377	519	365
Total	**65,725**	**-14,671**	**80,396**	**444**	**636**	**425**

According to calculations based on measured flows, Lundbreck should have adequate capacity to accommodate the full wastewater volume generated from the Hamlet of Beaver Mines. The Lundbreck Lagoon can handle up to 110 m^3/day of additional capacity while remaining in compliance on cell retention times. This additional flow could be from Beaver Mines or limited to a portion of Beaver Mines plus other sources (hauled septage). It is worth noting that practical retention times are expected to be shorter due to the dry period over which the flows were recorded. However, this is not expected to affect Lundbreck's ability to receive the full wastewater volume from the Hamlet of Beaver Mines.

4.1.5.1 Potential Regional Wastewater Connection

The MD is interested in examining the potential for a permanent connection between the Cowley and Lundbreck lagoons, which would allow the Lundbreck Lagoon to take advantage of the Cowley Lagoon's greater available treatment capacity. Based on a high-level cost estimate included as part of Appendix A, the cost of installing a regional wastewater pumping system from the Lundbreck Lagoon to the Cowley Lagoon would be approximately $7 million. As both lagoons are already capable of operating at their existing volumes well into the 25-year design horizon, it is not recommended to install a regional wastewater connection.

4.2 SEWAGE COLLECTION

The Hamlet's wastewater collection system consists solely of a network of gravity flow pipes that drain to the wastewater treatment lagoons. The Hamlet does not utilize any lift stations. The pipes are flushed annually during the water main flushing program.

4.2.1 Wastewater Collection System Condition Assessment

Video inspections provided by the MD were reviewed as part of this assessment. All mains were inspected.

Approximately 55% of the mains are in "good" condition showing little to no signs of structural damage and a consistent grade. Approximately 43% of the mains are in "fair" condition showing minor structural damage, required cleaning beyond annual flushing, and a sufficiently consistent slope. Approximately 2% of the mains are in "poor" condition and require repairs in the short term.

In general, mains with a rating of "poor" indicate that the main segment has failed or will likely fail within the next 5 years. Mains with a rating of "fair" have moderate to severe defects or will likely fail within the next 5 to 20 years. Mains with a rating of "good" have minor defects or will not likely fail for at least 20 years or in the foreseeable future. Figures 2.1 and 2.2 show the results of the condition assessments.

LEGEND

- EXISTING WASTEWATER PIPE - GOOD CONDITION
- EXISTING WASTEWATER PIPE - FAIR CONDITION
- EXISTING WASTEWATER PIPE - POOR CONDITION

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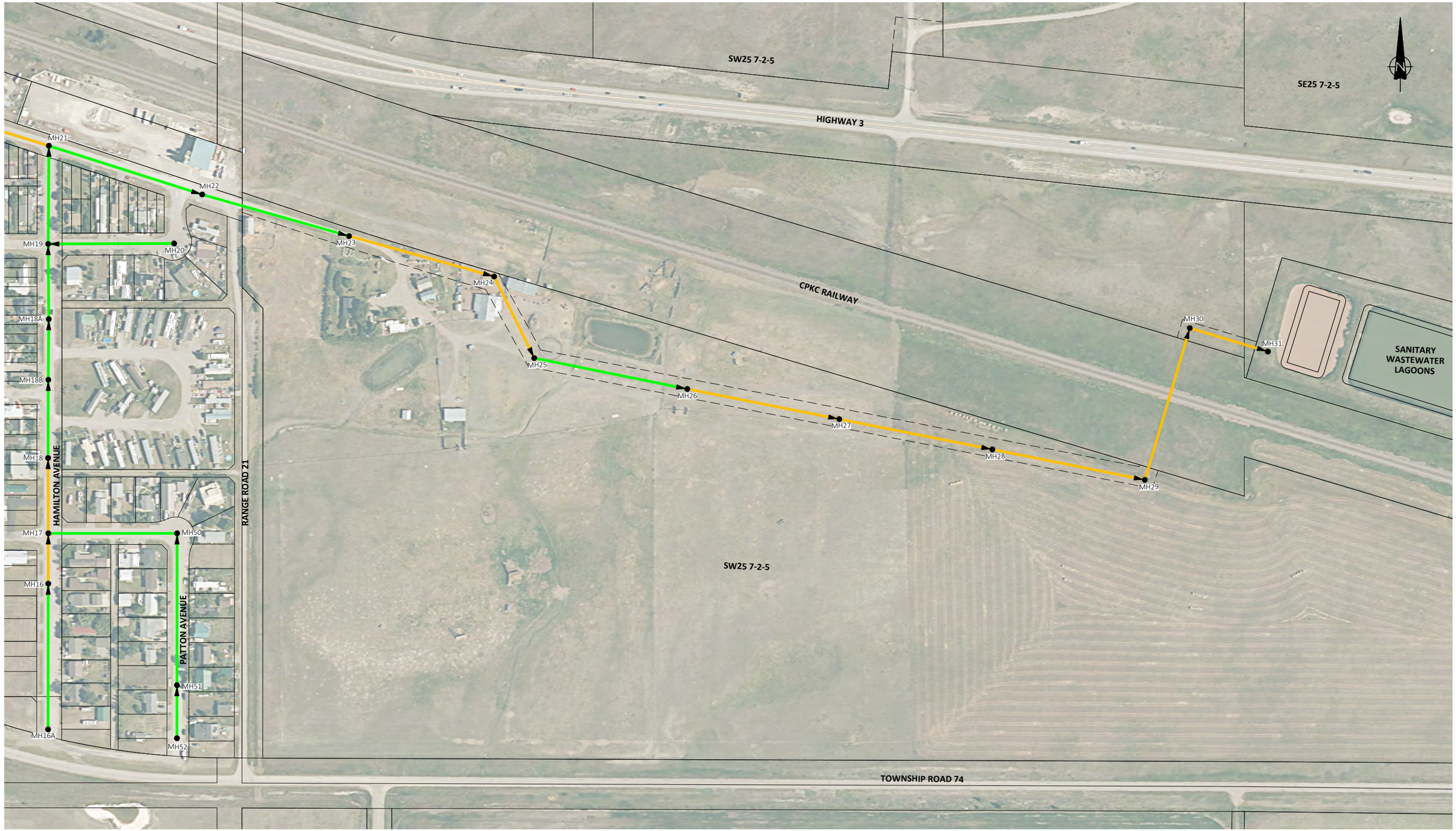
LUNDBRECK LAGOON ASSESSMENT
WASTEWATER COLLECTION SYSTEM
EXISTING PIPE CONDITION

SCALE:	DATE:	JOB:	FIGURE:
1:3000	JANUARY 2025	1770-025-00	2.1



LEGEND

- EXISTING WASTEWATER PIPE - GOOD CONDITION
- EXISTING WASTEWATER PIPE - FAIR CONDITION
- EXISTING WASTEWATER PIPE - POOR CONDITION

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MUNICIPAL DISTRICT OF PINCHER CREEK

LUNDBRECK LAGOON ASSESSMENT
WASTEWATER COLLECTION SYSTEM
EXISTING PIPE CONDITION

SCALE:	1:3000	DATE:	JANUARY 2025	JOB:	1770-025-00	FIGURE:	2.2

4.3 WASTEWATER SYSTEM RECOMMENDATIONS AND UPGRADES

4.3.1 Collection System Upgrades

The proposed upgrades and recommendations for the wastewater collection system are divided into operation and maintenance (O&M) and cured-in-place pipe (CIPP) lining. Details of the improvements are provided in the following subsections.

4.3.1.1 OPERATION AND MAINTENANCE

A general note from the reviewed video inspections is that many of the mains require extensive cleaning. Several of the mains were noted to have high water levels in the pipe (25% and greater). The high water level makes it difficult to determine if the high water levels are due to sags in the pipes or obstructions from grease, sediment, or mineral buildup. While some cleaning was completed prior to the video inspections, it is recommended that the MD improve their cleaning and flushing program to include regular root and mineral cutting, and grease removal where necessary. This will help ensure that the mains and manholes are able to provide unobstructed flow.

4.3.1.2 CIPP LINING

One section of main (MH 5 to MH 6) was noted to be a material other than PVC and would be a candidate for trenchless rehabilitation. The main is located outside a roadway and open-cut installation of a new main would be challenging. CIPP lining is a technology that utilizes the existing pipe as a mold for a new structural pipe to be installed (a pipe within a pipe). The existing pipe is cleaned and prepped, a resin saturated felt tubing is then pulled into place, inflated, and cured. The advantage of CIPP lining is limited surface restoration (typically lower cost) and limited-service disruption to the public. CIPP lining is generally recommended for AC, VCT, or concrete mains that have structural damage but a consistent grade. CIPP lining cannot fix sags or offset joints, nor fill in missing sections of mains. The CIPP lined pipe will mirror the existing pipe.

4.3.2 Wastewater Treatment Upgrades

Based on the wastewater treatment assessment outlined in Section 4.1, capacity upgrades to the Lundbreck Lagoon are not required. A flow meter should be installed at the Brewery to monitor the flow entering the collection system which is discussed further in Section 5.2.

4.3.3 New Sanitary Dump Station

The MD currently maintains a sanitary dump station within the Hamlet of Lundbreck. The current location is hazardous and difficult to access due to nearby power lines. It is recommended that a new sanitary dump station be installed at a new location within the Hamlet. Potential land locations include the parcel north of Township Road 74A between Breckenridge Avenue and Hamilton Avenue, utilizing a portion of the road right-of-way east of the Hamlet, and the Public Works shop north of the Fire Hall. The final location can be determined in detailed design.

4.3.4 Sludge Survey and Desludging

A sludge survey of the Lundbreck lagoons was last conducted in 2019. Sludge levels at the time were found to range from 10% to 20% of the total lagoon depth. No issues were identified, and no desludging was recommended. Recently, the MD has expressed interest in exploring chemical/algae control options for the Lundbreck lagoons. It is unknown if sludge build up is related to the odor issues faced by the MD.

It is recommended to carry out a new sludge survey complete with laboratory analysis to determine the chemical qualities of the sludge and if desludging is now required. The cost of desludging cannot be determined prior to survey, but based on typical prices, it will fall outside the scope of this project's budget and need to be done as part of future work.

4.4 Wastewater System Cost Estimates

Order of magnitude cost estimates were prepared for the recommended upgrades. Detailed cost estimates can be found in Appendix A. The following table provides a summary of the estimated costs.

Table 4.4 – Order of Magnitude Costs for Wastewater System Projects

Location	Project	Order of Magnitude Cost
MH 5 to MH 6	CIPP Lining	$57,000
Lundbreck Brewery	Flow Meter	$25,000
Sanitary Dump Station	New Sanitary Dump Station	$243,000
Wastewater Lagoon Survey	Sludge Survey	$13,000*
	Total Estimated Wastewater System Costs	***$338,000***

*Price of desludging not included but will likely cost hundreds of thousands of dollars if required.

The cost estimates provided are an opinion of probable cost and are a function of many factors that can change with time and hence must not be relied upon as the actual cost. Construction equipment and methods that are commonly used in the industry are assumed for estimating purposes.

5 WASTEWATER CHARACTERIZATION

5.1 WASTEWATER SAMPLING

The Hamlet of Lundbreck contains a commercial and industrial business (Brewery) that discharge wastewater of high strength which can have a detrimental impact on the lagoon's performance, odor, and appearance. Currently, Lundbreck does not allow the discharge of the high-strength wastewater stream into the lagoon to maintain healthy biological conditions of the lagoon. As part of the assessment of the Hamlet's lagoon treatment system, MPE took a sample of the municipal wastewater entering the lagoon system and of the local Brewery's wastewater. The lagoon influent sample was taken from the inlet manhole upstream of Cell 1. The Brewery wastewater sample was taken from their onsite storage tank located inside the Brewery. Table 5.1 provides a summary of the laboratory test results of both samples. Laboratory test results can be found in Appendix A.

Table 5.1.1 – Laboratory Test Results

Parameter	Units	Lagoon Influent Wastewater	Brewery Wastewater
		Test Result	Test Result
Biochemical Oxygen Demand (BOD)	mg/L	104	3450
pH	-	7.72[1]	9.81[1]
		7.81	6.92
Nitrogen as Free Ammonia (NH_3-N)	mg/L	9.57	23.8
Total Kjeldahl Nitrogen (TKN)	mg/L	17.9	98.5
Total Phosphorus	mg/L	1.88	42.4
Phosphate	mg/L	2.65	84.4
Total Alkalinity	mg/L	305	840
Total Suspended Solids (TSS)	mg/L	48.8	103

[1]pH value is related to BOD test sample only. The other pH value listed is relevant for the other parameters.

Typical concentrations for raw wastewater of some of the measured parameters can be found in Table 5.2 to use as a reference. As Lundbreck's Average Day Flow is 385 Lpcd, the basis for our analysis will be the typical concentrations within the moderate-high strength wastewater parameters as in Table 5.2 on the following page.

Table 5.1.2 – Typical Concentrations of Raw Wastewater

Parameter	Units	Concentration		
		Low Strength (750 Lpcd)	Moderate Strength (450 Lpcd)	High Strength (240 Lpcd)
Total Suspended Solids (TSS)	mg/L	120	210	400
Biochemical Oxygen Demand (BOD)		110	190	350
Nitrogen as Free Ammonia (NH_3-N)		12	25	45
Total Phosphorus		4	7	12

When comparing the test results for the lagoon influent and the brewery waste effluent, we can see that the brewery waste is highly concentrated. The Brewery waste has a Biochemical Oxygen Demand (BOD) of 3450 mg/L indicating that there is a high organic content and will require a large amount of dissolved oxygen (DO) to treat the wastewater. The brewery waste also has a high concentration of total phosphorus and phosphates. Phosphorus levels have been linked to the eutrophication of lagoon systems, eutrophication being the accumulation of minerals and nutrients that encourage the growth of algae blooms and the eventual depletion of DO.

5.2 Impact of High Strength Commercial Discharge (Lundbreck Brewery)

A theoretical mass balance was conducted to determine the effects of the high concentrate stream (Brewery waste) on the wastewater system's influent quality. Multiple Brewery waste discharge scenarios were performed to determine the rate which would have the lowest impact of the on the lagoon system. To determine the impact of the Brewery waste on the wastewater lagoon influent, the scenarios reviewed the increase of contaminant concentrations in the wastewater influent and provides the resulting total contaminant concentration. The mass balance analysis summarizes the increase in concentration of the parameters of concern subsequent to the Brewery waste stream being introduced to the wastewater lagoon.

The scenarios determined to have the least impact on the lagoon were utilizing a Brewery waste stream flows of 15 m^3/week (2.1 m^3/day) with theoretical influent flows and 8 m^3/week (1.1 m^3/day) with measured influent flows. Table 5.2.1 summarizes the results of the mass balance illustrating the resultant concentration of the estimated lagoon influent combined with Brewery waste stream. Table 5.2.2 summarizes the results of the mass balance illustrating the resultant concentration of the measured lagoon influent combined with the Brewery waste stream.

Table 5.2.1 – Increase in Concentration in Lundbreck Wastewater Lagoon Based on Influent Estimates

Parameter	Lagoon Influent Flow	Lagoon Influent Conc.	Brewery Flow	Brewery Conc.	Resultant Conc.
	(m^3/day)	(mg/L)	(m^3/week)	(mg/L)	(mg/L)
Total Suspended Solids (TSS)	114	48.8	15	103	**49.8**
Biochemical Oxygen Demand (BOD)		104		3450	**166**
Nitrogen as Free Ammonia (NH_3-N)		9.6		23.8	**9.8**
Total Phosphorus		1.9		42.4	**2.6**
Total Kjeldahl Nitrogen (TKN)		17.9		98.5	**19.4**
Phosphate		2.7		84.4	**4.2**
Total Alkalinity		305		840	**315**

Table 5.2.2 – Increase in Concentration in Lundbreck Wastewater Lagoon Based on Influent Measurements

Parameter	Lagoon Influent Flow	Lagoon Influent Conc.	Brewery Flow	Brewery Conc.	Resultant Conc.
	(m^3/day)	(mg/L)	(m^3/week)	(mg/L)	(mg/L)
Total Suspended Solids (TSS)	36	48.8	8	103	**50.4**
Biochemical Oxygen Demand (BOD)		104		3450	**203.2**
Nitrogen as Free Ammonia (NH_3-N)		9.6		23.8	**10.0**
Total Phosphorus		1.9		42.4	**3.0**
Total Kjeldahl Nitrogen (TKN)		17.9		98.5	**20.1**
Phosphate		2.7		84.4	**4.9**
Total Alkalinity		305		840	**319.5**

The main parameter of concern is the Biochemical Oxygen Demand (BOD) concentration. BOD determines the oxygen required to deteriorate the organic matter present in the wastewater; a higher BOD will deplete the lagoons' dissolved oxygen (DO) level substantially. Comparing the resultant concentrations from Tables 5.2.1 and 5.2.2 with the values seen in Table 5.1.2, both the BOD levels will be below the typical BOD level of medium strength effluent and should have minimal effect on the DO levels within the lagoon cells specifically, since the first lagoon cell is assisted with an aeration system.

As the volume of high concentrate Brewery wastewater is relatively low compared to the measured municipal flow (252 m^3/week vs 15 m^3/week), the Brewery waste will be diluted significantly prior to entering the lagoon system and should have minimal effect on the treatment process. The MD will need to monitor the resultant concentrations in the Lundbreck Lagoon to ensure there are no upsets to the biological process. The discharge flow should be completed over a 24-hour period (i.e., limit the flow to 0.013 L/s). A flow meter has been installed at the Brewery to monitor the flow rate.

5.3 SUGGESTED TESTING AND MONITORING PROGRAM

Discharge flow should be monitored at the Brewery to ensure the flow does not exceed the limit noted in Section 5.2. Discharge testing requirements should consist of sampling once upon the Brewery discharge and consist of the following parameters:

- Biochemical Oxygen Demand (BOD)
- Chemical Oxygen Demand (COD)
- Oil and Grease(O&G)
- Total Suspended Solids (TSS)
- Total Kjeldahl Nitrogen (TKN)
- Total Phosphorus (TP)
- Ammonia-Nitrogen (NH_3-N)

Samples are to be taken from the Brewery wastewater storage tank and sent to an accredited laboratory for analysis. The Brewery would be required to pay the overstrength surcharge fees and any additional overstrength surcharge fees as per the calculation in MD bylaw 1344-22, Schedule C Section 7, and corresponding Schedules E and G.

Frequency of testing should be upon every brewery discharge (assume this will be once - 1 day per week based on flow information). If after 3-4 weeks the results are found to be consistent, testing could be decreased to bi-weekly, and then eventually monthly assuming the results remain consistent (i.e., no changes to the waste stream). This should all be at the MD's discretion and the MD can discontinue the acceptance at any time if a lagoon upset is discovered.

The Lundbreck Lagoon influent should be monitored for BOD, TSS, TKN, TP and NH_3-N during the discharge to ensure there are no upsets to the biological process.

6 CONCLUSIONS AND RECOMMENDATIONS

Based on the items reviewed within this report the following conclusions can be made:

- The majority of the wastewater collection system is comprised of PVC pipe in “good’’ to “fair” condition.
- The Lundbreck Lagoon treatment and storage cells have sufficient capacity for the current and 25-year design flows. No upgrades are required to increase capacity.
- No historical flow records are available for the Lundbreck Lagoon as there is no flow meter in the system to measure flow entering the lagoon.
- Due to the lack of existing wastewater flow information, wastewater production was estimated utilizing potable water usage.
    - Production estimates were validated by a 90-day flow monitoring program, which found the assumptions to be conservative.
- Existing lagoon design data was based on record drawings provided by the MD of Pincher Creek and air photos.
- Based on data from the flow monitoring program, the Lundbreck Lagoon treatment system has the capacity to accept up to 110 m^3/day of additional wastewater from the Hamlet of Beaver Mines (or other sources) temporarily.
- A regional wastewater pumping system from the Lundbreck Lagoon to the Cowley Lagoon is possible, but not recommended.
- A theoretical Mass Balance of the introduction of the Brewery’s high concentration wastewater into the Hamlet’s municipal stream determined that the gradual introduction (≤ 8 m^3/week) of the Brewery’s wastewater will not negatively impact the lagoon’s wastewater influent quality.

Based on the findings of this report, the following recommendations can be made:

- Complete annual cleaning and flushing of the wastewater collection system.
- Complete a CIPP lining of the sewer main between MH 5 and MH 6.
- Complete a sludge survey of the Lundbreck Lagoon.
- Install flow monitoring at the Brewery.
- Upgrade the existing Sanitary Dump Station with new Sanitary Dump Station at a new location.
- Resume the disposal of the Brewery's wastewater stream into the Hamlet's lagoon system on the following conditions:
    - Limit the volume of Brewery wastewater accepted to no more than 15 m^3 per week.
    - Introduce the Brewery wastewater to the collection system as a slow-release discharge (2.1 m^3/day discharge rate completed over a 24-hour period).
    - Continue monitoring the Brewery wastewater for routine parameters to ensure there are no major increases in contaminant concentrations.
    - Monitor the resultant concentrations at the Lundbreck lagoon to ensure there are no upsets to the biological process.
    - Have an agreement in place with the Brewery that the MD can discontinue the acceptance at any time if a lagoon upset is discovered.
- The MD can proceed with accepting additional untreated wastewater at the Lundbreck Lagoon from the Hamlet of Beaver Mines (or other sources), up to a maximum of 110 m^3/day.
- The MD should ensure they submit effluent quality results for BOD, TSS, and un-ionized ammonia to Environment Canada as per the Federal WSER Guidelines and that annual WSER reporting requirements are satisfied.

7 REFERENCES

(1) Alberta Environment, "Code of Practice for Wastewater Systems Using a Wastewater Lagoon", Environmental Protection and Enhancement Act and the Wastewater and Storm Drainage Regulation, Edmonton, Alberta, September 2003.

(2) Alberta Environment, "Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems", Drinking Water Branch, Environmental Policy Branch, Environmental Assurance Division, Edmonton, Alberta, March 2013.

(3) Banner Environmental Engineering Consultants Ltd., "Lundbreck Wastewater Treatment Lagoon Rehabilitation – Aeration System Proposal", October 2020.

(4) Banner Environmental Engineering Consultants Ltd., "Lundbreck Lagoon – Kinetic Modeling", March 2021.

(5) Environment Canada, "Wastewater Systems Effluent Regulations", August 2023.

(6) Metcalf & Eddy, Inc., "Wastewater Engineering Treatment and Reuse, 4th Ed.", McGraw-Hill, New York, NY, 2003

(7) US Environmental Protection Agency, "Principles of Design and Operations of Wastewater Treatment Pond Systems for Plant Operators, Engineers, and Managers", August 2011.

