

AGENDA
COUNCIL MEETING
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
February 9, 2021
1:00 pm via GoToMeeting

A. ADOPTION OF AGENDA

B. PUBLIC HEARING

- Bylaw 1325-21 Road Closure

C. DELEGATIONS

- a) 1:00 pm – 1:10 pm Micheal D. Sawyer - Proposed Sale of Shell Canada

D. MINUTES/NOTES

1. Council Committee Meeting Minutes
 - January 26, 2021
2. Council Meeting Minutes
 - January 26, 2021
3. Special Council Meeting Minutes
 - January 29, 2021
4. Special Council Meeting Minutes
 - February 2, 2021

E. BUSINESS ARISING FROM THE MINUTES

- a) Signed Joint Letter - Oldman River Basin Water Allocation Order
 - Letter from MD of Ranchland and MD of Pincher Creek

F. UNFINISHED BUSINESS

- a) REDAs Letter
 - Response letter from Minister of Jobs, Economy and Innovation Doug Schweitzer
- b) Municipality of Crowsnest Pass
 - Tourism Levy Update

G. COMMITTEE REPORTS / DIVISIONAL CONCERNS

1. Councillor Quentin Stevick – Division 1
2. Councillor Rick Lemire – Division 2
3. Councillor Bev Everts– Division 3
 - ORRSC AGM Minutes September 3, 2020
 - Agricultural Service Board Minutes December 2020
4. Reeve Brian Hammond - Division 4
 - Crowsnest/Pincher Creek Landfill Association – November 2020
5. Councillor Terry Yagos – Division 5

H. ADMINISTRATION REPORTS

1. Operations
 - a) Operations Report
 - Report from Director of Operations dated February 4, 2021
 - Capital Budget Summary
 - Public Works Call Log
2. Finance

3. Planning and Development

- a) Bylaw 1326-21 (Amending Land Use Bylaw 1289-18) Resignation – Lundbreck Dog Park
 - Bylaw presented for first reading
 - Public Hearing to be scheduled for March 9, 2021
- b) Agricultural Environment Services Monthly Reports
 - January 2021
 - February 2021

4. Municipal

- a) Chief Administrative Officer Report
 - Report from CAO, dated February 3 2021
- b) Pincher Creek Foundation – Funding Formula
 - Report from Administration, dated February 3, 2021

I. CORRESPONDENCE

1. For Action

- a) Letter from Avail Chartered Professional Accountant
 - Letter to Council
- b) Universal Broadband Fund - TELUS Sites in Pincher Creek No. 9
 - Letter of Support Request
- c) Reinstatement of the 1976 Coal Development Policy
 - Letter of Request from Town of High River
- d) Need for a Stronger Western Canadian Municipal Advocate
 - Letter from MD of Bonnyville

2. For Information

- a) Uncollectable Property Taxes in the County of Stettler/Seniors Housing Requisitions
 - Letter from Stettler County
- b) Letter of Thanks – Coal Policy
 - Residents in the MD of Pincher Creek
- c) Letter to Premier Kenney - COVID-19 Restrictions
 - Letter from Mackenzie County
- d) Letter to Premier Kenney
 - Letter from MD of Spirit River
- e) Police Advisory Committee Notes
 - January 20, 2021
- f) Grant Specialist report
 - December 2020

J. NEW BUSINESS

K. CLOSED MEETING SESSION

- a. Peer Review for Castle Mountain Parks Summary, 2019 – FOIP Section 19
- b. Temporary Standpipe in Beaver Mines/Upgrades to Standpipe in Pincher Creek and Cowley – FOIP Section 17
- c. ICF – Municipality of Crowsnest Pass – FOIP Section 17
- d. Road Closure and Purchase Request – FOIP Section 17
- e. Road Closure and Purchase Request – FOIP Section 17

L. ADJOURNMENT

**MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
BYLAW NO. 1325-21**

A Bylaw of the Municipal District of Pincher Creek No. 9 in the Province of Alberta, for the purpose of closing a portion of a public roadway in accordance with Sections 22 and 606 of the *Municipal Government Act*, Revised Statutes of Alberta 2000, Chapter M-26, as amended.

The Council of the Municipal District of Pincher Creek No. 9 of the Province of Alberta, duly assembled, hereby enacts as follows:

WHEREAS the lands described below are no longer required for public travel;

AND WHEREAS application has been made to Council to have the roadway closed;

AND WHEREAS the Council of the Municipal District of Pincher Creek No. 9 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 disposing of same;

AND WHEREAS the advertising requirements of Section 606 of the Act have been complied with;

NOW THEREFORE be it enacted that the Council for the Municipal District of Pincher Creek No. 9 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.

GOVERNMENT ROAD ALLOWANCE LYING ADJACENT TO
NW ¼ SEC. 31, TWP. 7, RGE. 1, W5M AND SW ¼ SEC. 6, TWP. 8, RGE. 1, W5M
FORMING PART OF LOT 1, BLOCK 1, PLAN _____,
CONTAINING 1.19 HECTARES (2.94 ACRES) MORE OR LESS
EXCEPTING THEREOUT ALL MINES AND MINERALS

Received first reading this 12th day of January, 2021

REEVE
(Seal)

CAO

APPROVED this _____ day of _____, 20__.