APPENDIX A:

COST ESTIMATES

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MD of Pincher Creek

Lundbreck Wastewater System Assessment
Wastewater System Upgrades

ORDER OF MAGNITUDE COST ESTIMATES

CIPP Lining - MH 5 to M H6		QUANTITY	UNIT	UNIT PRICE	COST
1	General Requirements	1	L.S.	$ 4,000.00	$ 4,000.00
2	Bypass Pumping	1	L.S.	$ 3,000.00	$ 3,000.00
3	Supply and Install 200mm Cured-In-Place Pipe Liner	90	m	$ 350.00	$ 31,500.00
				SUBTOTAL	$ 39,000.00
CONTINGENCY (20%)					$ 10,000.00
ENGINEERING (15%)					$ 8,000.00
				TOTAL	**$ 57,000.00**

Flow Meter at Brewery		QUANTITY	UNIT	UNIT PRICE	COST
1	General Requirements	1	L.S.	$ 1,000.00	$ 1,000.00
2	Supply and Install Magnetic Flow Meter	1	L.S.	$ 10,000.00	$ 10,000.00
				SUBTOTAL	$ 11,000.00
CONTINGENCY (20%)					$ 10,000.00
ENGINEERING (15%)					$ 4,000.00
				TOTAL	**$ 25,000.00**

New Sanitary Dump Station		QUANTITY	UNIT	UNIT PRICE	COST
1	General Requirements	1	L.S.	$ 16,000.00	$ 16,000.00
2	Supply and Install Precast Vault Structure	1	L.S.	$ 75,000.00	$ 75,000.00
3	Civil Site Work	1	L.S.	$ 50,000.00	$ 50,000.00
4	Dump Station System Package (Sani-Star)	1	L.S.	$ 5,000.00	$ 5,000.00
5	Electrical	1	L.S.	$ 15,000.00	$ 15,000.00
6	Decommission old Sanitary Dump Station	1	L.S.	$ 10,000.00	$ 10,000.00
				SUBTOTAL	$ 171,000.00
CONTINGENCY (20%)					$ 40,000.00
ENGINEERING (15%)					$ 32,000.00
				TOTAL	**$ 243,000.00**

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MD of Pincher Creek

Lundbreck Wastewater System Assessment
Wastewater System Upgrades

ORDER OF MAGNITUDE COST ESTIMATE

	Regional Wastewater Connection - Lundbreck to Cowley	QUANTITY	UNIT	UNIT PRICE	COST
1	General Requirements	1	L.S.	$ 305,000.00	$ 305,000.00
2	Hydroexcavation	120	hrs	$ 350.00	$ 42,000.00
3	Connection to Existing Wastewater Lagoons	2	ea	$ 15,000.00	$ 30,000.00
4	Highway Trenchless Crossing	2	ea	$ 100,000.00	$ 200,000.00
5	Railroad Trenchless Crossing	1	ea	$ 100,000.00	$ 100,000.00
6	Supply and install 200 mm DR11 HDPE Sewer Pipe	8000	m^2	$ 250.00	$ 2,000,000.00
7	Lift Station c/w 20 HP Pumps, Valves, and Controls	2	L.S.	$ 800,000.00	$ 1,600,000.00
8	Grass Restoration - Topsoil and Seed	12000	m^2	$ 7.50	$ 90,000.00
				SUBTOTAL	$ 4,367,000.00
				CONTINGENCY (30%)	$ 1,320,000.00
				GEOTECHNICAL AND MATERIALS TESTING (5%)	$ 290,000.00
				ENGINEERING (15%)	$ 860,000.00
				TOTAL	**$ 6,840,000.00**

LAMBOURNE
ENVIRONMENTAL

MPE Engineering

Lundbreck, AB - Wastewater Lagoon Survey Pricing

April 15, 2024

Prepared For:
MPE Engineering

Prepared By:
Lambourne Environmental Ltd.
51 Belich Cres., Red Deer County, AB T4S 2K5
Ph. 403-348-8298

April 15, 2024

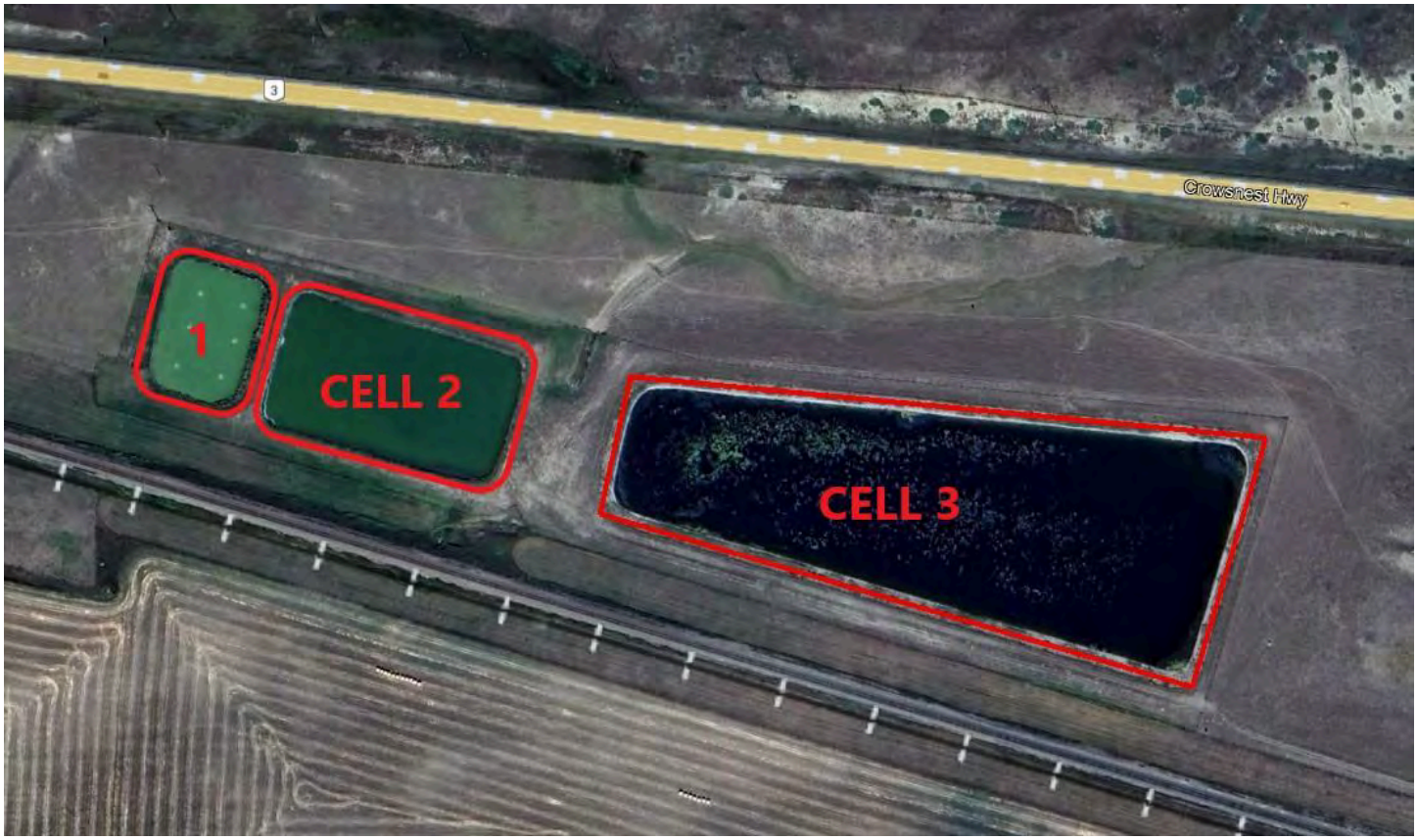
MPE Engineering

Attn: Keith Mateo, EIT

RE: Lundbreck, AB - Wastewater Lagoon Survey Pricing

1. UNDERSTANDING OF SCOPE

Lambourne Environmental Ltd. ("Lambourne") thanks MPE for the opportunity to provide pricing for the surveying of 3 wastewater lagoons located at Lundbreck, AB, as per the image below.



The sludge survey will provide the following information:

- Determine current in-situ sludge volumes and corresponding dry tonnes.
- Provide lab analysis to determine disposal options for the biosolids (i.e,. land application, Geotube, etc.).
- Provide visualizations of sludge distribution in each cell to identify the most heavily loaded areas of sludge.
- Provide accurate measurements, depths and hydraulic capacities of cells being surveyed.
- Provide observations on condition of cells and potential issues to be addressed.
- Provide an accurate baseline from which to measure sludge accumulation or monitor dredging progress in the future.

Our survey will assist in:

- Determining whether dredging is currently necessary.

- Determining the preferred method of disposal.
- Developing a long term plan for future desludging, and
- Developing a budget for future desludging.

2. PRICING

LAGOON SURVEY PRICING

ITEM	UNIT COST	# UNITS	TOTAL
Mobilization / Demobilization	$1,100.00	1	$1,100.00
Field Operations	$7,100.00	1	$7,100.00
Reporting and Sludge Sample Analysis	$4,800.00	1	$4,800.00
TOTAL			**$13,000.00**

Items not included in pricing:

- GST
- Delays caused by inclement weather resulting in need to stop survey

3. SLUDGE SURVEY DELIVERABLES

After conducting the field data collection portion of the sludge survey, Lambourne will provide the following information for each cell surveyed in the Survey Report:

- Sludge dry tonnes, in-situ sludge volume, hydraulic capacity, dredgeable area and lagoon dimensions.
- Sludge blanket thickness map that clearly shows the sludge distribution in each cell surveyed.
- Sludge blanket elevation map - to use when creating dredging bid packages and for monitoring sludge accumulation / reduction. Elevations are provided to the CGVD2013. Local survey control points will be established on site to ensure the accuracy of future surveys.
- Qualitative field observations including infrastructure condition, debris in cells, subsurface vegetation, etc.
- Depths to the top of sludge blanket map.
- Lagoon / Pond Liner map.
- Virtual site tour and site map (aerial orthophoto) where drone flying is possible..
- 3D sludge profile maps in pdf format for use in planning discussions and presentations.
- Water level, hydraulic capacity calculations, and freeboard elevations.
- Access to mobile field app with georeferenced sludge maps to improve dredging efficiency.
- Comprehensive sludge survey methodology
- xyz sludge survey data sets in csv. format (if requested)
- Sludge sample test results for:
    - Percent total solids, percent total volatile solids and dry material specific gravity
    - Alberta Land Application of Biosolids criteria

A sample redacted sludge survey report and a sample 3D pdf sludge map is included with this proposal.

4. METHODOLOGY

Lambourne proposes that the sludge surveys be conducted using the following methodology to maintain consistent accuracy and allow sludge survey data to be used for future monitoring of dredge activities and / or sludge accumulation:

- We will conduct the hydrographic sludge survey using either an autonomous survey vessel (ASV) or a manned survey vessel, mounted with a single beam echosounder that operates at two frequencies simultaneously (a high frequency of 200 kHz and a low frequency of 30 kHz). The echosounder will be calibrated on-site using sound velocity of the water column.
- Sonar data will be tightly coupled in real-time with GNSS positioning data from a dual-frequency multi-constellation RTK system (base and rover), where the vessel-mounted rover will receive real-time positioning correction from the RTK base located onshore for better than 2 cm horizontal and vertical accuracy.
- The sludge survey will be conducted in a grid, with areas near mixers and aerators receiving grid spacing as required to collect sufficient data to map the influence of those systems on the sludge blanket. The grid of survey coverage is achieved using software that combines a live GNSS feed of vessel location overlaid on preplanned survey lines and real-time hydrographic data coverage.
- We will use a manned vessel to collect a minimum of 30 - 40 individual liner measurements per cell including side slopes using RTK GNSS survey technology to develop an accurate liner map, which is used for sludge volume calculations.
- 4 sludge samples will be collected from each cell and mixed to form 1 composite sample per cell that will be sent to a laboratory for analysis. Samples will be collected using either a dredge-style grab sampler or a thief sampler depending on the thickness of the sludge blanket.
- Data will be reviewed for accuracy and completeness daily.
- Data for each pond will be post-processed using CAD software to develop both the top of the sludge surface and the liner surface. This sludge surface can then be used moving forward as a basis for comparison for sludge levels. If engineering drawings are available, the CAD liner surface will be compared to identify any notable differences. We utilize the water column echogram to identify the sludge blanket.

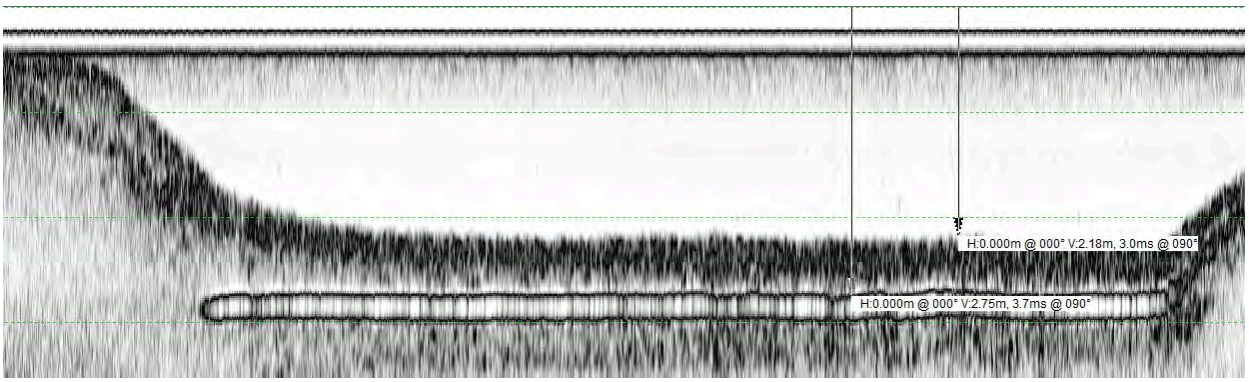


Figure 2 We use full water column visualizations to identify the sludge blanket (sample echogram shown above)

- The sludge and liner surfaces will be used to compute sludge volume in the cell. Sludge volumes will then be further reduced to dry tonnage using the sludge sample test results for percent total solids and specific gravity. The dry tonnage value provides a level playing field for dredging contractors to provide remediation cost estimates.

5. COMPANY OVERVIEW

Lambourne Environmental Ltd. is an industry leader in the dredging and desludging of municipal and industrial wastewater and stormwater ponds, and the removal and disposal of the related sludges, slurries and sediments. Lambourne is based in Red Deer, AB, and has been completing projects for clients throughout Western and Northern Canada since 1990. Lambourne prides itself on providing a 'turnkey' service to its customers, from lagoon survey to final disposition of removed materials, as well as providing required reporting to regulatory boards and agencies. Our experience with a variety of municipal and industry clients allows us to offer innovative and comprehensive solutions to meet our customers needs. In 2023 we removed approximately 423,542 m^3 of sludge and leachates for 28 different municipal and industrial clients, and completed 6 lagoon surveys.

Lambourne is focused on providing a safe work environment for its employees and contractors. Lambourne has established safe work practices and procedures for all job related tasks, has training processes related to both the company safety program and operator competency, and performs field level hazard assessments and safety plans for all projects. Lambourne's safety program is managed by a full-time, accredited safety officer. Lambourne has a valid COR, and is a member in good standing of the Alberta Construction Safety Association. Lambourne maintains current certifications with ISNetworld and Avetta. Lambourne maintains Comprehensive General Liability insurance coverage of $5 million and Automobile insurance coverage of $5 million. Lambourne is a bondable company.

Lambourne offers high quality services to its clients in the following areas:

- Lagoon Desludging - Dredging
- Lagoon Desludging - Lagoon Agitator Pumps
- Biosolids Management - Land Application
- Biosolids Management - Dewatering
- Lagoon Management - Consulting
- Lagoon Surveys

6. TERMS AND CONDITIONS

The following terms and conditions apply to this quote:

- Project pricing is valid for 30 days from the date of this proposal.
- Although unlikely, circumstances beyond our control (such as, but not limited to unsafe weather or poor site conditions) may cause significant delays in the project. In the event that significant delays cause the project to exceed the estimated timeframe, we will communicate those delays to the client immediately and adjust project pricing accordingly to ensure the client understands any extra costs that might be incurred. Our field crew is billed at $1,500.00/day for unsafe weather standby days.
- In areas where the sonar data cannot be collected due to obstructions on the cell (ex. Depths too shallow, thick blanket of algae or sludge crust present, debris on cell), We will utilize an infrared interface detector to map those areas of the sludge blanket.
- Survey grid spacing, liner measurements and sludge samples may be subject to change based on lagoon conditions and infrastructure. For cell liners that are deeper than 5m, engineering record drawings are required.

- Any aeration/mechanical mixing systems must be shut down a minimum of 2 hours prior to conducting the sludge survey to allow for suspended particles to settle out of the water column, which improves the accuracy of the survey.
- The safety of our personnel and clients is our top priority. Unsafe weather conditions such as extremely high winds, heavy rains, and lightning storms may result in a temporary delay in conducting the sludge surveys.
- We require a minimum of 1.5 feet of water cap in the lagoon to conduct a sludge survey. Where the water cap is less than 1.5 feet we will assume that the cell is full of sludge in that area.
- Project estimate assumptions: ponds are free of ice and excessive floating debris and lagoon access is not hindered by trees, brush, or cattail overgrowth. Suitable boat launch access must be available at each pond being surveyed.
- Delays resulting from excessive vegetation overgrowth or other obstructions that block access to the lagoon(s) will be billed to the client at an hourly rate.
- Purchase order and/or signed contract for services are requested. Lead time for this work is 2-3 weeks after receipt of the above-mentioned items.
- We may require weekend and after hours access to the site to complete the survey.

7. CLOSURE

Lambourne Environmental Ltd. would like to thank MPE for the consideration of this proposal. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Sincerely,

Lambourne Environmental Ltd.

Nathan Stephan, Chief Financial Officer

APPENDIX B:

LABORATORY TEST RESULTS

Down To Earth Labs Inc.

The Science of Higher Yields

MPE Engineering
3320 18 Ave N
Lethbridge, AB T1H 5J3

Report # : 150904
Report Date: 2023-05-08
Received: 2023-05-04
Completed: 2023-05-05
Test Package: WIndividual

Project:
PO:
Grower:

3510 6th Ave North
Lethbridge, AB T1H 5C3
403-328-1133
www.downtoearthlabs.com
info@downtoearthlabs.com

Sample	ID	Usage	Analysis	Result	Units	Water Quality Guidelines: Acceptable / Caution / Unacceptable
230504Q013	Lundbreck Lagoon	Human	pH	7.81	-	
			Phosphate	2.65	mg/L	
			Total Alkalinity	305	mg/L	
			Total Suspended Solids	48.8	mg/L	
230504Q014	Brewery	Human	pH	6.92	-	
			Phosphate	84.4	mg/L	
			Total Alkalinity	840	mg/L	
			Total Suspended Solids	103	mg/L	

Approved by

Raygan Boyce, Lab Manager

For further information visit the Alberta Agriculture Rural Water Quality site below and click on 'Accept the Disclaimer'
http://www.agric.gov.ab.ca/app84/rwqit/rwqitwateruse.jsp

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W: www.element.com

Report Transmission Cover Page

Bill To: Down to Earth Labs Inc.
3510 - 6 Avenue N.
Lethbridge, AB, Canada
T1H 5C3
Attn: Reports
Sampled By:
Company:

Project ID: MPE Engineering
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1649479**
Control Number:
Date Received: May 6, 2023
Date Reported: May 15, 2023
Report Number: 2871092

Contact	Company	Address
Justin Quinton	**Down to Earth Labs Inc.**	3510 - 6 Avenue N. Lethbridge, AB T1H 5C3 Phone: (403) 328-1133 Fax: (403) 320-1033 Email: ap@downtoearthlabs.com

Delivery	Format	Deliverables
Email - Merge	PDF	COC / Invoice

Contact	Company	Address
Reports	**Down to Earth Labs Inc.**	3510 - 6 Avenue N. Lethbridge, AB T1H 5C3 Phone: (403) 328-1133 Fax: (403) 320-1033 Email: info@downtoearthlabs.com

Delivery	Format	Deliverables
Email	PDF	COA
Email	PDF	COC / Test Report
Email	PDF	COR

Notes To Clients:

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Analytical Report

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Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1649479**
Control Number:
Date Received: May 6, 2023
Date Reported: May 15, 2023
Report Number: 2871092

Reference Number	1649479-2	1649479-3	1649479-5
Sample Date			
Sample Time			
Sample Location			
Sample Description	Lundbreck Lagoon-TKN / 230505N004 / 6.2°C	Lundbreck Lagoon-P/N / 230505N005 / 6.2°C	Brewery-TKN / 230505N007 / 6.2°C
Matrix	Water	Water	Water

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L		9.57		0.025
Ammonium/Ammonia Preservation				Yes		
Kjeldahl Nitrogen	Total	mg/L	17.9		98.5	0.1
Phosphorus	Total	mg/L		1.88		0.05

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Lot ID: **1649479**
Control Number:
Date Received: May 6, 2023
Date Reported: May 15, 2023
Report Number: 2871092

Reference Number	1649479-6
Sample Date	
Sample Time	
Sample Location	
Sample Description	Brewery-P/N / 230505N008 / 6.2°C
Matrix	Water

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Ammonium - N		mg/L	23.8			0.025
Ammonium/Ammonia Preservation			Yes			
Phosphorus	Total	mg/L	42.4			0.05

Approved by:

Benjamin Morris, B.Sc
Operations Manager

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).
Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

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Methodology and Notes

Bill To: Down to Earth Labs Inc.
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T1H 5C3
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Company:

Project ID: MPE Engineering
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Proj. Acct. code:

Lot ID: **1649479**
Control Number:
Date Received: May 6, 2023
Date Reported: May 15, 2023
Report Number: 2871092

Method of Analysis

Method Name	Reference		Method	Date Analysis Started	Location
Ammonium-N in Water	APHA	*	Automated Phenate Method, 4500-NH3 G	May 11, 2023	Element Edmonton - Roper Road
Phosphorus - Total in Water	APHA	*	Automated Ascorbic Acid Reduction Method, 4500-P F	May 11, 2023	Element Edmonton - Roper Road
Total and Kjeldahl Nitrogen (Total) in Water	ISO	*	Water Quality - Determination of nitrogen, ISO/TR 11905-2	May 10, 2023	Element Edmonton - Roper Road

** Reference Method Modified*

References

APHA	Standard Methods for the Examination of Water and Wastewater
ISO	International Organization for Standardization

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Attn: Justin Quinton
Sampled By:
Company:

Project ID: MPE Engineering
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1650596**
Control Number:
Date Received: May 12, 2023
Date Reported: May 18, 2023
Report Number: 2872724

Contact	Company	Address
Justin Quinton	**Down to Earth Labs Inc.**	3510 - 6 Avenue N. Lethbridge, AB T1H 5C3 Phone: (403) 328-1133 Fax: (403) 320-1033 Email: ap@downtoearthlabs.com

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Analytical Report

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T1H 5C3
Attn: Justin Quinton
Sampled By:
Company:

Project ID: MPE Engineering
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1650596**
Control Number:
Date Received: May 12, 2023
Date Reported: May 18, 2023
Report Number: 2872724

Reference Number	1650596-1	1650596-2
Sample Date	May 11, 2023	May 11, 2023
Sample Time	NA	NA
Sample Location		
Sample Description	Lundebreck Lagoon / 230511P011 / 4.1°C	Brewery / 230511P012 / 4.1°C
Matrix	Water	Water

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Aggregate Organic Constituents					
Biochemical Oxygen Demand 5 Day	mg/L	104	3450		4
Routine Water					
pH		7.72	9.81		1

Approved by:

Benjamin Morris, B.Sc
Operations Manager

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Methodology and Notes

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Attn: Justin Quinton
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Company:

Project ID: MPE Engineering
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1650596**
Control Number:
Date Received: May 12, 2023
Date Reported: May 18, 2023
Report Number: 2872724

Method of Analysis

Method Name	Reference		Method	Date Analysis Started	Location
Alkalinity, pH, and EC in water	APHA	*	pH - Electrometric Method, 4500-H+ B	May 15, 2023	Element Edmonton - Roper Road
BOD in water	APHA	*	BOD: 5-Day Test, 5210 B	May 12, 2023	Element Edmonton - Roper Road

** Reference Method Modified*

References

APHA Standard Methods for the Examination of Water and Wastewater

a division of Englobe

REPORT FOR:

MUNICIPAL DISTRICT OF PINCHER CREEK NO.9

REGIONAL WASTEWATER TREATMENT ASSESSMENT

Technical Memorandum No. 2 – Village of Cowley Lagoon Assessment

---

Date: March 10, 2025
Project #: 1770-025-00

Proud of Our Past... Building the Future

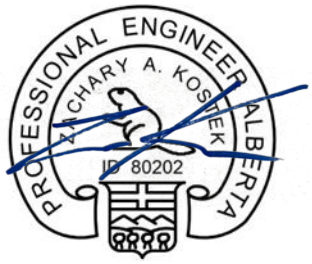
www.mpe.ca

CORPORATE AUTHORIZATION

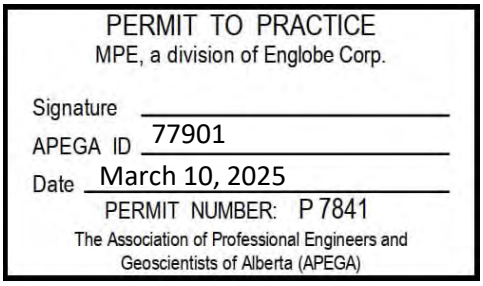
This report has been prepared by MPE a division of Englobe under authorization of the Municipal District of Pincher Creek, No. 9. The material in this report represents the best judgment of MPE a division of Englobe given the available information. Any use that a third party makes of this report, or reliance on or decisions made based upon it is the responsibility of the third party. MPE a division of Englobe accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions taken based upon this report.

Should any questions arise regarding the content of this report, please contact the undersigned.

MPE a division of Englobe



March 10, 2025



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1 INTRODUCTION

1.1 BACKGROUND

The Municipal District of Pincher Creek (the MD) retained MPE a division of Englobe to complete a regional wastewater assessment on the feasibility of regional wastewater collection and treatment for the Hamlet of Lundbreck and the Village of Cowley. Both operate conventional lagoon systems. The proposed work would include a review of the capacity and general condition of wastewater treatment infrastructure, to establish a baseline of available treatment capacity to support future growth within each community.

This report focuses on the assessment of the Cowley Wastewater Lagoon system. A *Regional Infrastructure Master Plan* was previously completed by MPE in 2022 for the Village of Cowley. The wastewater generation projections and sanitary infrastructure assumptions made in the previous report are used throughout this study. This study will review the capacity of the Cowley lagoon and the ability to temporarily accept raw wastewater from the Hamlet of Beaver Mines. Where necessary, upgrade alternatives will be developed and presented including relevant drawings and cost estimates.

1.2 PROJECT LOCATION

The Village of Cowley is situated in the Municipal District of Pincher Creek, No. 9, approximately 50 km southwest of Fort Macleod, Alberta, and 13 km northwest of the Town of Pincher Creek. The legal land description for Cowley is Section 2, Township 21, Range 7, and West of the Fourth Meridian.

1.3 SCOPE OF WORK

The scope of this study includes the following:

- Data collection and analysis:
  - Review of lagoon record drawings.
  - Review of flow data (if available), or provide estimates based on water usage where required.
  - Review of historical discharge records (flow and effluent quality).
  - Review of historical wastewater reporting documentation, as available.
- Wastewater flow projections and characterization.
- Lagoon assessment and review of relevant regulatory requirements.
- Identification of available capacity for accepting untreated wastewater from the Hamlet of Beaver Mines temporarily.
- Identification of any potential required upgrades and estimated costs.
- Conclusions and Recommendations based on findings.

2 WASTEWATER PRODUCTION

2.1 HISTORICAL DATA REVIEW

2.1.1 Data Collection

The Village of Cowley is not required to record wastewater treatment plant information on a daily, weekly, or monthly basis; therefore, only limited wastewater data was available for the lagoon system. Evaporation and precipitation data was obtained from Environment Canada and population data was obtained from Statistics Canada.

2.1.2 Historical Wastewater Flows

No historical flow records are available for the Cowley wastewater lagoons as there is currently no flow meter in the system to measure flow entering the lagoon. Current and projected wastewater flows were determined using potable water flows from the past 5 years (2018-2022), then comparing the water usage during dry periods (October to April) with the annual average day usage.

It is recommended that a flow monitoring study be performed on the lagoon influent to get a better understanding of the Village's wastewater production. A detailed record of the inflow to the facility would provide data to determine a more accurate average day flow, average dry weather flow, peak dry weather flow and peak wet weather flow (assuming a significant storm event occurs). This would provide some indication of the effects of inflow and infiltration on the wastewater collection system upstream of the lagoons by correlating the wet weather flow data with precipitation records.

2.2 POPULATION PROJECTIONS

Historical population figures were obtained from Statistics Canada (www.statcan.ca) and factored in with estimates. The growth rate was determined to be 1% per year. Table 2.2 provides the historical and projected populations for the 25-year design horizon for the Village of Cowley.

Table 2.2 – Village of Cowley Population Projections

Growth Rate Projection	Historical Population			Projected Population					
%/yr	2011	2016	2021	2023	2028	2033	2038	2043	2048
1.0%	236	209	216	220	232	243	256	269	283

2.3 CURRENT & PROJECTED WASTEWATER FLOWS

No historical flow records were available for the wastewater system as there is no flow meter in the system to measure flows entering the wastewater lagoons. As water usage for the dry period was approximately 80% of the average day water demand. Hence, the Village's per capita wastewater generation was assumed to be 80% of the determined water usage rate. The water usage rate was determined to be 251 Litres per capita per day (Lpcd) which correlates to a per capita wastewater generation rate of 202 Lpcd.

2.3.1 Wastewater Production

Future sewage flows were calculated based on the population projection noted above. To account for the diurnal fluctuations in sewage flows, maximum daily flows are calculated based on the peaking factor derived from the Harmon equation.

$$\text{Harmon's Peaking Factor} = 1 + 14 / (4 + P^{1/2})$$

where: P = design contributing population in thousands

Assuming that Cowley's population in 2048 is 283, Harmon's peaking factor will be equal to 4.09. Table 2.3 illustrates the current and projected sewage flows in 2048.

Table 2.3 – Village of Cowley Current & Projected Wastewater Flows

	Population	Harmon Peaking Factor	Avg Day Flow	Avg Dry Weather Flow	Peak Dry Weather Flow	Infiltration / Inflow	Peak Wet Weather Flow
			(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)
Current (2023)	220	4.13	44	36	148	441	588
Projected (2048)	283	4.09	57	46	187	472	659

Notes:

1. Avg Day Flow =	202	lpcd
2. Dry Weather Flow =	164	lpcd
3. Wet Weather Flow =	792	lpcd
4. Inflow/Infiltration =	2,000	lpcd

Based on the information in Table 2.3, the average day flow (ADF) in 2048 is estimated to be 57 m^3/day, the average dry weather flow (ADWF) is estimated to be 46 m^3/day, the peak dry weather flow (PDWF) is estimated to be 187 m^3/day and the peak wet weather flow (PWWF) is estimated to be 659 m^3/day. These estimations are intended to assist in the preparation of budgets and are considered to be conservative.

2.3.2 Estimation of Inflow/Infiltration

Inflow and infiltration (I/I) are generally attributed to leaky wastewater pipes, sags in roads, the assumption that many homes have their weeping tile foundation drains or sump pumps connected directly to the sanitary system, downspouts connected to the weeping tile, and lot grades do not always provide positive drainage away from the building's foundation. This is a common problem shared by many municipalities in southern Alberta. As a result, many communities have passed bylaws prohibiting this practice in new developments.

The flow data during the months of high precipitation are useful in determining the amount of inflow and infiltration (I/I), which occurs in the collection system. Since there is no flow data available, the 2021 City

of Lethbridge design standards were used. The design standards use a value of 2,000 Lpcd. Inflow and infiltration values in Table 2.3 are reflective of these published inference values.

2.3.3 Evaporation and Precipitation

Evaporation and precipitation rates for Cowley were determined by using data compiled by Environment Canada from 1981 – 2010 for the Connelly Creek region.

Table 2.3.3 – Evaporation and Precipitation Data for Connelly Creek Area

Month	Avg. Vap. Pres. (kPa)	Avg Temp (°C)	Wind Speed (km/hr)	Evaporation (mm/Month)	Precipitation (mm/Year)	Net Change (mm/Year)
January	0.3	-5.3	18.3	25.6	34.3	8.7
February	0.3	-3.9	21.5	36.9	35.7	-1.2
March	0.4	-0.5	17.6	49.4	44.5	-4.9
April	0.5	4.4	15.7	99.6	47.0	-52.6
May	0.7	9.0	16.9	143.2	74.3	-68.9
June	1.0	12.7	13.8	151.9	88.8	-63.1
July	1.2	15.7	10.6	167.9	46.8	-121.1
August	1.1	15.3	10.6	173.9	40.3	-133.6
September	0.8	10.9	11.3	125.7	47.2	-78.5
October	0.6	5.5	14.6	82.0	34.9	-47.1
November	0.4	-4.9	15.7	39.0	43.8	4.8
December	0.3	4.8	14.0	22.4	30.2	7.8
Annual				**1117.3**	**567.8**	**-549.5**

Table 2.3.3 illustrates monthly average precipitation and evaporation rates for the years 1981 – 2010. The 30-year average net evaporation is approximately 549.5 mm, which is accounted for in adjusting the amount of effective storage available in the lagoon treatment system. According to the Alberta Environment and Protected Areas *Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems*, lagoon volume adjustment using net evaporation is allowed where historical climatology data shows that average evaporation exceeds the average precipitation. The minimum freeboard under this scenario, however, must be increased to accommodate lower net evaporation during wet years. The required freeboard for the facultative and storage cells is one meter above the full supply level.

2.3.4 Wastewater Monitoring Program

In June 2024, MPE installed equipment downstream of the Cowley Lagoon as part of a 90-day wastewater monitoring program. Measurements were collected using a VEGAPULS C 21 radar level sensor, which was calibrated to transmit data points every 15 to 20 seconds throughout a 5-minute period programmed to begin at intervals of 15 minutes. The Manning equation was used to derive a series of flow rates from level data, assuming a semi-circular channel flow within the manhole. The peaks and averages of these flow rates were then used to verify the estimated 2023 flows in this report.

Table 2.3.4 – Village of Cowley Measured Wastewater Flows

Source	Parameter	Units		Percent Difference
		m^3/d	lpcd	
Measured	Avg Day Flow	29	132	
	Peak Day Flow	177	805	
Estimated (2023)	Avg Day Flow	44	200	-34%
	Avg Dry Weather Flow	36	164	-19%
	Peak Dry Weather Flow	148	673	20%
	Peak Wet Weather Flow	588	2673	-70%

Table 2.3.4 compares the results of this program with the estimated values. The closest points of comparison are the estimated ADWF and PDWF. The measured average day flow is 29 m^3/d, which is 19% less than the estimated ADWF. The measured peak flow is 177 m^3/d, which was 20% greater than the estimated PDWF. However, the measured peak flow was 70% less than the PWWF of 588 m^3/d. As the data in Table 2.3.4 does not exceed peak values, the estimated flows should be generally considered conservative. However, the lack of a high flow events during the monitoring period may have affected accuracy of the metering program.

3 REGULATORY REVIEW

Alberta Environment and Parks (AEP) among others has established standards and guidelines for the design of wastewater treatment systems, lift stations, and wastewater collection systems under the *Environmental Protection and Enhancement Act*. Furthermore, wastewater treatment systems should also be designed with consideration of the federal Wastewater Systems Effluent Regulations (WSER) under the *Fisheries Act* which came into force in 2015. The federal WSER apply to systems which are designed to collect an average daily volume of 100 m^3 or more of influent. Since the projected average daily flow volume for Cowley is 57 m^3, the WSER will not apply unless additional influent from Beaver Mines or other sources results in exceedance of the threshold.

3.1 STANDARDS AND GUIDELINES

3.1.1 Wastewater Lagoons

The Alberta *Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems* (March 2013) outlines acceptable methods for design and operation of conventional wastewater lagoons. For systems with a design average day flow of less than 250 m^3/d, treatment may be accomplished with a combination of anaerobic cells, facultative cells, and storage cells. Meteorological conditions such as rainfall and evaporation are to be considered while defining the design volume.

Disposal of effluent from wastewater lagoons is regulated under the AEP *Code of Practice for Wastewater Systems Using a Wastewater Lagoon* (September 2003) and the *Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems* (March 2013). Effluent from lagoons may be discharged to a receiving water body between April 1st and November 30th over a period of no longer than three consecutive weeks unless otherwise permitted by the Director. The seasonal discharges to a receiving watercourse from wastewater lagoons are exempt from receiving water assessments.

3.1.2 Anaerobic Cells

The Standards and Guidelines stipulate that each anaerobic cell must have a minimum retention time of 2 days and a minimum depth of 3 meters. For adequate mobility of construction equipment and sufficient bottom area for sludge accumulation, a cell bottom of at least 3 meters square should be provided. The minimum practical design volume for anaerobic cells with 3:1 inside slopes and 3 m of operating depth is approximately 500 m^3. This yields a minimum practical average day design flow of approximately 250 m^3/day for an anaerobic cell.

A minimum of two anaerobic cells shall be provided for average daily design flows of 250 m^3/day and up to 500 m^3/day. Design flows greater than 500 m^3/day require four anaerobic cells. The anaerobic cells shall be operated in series and each individual cell must be isolatable for maintenance purposes.

3.1.3 Facultative Cells

The facultative cell precedes long-term detention storage and is a requirement for all wastewater lagoon systems in Alberta. The facultative cell must retain influent wastewater for at least 60 days based on the average daily design flow and operate at a maximum depth of 1.5 m.

3.1.4 Storage Cell

The storage cell's purpose is to provide additional wastewater treatment (including nutrient removal) under facultative conditions. It serves to reduce the environmental impact on the receiving drainage course by facilitating the annual discharge of high-quality effluent wastewater.

The storage cell must retain influent wastewater for a minimum retention period of 12 months based on the average daily design flow and operate at a maximum depth of 3.0 m. For systems utilizing wastewater irrigation as the method of treated effluent disposal, the minimum retention period is 7 months (210 days). In the case where historical climatology data shows that average evaporation exceeds the average precipitation, then the net evaporation may be taken into account in sizing the storage cell(s). Thus, the minimum "free-board" shall be increased to accommodate additional flows in an anomalous precipitation year.

3.1.5 Lagoon Siting

Setback distances from wastewater lagoons are required to buffer the effect of potential odors and provide a margin of public safety. Setbacks also serve to protect the physical integrity of nearby buildings and roads.

Consideration should also be given to the direction of prevailing winds and future municipal expansion. AEP specifies that wastewater lagoons cannot be located within:

- 30 m of the facility property line
- 30 m of the designated right-of-way of a rural road or railway
- 100 m of the designated right-of-way of a primary or secondary highway
- 300 m of a building site for school, hospital, food establishment, or residential use

3.2 Federal Standards and Guidelines

The *Wastewater Systems Effluent Regulations* (WSER) were developed under the *Fisheries Act* and are intended to set consistent federal effluent quality standards for wastewater prior to discharge to receiving water bodies. These regulations apply to any wastewater system that collects or is designed to collect an ADF of 100 m^3/day or more and deposit specified harmful substances into water frequented by fish. The WSER does not currently apply to the Cowley Wastewater Lagoon system, but it will be applicable if the MD wishes to accept additional wastewater into the system beyond the 100m^3/day threshold. Table 3.2 on the next page provides the Federal WSER guideline limits that would be applicable to the Village of Cowley wastewater system.

Table 3.2 – Federal WSER Guidelines for Effluent Limits

Discharge Type[1]	Average Daily Flow	CBOD	TSS	NH_3-N
Intermittent	100 to 2,500 m^3	< 25 mg/L	< 25 mg/L	< 1.25 mg/L

1. Sample to be collected once per discharge period.

CBOD - Carbonaceous Biochemical Oxygen Demand
TSS - Total Suspended Solids
NH3-N - Un-ionized Ammonia

Should the Cowley lagoons fall within the scope of the WSER in the future, the MD should ensure they are submitting effluent quality results for BOD, TSS, and un-ionized ammonia to Environment Canada as per the Federal WSER Guidelines and that annual WSER reporting requirements are satisfied.

4 EXISTING WASTEWATER INFRASTRUCTURE

4.1 WASTEWATER TREATMENT

4.1.1 Treatment Process & Infrastructure

The sanitary collection system in the Village of Cowley consists of a network of sanitary force mains and three (3) lift stations. All sanitary flows drain to the wastewater treatment lagoons. Wastewater stabilization ponds (lagoons) are utilized for treatment of sewage in the Village of Cowley. No record information was available for the Village's lagoon system. The lagoons are located southeast of the Village and north of the Crowsnest Highway. The wastewater treatment system consists of two (2) anaerobic cells, one (1) facultative cell, and one (1) storage cell. No record information was available for the existing wastewater lagoons. Current aerial imagery and the recommended depths from the Standards and Guidelines were used to determine the capacity of each of the lagoon cells.

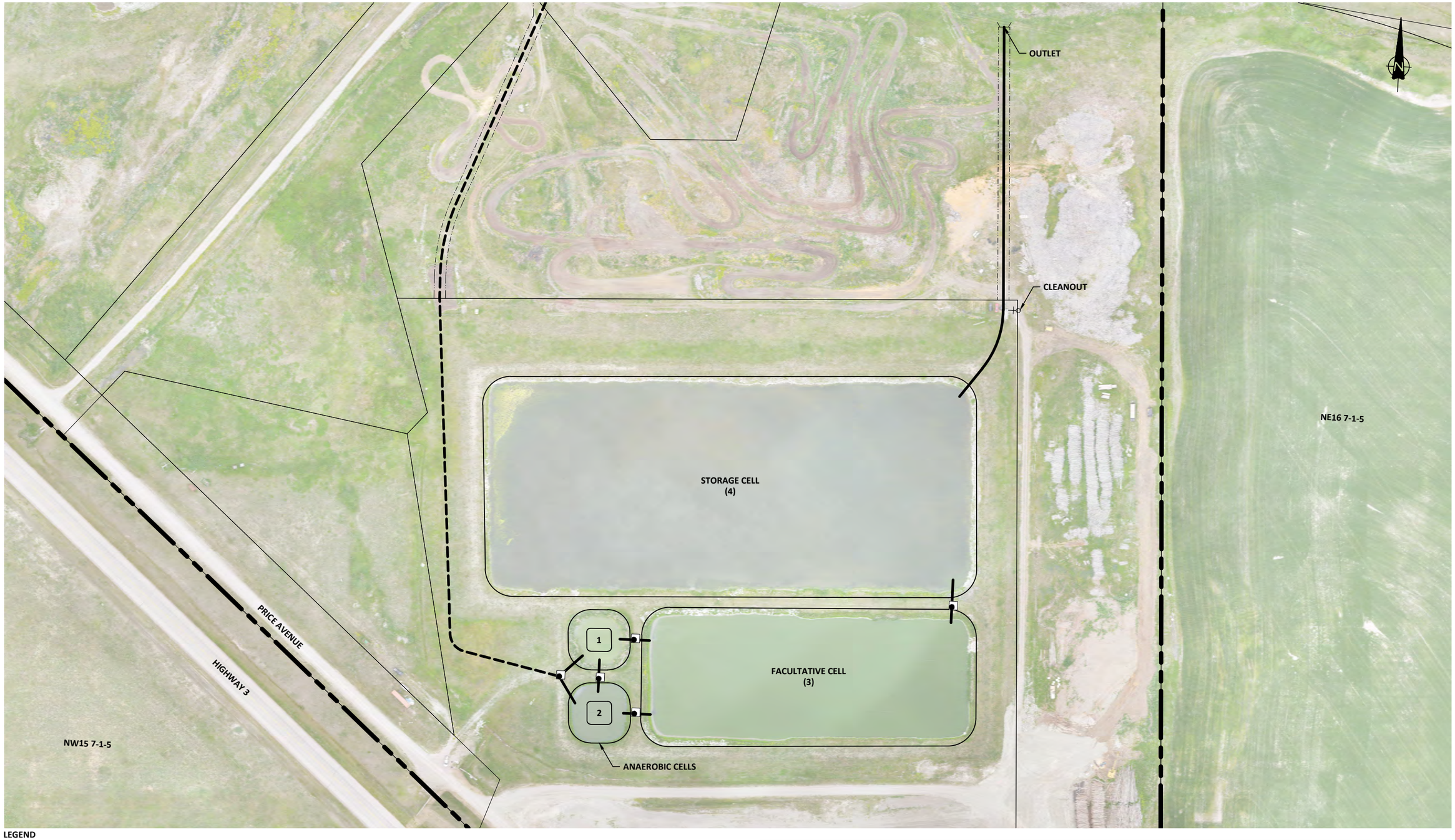
The existing wastewater treatment system is illustrated by Figure 2 on the following page.

As part of the condition assessment completed in the *Regional Infrastructure Master Plan*, the transfer structures around the lagoons were inspected. The concrete inside the structures is showing signs of deterioration with exposed aggregate and severely corroded rungs. Some of the wooden lids have deteriorated to the point that they could not be opened without damaging them. The transfer structures between the anaerobic cells and the facultative cell could not be opened, and the stop logs in all the structures do not appear to be functioning at all.