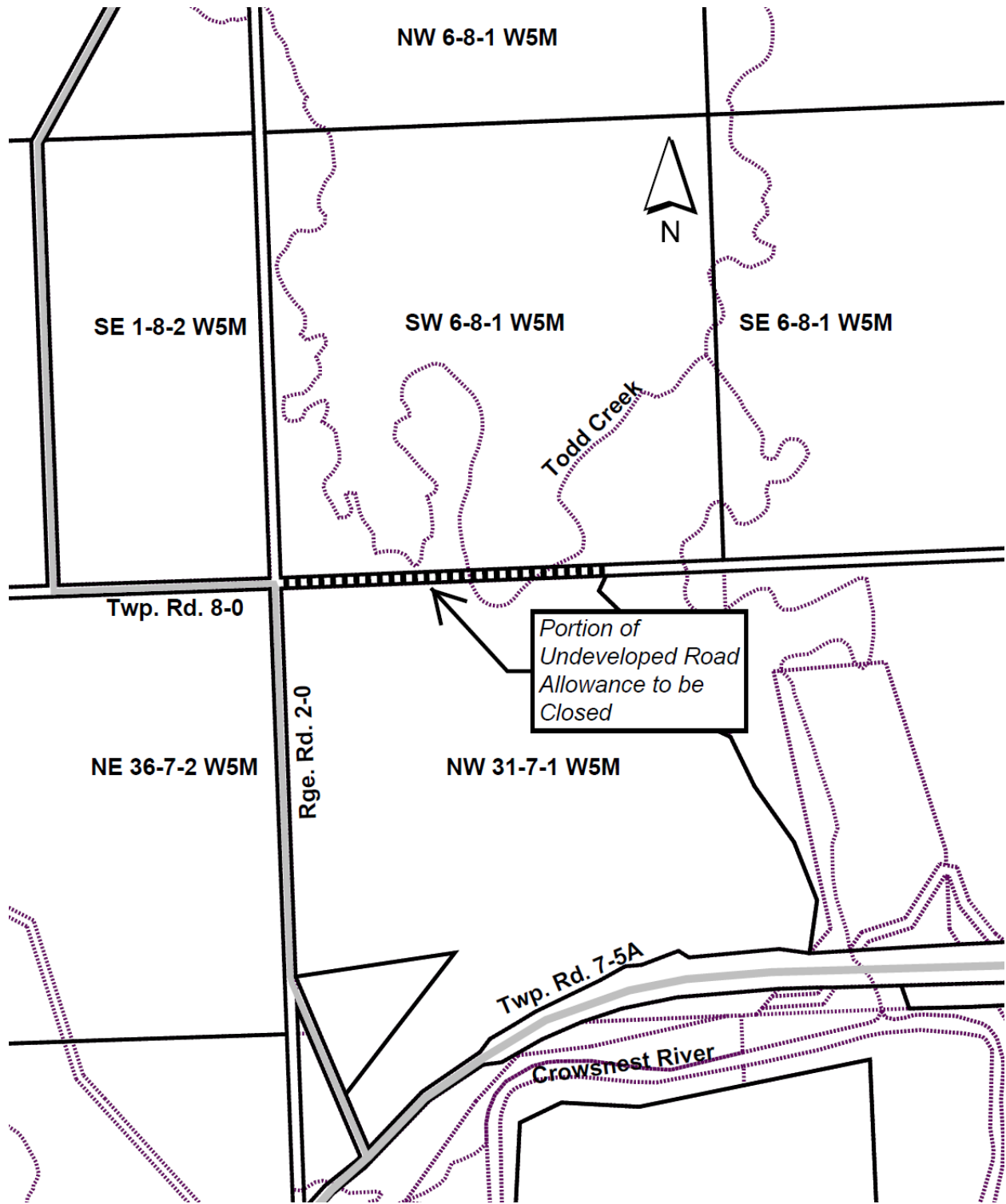
MINISTER OF TRANSPORTATION

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

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

REEVE
(Seal)

CAO



From: [Hayduke](#)
To: [Jessica McClelland](#)
Subject: Request to address Council on Tuesday February 9th 2021
Date: February 1, 2021 1:34:03 PM

Good afternoon,...

I would like to request the opportunity to make a 3 to 5 minute presentation to Council on the above referenced date. The presentation will be about the proposed sale of Shell Canada Limited foothills assets, which include the Waterton, Jumping Pound and Caroline gas plants and the associated infrastructure, to Pieridae Energy. The proposed sale was rejected by the Alberta Energy Regulator in 2020 and now Shell has re-applied to the Alberta Energy Regulator for the required authorization to sell the assets to Pieridae.

Shell has operated its three gas plants/fields for up to 70 years and has accrued significant reclamation liabilities, estimated to be in the billions of dollars. If the sale is approved there is a very real risk that Pieridae, an inexperienced and under-financed junior oil and gas company, will not survive and if they declare bankruptcy the unfunded reclamation liabilities would fall to the provincial and federal taxpayers.

Additionally, and importantly for the MD of Pincher Creek, the Shell assets make a very significant addition to the tax base in the municipal districts where the assets are located. If Pieridae is unable to pay its tax obligations, and given the size and experience of the company, that is a predictable situation, the tax base in the MD of Pincher Creek will be adversely affected and the ratepayers in the MD will have to pay higher taxes to cover any shortfall.

I am representing a number of clients who will be filing Statements of Concerns in the current Alberta Energy Regulator proceeding with respect to this matter and I believe the information I would like to present to Council will alert them to the risks that the proposed asset sale represents for the MD and will assist Council in making more informed decisions that better reflect the interests of the residents of the MD of Pincher Creek.

If you have any questions about this request, please contact me directly at 250-877-8678 or via email at sawyer@hayduke.ca

Best regards

Mike Sawyer

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Micheal D. Sawyer
Phone: 250-877-8678
Email: sawyer@hayduke.ca

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MINUTES
COUNCIL COMMITTEE MEETING
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
Tuesday, January 26, 2021 9:00 am
Via GoToMeeting

Present: Reeve Brian Hammond, Deputy Reeve Rick Lemire, Councillors Terry Yagos, Quentin Stevick and Bev Everts.

Staff: CAO Troy MacCulloch, Director of Development and Community Services Roland Milligan, Director of Finance Meghan Dobie and Executive Assistant Jessica McClelland.

Reeve Brian Hammond called the meeting to order, the time being 9:00 am.

1. Approval of Agenda

Councillor Quentin Stevick

Moved that the agenda for January 26, 2021 be approved as presented.

Carried

2. Next Steps – Water Allocation Order/Coal Mine Development

Council reviewed draft resolutions and discussed how they want to proceed with the next steps in regards to the water allocation changes, and coal mine development in the area. A resolution will be presented at the afternoon Council meeting.