4.1.2 Anaerobic Cells

The Village's treatment system consists of two (2) anaerobic cells. The combined surface area at current water elevation was determined to be 1,820 m^2. Using the Standards and Guidelines depth (3.0 m) and bank slope requirements (3:1), the combined capacity of the two anaerobic cells is 2,650 m^3. The two anaerobic cells are connected to each other and to the facultative cell via a transfer structure and piping of unknown size and material. Alberta Environment stipulates that each individual anaerobic cell must also be isolatable for maintenance purposes.

The minimum practical design volume for anaerobic cells with 3:1 inside slopes and 3 m of operating depth is approximately 500 m^3. This yields a minimum practical average day design flow (ADDF) of approximately 250 m^3/day for an anaerobic cell.



LEGEND

- VILLAGE BOUNDARY
- EXISTING WASTEWATER MANHOLE
- EXISTING WASTEWATER TRANSFER STRUCTURE
- EXISTING WASTEWATER PIPE - UNKNOWN SIZE AND MATERIAL
- EXISTING WASTEWATER FORCE MAIN - UNKNOWN SIZE AND MATERIAL

ANAEROBIC CELLS - CELL 1 AND 2
VOLUME = 2650 m^3

FACULTATIVE CELL - CELL 3
VOLUME = 15 250 m^3

STORAGE CELL - CELL 4
VOLUME = 80 400 m^3

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MUNICIPAL DISTRICT OF PINCHER CREEK

COWLEY LAGOON ASSESSMENT
SITE OVERVIEW

SCALE: 1:2000	DATE: DECEMBER 2023	JOB: 1770-025-00	FIGURE: 2

4.1.3 Facultative Cell

The facultative cell follows the anaerobic cells and is used to biologically stabilize the wastewater under predominantly aerobic conditions. It precedes long-term detention storage and is a requirement for all wastewater lagoon systems in Alberta. The facultative cell must retain influent wastewater for at least 60 days based on the average daily design flow and be operated at a maximum depth of 1.5 m.

The Village's treatment system utilizes one (1) facultative cell that has a surface area of 11,277 m^2 at current water elevation. Using the Standards and Guidelines depth (1.5 m) and bank slope requirements (3:1), the capacity of the facultative cell is 15,250 m^3. The facultative cell meets the requirements of the Alverta Environment and Protected Areas design guidelines for capacity and retention time at the current wastewater flow.

4.1.4 Storage Cell

The storage cell's purpose is to provide additional wastewater treatment (including nutrient removal) under facultative conditions. It serves to reduce the environmental impact on the receiving drainage course by facilitating the annual discharge of high-quality effluent wastewater. The storage cell must retain influent wastewater for a minimum retention period of 12 months (365 days) based on the average daily design flow and operate at a maximum depth of 3.0 m.

A single storage cell follows the facultative cell. The storage cell is assumed to be constructed with 3:1 internal side slope and a maximum water depth of 3 m, resulting in a volume of approximately 80,400 m^3. The storage cell meets the Alberta Environment and Protected Areas design guidelines for capacity and is in compliance with the current wastewater flows.

4.1.5 Treatment Capacity

The cell volumes of the existing sewage lagoon treatment system were calculated using Autodesk Civil 3D® software based on record drawings provided by the MD of Pincher Creek and aerial views. Net evaporation/precipitation has been included in the calculation of the storage cell volume. The cell retention time was calculated using the average daily flow (ADF). The retention times were determined for the current flow of 44 m^3/day, the measured flow of 29 m^3/day, and the 25-year projected flow of 57 m^3/day. Table 4.1.5 summarizes the lagoon cell volumes and respective retention times.

Table 4.1.5 – Sewage Lagoon Treatment Volumes & Retention Times

Treatment Cell	Volume	Net E/P Change	Adjusted Cell Volume	Retention Time (Days)			
				Estimated Current (2023)	Measured Current (2024)	25 Year (2048)	Alberta Environment Requirements
	(m^3)	(m^3)	(m^3)				
Cells 1 & 2 - Anaerobic	2,650	-	2,650	60	91	46	8
Cell 3 - Facultative	15,250	-	15,250	343	525	267	60
Cell 4 - Storage	80,400	-16,500	96,900	2,179	3,341	1,699	365
Total	**98,300**	**-16,500**	**114,800**	**2,581**	**3,957**	**2,013**	**433**

When analyzing the lagoon treatment system compartments, the capacity for the facultative cell currently meets the required retention time of 60 days and will continue to meet the requirements for the projected 25-year sewage flow. The storage cell meets the required retention time of 365 days for the current and the projected 25-year sewage flows.

4.1.6 Review of the Acceptance of Hauled Wastewater from Beaver Mines or Other Sources

As part of this study, the MD has requested a brief analysis of the Cowley lagoon system's ability to accept wastewater from the neighboring Hamlet of Beaver Mines or other nearby sources. In 2016, MPE completed the *Beaver Mines Wastewater Options Study*. For the purposes of this study, the projected average day flow (ADF) of 63 m^3/day in 2016 was updated to a current (2023) flow of 67 m^3/day using census population data. Combining Beaver Mines' sanitary flows with Cowley's estimated and measured sanitary flows, a current combined flow rate of 96 m^3/day (111 m^3/d based on estimated flows), was used to calculate the retention times. Table 4.1.6 summarizes the combined flow retention times.

Table 4.1.6 – Additional Sewage Lagoon Treatment Volumes & Retention Times

Treatment Cell	Volume	Net E/P Change	Adjusted Cell Volume	Retention Time (Days)		
				Estimated Flow Including Beaver Mines (2023)	Measured Flow Including Beaver Mines (2024)	Alberta Environment Requirements
	(m^3)	(m^3)	(m^3)			
Cells 1 & 2 - Anaerobic	2,650	-	2,650	24	26	8
Cell 3 - Facultative	15,250	-	15,250	138	158	60
Cell 4 - Storage	80,400	-16,500	96,900	877	1,009	365
Total	**98,300**	**-16,500**	**114,800**	**1,039**	**1,193**	**433**

According to the above lagoon capacity calculations, Cowley's lagoon cells have more than sufficient capacity to accommodate raw wastewater from the Hamlet of Beaver Mines as well as the demands of the 25-year projected population.

To keep cell retention time in compliance, the Cowley Lagoon can currently handle up to a maximum of 225 m^3/day of additional wastewater based on the measured ADF from the Village. This additional flow could be from Beaver Mines or limited to a portion of Beaver Mines plus other sources (hauled septage). Accepting additional capacity resulting in an ADF greater than 100 m^3/day will put the WSER into effect for this system.

4.1.6.1 Potential Regional Wastewater Connection

The MD is interested in examining the potential for a permanent connection between the Cowley and Lundbreck lagoons, which would allow the Lundbreck Lagoon to take advantage of the Cowley Lagoon's greater available treatment capacity. Based on a high-level cost estimate included as part of Appendix A, the cost of installing a regional wastewater pumping system from the Lundbreck Lagoon to the Cowley Lagoon would be approximately $7 million. As both lagoons are already capable of operating at their existing volumes well into the 25-year design horizon, it is not recommended to install a regional wastewater connection.

4.2 Wastewater System Recommendations and Upgrades

4.2.1 Wastewater Treatment Upgrades

Based on the wastewater treatment assessment outlined in Section 4.1, capacity upgrades to the Cowley Lagoon are not required. However, the lagoon transfer structures are in poor condition and should be replaced in accordance with the assessment done previously as part of the *Regional Infrastructure Mater Plan*.

4.3 Wastewater System Cost Estimates

An order of magnitude cost estimate was prepared for the recommended upgrade. Detailed cost estimates can be found in Appendix A. The following table provides a summary of the estimated cost.

Table 4.3 – Order of Magnitude Cost for Wastewater System Projects

Location	Project	Order of Magnitude Cost
Cowley Lagoon	Lagoon Transfer Structure Replacements	$460,000.00
	Total Estimated Wastewater System Costs	$460,000.00

The cost estimates provided are an opinion of probable cost and are a function of many factors that can change with time and hence must not be relied upon as the actual cost. Construction equipment and methods that are commonly used in the industry are assumed for estimating purposes.

5 CONCLUSIONS & RECOMMENDATIONS

Based on the items reviewed within this report the following conclusions can be made:

- The Cowley Lagoon treatment and storage cells have sufficient capacity for the current and 25-year design flows. No upgrades are required to increase capacity.
- No historical flow records are available for the Cowley Lagoon as there is no flow meter in the system to measure flow entering the lagoon.
- Due to the lack of existing wastewater flow information, wastewater production was estimated utilizing potable water usage.
    - Production estimates were validated by a 90-day flow monitoring program, which found the assumptions to be conservative.
- Existing lagoon design data was based on record drawings provided by the MD of Pincher Creek and air photos.
- The Cowley Lagoon's transfer structures are in poor condition and require replacement.
- The Cowley Lagoon treatment system has the capacity to accept up to 225 m^3/day additional wastewater from the Hamlet of Beaver Mines (or other sources) temporarily. Accepting more than an additional 71 m^3/day based on measured flows will require WSER reporting.
- A regional wastewater pumping system from the Lundbreck Lagoon to the Cowley Lagoon is possible, but not recommended.

Based on the findings of this report, the following recommendations can be made:

- Install replacements for existing lagoon transfer structures.
- The MD can proceed with accepting additional untreated wastewater at the Cowley Lagoon from the Hamlet of Beaver Mines (or other sources) up to a maximum of 225 m^3/day.
    - If the resulting flow exceeds an average of 100 m^3/day, the MD should ensure they submit effluent quality results for BOD, TSS, and un-ionized ammonia to Environment Canada as per the Federal WSER Guidelines and that annual WSER reporting requirements are satisfied.

6 REFERENCES

(1) Alberta Environment, “Code of Practice for Wastewater Systems Using a Wastewater Lagoon”, Environmental Protection and Enhancement Act and the Wastewater and Storm Drainage Regulation, Edmonton, Alberta, September 2003.

(2) Alberta Environment, “Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems”, Drinking Water Branch, Environmental Policy Branch, Environmental Assurance Division, Edmonton, Alberta, April 2012.

(3) Environment Canada, “Wastewater Systems Effluent Regulations”, August 2023.

(4) Metcalf & Eddy, Inc., “Wastewater Engineering Treatment and Reuse, 4th Ed.”, McGraw-Hill, New York, NY, 2003

(5) US Environmental Protection Agency, “Principles of Design and Operations of Wastewater Treatment Pond Systems for Plant Operators, Engineers, and Managers”, August 2011.

APPENDIX A:

COST ESTIMATES

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MD of Pincher Creek

Cowley Lagoon Assessment
Wastewater System Upgrades

ORDER OF MAGNITUDE COST ESTIMATE

	Lagoon Transfer Structures	QUANTITY	UNIT	UNIT PRICE	COST
1	General Requirements	1	L.S.	$ 22,000.00	$ 22,000.00
2	Hydroexcavation	8	hrs	$ 350.00	$ 2,800.00
3	Bypass Pumping	1	L.S.	$ 10,000.00	$ 10,000.00
4	Dewatering	1	L.S.	$ 75,000.00	$ 75,000.00
5	AC to FC Transfer Structures	1	L.S.	$ 150,000.00	$ 150,000.00
6	FC to SC Transfer Structure	1	L.S.	$ 50,000.00	$ 50,000.00
				SUBTOTAL	$ 310,000.00
				CONTINGENCY (20%)	$ 70,000.00
				GEOTECHNICAL AND MATERIALS TESTING (5%)	$ 20,000.00
				ENGINEERING (15%)	$ 60,000.00
				TOTAL	**$ 460,000.00**

MD of Pincher Creek

Cowley Lagoon Assessment
Wastewater System Upgrades

ORDER OF MAGNITUDE COST ESTIMATE

	Regional Wastewater Connection - Lundbreck to Cowley	QUANTITY	UNIT	UNIT PRICE	COST
1	General Requirements	1	L.S.	$ 305,000.00	$ 305,000.00
2	Hydroexcavation	120	hrs	$ 350.00	$ 42,000.00
3	Connection to Existing Wastewater Lagoons	2	ea	$ 15,000.00	$ 30,000.00
4	Highway Trenchless Crossing	2	ea	$ 100,000.00	$ 200,000.00
5	Railroad Trenchless Crossing	1	ea	$ 100,000.00	$ 100,000.00
6	Supply and install 200 mm DR11 HDPE Sewer Pipe	8000	m^2	$ 250.00	$ 2,000,000.00
7	Lift Station c/w 20 HP Pumps, Valves, and Controls	2	L.S.	$ 800,000.00	$ 1,600,000.00
8	Grass Restoration - Topsoil and Seed	12000	m^2	$ 7.50	$ 90,000.00
				SUBTOTAL	$ 4,367,000.00
				CONTINGENCY (30%)	$ 1,320,000.00
				GEOTECHNICAL AND MATERIALS TESTING (5%)	$ 290,000.00
				ENGINEERING (15%)	$ 860,000.00
				TOTAL	**$ 6,840,000.00**

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REPORT FOR:

MUNICIPAL DISTRICT OF PINCHER CREEK NO.9

REGIONAL WASTEWATER TREATMENT ASSESSMENT

Regional Wastewater Treatment Assessment Summary

March 10, 2025
Project #: 1770-025-00

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Municipal District of Pincher Creek
1037 Herron Avenue
Box 279, Pincher Creek, AB
T0K 1W0

March 10, 2025
File: N:\1770\025-00\R01

Attention: Mr. David Desabrais, P.Eng.

Dear Mr. Desabrais:

Re: Regional Wastewater Treatment Assessment

We are pleased to submit a final copy of the above noted assessment.

This assessment is completed in a series of three (3) documents, namely:

- Municipal District of Pincher Creek No. 9 Regional Wastewater Treatment Assessment Summary (this document),
- Technical Memorandum No. 1: Hamlet of Lundbreck Wastewater System Assessment,
- Technical Memorandum No. 2: Village of Cowley Lagoon Assessment.

The content of the two Technical Memoranda is summarized in the Assessment Summary document. The Assessment Summary document also includes discussion on the overall scope of the project, summaries of project cost estimates, and overall conclusions and recommendation.

We thank you for the opportunity to be of service and to have prepared this report on your behalf. We look forward to assisting you in implementing your plans for the future.

If you have any inquiries regarding our report or if clarification is required, please contact the undersigned.

Yours truly,

MPE a division of Englobe

Zac Kostek, P.Eng.
Project Manager

ZK:km
Enclosure

CORPORATE AUTHORIZATION

This report has been prepared by MPE a division of Englobe under authorization of Municipal District of Pincher Creek, No. 9. The material in this report represents the best judgment of MPE a division of Englobe given the available information. Any use that a third party makes of this report, or reliance on or decisions made based upon it is the responsibility of the third party. MPE a division of Englobe accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions taken based upon this report.

Should any questions arise regarding content of this report, please contact the undersigned.

MPE a division of Englobe

March 10, 2025

PERMIT TO PRACTICE
MPE, a division of Englobe Corp.
Signature
APEGA ID 77901
Date March 10, 2025
PERMIT NUMBER: P 7841
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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LIST OF TABLES

1 INTRODUCTION

1.1 OVERVIEW

The Municipal District of Pincher Creek (the MD) retained MPE a division of Englobe (MPE) to complete an assessment on the feasibility of regional wastewater collection and treatment. Both the Hamlet of Lundbreck and the Village of Cowley operate conventional lagoon systems. The proposed work would include reviews of the capacity and general condition of wastewater treatment infrastructure at both locations to establish a baseline of available treatment capacity to support future growth within each community. This document summarizes the key findings of those reviews. The detailed information is provided in the following Technical Memoranda, which are attached to this document.

- **Technical Memorandum No. 1**: Hamlet of Lundbreck Wastewater System Assessment
- **Technical Memorandum No. 2**: Village of Cowley Lagoon Assessment

The two technical memoranda and this summary document together comprise the Municipal District of Pincher Creek Regional Wastewater Treatment Assessment.

1.2 STUDY SCOPE

The focus of this report is to provide a comprehensive summary document, bringing together work completed in the two Technical Memoranda, and providing the MD with overall project scope, project costs, and conclusions and recommendations.

The general work scope items completed as part of the Assessment Summary are as follows:

- Preparation of a summary of each of the two Technical Memoranda:
  - Technical Memorandum No. 1: Hamlet of Lundbreck Wastewater System Assessment
  - Technical Memorandum No. 2: Village of Cowley Lagoon Assessment
- Discussion of the regulatory-related aspects of this proposed project,
- Discussion of the regional background of this proposed project,
- Identification of any potential required upgrades,
- Development of a summary of project cost estimates.
- Development of overall conclusions and recommendations,
- Development of final summary report document.

1.3 OBJECTIVE

The objective of this document is to provide the MD with a comprehensive overview of the entire work completed in the development of the Regional Wastewater Treatment Assessment. The intent is that this document brings together the conclusions and recommendations from each of the two Technical Memoranda to allow for the development of overall project conclusions and recommendations.

2 PROJECT BACKGROUND

2.1 OVERVIEW

The MD and the Village of Cowley wish to complete an assessment on the feasibility of current regional wastewater collection and treatment. Both the Hamlet of Lundbreck and the Village of Cowley currently operate conventional lagoon-based wastewater treatment systems. The Lundbreck system consists of two (2) facultative cells, one utilizing a surface aeration system, as well as one (1) storage cell which are all operated in series. The Cowley system consists of two (2) anaerobic cells, one (1) facultative cell, and one (1) storage cell. Operation of both systems is regulated through a registration under the Province of Alberta *Code of Practice for Wastewater Systems Using a Wastewater Lagoon*. Federally, only the Lundbreck system is required to report to Environment and Climate Change Canada under the requirements of the *Wastewater Systems Effluent Regulations* (WSER). Both are currently operating within compliance.

Previous studies have outlined the potential issues present at both sites. The Cowley Lagoon's transfer structures are in poor condition and should be replaced. Segments of the Lundbreck collection system requires cleaning and rehabilitation. Additionally, wastewater from the Lundbreck brewery may impact influent quality, adversely affecting biological processes in the lagoon and causing issues such as increased odors. In accordance with past recommendations, a surface aeration system was installed to address odor issues, yielding positive changes.

Additionally, the MD is interested in investigating the feasibility of accepting wastewater from the Hamlet of Beaver Mines or other sources at each location. No historical water flow records currently exist at either location, limiting understanding of available capacities long-term.

2.1.1 *Previous Study*

Wastewater treatment and disposal options for the Municipal District of Pincher Creek have been the subject of several previous studies. These studies were reviewed in detail in the preparation of this document:

- Village of Cowley Regional Infrastructure Master Plan – MPE a division of Englobe, November 2023
- Lundbreck Lagoon Kinetic Modeling – Banner Environmental Engineering Consultants Ltd., March 2021
- Lundbreck Sanitary Collection System Preliminary Inspections – Banner Environmental Engineering Consultants Ltd., November 2020
- Hamlet of Lundbreck: Lagoon Incident Report from Site Investigation of Odour Complaints – Banner Environmental Engineering Consultants Ltd., September 2020
- Beaver Mines Wastewater Options Study – MPE a division of Englobe, 2016

The *Regional Infrastructure Master Plan* completed by MPE in 2023 identified several deficiencies at the Village of Cowley and recommended potential upgrades for high priority items. Among these items, the transfer structures in the lagoons as well as a large portion of the village's wastewater mains were found to be in poor condition. As noted in the TMs, historical flow data was unavailable, but inspections concluded that there is currently ample capacity in the wastewater collection system, treatment process, and lift stations to handle current and projected flows.

The 2016 *Beaver Mines Wastewater Options Study* reviewed several options for handling wastewater generated at the Hamlet of Beaver Mines. The most viable alternatives were determined to be the construction of either a convention wastewater lagoon at Mill Creek or a regional sanitary forcemain connected to the wastewater lagoon at the Village of Cowley.

Past site investigations in Lundbreck determined that elevated populations of sulphuric bacteria were increasing odors in the area, which could potentially have adverse effects on regulatory compliance over time. Similarly, a 2020 preliminary inspection of the Lundbreck sanitary collection system was conducted to verify the cause of elevated sulphate levels reported by the MD, which identified areas of concern for ground infiltration and debris accumulation.

Kinetic modeling done in 2021 indicated that incorporating wastewater from the Lundbreck Brewery into the local wastewater treatment plant would exacerbate existing anoxic conditions and odor issues. Recommendations were provided that would allow the Lundbreck lagoons to receive brewery wastewater and minimize odor issues.

Past work has provided a baseline of knowledge but has not identified a clear path for accomplishing the treatment objectives and accepting additional wastewater from other sources, and doing so in a reasonable, comprehensive, and cost-effective manner for both locations.

2.1.2 Regulatory Review

Both the Hamlet of Lundbreck and the Village of Cowley utilize conventional lagoon systems designed and operated under the AEPA *Code of Practice for Wastewater Systems Using a Wastewater Lagoon* (September 2003) and the Alberta *Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems* (March 2013). Under these regulations, effluent from both lagoon systems may be discharged to a receiving water body between April 1st and November 30th over a period of no longer than three consecutive weeks unless otherwise permitted by the Director. The seasonal discharges to a receiving watercourse from wastewater lagoons are exempt from receiving water assessments.

The Federal *Wastewater Systems Effluent Regulations* (WSER) guideline limits under the *Fisheries Act* apply to any wastewater system that collects or is designed to collect an average daily flow of 100 m^3/day or more and deposit specified harmful substances into water frequented by fish. The Lundbreck Lagoon exceeds an average daily flow of 100 m^3/day; therefore, it is subject to the WSER guideline limits and effluent quality results for BOD, TSS, and un-ionized ammonia are required to be submitted annually to Environment Canada as per the Federal WSER. Currently, the Cowley Lagoon is not subject to this regulatory framework, but it is likely that it will be subject to this regulation should plans to haul wastewater from external sources be undertaken.

3 SUMMARY OF APPENDED DOCUMENTS

3.1 TECHNICAL MEMORANDUM NO. 1: HAMLET OF LUNDBRECK WASTEWATER TREATMENT ASSESSMENT

3.1.1 Document Overview

Technical Memorandum No. 1 assessed the current wastewater treatment system employed by the Hamlet of Lundbreck, including the sewage collection system and local sanitary dumps. It is understood that the MD wishes to leverage available capacity by temporarily accepting wastewater from the Hamlet of Beaver Mines or other sources. Accordingly, the present and future wastewater flows in the region were quantified using estimates based on population data and potable water usage. A baseline of available capacity was developed for a 25-year design period based on facility design data and estimated wastewater flows. This baseline was then used to generate conclusions and recommendations for future action, while any deficiencies identified by these analyses were addressed by a series of suggested upgrade projects.