2. Closed Session

Councillor Quentin Stevick

Moved that Council move into closed session to discuss the following, the time being 9:26 am:

- a) Municipal Operating Support Transfer (MOST) Community Organizations – FOIP Section 17
- b) Regional Director of Emergency Management – FOIP Section 19
- c) Fire Response Charges – FOIP Section 17
- b) CAO 2020 Performance Review - FOIP Section 19

Carried

Councillor Rick Lemire

Moved that Council move out of closed session, the time being 12:31 pm.

Carried

3. Adjournment

Councillor Quentin Stevick

Moved that the Committee Meeting adjourn, the time being 12:32 pm.

Carried

MINUTES
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
REGULAR COUNCIL MEETING
JANUARY 26, 2021

The Regular Meeting of Council of the Municipal District of Pincher Creek No. 9 was held on Tuesday, January 26, 2021, at 1:00 pm, via GoToMeeting.

PRESENT Reeve Brian Hammond, Deputy Reeve Rick Lemire, Councillors Terry Yagos, Quentin Stevick and Bev Everts.

STAFF CAO Troy MacCulloch, Director of Development and Community Services Roland Milligan, Director of Finance Meghan Dobie, Director of Operations Aaron Benson and Executive Assistant Jessica McClelland.

Reeve Brian Hammond called the meeting to order, the time being 1:00 pm.

A. ADOPTION OF AGENDA

Councillor Quentin Stevick 21/036

Moved that the Council Agenda for January 26, 2021 be amended to include:

- New Business:
 - c) Coal Development Policy
 - d) Meeting Agenda with Ranchland
 - e) MOST Grant Finalization
 - f) Pincher Creek Emergency Services Commission

And that the agenda be approved as amended.

Carried

B. DELEGATIONS

a) Sgt. Ryan Hodge

RCMP Sgt. Ryan Hodge with the Pincher Creek Detachment attended the meeting at this time to review with Council the 2020 year end crime statistics. Council thanked the Sgt. for updating them on the community crime information.

Sgt. Hodge left the meeting, the time being 1:12 pm.

b) Harold Hollingshead - Fire Response Charges

Mr. Hollingshead attended the meeting at this time and read a submission to Council with the following points:

- Has spoken with neighbours and ratepayers in the MD of Pincher Creek concerning the PC Fire Commission and the Emergency services commission
- Concerns over how much longer can the MD/Ratepayers continue to support what Town of Pincher Creek Councillor Mark Barber referred to as “the fantastic capital requirements of the emergency services commission “, an estimated \$15 million over the next 10 years, to which the MD is committed to 67% which is more or less \$10 million.
- Maybe it’s time to say enough is enough
- We need a fire department, we also need transparency and fairness.
- Appears that the ambulance service is a money pit. Why are we continuing to run a venture that the provincial government would gladly take over?
- We don’t believe that the equipment that fire commission is of much use other than for structural fires, as evidenced on the fire on Snake Trail August 24 2020
 - 8 pieces of fire equipment were billed out plus 2 command units at a cost of about \$24,243 for that day alone not counting labour costs
 - To my knowledge of that equipment only 2 of those units actually put water on the fire
 - Old Cowley fire truck and a pickup, the tender truck did fill farmers/neighbors who were actively fighting the fire
 - No reflection on the fire fighters, only commenting on the equipment which for the most part was parked on the road and at the bottom of the hill

Minutes
 Regular Council Meeting
 Municipal District of Pincher Creek No. 9
 January 26, 2021

- Does it seem fair to send a bill for equipment that was not used
- Seems that our memory of the Kenow fire and its shortcomings have faded
- Many recommendations coming from the audit of that fire, how many of those recommendations were acted upon?
- It appears that we are passengers on a runaway train with no chance of taking control
- We have many rate payers who are now hesitant to call the fire department because of the cost, this is totally against what we believe should be the norm
- We need a fire department that works for us not one that's trying to make the most revenue from our misfortune
- Get control of the budget of the fire commission or withdraw from Emergency Services funding entirely and taking MD's proportions of those assets, all for the MD have it's own Fire Commission/Emergency services commission
- I would imagine that even the thought of this proposal will be unsettling to the Town of Pincher Creek
- At which point we can buy the equipment that is relevant to MD ratepayers needs
- A million dollars a year is a significant amount. I guess the question is do we want to put the effort into this
- If we choose to stay in the existing commission
 - At present we are paying 2/3 of the cost
 - Commission should represent our ratepayers with 2/3rd of the vote on the commission
 - We believe there needs to be a total reshaping of the fire department starting from the top
 - We think 2 MD ratepayers should be added to the Fire commission with voting privileges
 - We propose that what ever the MD's share of the fire commission's budget, 20% should be held back in a fund to help fund purchase firefighting equipment for rate payers
 - Our neighbours are always the first at the fire, our readiness will reduce fire costs if we are better equipped, at arms length from the fire department
 - We would suggest 50% of cost to a maximum of \$1000/year for ratepayers buying fire fighting equipment to help with the purchasing of such things as pumps and hoses and refunding rate payers costs associated with fires
- We believe that when there is a bill for fire service any equipment charges should be returned to the MD and the town of Pincher Creek proportionally related on the percentage contributed
 - Example of costs on the fire of august 24, 2020 equipment charges were \$24,243 for equipment
 - MD's contributed 67% to the fire commission budget, the MD should be refunded \$16,242.82
 - The town contributed 33% so they should be refunded \$8000.19
- We believe that you are faced with some hard decisions, but we believe that given these challenges we can have a better fire service

Harold Hollingshead left the meeting at this time, the time being 1:20 pm

Blaine Moen - Fire Response Charges

Mr. Moen attended the meeting at this time to discuss his opinion regarding the fire on Snake Trail last year and the MD of Pincher Creek policy(s) regarding billing/invoicing MD residents. He provided the following information:

- Last year my wife and I were at home when I received a call from a friend/neighbor asking if I could see the fire which was difficult to see, but after a minute I could see smoke south, southwest of us
 - We drove my water truck to the fire and immediately joined the Wildfire Fire Fighters who were being flown into the north east area of the fire
 - We provided water to them to refill their backpacks until the water bombers were able to stop the leading edge of the fire
 - At the time I did not know whose land it was, nor the cause of the fire, nor the MD fire policy, all I knew was there was a fire and we, like so many others, went to help

Minutes
 Regular Council Meeting
 Municipal District of Pincher Creek No. 9
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- We did so not because we were told, not because I knew Mark Burles, but because there was a fire on a windy day and we needed to stop it before it damaged buildings or worse, injured someone

1) Why do we Fight Fires?

- When there is a fire, everyone I know here comes to help. Why? Some people would rather let their pasture burn as it helps to regenerate the grass. Others, like me, do everything we can to stop the fire as soon as possible. Why? I do it because in the case of the Snake Trail fire, I knew Tom Ross' place is to the east of the fire right in the fire's path. So, when we helped with that fire, we went to save Tom Ross' place. So, when it comes to responsibility to pay for firefighting, should Mark pay or should Tom pay? Neither. The MD should pay as we are fighting the fire for ALL of us, so we should all pay via the MD

2) How much should we pay?

- Respectfully, in my defence, this is “hearsay”, but I heard that these invoices may have been inflated initially. I heard there was an initial invoice then it was sent back and reduced and sent out again. Is that true? No matter, where an invoice is sent, whether to a resident, to the MD or an insurance company, the invoices need to reflect REAL costs. If invoices to insurance companies are inflated then eventually, we will not even be able to purchase fire insurance. There are places in the States where you cannot buy fire insurance. That may eventually happen here, so the invoices need to be reasonable to help ensure that we can continue to get fire insurance.
 Question, who and how are water bomber invoices charged from? G of A?

3) Who should pay how much when?

- With respect, in my opinion, gross negligence is the only situation whereby a resident should be invoiced for firefighting, and in that instance, the entire amount. If someone does something insanely stupid and/or reckless, then they should be held responsible, without question. Otherwise, how do we know what or who caused a fire? When a fire starts along an MD road, and gross negligence is not the cause, then the MD should pay the entire invoice, no matter whose place the fire is on. Unless the cause of a fire is black and white gross negligence, we should all pay those costs via our MD taxes.
 - From Bennett Jones law firm:
 Gross Negligence / Wilful Misconduct means any act or failure to act (whether sole, joint or concurrent) by any person or entity which was intended to cause, or which was in reckless disregard of or wanton indifference to, harmful consequences such person or entity knew, or should have known, such act or failure would have on the safety or property of another person or entity. With respect, that is the ONLY time someone should receive an invoice for a fire.

4) Safety

- Right now, many people are hesitant to call 9-1-1 if they have a fire because they believe they will get the invoice. This is going to lead to someone getting injured or god forbid, killed. Then what will be the liability to the MD?

5) Opinion

- In the specific case of the Snake Trail fire and Mark Burles invoice, I am strongly against any landowners paying anything. I have met Mark one time; I have no other motive here than fairness. If this fire were set by some idiot making a campfire on a dry windy day, would the MD still expect Mark to pay even though this was clearly someone else's fault? I doubt it, or at least I hope not. So

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 Regular Council Meeting
 Municipal District of Pincher Creek No. 9
 January 26, 2021

why should a fire started along an MD road be any different? The MD should cover costs of fires, then pass them along to all MD Ratepayers via taxes or another method.

- Mr. Moen Requested:

1. The MD should pay all fire costs other than gross negligence because it is in all our benefit to stop fires.
2. The MD review invoicing practices and ensure any invoice is reviewed by a group that must include MD residents.
3. The MD ensure all residents know they can call 9-1-1 without worrying about having to pay out of pocket for a service we should all reasonably expect with our taxes. Someone is going to get injured or worse if this continues.

Blaine Moen left the meeting at this time, the time being 1:34 pm.

C. MINUTES

1. Committee Meeting Minutes

Councillor Terry Yagos 21/037

Moved that the Minutes of the Committee Meeting on January 26, 2021 be approved as presented.

Carried

2. Council Meeting Minutes

Councillor Bev Everts 21/038

Moved that the Minutes of the Council Meeting on January 12, 2021 be approved as presented.

Carried

3. Special Council Meeting Minutes

Councillor Bev Everts 21/039

Moved that the Minutes of the Special Council Meeting on January 14, 2021 be amended with the changes as discussed,

AND THAT the minutes be approved as amended.

Carried

D. BUSINESS ARISING FROM THE MINUTES

E. UNFINISHED BUSINESS

F. COMMITTEE REPORTS / DIVISIONAL CONCERNS

1. Councillor Quentin Stevick – Division 1
2. Councillor Rick Lemire – Division 2
 - a) Emergency Advisory Committee
 - b) Intermunicipal Collaboration Framework Committee with Town of Pincher Creek

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3. Councillor Bev Everts– Division 3
 - a) Family and Community Support Services
 - b) Castle Mountain Community Association
 - c) Beaver Mines Community Association
4. Reeve Brian Hammond - Division 4
 - a) Joint Health and Safety
 - b) Special Council Meeting (Joint Council with Town of Pincher Creek)
 - c) Crowsnest Pincher Creek Landfill Association
 - d) Recycle Committee
5. Councillor Terry Yagos – Division 5
 - a) Emergency Advisory Committee

Councillor Terry Yagos 21/040

Moved to accept the Committee Reports and information.

Carried

Public Works Superintendent Eric Blanchard attended the meeting at this time to discuss the call logs, and left the meeting at 2:07 pm.