3.1.2 Data Review

Data collected and reviewed as part of the development of this Technical Memorandum included data from numerous sources, including regulatory documents and design manuals from Alberta Environment and Protected Areas, and the Canadian Council of Ministers of the Environment. However, no historical flow records were available for Lundbreck Lagoon as there is no flow meter in the system to measure flow entering the lagoon. Due to the lack of existing wastewater flow information, wastewater production was estimated utilizing potable water usage and census information. Wastewater flow estimates were later validated by a 90-day flow monitoring program, which concluded that the values used in the report were conservative. Existing lagoon design data was based on record drawings provided by the MD of Pincher Creek and air photos.

3.1.3 Current and Projected Wastewater Flows

In absence of historical wastewater data, future sewage flows were calculated based on population projections assuming a growth rate of 1% per year. Table 3.1.3.1 illustrates the current and projected sewage flows, as current and projected population values. Based on the information in Table 3.1.3.1, the average day flow (ADF) in 2048 is estimated to be 146 m^3/day, the average dry weather flow (ADWF) is estimated to be 118 m^3/day, the peak dry weather flow (PDWF) is estimated to be 476 m^3/day and the peak wet weather flow (PWWF) is estimated to be 1,255 m^3/day.

Table 3.1.3.1 – Hamlet of Lundbreck Current & Projected Wastewater Flows

	Population	Harmon Peaking Factor	Avg Day Flow	Avg Dry Weather Flow	Peak Dry Weather Flow	Infiltration / Inflow	Peak Wet Weather Flow
			(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)
Current (2023)	295	4.08	114	92	375	737	1,113
Projected (2048)	378	4.03	146	118	476	779	1,255

Notes:

1. Avg Day Flow =	387	lpcd
2. Dry Weather Flow =	312	lpcd
3. Wet Weather Flow =	1,547	lpcd
4. Inflow/Infiltration =	2,500	lpcd

In June 2024, MPE installed equipment downstream of the Lundbreck lagoons as part of a 90-day wastewater monitoring program. The data was then used to confirm the estimated 2023 flows in this report were conservative. Based on the information in Table 3.1.3.1, the measured average day flow is 36 m^3/d, which is 61% less than the estimated ADWF, and the measured peak flow is 198 m^3/d, which was 47% less than the estimated PDWF.

Table 3.1.3.2 – Hamlet of Lundbreck Measured Wastewater Flows

Source	Parameter	Units		Percent Difference
		m^3/d	lpcd	
Measured	Avg Day Flow	36	122	
	Peak Day Flow	198	671	
Estimated (2023)	Avg Day Flow	114	386	-68%
	Avg Dry Weather Flow	92	312	-61%
	Peak Dry Weather Flow	375	1271	-47%
	Peak Wet Weather Flow	1113	3773	-82%

3.1.4 Existing Treatment Infrastructure Condition and Capacity Assessment

Inspection of the existing wastewater treatment system found that all cells, ponds, and treatment processes are currently in compliance with all existing regulations. Previous assessment by a third party indicated that the facultative cells suffer from strong odor production, but this has been mitigated by the recent addition of surface aeration. Process infrastructure otherwise has no notable characteristics. Calculated system volumes and retention times are listed in Table 3.1.4.1.

Table 3.1.4.1 – Hamlet of Lundbreck Sewage Treatment Volumes & Retention Times

Treatment Cell	Volume	Net E/P Change	Adjusted Cell Volume	Retention Time (Days)					
				Estimated Current (2023)	Measured Current (2024)	25 Year (2048)	Estimated Flow Including Beaver Mines (2023)	Measured Flow Including Beaver Mines (2024)	Alberta Environment Requirement
	(m^3)	(m^3)	(m^3)						
Cell 1 - Aerated	2,395	0	2,395	21	66	16	13	23	0
Cell 2 - Facultative	9,776	0	9,776	86	271	67	54	94	60
Cell 3 - Storage	53,555	-14,671	68,226	640	1,487	499	377	519	365
Total	**65,725**	**-14,671**	**80,396**	**747**	**1,824**	**583**	**444**	**636**	**425**

System capacity at Lundbreck Lagoon currently meets all retention time requirements and will continue to meet the requirements for the projected 25-year flow if nothing changes. Based on measured flows, the Lundbreck Lagoon can handle up to 110 m^3/day of additional capacity while remaining in compliance on cell retention times, which is adequate capacity to accommodate the full wastewater volume generated from the Hamlet of Beaver Mines. Practical retention times are expected to be shorter due to the dry period over which the flows were recorded. However, this is not expected to affect Lundbreck's ability to receive the full wastewater volume from the Hamlet of Beaver Mines.

3.1.5 Sanitary Dump Station

The MD currently maintains a sanitary dump station in the area. However, the current location is hazardous and difficult to access due to nearby power lines. Suggested locations for a replacement installation include the parcel north of Township Road 74A between Breckenridge Avenue and Hamilton Avenue, utilizing a portion of the road right-of-way east of the Hamlet, and the Public Works shop north of the Fire Hall.

3.1.6 Sewage Collection System Condition Assessment

The Hamlet of Lundbreck's wastewater collection system consists solely of a network of gravity flow pipes that drain into the wastewater treatment lagoons. The Hamlet does not utilize any lift stations. The pipes are flushed regularly during the water main flushing program.

Video inspection of all but one main determined that approximately 55% of the mains are unlikely to fail for at least 20 years ("good"), 43% are likely to fail within the next 5 to 20 years ("fair"), and 2% have already failed or are likely to fail within the next 5 years ("poor").

A poor section of the main was noted to be a material other than PVC and would be suitable for trenchless rehabilitation using cured-in-place-pipe lining. Additionally, some of the mains were noted to have high water levels in the pipe (25% and greater), which may be caused by obstructions from grease, sediment, or mineral build-up. As such, it is recommended that the MD improve their cleaning and flushing program to include regular root and mineral cutting, and grease removal where necessary.

3.1.7 Commercial/Industrial Wastewater Characterization

Currently, the Hamlet of Lundbreck does not accept commercial and industrial wastewater from the Lundbreck Brewery to maintain the healthy biological conditions of the lagoon. As part of the assessment done in this TM, wastewater from the Brewery was sampled and analyzed to determine potential effects on the wastewater stream. Down to Earth Labs Inc. was utilized to complete the laboratory analysis of wastewater samples entering the lagoon system and from the local Brewery's wastewater. MPE then took the laboratory results and conducted a theoretical mass balance to determine the effects of the Brewery waste on the wastewater system's current influent quality under different scenarios.

The assessment determined that the least impact on the lagoon was produced by utilizing a Brewery waste stream flow of 8 m^3/week (1.1 m^3/day). At this rate, it is likely that the volume of municipal flow will significantly dilute the comparatively low volume of Brewery wastewater. A comparison between the results of the mass balance under this flow rate and typical wastewater conditions indicates that the parameter of greatest concern (BOD_5) would still be below the current expectations for medium strength effluent and should have minimal effect.

To ensure there are no upsets to the biological process, the MD will need to monitor the resultant concentrations in the Lundbreck Lagoon. The discharge flow should be completed over a 24-hour period (i.e. limit the flow to 0.013 L/s). A flow meter has been installed at the Brewery to monitor the flow rate.

3.1.8 Document Conclusions and Recommendations

Upon completion of the Hamlet of Lundbreck Wastewater Treatment Assessment, the following key conclusions were developed:

- The majority of the wastewater collection system is comprised of PVC pipe in "good" to "fair" condition.
- The Lundbreck Lagoon treatment and storage cells have sufficient capacity for the current and 25-year design flows. No upgrades are required to increase capacity.
- No historical flow records are available for the Lundbreck Lagoon as there is no flow meter in the system to measure flow entering the lagoon.
- Due to the lack of existing wastewater flow information, wastewater production was estimated utilizing potable water usage.
    - Production estimates were validated by a 90-day flow monitoring program, which found the assumptions to be conservative.
- Existing lagoon design data was based on record drawings provided by the MD of Pincher Creek and air photos.
- The Lundbreck Lagoon treatment system has the capacity to accept up to 110 m^3/day if additional wastewater from the Hamlet of Beaver Mines (or other sources) temporarily.

- A theoretical Mass Balance of the introduction of the Brewery's high concentration wastewater into the Hamlet's municipal stream determined that the gradual introduction (≤ 8 m^3/week) of the Brewery's wastewater will not negatively impact the lagoon's wastewater influent quality

Additionally, the following recommendations were developed:

- Complete annual cleaning and flushing of the wastewater collection system.
- Complete a CIPP lining of the sewer main between MH 5 and MH 6.
- Install flow monitoring at the Brewery.
- Upgrade the existing Sanitary Dump Station with new Sanitary Dump Station at a new location.
- Resume the disposal of the Brewery's wastewater stream into the Hamlet's lagoon system on the following conditions:
    - Limit the volume of Brewery wastewater accepted to no more than 8 m^3 per week.
    - Introduce the Brewery wastewater to the collection system as a slow-release discharge (1.1 m^3/day discharge rate completed over a 24-hour period).
    - Monitor the Brewery wastewater for routine parameters to ensure there are no major increases in contaminant concentrations.
    - Monitor the resultant concentrations at the Lundbreck lagoon to ensure there are no upsets to the biological process.
    - Have an agreement in place with the Brewery that the MD can discontinue the acceptance at any time if a lagoon upset is discovered.
- The MD can proceed with accepting additional untreated wastewater at the Lundbreck Lagoon from the Hamlet of Beaver Mines (or other sources), up to a maximum of 110 m^3/day.

3.2 TECHNICAL MEMORANDUM NO. 2: VILLAGE OF COWLEY LAGOON ASSESSMENT

3.2.1 Document Overview

Technical Memorandum No. 2 reviewed the current wastewater treatment system employed by the Village of Cowley. Current and future wastewater flows in the region were quantified based on historical population data and potable water usage. A baseline of available capacity was developed for a 25-year design period based on facility design data and estimated wastewater flows to assess the feasibility of temporarily accepting wastewater from the Hamlet of Beaver Mines or other sources. This baseline was then used to generate conclusions and recommendations for future action, and any deficiencies identified by these analyses were used to develop suggested upgrade projects.

3.2.2 Data Review

Data collected and reviewed as part of the development of this Technical Memorandum included data from numerous sources, including regulatory documents and design manuals from Alberta Environment and Protected Areas, and the Canadian Council of Ministers of the Environment. However, no historical flow records were available for Cowley Lagoon as there is no flow meter in the system to measure flow entering the lagoon. Due to the lack of existing wastewater flow information, wastewater production was estimated utilizing potable water usage and census information. Wastewater flow estimates were later validated by a 90-day flow monitoring program, which concluded that the values used in the report were conservative. Existing lagoon design data was based on record drawings provided by the MD of Pincher Creek and air photos.

3.2.3 Current and Projected Wastewater Flows

In absence of historical wastewater data, future sewage flows were calculated based on population projections assuming a growth rate of 1% per year. Table 3.2.3.1 illustrates the current and projected sewage flows, as current and projected population values. Based on the information in Table 3.2.3.1, the average day flow (ADF) in 2048 is estimated to be 57 m^3/day, the average dry weather flow (ADWF) is estimated to be 46 m^3/day, the peak dry weather flow (PDWF) is estimated to be 187 m^3/day and the peak wet weather flow (PWWF) is estimated to be 659 m^3/day.

Table 3.2.3.1 – Village of Cowley Current & Projected Wastewater Flows

	Population	Harmon Peaking Factor	Avg Day Flow	Avg Dry Weather Flow	Peak Dry Weather Flow	Infiltration / Inflow	Peak Wet Weather Flow
			(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)	(m^3/d)
Current (2023)	220	4.13	44	36	148	441	588
Projected (2048)	283	4.09	57	46	187	472	659

Note:

1. Avg Day Flow =	202	lpcd
2. Dry Weather Flow =	162	lpcd
3. Wet Weather Flow =	792	lpcd
4. Inflow/Infiltration =	2,000	lpcd

In June 2024, MPE installed equipment downstream of the Cowley Lagoon as part of a 90-day wastewater monitoring program. The data was then used to confirm the estimated 2023 flows in this report were conservative. Based on the information in Table 3.1.3.1, the measured average day flow is 29 m^3/d, which is 19% less than the estimated ADWF, and the measured peak flow is 177 m^3/d, which was 20% greater than the estimated PDWF. However, the measured peak flow was 70% less than the PWWF of 588 m^3/d.

Table 3.2.3.2 – Village of Cowley Measured Wastewater Flows

Source	Parameter	Units		Percent Difference
		m^3/d	lpcd	
Measured	Avg Day Flow	29	132	
	Peak Day Flow	177	805	
Estimated (2023)	Avg Day Flow	44	200	-34%
	Avg Dry Weather Flow	36	164	-19%
	Peak Dry Weather Flow	148	673	20%
	Peak Wet Weather Flow	588	2673	-70%

3.2.4 *Existing Treatment Infrastructure Condition and Capacity Assessment*

Inspection of the existing wastewater treatment system found that all cells, ponds, and treatment processes are currently in compliance with all existing regulations. No notable characteristics have been identified during the inspection, except for the condition lagoon transfer structures. The transfer structures around the lagoons were inspected in a previous inspection done by MPE and were found to be in extremely poor condition. These structures have not been replaced or rehabilitated since then. Calculated system volumes and retention times are listed in Table 3.2.4.1.

Table 3.2.4.1 – Village of Cowley Sewage Lagoon Treatment Volumes & Retention Times

Treatment Cell	Volume	Net E/P Change	Adjusted Cell Volume	Retention Time (Days)					
				Estimated Current (2023)	Measured Current (2024)	25 Year (2048)	Estimated Flow Including Beaver Mines (2023)	Measured Flow Including Beaver Mines (2024)	Alberta Environment Requirement
	(m^3)	(m^3)	(m^3)						
Cells 1 & 2 - Anaerobic	2,650	-	2,650	60	91	46	24	26	0
Cell 3 - Facultative	15,250	-	15,250	343	525	267	138	158	60
Cell 4 - Storage	80,400	-16,500	96,900	2,179	3,341	1,699	877	1,009	365
Total	**98,300**	**-16,500**	**114,800**	**2,581**	**3,957**	**2,013**	**1,039**	**1,193**	**425**

System capacity at the Cowley Lagoon currently meets all retention time requirements and will continue to meet the requirements for the projected 25-year flow. To keep the facultative cell retention time in compliance, the Cowley Lagoon can handle up to a maximum of 225 m^3/day of additional wastewater based on the measured ADF from the Village. This is more than sufficient capacity to accommodate both the raw wastewater from the Hamlet of Beaver Mines as well as the demands of the 25-year projected population. Accepting additional capacity resulting in an average day flow greater than 100 m^3/day will put this system under the jurisdiction of the WSER.

3.2.5 Document Conclusions and Recommendations

Upon completion of the Village of Cowley Wastewater Treatment Assessment, the following key conclusions were developed:

- The Cowley Lagoon treatment and storage cells have sufficient capacity for the current and 25-year design flows. No upgrades are required to increase capacity.
- No historical flow records are available for the Cowley Lagoon as there is no flow meter in the system to measure flow entering the lagoon.
- Due to the lack of existing wastewater flow information, wastewater production was estimated utilizing potable water usage.
    - Production estimates were validated by a 90-day flow monitoring program, which found the assumptions to be conservative.
- Existing lagoon design data was based on record drawings provided by the MD of Pincher Creek and air photos.
- The Cowley Lagoon's transfer structures are in poor condition and require replacement.
- The Cowley Lagoon treatment system has the capacity to accept up to 225 m^3/day additional wastewater from the Hamlet of Beaver Mines (or other sources) temporarily. Accepting more than an additional 71 m^3/day at current flow will require WSER reporting.

Additionally, the following recommendations were developed:

- Install replacements for existing lagoon transfer structures.
- The MD can proceed with accepting additional untreated wastewater at the Cowley Lagoon from the Hamlet of Beaver Mines (or other sources) up to a maximum of 225 m^3/day.
    - If the resulting flow exceeds an average of 100 m^3/day, the MD should ensure they submit effluent quality results for BOD, TSS, and un-ionized ammonia to Environment Canada as per the Federal WSER Guidelines and that annual WSER reporting requirements are satisfied.

4 DISCUSSION

4.1 PROJECT SCOPE

Assessments completed in Technical Memoranda Nos. 1 and 2 identified four areas of concern:

- The sanitary sewer line between Manhole 5 to Manhole 6 is in poor condition and should be rehabilitated,
- There is currently no way to accurately monitor commercial/industrial wastewater discharge from the Lundbreck Brewery into the collection system,
- Lundbreck's sanitary dump station is in a hazardous and difficult to access location due to nearby power lines,
- Various aspects of Cowley Lagoon's transfer structures are significantly deteriorated or not functional.

Accordingly, the scope of this project includes four items developed to address the issues:

- Installation of CIPP lining to rehabilitate the sewage main between Manhole 5 and Manhole 6,
- Installation of a flow meter at Lundbreck Brewery to monitor flow into the collection system,
- Installation of a new sanitary dump station for the Lundbreck Lagoons at a more optimal location,
- Replacement of lagoon transfer structures at the Cowley Lagoon.

4.2 PROJECT COSTS

Estimates of project costs have been developed for this project, including costs for construction, equipment, and related operational and maintenance. These cost estimates provided are an opinion of probable cost and are a function of many factors that can change with time and hence must not be relied upon as the actual cost. Table 4.2.1 aggregates the results of cost assessments included in TM No. 1 and TM No. 2.

Table 4.2.1: Aggregated Order of Magnitude Costs for Wastewater System Projects

Location	Project	Order of Magnitude Cost
MH 5 to MH 6	CIPP Lining	$57,000
Lundbreck Brewery	Flow Meter	$25,000
Sanitary Dump Station	New Sanitary Dump Station	$243,000
Wastewater Lagoon Survey	Sludge Survey	$13,000
	Subtotal	***$338,000***
Cowley Lagoon	Lagoon Transfer Structure Replacements	$460,000
	Subtotal	***$460,000***
	Total Estimated Wastewater Systems Costs	***$798,000***

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 GENERAL CONCLUSIONS

The Municipal District of Pincher Creek Wastewater Treatment Assessment Summary was developed in a series of three documents, each with its own set of objectives and with each arriving at a series of conclusions and recommendations. Overall, the objective of this project was to assess the capacity and condition of regional wastewater infrastructure to establish a baseline of available treatment capacity to support future growth and identify further opportunities for regional collaboration.

Taking into account the entirety of the work completed as part of this project, the following general conclusions can be made:

- Both the Lundbreck Lagoon and Cowley Lagoon treatment and storage cells have sufficient capacity for current and 25-year design flows. No upgrades are required to increase capacity.
- No historical flow records are available for the Lundbreck and Cowley Lagoons as there are no flow meters in the systems to measure flow entering the lagoons.
- Due to the lack of existing wastewater flow information, wastewater production must be estimated using potable water usage.
    - Estimates were validated by a 90-day flow monitoring program, which found the assumptions to be conservative at both locations.
- Existing lagoon design data was based on record drawings provided by the MD of Pincher Creek and air photos.
- Both lagoon treatment systems can accept additional wastewater from the Hamlet of Beaver Mines (or other sources) temporarily, up to a certain threshold specific to each location.
    - Hamlet of Lundbreck: Up to 110 m^3/day
    - Village of Cowley: Up to 225 m^3/day with WSER reporting or 71 m^3/day without WSER reporting
- Implementation of a regional wastewater pumping system is not recommended.
- Four areas of concern were identified, and upgrade projects were suggested to provide a path forward for the MD. Total project costs amount to $785,000 divided into $325,000 for work to be done for the Lundbreck Lagoon and $460,000 for work to be done for the Cowley Lagoon.

5.2 GENERAL RECOMMENDATIONS

The primary objective of this Assessment Summary was to provide the MD with a clear path forward to support growth within the region by ensuring adequate wastewater collection, treatment and disposal services are provided. This report provides the MD with the technical content and economic information necessary to begin the process of moving any future plans forward.

Given that, the following general recommendations should be followed:

- Proceed with the projects outlined in Section 4.
- Adhere to any site-specific recommendations included in Section 3.1.8 and 3.2.5.

- The MD can proceed with accepting additional untreated wastewater at both locations from the Hamlet of Beaver Mines (or other sources), up to a certain threshold:
    - Hamlet of Lundbreck: Up to 110 m^3/day
    - Village of Cowley: Up to 225 m^3/day with WSER reporting or 71 m^3/day without WSER reporting
- The MD should ensure they submit effluent quality results for BOD, TSS, and un-ionized ammonia to Environment Canada as per the Federal WSER Guidelines and that annual WSER reporting requirements are satisfied for the Lundbreck Lagoons, as well as the Cowley Lagoons if flows exceed the WSER reporting threshold.

6 REFERENCES

(1) Alberta Environment, "Code of Practice for Wastewater Systems Using a Wastewater Lagoon", Environmental Protection and Enhancement Act and the Wastewater and Storm Drainage Regulation, Edmonton, Alberta, September 2003.

(2) Alberta Environment, "Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems", Drinking Water Branch, Environmental Policy Branch, Environmental Assurance Division, Edmonton, Alberta, March 2013.

(3) Banner Environmental Engineering Consultants Ltd., "Lundbreck Wastewater Treatment Lagoon Rehabilitation – Aeration System Proposal", October 2020.

(4) Banner Environmental Engineering Consultants Ltd., "Lundbreck Lagoon – Kinetic Modeling", March 2021.

(5) Environment Canada, "Wastewater Systems Effluent Regulations", August 2023.

(6) Metcalf & Eddy, Inc., "Wastewater Engineering Treatment and Reuse, 4th Ed.", McGraw-Hill, New York, NY, 2003

(7) US Environmental Protection Agency, "Principles of Design and Operations of Wastewater Treatment Pond Systems for Plant Operators, Engineers, and Managers", August 2011.

APPENDIX A:

TECHNICAL MEMORANDUM NO. 1
HAMLET OF LUNDBRECK WASTEWATER SYSTEM ASSESSMENT

APPENDIX B:

TECHNICAL MEMORANDUM NO. 2
VILLAGE OF COWLEY LAGOON ASSESSMENT

Administration Guidance Request

TITLE: Community Events Board - Procurement			
PREPARED BY: David Desabrais		**DATE: March 18th, 2025**	
DEPARTMENT: Utilities & Infrastructure			
David Desabrais	25/03/19	**ATTACHMENTS:** **1. Location & LED Options**	
Department Supervisor	**Date**		
APPROVALS:			
David Desabrais	25/03/19	**Roland Milligan**	2025/03/19
Department Director	**Date**	**CAO**	**Date**

RECOMMENDATION:

That Council direct Administration to proceed with a procurement direction for the Community Events Board.

BACKGROUND:

The 2025 Capital Budget includes a budget for *"a single-sided electric community events board [...] on the Admin Building"*. Prior to submitting a sign permit for the Town of Pincher Creek, we need to decide on the proposed option.