I. ADMINISTRATION REPORTS

1. Operations

a) Operations Report

Councillor Bev Everts 21/041

Moved that Council receive for information:

- Report from Director of Operations dated January 21, 2021
- Public Works Call logs, dated January 21, 2021
- Addition of letter from Pat Moskaluk regarding call log number 2596
 - During the summer of 2020, they had dust suppression product applied to 100 meters of gravel road adjacent to their yard on Township Road 5-4, otherwise known as Alberta Ranch Road.
 - The dust suppression portion of the road survived the winter conditions very well and was in a good state with just a very few small divots at one end. Doesn't feel there were any potholes or any breaks or a safety issue.
 - On or about January 12 or 13, 2021, I feel that an MD grader operator destroyed the dust suppression area by grading the whole area and turning it back into an ordinary gravel road.
 - Requesting that we be given an application of dust suppression product for 2021 at no charge
- Capital Budget Summary, dated January 21, 2021
- Program Capital Budget Projects Status, dated January 21, 2021
- AND THAT a letter is sent to Mrs. Moskaluk denying the request for 2021 dust control at no cost, explaining that as per the agreement to purchase dust control, there is no warranty on the product and that winter maintenance and safety conditions are paramount in road maintenance within the MD.

Carried

2. Development and Community Services

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 Regular Council Meeting
 Municipal District of Pincher Creek No. 9
 January 26, 2021

a) Request for Reimbursement for North Burmis Fire Work

Councillor Terry Yagos 21/042

Moved that Council thank residents Alan Michalsky et al for their actions to help contain the spread of the September 1, 2020 fire on the North Burmis Road,

AND FURTHER THAT the landowner be reimbursed for the use of his weed spraying truck in the amount of \$700.00, to come from Admin Miscellaneous Expenses, Account No. 2-12-0-590-2590.

Carried

3. Finance

4. Municipal

a) Chief Administrative Officer Report

Councillor Bev Everts 21/043

Moved that Council receive for information, the Chief Administrative Officer's report for the period of January 13, 2021 to January 26, 2021.

Carried

b) Amending Cowley Water Agreement

Councillor Bev Everts 21/044

Moved that an amending agreement with the Village of Cowley be signed, stating that "in accordance with schedule E of Bylaw 1320-20 (Utilities), Section 1 Part G of the Operations Agreement signed May 28, 2014 amend "fees to MD" means that One Dollar and Fifteen Cents (\$1.15) per cubic meter payable by the Village to the MD, for the MD to treat the Village's Raw Water. And that the base rate for capitol repair and replacement for Cowley be based on Schedule E, at a rate of \$300.00 per month

AND THAT this amendment will remain in effect from March 1, 2021 until such time that the rates change as per Bylaw 1320-20 (Utilities).

Carried

c) Airport Authority – ACP Grant

Councillor Terry Yagos 21/045

Moved that the MD of Pincher Creek approve the Town of Pincher Creek to be the managing partner for the Alberta Community Partnership (ACP) Grant application through the Province of Alberta to be used in the application for the Airport Master Plan project.

Carried

J. CORRESPONDENCE

1. For Action

a) Heritage Acres – Letter of Support – Shell Legacy Funds

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 Regular Council Meeting
 Municipal District of Pincher Creek No. 9
 January 26, 2021

Councillor Bev Everts 21/46

Moved that a letter of support be written for Heritage Acres for their application towards the Shell Legacy Fund.

Carried

b) 2021 Census of Population

Councillor Terry Yagos 21/047

Moved that the MD of Pincher Creek supports the 2021 Census, and encourages all residents to complete their census questionnaire online at www.census.gc.ca as accurate and complete census data support programs and services that benefit our community.

Carried

c) Xplornet Communications Ltd. Letter of Support Request

Councillor Quentin Stevick 21/048

Moved that as Council sees the importance of reliable high-speed internet for all residents, Council send a letter of support for Xplornet Communication to use in their upcoming applications for funding that would allow for a cost effective build out of a hybrid fiber and wireless network to service costumers and utilize satellite for remote and less dense service.

Carried

d) Request for Councillor – Transportation Committee

Councillor Rick Lemire 21/049

Moved that Council appoint Reeve Brian Hammond to the Town of Pincher Creek Transportation Committee.

Carried

2. For Information

Councillor Bev Everts 21/050

Moved that the following be received as information:

- a) Chinook Arch Regional Library Board Report
 - Report for December 2020
- b) Alberta Conservation Association survey
 - Information for survey
- d) Foothills Little Bow Municipal Association Minutes
 - Minutes from Friday January 17, 2021

Carried

c) Coal Project Letters

Councillor Bev Everts 21/051

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 Municipal District of Pincher Creek No. 9
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Moved that letters be sent to the following residents that provided feedback on the changes to the Coal Development Policy by the Province,

- Email from Curtis Sinnott
- Email from Brandon Smith

AND THAT they be advised that Council appreciates the feedback from residents regarding issues affecting our Municipality.

Carried

K. NEW BUSINESS

a) Draft CNP Recreation Agreement

Councillor Terry Yagos 21/052

Moved that the draft Recreation Agreement with the Crowsnest Pass be approved as presented.

Councillor Quentin Stevick requested a recorded vote:

For	Against
Reeve Brian Hammond Councillor Rick Lemire Councillor Bev Everts Councillor Terry Yagos	Councillor Quentin Stevick

Carried

b) Alberta Community Partnership Grant Application – Cowley

Councillor Terry Yagos 21/053

Moved that the MD of Pincher Creek supports the Village of Cowley as a managing partner, in their submission of a 2020/21 Alberta Community Partnership grant application in support of the Regional Infrastructure Master Plan project.

Carried

c) Coal Development Policy

Councillor Quentin Stevick 21/054

Moved that Council direct administration to draft a letter to Premier Jason Kenney, requesting the immediate reinstatement of the June 15, 1976 Coal Development Policy for Alberta, which was rescinded on June 1, 2020,

AND THAT we further request that the Government of Alberta begin public consultation with all stakeholders in Alberta on any proposed revision or replacement to this policy,

AND FINALLY THAT this letter be copied to Environment & Parks Minister Jason Nixon, Energy Minister Sonya Savage, MLA for Livingstone-Macleod Roger Reid, Town of Pincher Creek, Village of Cowley, Municipality of the Crowsnest Pass, MD of Ranchland, MD of Willow Creek, Cardston County and the Piikani Nation.

Carried

d) Meeting Agenda with Ranchland

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 Municipal District of Pincher Creek No. 9
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Administration was directed to draft an agenda for the meeting with Ranchland for Friday January 29, 2021 and that this meeting be a special meeting of Council to allow for resolutions to be made.

e) MOST Grant Finalization

Councillor Bev Everts 21/055

Moved that Council approve the use of the Municipal Operating Support Transfer (MOST) grant of \$171,390.72 to support and financially assist the 19 community organizations, as decided by Council, that have suffered economic hardship as a result of COVID-19,

AND THAT once the organizations receiving funding have been notified, the list be made public.

Carried

f) Pincher Creek Emergency Services Commission

Councillor Rick Lemire 21/056

Moved that Council direct members sitting on PCESC to rescind section 4.01.2.1 of PCESC Bylaw 3 as the MD is no longer willing to bill on behalf of PCESC,

AND THAT Council direct Administration to recover the costs from PCESC for invoice MD-23-20 either directly or by applying a credit to the levy payment,

AND THAT Council direct members sitting on PCESC to review fire response charges specific to MD-23- 20 by answering the following queries:

- Invoice MD-23-20 outlines the revenue for fire response, what was the cost?
- If the cost of fire response is less than the revenue, why is PCESC generating profit?
- Is the above cost for fire response reasonable?
- What of the above cost is already covered through the levy (i.e. part of the approved budget and already funded by MD tax payers)?
- What cost, if any, is remaining, who should cover that cost and by what means?

AND THAT Council direct members sitting on PCESC to review and update the internal processes of PCESC to ensure the process is efficient, fair and equitable,

AND FURTHER THAT administration forward the necessary correspondence to the PCEMS as discussed.

Carried

L. CLOSED SESSION

M. ADJOURNMENT

Councillor Quentin Stevick 21/057

Moved that Council adjourn the meeting, the time being 3:49 pm.

Carried

REEVE

CHIEF ADMINISTRATIVE OFFICER

MINUTES
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
SPECIAL COUNCIL MEETING
JANUARY 29, 2021

The Special Meeting of Council of the Municipal District of Pincher Creek No. 9 was held on Tuesday, January 29, 2021, at 1:30 pm, via GoToMeeting.

PRESENT Reeve Brian Hammond, Deputy Reeve Rick Lemire, Councillors Terry Yagos, Quentin Stevick and Bev Everts.

STAFF CAO Troy MacCulloch and Executive Assistant Jessica McClelland.

ALSO MD of Ranchland Representatives:
Reeve Ron Davis, Councillors Harry Streeter and Cam Gardner, CAO Robert Strauss.

Notice of this Special Council Meeting was posted on the MD website and social media.

Reeve Brian Hammond called the meeting to order, the time being 1:30 pm.

A. ADOPTION OF AGENDA

Councillor Bev Everts 21/058

Moved that the Special Council Agenda for January 29, 2021 be amended to include:

- Moving the following items to closed meeting session – FOIP Sec 17
 - Additional Information provided by Councillor Cam Gardner

And that the agenda be approved as amended.

Carried

B. CLOSED MEETING SESSION

Councillor Terry Yagos 21/059

Moved that Council move in to closed session to discuss the following, the time being 1:47 pm:

- Review Background - FOIP Sec. 17
- Next Steps – FOIP Sec. 17
- Additional Information provided by Councillor Cam Gardner – FOIP Sec. 17

Carried

Councillor Rick Lemire 21/060

Moved that Council open the Council meeting to the public, the time being 2:43 pm.

Carried

Councillor Terry Yagos 21/061

Moved to direct administration for both the MD of Ranchland, and the MD of Pincher Creek, to collaborate and craft a document regarding the Oldman River Water Allocation Order changes, requesting that:

- The Alberta Government pause on any changes to the water allocation orders,
- Request for more community consultation,
- That the letter be forwarded to the relevant stakeholders as discussed.

Carried

Minutes
Special Council Meeting
Municipal District of Pincher Creek No. 9
January 29, 2021

G. ADJOURNMENT

Councillor Quentin Stevick 21/062

Moved that Council adjourn the meeting, the time being 2:56 pm.

Carried

REEVE

CHIEF ADMINISTRATIVE OFFICER

**MINUTES
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
SPECIAL COUNCIL MEETING
FEBRUARY 2, 2021**

The Special Meeting of Council of the Municipal District of Pincher Creek No. 9 was held on Tuesday, February 2, 2021, following the MPC Meeting, via GoToMeeting.

PRESENT Reeve Brian Hammond, Deputy Reeve Rick Lemire, Councillors Terry Yagos, Quentin Stevick and Bev Everts.

STAFF CAO Troy MacCulloch and Executive Assistant Jessica McClelland.

Notice of this Special Council Meeting was posted on the MD website and social media.

Reeve Brian Hammond called the meeting to order, the time being 6:48 pm.

A. ADOPTION OF AGENDA

Councillor Bev Everts 21/063

Moved that the Special Council Agenda for February 2, 2021 be approved as presented.

Carried

B. CLOSED MEETING SESSION

Councillor Rick Lemire 21/064

Moved that Council move in to closed session to discuss the following, the time being 6:49 pm:

- Review Draft Letter to MLA Reid Regarding Proposed Changes to Water Allocation Order 109/2010 – FOIP 17

Carried

Councillor Bev Everts 21/065

Moved that Council open the Council meeting to the public, the time being 6:57 pm.

Carried

Councillor Quentin Stevick 21/066

Moved that the letter written by both MD of Ranchland and MD of Pincher Creek Councils, regarding proposed changes to water allocation order 19/2021, be sent to the Alberta Government as discussed.

Carried

G. ADJOURNMENT

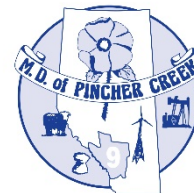
Councillor Terry Yagos 21/067

Moved that Council adjourn the meeting, the time being 6:58 pm.