Install

Administration proposes installing on the South side of the Admin building, above or to West side of the windows to keep within the total budget cost and highway signage guidelines

- The max possible size is about 5 ft. x 10 ft. *(Attachment #1)*. For reference:
  - The Eco Centre details sign is 4 ft. x 8 ft.
  - The Lost Things Distillery Sign is about 6.5 ft. x 4 ft.

Options

There are various options available for electronic and/or LED signs, varying in quality and size. Administration did a search for suppliers and installers local to Southern Alberta close to the budget price.

Administration Guidance Request

The under budget options are summarized in the following table in order of total estimated cost:

Supplier/ Installer Information	Manufacturer/ Packager	Sign Description	Estimated Total Cost Compared to Budget
LA Neon, Lethbridge, AB	Daktronics, South Dakota, USA	• 4 ft. x 8 ft. (32 ft^2) • Red LED characters only • Max 36 character phrases (5-9 words) • 2 year warranty on sign	60%
LA Neon, Lethbridge, AB	Daktronics, South Dakota, USA	• 5 ft. x 10 ft. (50 ft^2) • Red LED characters only • Max 64 character phrases (9-16 words) • 2 year warranty on sign	82%
Sign City, Lethbridge, AB	Genoptic, Calgary, AB	• 4 ft. x 8 ft. (32 ft^2) • LED coloured display (no character limits, images available) • 10 year warranty + license	98%

Installing a Full LED 5 ft. x 10 ft. sign would require a budget increase between 17-35%, depending on the selected installer and brand.

Guidance Request

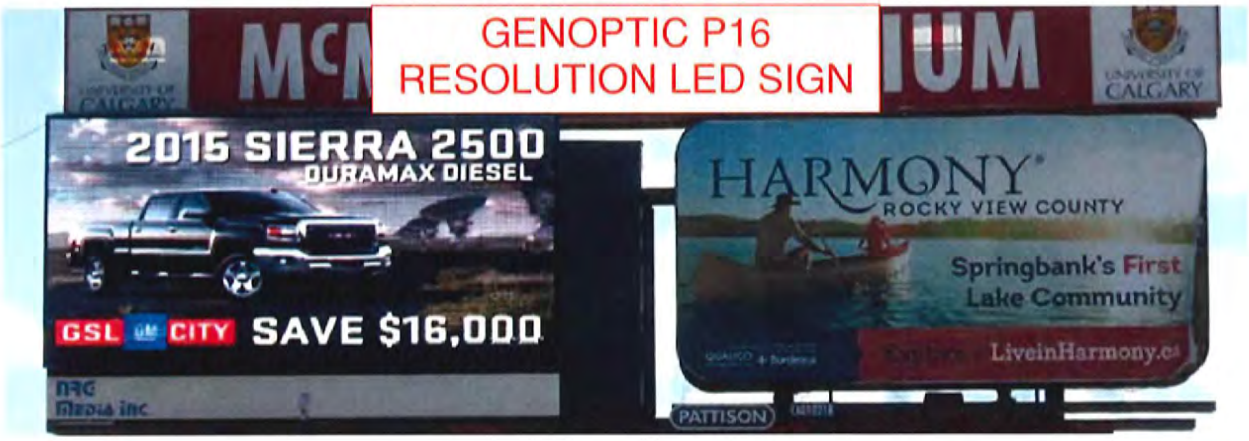
As this capital project is being driven by Council preference, and equivalent comparison is not possible, Administration is looking for direction on preference for the proposed sign as well as install location prior to completing a purchase order.

FINANCIAL IMPLICATIONS:

- No new implications if chosen option is within the $30,000 budget


5 ft x 10 ft
5 ft x 10 ft alternate location
ADMIN BUILDING INSTALL LOCATION OPTIONS


OPEN
Happy Hour
$1 Drinks
2 - 4
All Summer
DAKTRONICS RED LED SIGN


GENOPTIC P16 RESOLUTION LED SIGN
2015 SIERRA 2500
DURAMAX DIESEL
GSL GM CITY SAVE $16,000
HARMONY
ROCKY VIEW COUNTY
Springbank's First Lake Community
LiveinHarmony.ca
PATTISON

CHIEF ADMINISTRATIVE OFFICER'S REPORT

March 10, 2025 to March 20, 2025

Discussion:

Mar 10	File/Folder/Email Cleanup Information Session – for new server install
Mar 11	Council Committee and Council Meeting
Mar 12	Meeting with Town CAO and Dir. Fin. Re: PCESC Bylaw Review
Mar 12	Joint Health and Safety Committee Meeting
Mar 12	Meeting With Village of Cowley
Mar 13	PCREMO Core Working Group Meeting
Mar 13	9-11 Addressing Discussion for Alberta Parks Developments
Mar 17	Senior Management Team Meeting

Upcoming

Mar 25	Council Committee and Council Meeting
Mar 26	Utility Rates Open House - Lundbreck
Mar 27	Monthly Admin Staff and Safety Meetings

RECOMMENDATION:

That Council receive for information, the Chief Administrative Officer's report for the period March 10, 2025, to March 20, 2025.

Prepared by: CAO, Roland Milligan Date: March 19, 2025

Respectfully presented to: Council Date: March 25, 2025

ADMINISTRATIVE SUPPORT ACTIVITY
March 7, 2025 to March 19, 2025

Correspondence from the Last Council:

- Denial to Sell Land
- Northback – Thank you for attending
- Livingstone Landowners Group – MD position
- STARS – Thank you for attending

Advertising/Social:

- Volunteer Appreciation Dinner
- AES Summer jobs have been filled
- "Code of the West" reminder
- CEIP Program
- Employment Opportunity – Temp Full Time Receptionist

Other Activities:

- Pincher Creek & District Hometown Award Meeting
- Assisted HR with job postings
- Utility insert with notification of open house and survey

Invites to Council:

- Rural Crime Watch – has not responded
- Community Foundation – April 8, 2025

Upcoming Dates of Importance:

- Public Hearing 1354-25 – March 25, 2025
- Regular Committee, Council – March 25, 2025
- Utility Rate Open House – March 26, 2025
- Regular Committee, Council – April 8, 2025
- Coffee with Council Summerview – April 15, 2025
- Regular Committee, Council – April 22, 2025
- Pincher Creek & District Trade Show – April 25 and 26, 2025
- Volunteer Appreciation Dinner – April 30, 2025

Recommendation to Council

TITLE: CORPORATE POLICY C-CO-005 MUNICIPAL BOARDS, COMMITTEES AND APPOINTMENTS	
PREPARED BY: JESSICA MCCLELLAND	**DATE: March 18, 2025**
DEPARTMENT: ADMINISTRATION	
Department Supervisor / **Date**	**ATTACHMENTS: Draft C-CO-005 MUNICIPAL BOARDS, COMMITTEES AND APPOINTMENTS**

APPROVALS:

Department Director	**Date**	**CAO**	**Date** 2025/03/19

RECOMMENDATION:

That Council approve policy C-CO-005 Municipal Boards, Committees and Appointments.

BACKGROUND:

Administration has been directed to continue updating the Corporate Policy Manual. This policy hasn't been updated since 2023 and required bring up-to-date to ensure all Municipal boards and committees are on the list for appointments.

FINANCIAL IMPLICATIONS:

None at this time.

MD OF PINCHER CREEK NO. 9

CORPORATE POLICY

C-CO-005

TITLE: MUNICIPAL BOARDS, COMMITTEES AND APPOINTMENTS

Approved by Council	Date: January 23, 2009
Revised by Council	Date: June 13, 2023
Revised by Council	Date: September 26, 2023
Revised by Council	*Date: March 25, 2025*

PURPOSE OF POLICY

The Municipal District of Pincher Creek No. 9 (the "MD") appoint members on various Municipal boards and committees. All Municipal District of Pincher Creek members are appointed annually at the Organizational meeting.

POLICY STATEMENT

1. List of Municipal Boards and Committees.

DEFINITIONS

2. For the purpose of this policy, the following definitions shall apply:
   a) "Council" shall mean a person who is an official by an election to represent the Municipal District of Pincher Creek No. 9.
   b) "Members at Large" shall mean community members appointed by Council to sit on boards and committees.

BOARDS AND COMMITTEES

3. AGRICULTURAL SERVICE BOARD

Purpose: to administer agricultural related programs through the Agricultural Fieldman mainly in the areas of weed and pest control and soil conservation

Composition:

- Two (2) Councillor's
  - One Alternate
- Four (4) Members at Large
- CAO to attend all Agricultural Service Board meetings (non Voting) (resolution 99/610).

4. AGRICULTURAL SERVICE BOARD APPEAL COMMITTEE

Purpose: To hear and determine appeals brought forward to the M.D. by recipients of notices issued under the aforementioned acts.

Composition:

- Three (3) members, with membership encompassing Council members not sitting on Agricultural Service Board, members at large or a combination of both.

5. AIRPORT COMMITTEE

Purpose: Advise Council on airport opportunities and issues, policy and programs within the Southwestern Alberta Region with specific focus on the Pincher Creek Airport (CZPC).

Composition:

- Two (2) Councillors
    - One Alternate

6. ALBERTA SOUTHWEST REGIONAL ALLIANCE

Purpose: Alberta SouthWest Regional Alliance Ltd. (AlbertaSW) is a Regional Economic Development Alliance (REDA) of 16 communities working together to help each other succeed.

Composition:

- One Councillor
    - One Alternate

7. ALTERNATIVE LAND USE SYSTEM PARTNERSHIP ADVISORY COMMITTEE (ALUS PAC)

Purpose: ALUS provides expertise, resources and direct financial support to communities where farmers and ranchers build nature-based solutions on their land to deliver ecosystem services to sustain agriculture, help build community resilience and fight climate change and biodiversity loss for the benefit of future generations.

Composition:

- One Councillor
- Three (3) Members at Large

8. BEAVER MINES COMMUNITY ASSOCIATION

Purpose: Community Association for Beaver Mines.

Composition:

- Division 3 Councillor

9. CASTLE MOUNTAIN COMMUNITY ASSOCIATION

Purpose: Community Association for Castle Mountain Resort.

Composition:

- Division 3 Councillor

10. CHINOOK REGIONAL SUBDIVISION AND DEVELOPMENT APPEAL BOARD (SDAB)

Purpose: acts as an appeal body against decisions of the Municipal Planning Commission and the Development Officer regarding development permits and subdivision decisions of Council and the Oldman River Intermunicipal Services Agency.

Composition:

- One Member at Large

11. CROWSNEST- PINCHER CREEK LANDFILL ASSOCIATION

Purpose: operating a regional landfill to provide safe and effective disposal of solid wastes (garbage) originating within the boundaries of participating municipalities

Composition:

- One Councillor
    - One Alternate

12. CHINOOK ARCH REGIONAL LIBRARY BOARD

Purpose:

Composition:

- One Member of Council

13. EMERGENCY ADVISORY COMMITTEE (EAC)

Purpose:

Composition:

- 2 Members of Council
- 1 Alternate Member of Council

14. FAMILY AND COMMUNITY SUPPORT SERVICES (FCSS)

Purpose: Agreement between Her Majesty in Right of Alberta and Town of Pincher Creek to provide for the establishment, administration, and operation of a Family and Community Support Services Program in accordance with the Family and Community Support Services Act and Regulation.

Composition:

- One Councillor
  - One Alternate

15. FOOTHILLS LITTLE BOW ASSOCIATION

Purpose: an association of Southern Alberta municipalities which are members of the AAMD&C which meets in Lethbridge to discuss regional concerns and issues

Composition:

- Reeve is appointed as a Director and all Councillors are members

16. HEALTH PROFESSIONALS ATTRACTION AND RETENTION

Purpose:

Composition:

- 1 Member of Council

~~17. HIGHWAY 3 TWINNING DEVELOPMENT ASSOCIATION~~

~~Purpose: Members to this committee must be approved by the Association Board.~~

~~Composition:~~

- ~~One Councillor~~
  - ~~One Alternate~~

17. INTERCOLLABORATIVE FRAMEWORK COMMITTEE WITH THE TOWN OF PINCHER CREEK (ICF)

Purpose: As per Bylaw No. 1526, Intermunicipal Development Plan.

Composition:

- Two (2) Councillors
  - One Alternate

INTERMUNICIPAL DEVELOPMENT COMMITTEES

Purpose: Provide for integrated and strategic planning, delivery and funding of intermunicipal services; Allocate scarce resources efficiently in the providing of local services; ensure municipalities contribute funding to services that benefit their residents. Composition is two Councilors in Divisions adjacent to the shared boundaries.

18. TOWN OF PINCHER CREEK

Composition:

- Two (2) Councillors
  - One Alternate

19. MUNICIPALITY CROWSNEST PASS

Composition:

- Two (2) Councillors
  - One Alternate

20. MD OF RANCHLANDS

Composition:

- Two (2) Councillors
  - One Alternate

21. MD OF WILLOW CREEK

Composition:

- Two (2) Councillors
  - One Alternate

22. CARDSTON COUNTY

Composition:

- Two (2) Councillors
    - One Alternate

23. JOINT FUNDING SUB COMMITTEE

Purpose: Review application and process, prior to being approved by Councils.

Composition:

- Two (2) Councillors
    - One Alternate

~~25. JOINT HEALTH AND SAFETY COMMITTEE (JHSC)~~

~~Purpose:~~

- ~~Council is authorized for Joint Health and Safety Committee Meetings~~
- ~~Identifies opportunities and recommends initiatives to promote physical and psychological health and safety and continuous improvement in the operation and effectiveness of the Municipal District of Pincher Creek No. 9 Health and Safety Program~~
- ~~Helps department management fulfill their obligation to address employee concerns related to hazardous activities or conditions that affect employee health and safety across the department's business operations~~
- ~~Promotes and encourages employees to participate in health and safety committees and events at the workplace~~
- ~~Will maintain worker confidentiality when required~~
- ~~It is understood that these terms of reference shall not amend, alter, subtract from, add to or qualify in any way, the OHS Act, or the terms of collective agreements between the Employer and the union that is the certified bargaining agents~~
- ~~Any amendments to the OHS Act or collective agreement provisions will be incorporated into the terms of reference, as applicable~~

~~Composition:~~

- ~~One Member of Council~~
    - ~~One Alternate~~

24. LUNDBRECK CITIZENS COUNCIL

Purpose: Community Association in Lundbreck.

Composition:

- One Member of Council (Division 5)

25. MUNICIPAL PLANNING COMMISSION

Purpose: to administer the Land Use By-law, which regulates Development within the Municipality

Composition:

- All members of Council
  - Two (2) Members at Large

~~28. MUNICIPAL SCHOLARSHIP COMMITTEE~~

~~Purpose: To administer a Municipal Scholarship for each of the three High Schools in the community (Matthew Halton, St. Micheal's and Livingstone).~~

~~Composition:~~

- ~~One Member of Council~~

26. MUNICIPAL ENERGY COMMITTEE (TOWN)

Purpose:

Composition:

- One member of Council

27. OLDMAN RIVER REGIONAL SERVICES COMMISSION – BOARD OF DIRECTORS

Purpose: to provide planning services to the Municipality

Composition:

- One Councillor
  - One Alternate

28. PINCHER CREEK EMERGENCY SERVICES

Purpose: a joint venture with the Town of Pincher Creek to provide fire protection and ambulance services to the residents of the Municipality

Composition:

- Two (2) Councillors
  - One Alternative

29. PINCHER CREEK & DISTRICT HOMETOWN AWARD

Purpose: a joint venture with the Town, where Council recognizes and wishes to support post-secondary education applicants who contribute meaningfully to their community.

Composition:

- *One MD Councillor*
- *One Town Councillor*
- *Two (2) members at large from the community*

30. PINCHER CREEK FOUNDATION - CRESTVIEW LODGE

Purpose: to provide comfortable and affordable housing to local senior citizens

Composition:

- Two (2) Councillors
  - One Alternative

31. PINCHER CREEK JOINT EMERGENCY MANAGEMENT COMMITTEE (EAC)

Purpose: To act as an agent of the Council to carry out the Council's statutory powers and obligations as prescribed in the Emergency Management Bylaw.

Composition:

- One Councillor
  - One Alternate

32. PINCHER CREEK MUNICIPAL LIBRARY/CHINOOK ARCH LIBRARY BOARD

Purpose: to provide library services to residents through the management and operation of the Pincher Creek and District Public Library Board facilities

Composition:

- One Councillor
- Three (3) Members at large (Pincher Creek Library only)

33. PINCHER CREEK REGIONAL RECREATION ADVISORY BOARD

Purpose: continue to support certain recreational and cultural facilities and programs in the Town of Pincher Creek for the benefit of the residents of the community.

Composition:

- Member at Large

34. POLICE ADVISORY COMMITTEE

Purpose: Formalize the process for receiving input from the community and the partnership between the community, the RCMP and local government.

Composition:

- One Councillor

35. REGIONAL ASSESSMENT REVIEW BOARD

Purpose: Oldman River Regional Services Commission and Municipalities within the region jointly established a Regional Assessment Review Board to exercise the functions of a Local Assessment Review Board (LARB) and the function of a Composite Assessment Review Board (CARB) under the provisions of the Municipal Government Act in respect of assessment complaints made by taxpayers of a Regional Member

Composition:

- One Councillor

36. SOIL CONSERVATION ACT APPEAL COMMITTEE

Purpose: Requirement of Soil Conservation Act.

Composition:

- Three (3) Councillors (not on ASB) or Members at Large

37. TOWN OF PINCHER CREEK HOUSING COMMITTEE

Purpose: Study and provide advice regarding matters related to housing.

Composition:

- One Councillor
    - One Alternate

38. WEED CONTROL & AGRICULTURAL ACT APPEAL COMMITTEE

Purpose: To hear and determine appeals brought forward to the MD by recipients of notices issued under the Weed Control Act, and the Agricultural Pests Act.

Composition:

- Three (3) members, with membership encompassing Council members not sitting on Agricultural Service Board, members at large or a combination of both.

39. WATERTON BIOSPHERE

Purpose: As part of UNESCO's 'Man and the Biosphere' Program, the Waterton Biosphere Reserve strives to achieve a sustainable balance between three primary goals:

- Conservation of Biodiversity – to contribute to the conservation of landscapes, ecosystems, species and genetic variation.
- Sustainable Development – to encourage economic and human development which is socially, culturally, and environmentally sustainable (meets the needs of the present, without compromising the needs of future generations).
- Capacity Building – to improve the ability and potential of our communities to make sound decisions for conservation and resource use through research, monitoring, education and information exchange.

Composition:

- One Councillor

40. WEED CONTROL ACT & AGRICULTURAL PEST ACT APPEAL COMMITTEE

Purpose: Requirement per the Weed Control Act and the Agricultural Pest Act.

Composition:

- Three (3) members, with membership encompassing Council members not sitting on Agricultural Service Board, members at large or a combination of both.

Rick Lemire
Reeve

Roland Milligan
Chief Administrative Officer

Recommendation to Council

TITLE: CORPORATE POLICY C-CO-007 PINCHER CREEK & DISTRICT HOMETOWN AWARD COMMITTEE			
PREPARED BY: JESSICA MCCLELLAND		**DATE: March 18, 2025**	
DEPARTMENT: ADMINISTRATION			
			ATTACHMENTS: Draft C-CO-007 PINCHER CREEK & DISTRICT HOMETOWN AWARD COMMITTEE
Department Supervisor		**Date**	
APPROVALS:			
Department Director	**Date**	**CAO**	**Date**

RECOMMENDATION:

That Council approve policy C-CO-007 Pincher Creek & District Hometown Award Committee;

That Michelle Spencer be appointed as the MD Community Member at Large to the Pincher Creek & District Hometown Award Committee.

BACKGROUND:

Members at large appointed to MD Committees are paid according to the C-CO-01, Council Remuneration and Expenses Policy. The Pincher Creek & District Hometown Award Committee is new, and needs approval of policy and appointment of member at large.

FINANCIAL IMPLICATIONS:

Payment for committee member at large for required meetings.

M.D. OF PINCHER CREEK NO. 9

CORPORATE POLICY

C-CO-007

TITLE: PINCHER CREEK & DISTRICT HOMETOWN AWARD COMMITTEE

Approved by Council **Date: March 25, 2025**

Purpose of Policy

To appoint committee members to the Pincher Creek & District Hometown Award Committee.

Purpose:

To review, and choose, applicants that apply for the Pincher Creek & District Hometown Award.

Application of this Policy:

The committee will be comprised of two MD members, with membership encompassing a Councillor and a member at large from the Municipality.

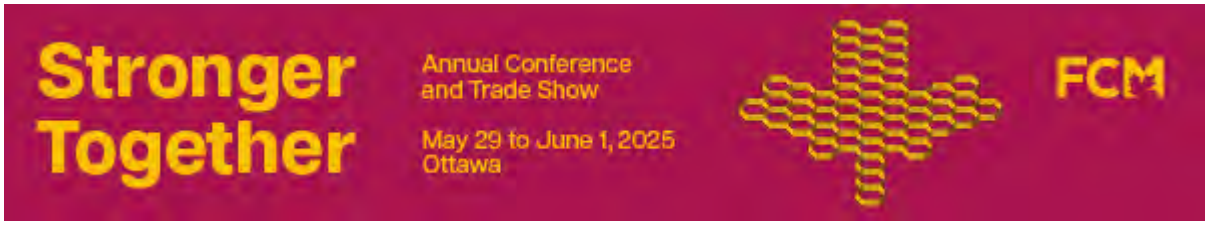
Member at large will selected be and appointed by Council. Committee members will be appointed annually at the Organizational Meeting of Council.

Remuneration will be paid to members according to the C-CO-01, Council Remuneration and Expenses Policy.

Rick Lemire
Reeve

Roland Milligan
Chief Administrative Officer

March 11, 2025



Join more than 1,500 elected municipal officials from May 29 to June 1 in Ottawa

In an ever-changing economic and political landscape marked by tensions between Canada and the U.S., we must unite to share our challenges and implement solutions that will make a real difference within our communities.

This is why we invite you to join us at FCM's 2025 Annual Conference and Trade Show, which will take place May 29 to June 1 in our Nation's Capital, Ottawa.

In the coming months, major decisions will influence Canada's future. Municipal governments must ensure their voices are heard. With the theme ***Stronger Together—Local Strength****, National Prosperity*, our conference will highlight the essential role local governments have as the heart of our country and key drivers of economic growth.

This year's FCM conference will also feature a captivating **rural stream** component highlighting the unique challenges and opportunities faced by rural, northern and remote communities. Whether you represent a large city or a small town, our comprehensive program will offer tailored ideas and resources to address your reality.

Before registering:

- **Explore the 2025 conference program:** browse through the workshop themes and wide selection of activities.
- **Discover our study tours**: As you register, make sure to reserve your spots on one of our many exciting **study tours**. During these visits, you will discover municipal projects and facilities in Ottawa and find inspiration on how to tackle the challenges in your community. Please note that space is limited.
- **Plan your trip to Ottawa**: check out the various **travel** and **accommodation** options available and enjoy special discounted offers.