Carried

REEVE

CHIEF ADMINISTRATIVE OFFICER



February 01, 2021

Mr. Roger Reid, MLA,
Livingstone – MacLeod Constituency
618 Centre Street, SE
High River, Alberta
T1V 1E9

Dear Roger,

RE: Oldman River Basin Water Allocation Order – Alberta Regulation 109/2010

The Councils of the Municipal District of Ranchland and the Municipal District of Pincher Creek have grave concerns surrounding the recent discussions and apparent direction on the part of the Province of Alberta to dismantle the very meaningful water allocation provisions that were set out in the above-cited Order.

The Order was created through a prerequisite process, that ensured extensive consultations with the immediately impacted municipalities. It is deeply troubling to see that this Order appears to be in the process of being dismantled, effectively with no consultation. What appears to be passing for consultation, is a rapid “drive-by” where provincial officials appear to be merely giving notice as to what is going to happen, as opposed to seeking meaningful input from the residents and jurisdictions impacted.

One of the original intents of the Order was to compensate those jurisdictions upstream from the Oldman River Dam for the impact due to the creation of the Dam project. A number of agriculture operations were moved out of the Oldman Dam footprint. The entire transportation network in the area was altered in a negative way, creating more time and expense for residents, and requiring them to go around the reservoir area. The intent of the Order was for the bulk of the water allocation to be used to enhance the irrigation potential in the upstream municipalities. In addition, the creation of the dam and reservoir displaced some existing irrigation operations that were already in place. It is very disappointing that the foundational principle of the Order seems to now have been forgotten or ignored.

Additionally, there is very little data on the potentially negative impacts of large industrial uses and withdrawal of water on the headwater tributaries and instream flows. We strongly believe that current stream flow testing should be conducted to establish baseline data for future reference. Decisions being contemplated to dismantle and arbitrarily remove sections of the Order, without first understanding the upstream usage and instream flow requirements for a healthy ecosystem are short-sighted and potentially detrimental.

Given the multitude of problems with the process to date, we respectfully but very strongly request that you cease any proposed changes to the existing Water Allocation Order – Alberta Regulation 109/2010.

It is critical that the Government of Alberta honour its past commitments and seek meaningful input from the residents and jurisdictions impacted by this Order, before even considering altering it in the future.

Sincerely,



Reeve, MD of Ranchland No.66



Reeve, MD of Pincher Creek No.9

cc.

Premier of Alberta, Honourable Jason Kenney

Minister of Environment and Parks, Honourable Jason Nixon

Minister of Energy, Honourable Sonya Savage



ALBERTA

JOBS, ECONOMY AND INNOVATION

*Office of the Minister
MLA, Calgary-Elbow*

January 21, 2021

AR 80421

Reeve Brian Hammond
MD of Pincher Creek
info@mdpincercreek.ab.ca

Dear Reeve Hammond,

Thank you for your letter regarding funding for Alberta's Regional Economic Development Alliances (REDAs).

As you may be aware, the Ministry of Jobs, Economy and Innovation (JEI) is charged with implementing Alberta's Recovery Plan. We know our success is dependant on all regions of Alberta working together, focused on building on our strengths, and growing our innovation eco-system. The Government of Alberta values the work that REDAs do to promote long-term economic development and prosperity in their regions, and they will continue to have an important role to play as we recover, and eventually grow our economy.

Given Alberta's fiscal situation, programs and services across government were evaluated, and some difficult decisions were made. This included re-evaluating the funding agreement with REDAs. I am pleased that JEI has finalized the three-year grant agreement with targeted outcomes for each of the nine REDAs, and I look forward to their continued excellent work.

I was pleased to meet with Alberta's REDAs at the virtual roundtable on December 1, 2020. My understanding is that arrangements are being made to have regular check-ins with government. Sharing information, challenges, and opportunities are of great value, and I appreciate your continued input and suggestions as we move forward.

In the meantime, if you require additional information or assistance, contact Tammy Powell, Regional Economic Development Services, at 780-712-1601 or tammy.powell@gov.ab.ca.

Thank you again for taking the time to share your thoughts.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Doug Schweitzer'.

Doug Schweitzer, Q.C.
Minister of Jobs, Economy and Innovation



Municipality of Crowsnest Pass Request for Decision

Meeting Date: February 2, 2021

Agenda #: 7.b

Subject: Tourism Levy Update

Recommendation: That Council accept the report on implementing a Tourism Levy for information.

Executive Summary:

Council has directed Administration to impose a Tourism Levy. The fee would apply equally to all tourist accommodations within the Municipality, including hotels, motels, bed and breakfasts, short-term apartment/home rentals, and campgrounds. The process for implementing the fee would be by bylaw. A review of the Municipal Government Act, the presentation made by Southern Canadian Rockies DMO Strategy, as well as other DMOs currently in place was completed. In the review process it was determined that a Municipality cannot operate a DMO directly nor can they make the levy mandatory. The legal firm of Brownlee LLP was engaged to review and provide their legal opinion on whether the Municipality of Crowsnest Pass has the legal authority to impose a tourism levy or destination marketing fee on room rentals by travelers.

Relevant Council Direction, Policy or Bylaws:

Council Motion 06-2020-08-01 Councillor Ward moved to direct Administration to draft a bylaw mandating a 3% tourism levy on all vacation beds in the Crowsnest Pass with an allowance that a portion remains with the providers for administering the program, to be effective for January 1, 2021.

Council Motion 19-2020-08-18 Councillor Ward moved to direct Administration that the proposed Tourism Levy Bylaw also be applicable to private campgrounds to be implemented for January 1, 2021.