Don't miss the opportunity to be at the heart of the action during this crucial time for our municipalities! Make sure to register before April 23 to take advantage of the early bird discount.

REGISTER NOW

FEDERATION OF CANADIAN MUNICIPALITIES
FÉDÉRATION CANADIENNE DES MUNICIPALITÉS

24 Clarence Street
Ottawa, Ontario K1N 5P3
T. 613-241-5221
fcm.ca

Outlook

Dolphins Swim Club Sponsorship Request

From Eliza Grose <grose.eliza@gmail.com>
Date Mon 2025-03-17 12:21 PM
To MDInfo <MDInfo@mdpinchercreek.ab.ca>

2 attachments (4 MB)
Sponsorship Letter 2025-2027 (2) (1).pdf; Dolphins Sponsorship Poster 2025 (2).pdf;

Good Afternoon,
Our Pincher Creek Dolphins swim club is looking for your support. Last season, over half of our members were MD of Pincher Creek residents. We would love to proudly wear the MD of Pincher Creek logo on our shirts for the next 3 years and celebrate the great place we call home. Our team shirts are worn to every swim meet we attend all across Alberta and in the off season our members wear them everywhere they go.
Please see the attached letter and poster for more information. Don't hesitate to reach out if you have any questions or what like a more formal ask or presentation from the swimmers.
Cheers,

Eliza Grose
Pincher Creek Dolphins Swim Club President

Pincher Creek Dolphins Swim Club
Box 855 Pincher Creek, AB T0K 1W0
pcdolphinswimclub@gmail.com

Dear Community Partner,

The **Pincher Creek Dolphins Swim Club** first put swimmers in the water in 1961. Over 64 years and counting, our club has provided a positive environment for generations of children, ranging in age from 4 to 17, to be inspired, remain active and leave a lasting legacy that will continue for the rest of their lives. Many of our current swimmers have parents who once swam as a Dolphin, and some still do!

More than ever, our athletes are excited to be gearing up for our 2025 season and are once again planning on representing our community with pride. The Pincher Creek Dolphins are looking for Community Partners to sponsor our Club and local athletes. Your support will assist the Club in continuing to be a strong contender in the sport of summer swimming and further the dreams and aspirations of our swimmers. Together, with ongoing fundraising efforts by our athletes and families, we will be able to deliver high quality coaching and mentorship to local children as we endeavor to keep registration fees affordable. The Dolphins host their annual swim meet which brings 300+ athletes, coaches, officials and families to Pincher Creek and we encourage them to support our local businesses.

The competitive swim season starts in May and goes through to late August, during which our swimmers will be traveling to compete in swim meets across Southern Alberta, finishing up with Provincials in Edmonton. With an average of 40 swimmers in our club, each eagerly wearing our team shirt embossed with your logo, it creates excellent exposure and brand recognition for your company.

We would be pleased to provide you with a copy of our swim meet schedule once available so you could meet the swimmers and see firsthand how your generous donation assists us in our development of strong, competitive swimmers.

Thank you for your time and consideration in supporting a team that is but one of the ways that make Pincher Creek a wonderful community. We look forward to creating a mutually beneficial partnership with you; please do not hesitate to contact us with any questions.

On behalf of the Dolphins Executive,

Aynsley Baker

Aynsley Baker- Fundraising Chair, Pincher Creek Dolphins Swim Club

Sponsorship Levels

(Sponsorship period is May 2025- August 2027)

Gold Sponsor $2250.00 (over three years: **$750.00/year**)

- **Gold level recognition** on all forms of club **social media** on an ongoing basis
- **Large logo placement on club shirt**. This shirt will be given to each athlete upon registration and will remain the club shirt for the duration of the 3 year sponsorship period
- **Large ad** in the annual Pincher Creek Dolphin swim meet package
- **Large Logo on sponsorship banner** to be hung at the Pincher Creek Pool during the club swim season, May through August each year
- **Recognition** at the annual end of season wrap up
- **Certificate** for your place of business and **team thank you card** at the end of the first season

Silver Sponsor $1200.00 (over three years: **$400.00/yr**)

- **Bronze level recognition** on all forms of club **social media** yearly
- **Medium logo placement** on back of shirt. Shirt will be given to each athlete upon registration and will remain the club shirt for the duration of the 3 year sponsorship period
- List company name in Pincher Creek Dolphin swim meet package
- **Recognition** at the Year End wrap up at the end of the first season
- **Certificate** for your place of business and team thank you card at the end of the first season

Bronze Sponsor **$300**

- Community Partner is recognized with your company name in **list format** on the back of the team shirt. Shirt will be given to each athlete upon registration and will remain the **club shirt** for the duration of the **3 year** sponsorship period
- Team **thank you card** at the end of the first season

Sponsorship can be sent to pcdolpswimclub@gmail.com or via cheque to Pincher Creek Dolphins Swim Club. .

Deadline is March 28, 2025

PINCHER CREEK DOLPHINS

COMMUNITY SPONSORSHIP PROGRAM

GOLD LEVEL

$2250 ($750/YEAR*)

- LARGE LOGO PLACEMENT ON CLUB SHIRT (WORN AT ALL SWIM MEETS) FOR 3 YEARS
- LOGO ON TEAM MEET BANNER
- SOCIAL MEDIA RECOGNITION MONTHLY
- LARGE AD IN MEET PACKAGE FOR OVER 400 SWIM FAMILIES
- CERTIFICATE TO DISPLAY
- TEAM THANK YOU CARD

SILVER LEVEL

$1200 ($400/YEAR*)

- MEDIUM LOGO PLACEMENT ON CLUB SHIRT (WORN AT ALL SWIM MEETS) FOR 3 YEARS
- SOCIAL MEDIA RECOGNITION ANNUALLY
- SMALL AD IN MEET PACKAGE FOR OVER 400 SWIM FAMILIES
- CERTIFICATE TO DISPLAY
- TEAM THANK YOU CARD

BRONZE LEVEL

$300

- COMPANY OR FAMILY NAME LISTED (NO LOGO) ON CLUB SHIRT (WORN AT ALL SWIM MEETS) FOR 3 YEARS
- TEAM THANK YOU CARD

*** GOLD & SILVER LEVELS ARE 3 YEAR COMMITTMENTS**

CONTACT :

AYNSLEY BAKER,

403-432-2230

PINCHER CREEK DOLPHINS

SWIMMING SINCE 1961

Volunteer Bénévoles Canada

National Volunteer Week
April 27 – May 3

La Semaine de l'action bénévole
27 avril – 3 mai

March 18, 2025

Dear Reeve & Council,

On behalf of the Town of Pincher Creek and M.D. of Pincher Creek, we would like to invite you to our Come "n" Go Social evening on April 30, 2025. This event is our way of saying thank you and recognizing over 90 organizations in our community and most importantly their volunteers. From 5:00 pm – 7:00 pm we will have a celebratory light meal with entertainment as just one of the activities in celebration of National Volunteer Week. We would like you to be part of our program if possible.

We look forward to hearing back with your response either through my email or phone. Hoping you can attend this great event in Pincher Creek.

Best regards,

Rhonda Oczkowski
Parks and Recreation of
Town of Pincher Creek
403-627-4322
rec@pinchercreek.ca

You are Invited to a Community Volunteer Appreciation Event

The Municipal District of Pincher Creek No. 9 and the Town of Pincher Creek are celebrating National Volunteer Week

We invite members of your organization to a celebratory social to honor the many volunteers in our community.

Enjoy a Come "n" Go complimentary light meal

Wednesday, April 30

Pincher Creek Community Hall (287 Canyon Drive)

5:00 pm – 7:00 pm

Volunteers Make Waves

Together we create ripples of change

VOLUNTEER ALBERTA

Alberta

March 13, 2024

To the Reeve and Council
Municipal District of Pincher Creek No. 9
PO Box 279
Pincher Creek, Alberta T0K 1W0

Ladies and Gentlemen:

RE: 2024 ANNUAL AUDIT OF MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9

We have been engaged to provide the following services for the Municipal District of Pincher Creek No. 9 for the year ending December 31, 2024:

- Audit the consolidated statement of financial position and the related consolidated statement of operations, change in net financial assets (debt), and cash flow
- Prepare the income tax returns and associated schedules
- Audit and assist in the preparation of the Financial Information Return (FIR)

We are pleased to provide the following report relating to our audit of the financial statements for the Municipal District of Pincher Creek No. 9. The matters identified are included in this report which has been prepared solely for the information of the Council and is not intended for any other purpose. As such we accept no responsibility to a third party who uses this report. Our report is intended to assist the Council in fulfilling its obligation with respect to the 2024 financial statements. We would be pleased to further discuss any of the issues addressed in the report or any other issue which may be of interest or concern.

Yours truly,

AVAIL LLP

Darren Adamson, CPA, CA
Enclosure

I. Purpose and Scope of Examination

Management, with the oversight of those charged with governance, is responsible for the preparation of the financial statements and accompanying notes. Avail LLP will advise management about appropriate accounting principles and their application and assist in the preparation of the financial statements, but the responsibility for the financial statements remains with management. This includes responsibilities related to internal control, such as designing and maintaining accounting records, selecting and applying accounting policies, safeguarding assets and preventing and detecting fraud and error.

Our responsibility as auditors is to report to the Council whether these financial statements present fairly, in all material respects, the financial position and results of operations and cash flows in accordance with Canadian public sector accounting standards. This audit is performed to obtain reasonable but not absolute assurance as to whether the financial statements are free of material misstatements. Due to the inherent limitations of an audit, there is an unavoidable risk that some misstatements of the financial statements will not be detected (particularly intentional misstatements concealed through collusion), even though the audit is properly planned and performed.

Our audit includes:

- Assessing the risk that the financial statements may contain misstatements that, individually or in the aggregate, are material to the financial statements taken as a whole; and
- Examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements.

As part of our audit, we will obtain a sufficient understanding of the business and the internal control structure of Municipal District of Pincher Creek No. 9 to plan the audit. This will include management's assessment of:

- The risk that the financial statements may be materially misstated as a result of fraud and error; and,
- The internal controls put in place by management to address such risks.

Since our audit does not involve a detailed examination of all transactions, it could not necessarily be expected to detect all misstatements, particularly intentional misstatements concealed through collusion. The discovery of such irregularities may, of course, result from our examination and, if so, we will report on any such significant matters to you.

Audit Committee (or Equivalent) Members' Responsibilities

The audit committee's (or equivalent) role is to act in an objective, independent capacity as a liaison between the auditors, management and the Reeve and Council, to ensure the auditors have a facility to consider and discuss governance and audit issues with parties not directly responsible for operations.

The audit committee's (or equivalent) responsibilities include:

- Being available to assist and provide direction in the audit planning process when and where appropriate;
- Meeting with the auditors as necessary and prior to release and approval of financial statements to review audit, disclosure and compliance issues;
- Where necessary, reviewing matters raised by the auditors with appropriate levels of management, and reporting back to the auditors their findings;
- Making known to the auditors any issues of disclosure, corporate governance, fraud or illegal acts, non-compliance with laws or regulatory requirements that are known to them, where such matters may impact the financial statements or auditor's report;

- Providing guidance and direction to the auditors on any additional work they feel should be undertaken in response to issues raised or concerns expressed;
- Making such enquiries as appropriate into the findings of the auditors with respect to corporate governance, management conduct, cooperation, information flow and systems of internal controls; and
- Reviewing the draft financial statements prepared by management, including the presentation, disclosures and supporting notes and schedules, for accuracy, completeness and appropriateness, and approve same to be passed to the Council for approval.

II. Communication with the Council

In accordance with the auditing standard "communications with those having oversight responsibility for the financial reporting process", the following matters are recommended to be communicated to the Council prior to the completion of the audit.

Matters to be Communicated	Reference/Comment
1. Management and the Auditors' Responsibility Under Generally Accepted Auditing Standards	Discussed under the heading "Purpose and scope of examination."
2. Planning	Our risk-based approach focuses on obtaining sufficient appropriate audit evidence to reduce the risk of material misstatement in the financial statements to an appropriately low level. This means that we focus our audit work on higher risk areas that have a higher risk of being materially misstated. Materiality in an audit is used to: • Guide planning decisions on the nature and extent of our audit procedures; • Assess the sufficiency of the audit evidence gathered; and • Evaluate any misstatements found during our audit. Materiality is defined as: Materiality is the term used to described the significance of financial statement information to decision makers. An item of information, or an aggregate of items, is material if it is probable that its omission or misstatement would influence or change a decision. Materiality is a matter of professional judgment in the particular circumstances. We plan to use a materiality of $550,000. The materiality for last year's audit was $500,000.
3. Timing of the Audit Engagements	• March 12 & 13, 2025 • April 22, 2024 - Council meeting to approve statements • May 1, 2024 - deadline for submission to Municipal Affairs

4. Illegal Acts, Intentional Misstatements, Fraud and Errors	Our auditing procedures, including tests of your accounting records, are limited to those considered necessary in the circumstances and would not necessarily disclose all illegal acts, fraud, intentional misstatements or errors should any exist. We will conduct the audit under Canadian generally accepted auditing standards (GAAS), which include procedures to consider (based on the control environment, governance structure and circumstances encountered during the audit), the potential likelihood of fraud and illegal acts occurring. These procedures are not designed to test for fraudulent or illegal acts, nor would they necessarily detect such acts or recognize them as such, even if the effect of their consequences on the financial statements is material. However, should we become aware that an illegal or possible illegal act or an act of fraud may have occurred, other than one considered clearly inconsequential, we will communicate this information directly to the audit committee (or equivalent). It is management's responsibility to detect and prevent illegal actions. If such acts are discovered or audit committee members become aware of circumstances under which the Municipal District of Pincher Creek No. 9 may have been involved in fraudulent, illegal or regulatory non-compliance situations, such circumstances must be disclosed to us.
5. Major Issues Discussed with Management that Influence Audit Appointment	No major issues were discussed with management prior to our appointment as auditors.
6. Written Representations from Management	At the conclusion of the audit, prior to the release of our auditors' report, we will request that management provide us with written representation that it has fulfilled its responsibility for the preparation of the financial statements and that it has provided us with the required information for us to complete our audit. We will not be able to provide an audit opinion if management does not provide this written representation.
7. Auditors' Independence	We provide you with the following to assist in your assessment of our independence: • All partners and senior staff have confirmed that they do not hold any investment in the Municipal District of Pincher Creek No. 9. • Financial statements issued by Avail LLP are subject to a partner review process. This process requires that a partner review items significant to the audit such as planning, materiality, application of GAAP and financial statement items and disclosure. • We are aware of no relationship between the Municipal District of Pincher Creek No. 9 and Avail LLP that, in our professional judgment, may reasonably be thought to bear on our independence.

H2b

Pincher Creek and District Municipal Annual Report 2024

The library had **2,500** open hours in 2024!

1,414 people have a card at our library

23,013 people walked through our doors last year

In addition to **26,946** website visits

The library added **1,863** new items last year

Bringing the total collection to **26,584**

There were **9,625** downloads of e-Content

Contributing to a total of **68,394** checkouts!

We lent our items to libraries outside of our system **10,746** times

And brought in **12,476** items upon patron request

Our service is delivered by **10** dedicated staff

And **15** amazing volunteers

We answered **607** reference questions

And our meeting spaces were booked **127** times

The library has **4** public computers

2 mobile devices available for loan

We offered **252** in-person programs

5,155 people attended in total!

Snowshoes were taken out **40** times

Cross-country ski equipment was taken out **337** times

And our Wi-Fi had **2,916** connections!

Alberta SouthWest Regional Alliance

Minutes of the Board of Directors Meeting

Wednesday, **February 5, 2025,**-REO Hall, Fort Macleod

Board Representatives

Brent Feyter, Fort Macleod
Brad Schlossberger, Claresholm
Barbara Burnett, Cowley
Cam Francis, Cardston County
Blair Painter, Crowsnest Pass
Rick Lemire, MD Pincher Creek
Sahra Nodge, Pincher Creek
Victor Czop, Nanton
Tim Court, Cardston

Resource Staff and Partners

Lori Hodge, LRSD
Marie Everts, JET
Mark Brown, CF ABSW
Bev Thornton, AlbertaSW

1	Call to Order and welcome	Chair Brent Feyter called the meeting to order
2	Approval of Agenda	Moved by Blair Painter THAT the agenda be approved with addition of First Nations MOU and municipal collaboration. **Carried.** [2025-02-941]
3	Approval of Minutes	Moved by Cam Francis THAT the Minutes of January 8, 2025, be approved as presented. **Carried.** [2025-02-942]
4	Approval of Cheque Register	Moved by Blair Painter THAT cheques #3485to #3503 be approved as presented. **Carried.** [2025-02-943]
5	NRED Grant Final Report	The Manufacturing Energy Construction Ag Processing (MECAP) has completed project plan funded by Northern and Regional Economic Development (NRED) grant. Final report is submitted. Some metrics will be share din February Bulletin. A second NRED grant has been applied for.
6	Year End report clarification	It is confirmed that Jobs, Economy, and Trade will require a Financial Audit for year ending 2024-2025. This is an unexpected added expense, as a Review Engagement has been acceptable in the past. Avail CPA has been advised of this requirement and will provide an estimate.
7	Qatalyst Consultation and REDA transition	Consultant report summarized interview and workshop discussion, reflecting some options to increase revenue and reduce expenses. Board will consider options with intent to o create a recommended plan by October 2025; o conduct orientation and recommendations to present to new Councils; o approve a transition and operating plan by August 2026.
8	Southern Alberta Economic Summit	This is a partnership event to be held Thursday March 27, 2025 8:30am to 3:30pm at the Agri-Food Hub. SouthGrow staff leads planning; sponsors include AlbertaSW, Community Futures, Economic Development Lethbridge, Tourism Lethbridge, and PrairiesCan

9	Blackfoot Signage update	There are still funds available in phase 1 of the project, and municipalities and businesses are encouraged to apply. This has been a successful initiative, and an application will go forward for phase 2, and extend further through the partner regions.
10	CEDI	Brandie Lea, PrairiesCan, provided information about the Community Economic Development Initiative (CEDI) that has a specific focus on connecting First Nations and Municipalities to identify common issues and partner on projects.
11	MOU with Kainai First Nation	February 9, 2024, Cardston, Cardston County, Fort Macleod ,Pincher Creek, and MD of Pincher Creek entered into a memorandum of respect, understanding and partnership with the Kainai/ Blood Tribe. Continued conversations have been positive.
12	Indigenous Tourism Alberta (ITA) Mini gathering	The first event was a success in 2024, and the second annual event will be held Tuesday, March 11, 2025, 9:00am to 4:00pm Tickets $150.00 Agri Food Hub, Lethbridge,
13	Executive Director Report	Moved by Rick Lemire THAT the Executive Director report be accepted as information. **Carried.** [2025-02-944]
14	Round table	Accepted as information.
15	Upcoming Board Meeting	➢ Wednesday, March 5, 2025-TBD ➢ Wednesday, April 2, 2025-TBD ➢ Wednesday, May 7, 2025-TBD ➢ Wednesday, Jube 4, 2025-AGM
16	Adjourn	Moved by Tim Court THAT the meeting be adjourned. **Carried.** [2025-02-945}

Approved March 5, 2025……

Executive Director Report February 2025

MEETINGS and PRESENTATIONS

Feb 4: RINSA meeting, Zoom

Feb 4: Geography 4700 student mapping project, Zoom

Feb 5: Board meeting, Fort Macleod

Feb 7: Agency meeting with entrepreneur, Zoom

Feb 7: Meeting with InnoVisions, Zoom

Feb 11: Alberta Chambers Pilot Project Proposal, Teams

Feb 11: Meeting with MP Barlow office, Zoom

Feb 12: EDA Webinar, Zoom

Feb 12: University of Lethbridge student meeting, Anderson Hall

Feb 13: Travel Alberta Strategic Insights Advisory Committee, Zoom

Feb 13: Highway 3 Twinning Development Association Board meeting [regrets]

Feb 14: Interviewed by Rob Kerr, Quality Urban Energy Systems of Tomorrow (QUEST Canada), Zoom

Feb 14: Meeting to discuss REDA and rural economic development issues, MLA, Zoom

Feb 14: EMC, MEEC, InnoVisions meeting, re: entrepreneur support, Zoom

Feb 19: EDL Board Meeting, Tecconnect

Feb 20: Fort Macleod Chamber Awards night, Fort Macleod

Feb 21: Multi-agency meeting with entrepreneur, Zoom

Feb 25: Economic Resiliency Task Force meeting, Teams

Feb 28: RINSA Goes Rural road trips planning meeting, Alberta Innovates and partners, Teams

PROJECT MANAGEMENT and REPORTING

- Submit MECAP Project for EDA Regional Collaboration and Partnerships Award , medium-sized community
- Provide support letters for other EDA award nominations
- Consult with Avail re: year-end requirements
- Continued input to Blackfoot Signage pilot project
- Review of Qatalyst report
- Grant program information inquiries; Succession Planning for Non-Profits inquiries

INVESTMENT ATTRACTION and REGIONAL PROMOTION

- Set up agency Resource Meetings for new local business operations
- Support planning for agency outreach in communities (NRC, Albertta Innovates, PrairiesCan, JET, etc)
- Invest /Xperience Alberta magazine 2025 is available on line https://www.edaalberta.ca/Invest-In-Alberta
- Meet with new uLeth student team re interactive mapping project (GEOG 4700) MECAP data

UPCOMING EVENTS

Indigenous Tourism Alberta (ITA) Mini-Gathering
Tuesday, March 11, 2025
9:00am to 4:00pm - Lethbridge Agrifood Hub
Tickets $150.00 available at this link:
The event promotes networking, story sharing, and engaging with tourism professionals to celebrate the accomplishments and partnerships that support the development of indigenous tourism.
https://www.eventbrite.ca/e/ita-regional-gathering-lethbridge-tickets-1200505657739?aff=ebdsoporgprofile

Southern Alberta Economic Summit
Thursday March 27, 2025
8:30am to 3:30pm – Lethbridge Agrifood Hub
Tickets - $80 available at this link:
https://www.eventbrite.ca/e/southern-alberta-economic-summit-2025-tickets-1058509342939

Alberta SouthWest Bulletin March 2025

Regional Economic Development Alliance (REDA) Update

❖ Formation of the Lethbridge Region Economic Resilience Task Force (LERTF)

- Thank you to Economic Development Lethbridge for taking the lead and bringing together the City, the 40 communities within Alberta SouthWest and SouthGrow , as well as a broad network of chambers, community futures, educational institutions, industry organizations, provincial and federal economic development agencies to share our best ideas to deal with impacts to commerce and industry in our regions.
- The initiative is intended to be temporary, to accomplish what the partners feel to be sufficient progress. Participation is voluntary and on a project-by-project basis.
- There is no financial contribution required; organizations contribute staff time, their best ideas and other in-kind resources within their capacity.
- Projects with funding requirements will be evaluated and resourced through available support programs and voluntary contributions on a case-by-case basis.
- While the task force is temporary, outcomes will focus on contributing to long term positive impacts.
- And, it must be a real thing, as we have an acronym and a logo!

❖ South-Western Blackfoot Signage Program carrying on!

This award-winning pilot project partnership is led by Community Futures Lethbridge Region and includes the Kainaiwa, SouthGrow, Tourism Lethbridge, and Alberta SouthWest.
Phase 1 is ending, and planning is going ahead for Phase 2.

- The project offers matching funding for the installation of Blackfoot language signage for communities, businesses, institutions, and more across the regions.
- The Kainaiwa Language and Cultural Committee provides the translation services needed to either inform applicants of their Blackfoot name or assign the proper Blackfoot interpretation and translation to a location. It is a fascinating and educational process!
- Matching funds can cover 80% of the cost, up to $2,000 per applicant.
- The application form lists prices of various signage options. More details on the website.

https://lethbridgeregion.albertacf.com/south-western-alberta-blackfoot-signage-project/

UPCOMING EVENTS

❖ Indigenous Tourism Alberta (ITA) Mini-gathering

Tuesday March 11, 2025, 9:00am-4:00pm , Agri-food Hub, Lethbridge. Last chance for tickets!
https://www.eventbrite.ca/e/ita-regional-gathering-lethbridge-tickets-1200505657739
Agenda is available on front page of Tourism Lethbridge website:
https://tourismlethbridge.com/

❖ Southern Alberta Economic Summit

Thursday March 27, 2025, 8:30am to 3:30pm- Agri-food Hub, Lethbridge Tickets - $80
https://www.eventbrite.ca/e/southern-alberta-economic-summit-2025-tickets-1058509342939

Alberta SouthWest Regional Economic Development Alliance
Box 1041 Pincher Creek AB T0K 1W0
403-627-0244 (cell)
bev@albertasouthwest.com
www.albertasouthwest.com

Commonly Asked Questions

The Government of Alberta is enhancing civilian governance of RCMP-policed communities to ensure they have a voice in setting local and province-wide policing priorities and performance goals by creating municipal and regional policing committees, as well as a Provincial Police Advisory Board.

This document provides answers to questions that were asked during the information sessions, which were held Dec. 17 and 18, 2024. Where appropriate, we have included updated information to reflect the current state and provide an accurate response.

Information Session 1: Municipal Population over 15,000

Will there be any further regulation change or direction on structure/operations of the committees forthcoming?	The act and the regulations came into force March 1, 2025. Further amendments or new regulations are not anticipated in the short term.
Is there an expectation as to when the committees need to be operational?	Due to the development of a new enhanced security check process for police governance bodies, most committees will experience delays in their appointment process. However, the expectation is that municipalities are taking all necessary steps to establish their bylaws and recruit/appoint members, as quickly as possible.
Municipal elections are happening in the fall. Could we delay appointing committee members until after the election?	As above, the legislation and accompanying regulations are in force. The expectation is that municipalities take all necessary steps to establish their committees, or appoint members, as soon as possible.
Why was the timeline for implementation so tight?	We recognize some communities may need more time to determine the best approach and to develop and pass a bylaw. We will remain connected with individual communities to gauge their progress towards implementing the bylaw and appointing committee members.
Our policing committee has a committee member code of conduct that has been established in the bylaw. Can that stay or does it have to be removed?	The legislation sets out a minimum standard. Municipalities may wish to ensure they have a suite of policies governing their policing committee and a code of conduct is highly recommended.
Does the act require that the committee be established through bylaw?	The committee would be established through the municipality's usual bylaw channels. Training materials are available through the Government of Alberta's Police Governance E-Learning Training Program. Bylaw templates and other useful resources are available on the Alberta Association of Police Governance's website: aapg.ca. We recognize that passing bylaws can take time and may require community consultation.

Can you elaborate on the process of a ministerial appointment to the committees? What will be the process? What will be the criteria for selection? Does a municipality have any input on this?

Ministerial appointments to committees follow the appointment process for agencies, boards and commissions coordinated by the Government of Alberta. There are a few methods for provincial appointments to municipal governance bodies. The Minister may choose to appoint members either directly or through an open competition or a combination of these two methods.

Provincial appointments will proceed in a manner that ensures the best representation on the governance bodies.

The Government of Alberta recognizes the critical importance of local oversight and input to policing. It is important to ensure community and municipality-specific concerns and trends are not overlooked, particularly for areas that have diverse and geographically dispersed populations and demographics.

The new model, consisting of a mixture of municipal and provincial appointments, ensures sufficient representation from both local and provincial government while allowing the municipalities to hold the majority of representation. This brings Alberta into alignment with other jurisdictions in Canada that facilitate provincial appointments to governance bodies.

Will the provincial appointments be limited to residents of the municipality for which the policing committee is set up?

Currently, municipal and provincial appointments are not restricted to residents of the municipality establishing the municipal policing committee.

Is it counter-intuitive to have the creation of municipal policing committees to enhance community input and involvement, while allowing for the GOA ministerial appointment of committee members?

Provincial appointees are subject to the individual bylaws of the police governance body to which they are appointed. The Minister of Public Safety and Emergency Services is responsible for ensuring that adequate and effective police services are provided across the province, and the decision to mandate provincial appointees on police governance bodies is a logical extension of the minister's mandate.

It is common practice to have provincial appointees on police boards and commissions across Canada, including B.C., Ontario, Manitoba, New Brunswick and Nova Scotia.

Our municipality has a policing committee that consists of nine members, do we need to reduce that number down to seven to align with this new regulation?

The Police Governance (Ministerial) Regulation states that a municipal policing committee shall consist of not fewer than three members and not more than seven members appointed by the municipality's council. To align with the regulation, the municipality would have to reduce the size of the municipal policing committee to seven. The minister may also make appointments to the committee.

The regulation states that if a municipal policing committee consists of:
(a) three members, the Minister may appoint one member to the committee,
(b) four to six members, the Minister may appoint up to two members to the committee, or,
(c) seven members, the Minister may appoint one member for each group of three members appointed to the committee, including any remaining group that is fewer than three members.

Why are chief elected officials not allowed to chair the committee?	This provision has been in the *Police Act* since the inception of governance bodies in the legislation. Further, the legislation also states that elected officials, mayors, and vice mayors cannot be elected as a vice chair, demonstrating the committee or commission is operating outside the normal course of political influence.
Is it a correct reading of the regulations to state that a committee could, potentially, consist of only council members?	While the legislation in its current form does not explicitly require community representation on all committees – and this may allow for some committees to be composed solely of council members - the intended purpose of these requirements to ensure community representation on every committee. The Ministry is currently reviewing this aspect of the regulation to ensure consistency across police governance bodies and to support strong community and civilian involvement in policing oversight. For municipal policing committees, the municipality typically conducts a recruitment process to engage interested community members. Regional policing committees may also follow a similar approach or may choose to appoint a council member as their representative, based on what they determine best represents their interests at the regional level.
Public access was indicated during municipal police committee meetings - is creating public access a requirement?	Public access is a feature of police governance that creates transparency and builds the public trust. There is latitude for a municipality to decide what an appropriate level of public involvement should be. By being present and observing / participating members of the community can better understand the purpose and scope of the municipal policing committee, thereby increasing engagement, public interest and input. Typically, the structure of meetings of police governance bodies involves a public portion and a private or "in-camera" portion of meetings. In-camera portions of meetings typically are set aside for official matters having to do with personnel or detachment issues that may be sensitive or confidential in nature.
Are committee members compensated for attending meetings? Are the provincially appointed members going to be compensated?	Municipal policing committees are formed under municipal bylaw and remain a municipal responsibility, meaning that municipalities are responsible for the costs of establishing, administering, and sustaining membership of municipal and regional policing committees. This also applies to provincially appointed members who are expected to participate at the same level. Municipalities do have the option of using a portion of their annual Police Support Grant, which allows funds to be used for governance and local police oversight. Communities with populations between 5,000 and 15,000 may also take the opportunity to share costs related to RCMP governance by becoming part of a regional policing committee.
Can you explain the expectations and standards surrounding the new required community safety plans?	The act creates a requirement for police governance bodies to create, maintain and submit community safety plans to the Ministry of Public Safety and Emergency Services. In the coming months, more information, tools, training and templates will be made available to support committees with this responsibility.

Will there be a standardized template for municipal police committee annual reporting?	Wherever possible and as deemed useful to municipalities and governance bodies, the Ministry will work with municipalities and the Alberta Association of Police Governance to provide templates for those plans that are submitted to the Ministry in order to provide for consistency.
Were municipalities directly consulted in the creation of the committee requirement and what feedback did they give?	Albertans shared their thoughts on policing and their experiences with the police through an online survey from Dec. 3, 2020 to Jan. 4, 2021. In late 2020 and early 2021, government officials met with stakeholders, including police associations, First Nations, community leaders, municipalities, and culturally and ethnically diverse communities. Following the proclamation of the *Police Amendment Act*, 2022 a series of amendments were set to come into force over the next three years. The ministry engaged with municipalities, municipal associations and the RCMP about RCMP governance bodies, their composition, roles, and functions during January and February of 2024. The feedback helped to inform the Police Governance Regulation and the Police Governance (Ministerial) Regulation that were enabled by the *Police Amendment Act* 2022.

Information Session 2: Regional Policing Committees

What is the composition of a regional policing committee?	Regional policing committees will consist of at least one member appointed by each municipality (with an MPSA) for a period of two to three years. They can also include additional members appointed by municipalities with the agreement of all the municipalities in the region where the municipality is located. The four regions are: Central Alberta; Southern Alberta; Eastern Alberta and Western Alberta and utilize the regional boundaries of the Alberta RCMP in Alberta.
If we currently have a policing committee, do we have to still get ministerial approval to maintain this?	If a municipality between 5,000 and 15,000 population, with a Municipal Police Service Agreement (MPSA), currently has a policing committee and wishes to continue with that committee, they may elect to opt out of the regional policing committee. To opt out of the regional policing committee, a municipality must seek ministerial approval by writing to the Minister to request permission to continue operating their municipal policing committee and confirming the municipal policing committee bylaw will align with the Police Governance Regulation and the Police Governance (Ministerial) Regulation.
Is there a notification or application process opt out of the regional committee. Are there certain requirements or criteria that a municipality has to meet in order to be considered?	To initiate the process of obtaining ministerial approval, a municipality should make a motion in council to opt out of the regional committee and write to the Minister requesting approval to establish their own municipal policing committee. There is no requirement or criteria; a municipality must simply identify its intentions and the benefits to the community and confirm that the municipal policing committee bylaw will align with regulations.

In terms of regional committees, will the province designate the regions or are they leaving it up to the municipalities to decide on the size of the committee or region?	As identified above, the regions are aligned with the current RCMP Districts (east, west, central and south). We recommend that municipalities within a region connect with each another, so they are actively and collectively aware of which communities intend to opt out and which ones want to remain in the regional committee.
Can MPSA municipalities and Provincial Police Service Agreement (PPSA) municipalities form a regional committee?	Communities policed by the PPS do not have a requirement to form a police governance body. All PPSA communities fall under the purview of the Provincial Police Advisory Board. Informal police advisory committees or regional police advisory committees continue to exist and collaboration amongst neighboring communities is recognized as being valuable. Although these advisory groups are not recognized in legislation an MPSA community along with neighboring PPSA communities may collaborate to form an informal police advisory committee. There is more information on this topic in section 3.
What is the reasoning for requiring an enhanced security clearance as opposed to reliability status?	A modern, robust security clearance framework will help ensure the integrity of appointees, as well as information, infrastructure and reputation of the committees. All appointees should be properly vetted to ensure public trust in government institutions and processes, which in turn would improve public safety. Security incidents within Canada's public service community, including law enforcement, have demonstrated the importance of strong vetting practices reflected in the enhanced security clearance process.
Have there been discussions on the anticipated impacts on detachment commanders to be able to support the number of committees they may have to support?	The Ministry of Public Safety and Emergency Services engages in regular meetings with Alberta RCMP K Division and remains in close contact with the division during the implementation of these governance bodies. There will be impacts, as there are with most shifts in policy at a provincial level, but the RCMP have pledged to work collaboratively with all partners to ensure the transition to this new governance framework is successful. RCMP detachments have always worked together with municipalities; the shift to this governance model is just a more formalized way of doing this. The ministry welcomes feedback from the RCMP and municipalities with respect to the new governance structures.
The same detachments will be required to align with municipal, regional, and the provincial police oversight bodies. How will conflicting priorities among these groups be handled and who ultimately directs the detachment priorities?	Alberta RCMP leadership and the RCMP Districts will determine the best way to address their participation in municipal and regional policing committees. Any issues encountered will be managed through regular meetings between the ministry and Alberta RCMP K Division.

Information Session 3: Provincial Police Advisory Board (PPAB)

Do we have to pass a bylaw if we fall under the PPAB?

PPSA communities who fall under the purview of the Provincial Police Advisory Board are not required to form a governance body and are not required to establish any formal bylaws at the community/municipal level. Small and rural communities with populations under 5,000 including municipal districts and counties who are policed by the RCMP will be represented by the Provincial Police Advisory Board (PPAB). The PPAB is established by the Government of Alberta.

How will representatives be selected within the four divisions?

The Minister will appoint 15 representatives following the existing appointment process to agencies, boards and commissions coordinated by the Government of Alberta. The Minister can appoint in three ways: via a direct appointment, an open competition or a combination of these methods. The act and regulations are prescriptive about the composition of the PPAB, so these requirements must be met. For the First Nations and Metis Settlements' representations, these nominations will come from the communities themselves.

As provided for in the *Police Act* and Police Governance Regulations, the PPAB will include:

- First Nations representation: The *Police Act* prescribes at least one member from a First Nation, nominated by the First Nation, and the regulation includes two additional First Nations representatives. The regulations make allowance for additional First Nations members.
- At least one member from a Metis Settlement or community, nominated by the Metis Settlement or community.
- Two Rural Municipalities of Alberta representatives.
- Two Alberta Municipalities representatives.
- Four representatives, one from each RCMP district, who are members of the community (not RCMP members).
- Three other representatives with consideration given to geographic representation, expertise and other desirable attributes that will contribute to the PPAB's ability to serve the 280+ small and rural communities it represents.

Why just three Indigenous representatives when there are four RCMP divisions?

The three Indigenous representatives are not bound by geographic districts. These representatives would serve in the broader interest of the board and may be nominated by their Nation to act in respect of the interests of all indigenous communities.

The First Nations communities policed by the RCMP are not considered municipalities and are not among the PPSA communities that fall under the *Police Act*. Instead, these communities are part of a framework agreement with the Government of Canada. Existing Community Consultative Groups apply in some of the RCMP-policed First Nations communities.

For municipal representation, does the legislation specify that PPAB membership be elected officials, or can they be community members at large?

The PPAB will be a blend of elected officials and residents from communities across Alberta.

How can PPSA communities ensure their local priorities and concerns are heard?

Communities should establish strong communication networks and channels with the PPAB to ensure their interests are represented to the ministry and Alberta RCMP. In addition, communities should expect that the PPAB will, in turn, represent information to them from the Ministry and Alberta RCMP.

The PPAB will help advance the interests of small and rural RCMP-policed communities by:

- Advising and supporting collaboration between the RCMP, communities and community agencies on integrated community safety planning.
- Representing the interests of communities served by the RCMP under a provincial police service agreement.
- Reporting annually on progress related to provincial police service priorities, provincial police service resourcing, and related initiatives.
- Working with the RCMP and the Ministry of Public Safety and Emergency Services to communicate with municipalities about provincial priorities, resourcing, and community specific challenges.

What is the mandate of the Provincial Police Advisory Board?

As per the roles and functions mentioned above, the PPAB will help foster effective communication and collaboration between the RCMP and the Ministry of Public Safety and Emergency Services with communities on matters of public safety or issues affecting their Alberta's small and rural communities.

What if the policing priorities identified by these existing regional advisory committees clash with those identified by the new PPAB?

The PPAB will represent the collective interests of small and rural communities across Alberta. Given the diverse needs of different regions, some variation in priorities is natural. The board will work to foster collaboration and ensure local concerns are heard, bringing key issues to the attention of the Government of Alberta and the RCMP.

How many meetings does the detachment commander have to go to?

Detachment commanders do not attend meetings of the PPAB. The PPAB will establish a regular meeting cycle with senior leadership at Alberta RCMP, including the commanding officer and representatives from the Ministry of Public Safety and Emergency Services. The PPAB may convene meetings on its own for its membership in deliverance of its mandate. Police members are not appointed to the PPAB.

If we have an enhanced agreement for a Community Peace Officer - does that have any impact?

The PPAB operates at a provincial level. Community Peace Officer programs are managed locally by municipalities and do not fall under the purview of the PPAB.

How is the PPAB envisioned to work with communities that have RCMP detachments that are under an MPSA for the urban portion and a portion of PPSA for the smaller rural component?	Currently, the structure for RCMP governance bodies in legislation is based upon the type of agreement via which a municipality receives policing services. PPSA communities are not required to have police governance bodies. MPSA communities do have governance obligations in administering their agreement and a responsibility to the communities they serve. PPSA communities may form informal police advisory groups with neighbouring PPSA communities to develop a regional police advisory approach to priority setting and community safety planning. Detachments do participate in local advisory committees with the communities represented. This local advisory approach is outside the scope of legislation but has seen success over the years in Alberta communities.
Do we have to stop having our own meetings with the RCMP (where they report to council on stats, and allow council to ask questions)? What is the status of local police advisory committees?	It is recommended that municipalities' with locally established advisory groups (advisory committees) for informal regional collaborations continue current practices, as these advisory groups add value and facilitate communication within and across communities. Many of these local and regional advisory groups have been successfully operating in the province for years. For example, Red Deer County operates a Regional Police Advisory Committee for PPSA neighbouring communities, often including other municipal representation. This configuration has proven effective in this jurisdiction as it offers excellent information sharing and engagement opportunities with the local communities and the police. It is recommended that these informal configurations continue.
Given the intent of the legislation is to promote community engagement with the RCMP, could you explain the rationale that municipalities under a PPSA cannot join a joint municipal police committee with a municipality under a MPSA.	While geographically adjacent communities served by the same RCMP detachment may benefit from collaboration, formal governance structures differ based on the type of policing agreement. The legislation does not intend to disrupt effective informal arrangements between communities. If your municipality has established informal collaboration mechanisms that are working well, we recommend maintaining these practices to continue meeting your communities' needs. The formal distinction between governance bodies exists primarily for administrative purposes but should not prevent practical cooperation that serves citizens effectively. Municipalities under an MPSA have statutory authority over policing, including setting priorities and monitoring performance, while PPSA municipalities provide input through advisory groups without formal oversight powers. This distinction requires separate governance structures but does not prevent informal collaboration. Municipalities are encouraged to maintain any existing cooperative arrangements that effectively support local policing needs.
Can an MPSA municipality fall under the PPAB or does it have to be represented under a regional committee?	Communities with populations over 5,000 that have MPSAs must join a regional committee or have their own municipal policing committee. The PPAB is limited to only serving the needs of those policed by the PPS in an advisory capacity.

Will those interested in participating in the PPAB apply through the GOA's agencies, boards and commissions process? Will opportunities be posted publicly?	Any municipality with an interest in serving as a member on the PPAB should express their interest in writing to the Minister or through their preferred association – Rural Municipalities of Alberta or Alberta Municipalities.
Can municipalities recommend members to the PPAB for ministerial approval?	Municipalities may recommend or nominate an individual to be considered for appointment to the PPAB by writing to the Ministry to advocate on behalf of a person. Communities may also make representation through Rural Municipalities of Alberta and Alberta Municipalities on behalf of someone they feel is an excellent candidate.
Will there be a change in the legislation to recognize the configuration of MPSA and PPSA?	As with any policy change, the ministry will work with municipalities over time to assess what is working well and where adjustments may be needed. Feedback on the new RCMP governance bodies is welcome and can be shared directly with the Minister, through the PPAB, or via albertapolicegovernance@gov.ab.ca.
Were the Alberta Summer Villages Association (ASVA) engaged to provide input into the process?	An invite to the stakeholder sessions would likely have been provided by the Rural Municipalities of Alberta. They should liaise with the RMA in connection with both this matter and future engagements.
Who is responsible for costs associated with the PPAB?	All the costs related to the Provincial Police Advisory Board are borne by the province. There will be no cost to municipalities in terms of the establishment or ongoing operations of this advisory board.
Who can municipalities contact with questions about the new civilian governance bodies?	Municipalities can contact the Ministry of Public Safety and Emergency Services at AlbertaPoliceGovernance@gov.ab.ca with questions and/or support in setting up these new governance bodies.

More information on RCMP civilian governance bodies can be found in the *Police Act*, *Police Amendment Act* and in the Police Governance Regulation and Police Governance (Ministerial) Regulation, found at Alberta King's Printer.

Alberta Forestry and Parks

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March 17, 2025

To Whom it may Concern:

As we approach the start of the 2025 wildfire season in Alberta, I am reaching out to you directly to share a new wildfire preparedness initiative the Government of Alberta is implementing.

We are introducing a new reporting tool to collect wildfire data outside of the Forest Protection Area, to enhance the province's emergency response and support the Emergency Statutes Amendment Act.

This wildfire reporting tool will contribute to resource planning and help us better understand the wildfire situation across the entire province. Even though fighting wildfires is a shared responsibility between the province and municipalities, we know that wildfires can happen anywhere, and we want all communities represented when it comes to wildfire response.

This easy-to-use tool will contribute to the planning and deployment of resources for wildfire response, while effectively sharing information about wildfires between jurisdictions. This will also provide valuable data for municipalities on wildfires within their boundaries which could help improve wildfire prevention, obtain FireSmart funding or provide rationale for additional resources.

By creating a central place to store this information, we are building a dataset that allows for a more collaborative approach to wildfire response in Alberta. Every municipality will be issued user access to contribute their own data. Your participation will be key to the success of this initiative. We ask that municipalities report any wildfire incidents in a timely manner. Training on how to use the tool will be provided to users soon and support will be available through your local Alberta Wildfire Prevention Officer.

I encourage you to have a conversation with your fire departments to inform them of the importance of this wildfire reporting tool so we can all work more effectively in the face of an emergency such as wildfire.

Implementing a new system is never easy and I know we all have many demands for our time, particularly during an emergency. Despite these challenges, this new tool is an important step towards a more wildfire resilient and responsive province.

If you have questions about the reporting tool, please reach out to your nearest Wildfire Prevention Officer. Our priority is working collaboratively with our partners to keep Albertans and our communities safe this wildfire season. Our Wildfire Prevention Officers will be providing detailed information and training to your staff in the coming weeks.

Sincerely,

Daniel Lux
Assistant Deputy Minister
Forestry Division