Discussion:

Council has directed Administration to impose a Tourism Levy, therefore a review of the Municipal Government Act, the presentation made by Southern Canadian Rockies DMO Strategy, as well as other DMOs currently in place was completed. In the review process it was determined that a Municipality cannot operate a DMO directly nor can they make the levy mandatory. The two areas of concern in implementing a Tourism Levy or as it is also referred to in other places, a Destination Marketing Fee, is can it be made mandatory for all organizations involved in tourism industry. The second issue to be

addressed is, can a Municipality be the Destination Management Organization or does it need to be a third party.

The MGA section 7 and 8, is very specific on the types of bylaws a Council can implement where revenue is concerned. A Municipality does not have authority to impose a tourism levy, only the Provincial Government has the authority. The Provincial Government would need to pass legislation enabling municipalities to impose this type of tax. This is not to say a Tourism Levy or Destination Marketing Fee cannot be implemented, but in reviewing how it has been implemented in other jurisdictions and reviewing online literature, the conclusion reached is destination marketing fees are becoming increasingly common throughout Alberta as a means of raising revenue to support tourism destination marketing. However, the program is voluntary, industry driven and operates with little to no local government involvement and no Provincial legislative sanction.

The second issue is, can the Municipality be the Destination Marketing Organization (DMO)? The most common method of generating revenue for local tourism marketing purposes is to establish a local or regional Destination Marketing Organization and have the DMO implement and collect the Destination Marketing Fee(DMF). Through incorporation (e.g. a society or for profit corporation), the bylaws state the purpose of what the organization can do. A DMF is not a tax, but rather a fee and is not imposed by the municipality, but rather the local or regional DMO. Basically, a DMF is individual businesses collectively deciding to work together under the umbrella of a DMO and contribute funds (collected from guests) to support a joint marketing program and related initiatives. There is no one formula for who can be the DMO, usually the designated DMO is the local tourist bureau/organization of the jurisdiction in which the DMF is applied.

This leaves the question, does Council wish to proceed with implementing a Destination Marketing Organization separate from the Municipality and implementing a destination marketing fee?

Analysis of Alternatives:

1. Discuss with hotel association in Crowsnest Pass on the formation of a DMO to implement a destination fee.
2. Identify the next steps in implementing a DMO including who in the hotel association would be part of the organization and contribute.

Financial Impacts:

There will be no fees directly collected by the Municipality that could then be put towards marketing efforts.

Attachments:



MINUTES - 2 (2020)
ANNUAL GENERAL BOARD OF DIRECTORS' MEETING
Thursday, September 3, 2020 – 7:00 p.m.
 ORRSC Conference Room (3105 - 16 Avenue North, Lethbridge)

BOARD OF DIRECTORS:

Kevyn Stevenson (absent) Village of Arrowwood Delbert Bodnarek (absent) Village of Barnwell Ed Weistra Village of Barons Tom Rose (absent)..... Town of Bassano Norman Gerestein.....City of Brooks Jim Bester Cardston County Richard Bengry Town of Cardston Peggy Hovde (absent)..... Village of Carmangay Jamie Smith (absent) Village of Champion Doug MacPherson (absent) Town of Claresholm Butch Pauls (absent)..... Town of Coaldale Elizabeth Christensen (absent)..... Town of Coalhurst Tanya Smith..... Village of Coutts Warren Mickels (absent) Village of Cowley Dave Filipuzzi.....Mun. Crowsnest Pass Dean WardMun. Crowsnest Pass Kole Steinley..... Village of Duchess Gordon Wolstenholme..... Town of Fort Macleod Gerry Carter (absent) Village of Glenwood Suzanne French (absent) Village of Hill Spring Morris Zeinstra (absent)..... Lethbridge County	Brad Koch (absent)..... Village of Lomond Richard Van Ee (absent) Town of Magrath Peggy Losey..... Town of Milk River Sheldon Walker (absent)..... Village of Milo Beryl West (absent)..... Town of Nanton Marinus de Leeuw (absent) Village of Nobleford Henry de Kok Town of Picture Butte Bev Everts M.D. of Pincher Creek Don Anderberg Town Pincher Creek Ronald Davis (absent) M.D. of Ranchland Stewart Foss - remotely Town of Raymond Don Norby (absent)..... Town of Stavely Matthew Foss - remotely Village of Stirling Jennifer Crowson M.D. of Taber Margaret Plumtree Town of Vauxhall Jason Schneider (absent) Vulcan County Lyle Magnuson..... Town of Vulcan David Cody County of Warner Marty Kirby Village of Warner Ian Sundquist M.D. Willow Creek
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STAFF:

Lenze Kuiper Director Mike Burla Senior Planner	Jordan Thomas..... GIS Analyst Barb Johnson Executive Secretary
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AGENDA:

1. **Approval of Agenda** – September 3, 2020.....
2. **Approval of Minutes** – March 5, 2020.....(attachment)
3. **Business Arising from the Minutes**

4. **STAFF PRESENTATION – Jordan Thomas, GIS Analyst – “Drone Operation Presentation”**
 5. **Reports**
 - (a) Executive Committee Report.....(attachment)
 6. **Business**
 - (a) Draft ORRSC 2019 Annual Report and Financial Statements.....(attachment)
 - (b) Regional Services Commission – Amendments to Part 15.1 of the MGA(attachment)
 - (c) Staff Update.....
 - (d) COVID-19 Update
 - (e) Subdivision Activity – 2020.....(attachment)
 7. **Accounts**
 - (a) Summary of Balance Sheet and Statement of Income for the
7-month period: January 1 - July 31, 2020(attachment)
 8. **Adjournment – Next Meeting December 3, 2020**
-

CHAIR GORDON WOLSTENHOLME CALLED THE MEETING TO ORDER AT 7:00 P.M.

1. APPROVAL OF AGENDA

Moved by: Ed Weistra

THAT the Board of Directors approve the agenda of September 3, 2020, as presented. **CARRIED**

2. APPROVAL OF MINUTES

Moved by: Peggy Losey

THAT the Board of Directors approves the minutes of March 5, 2020, as presented. **CARRIED**

3. BUSINESS ARISING FROM THE MINUTES

None.

4. STAFF PRESENTATION – Jordan Thomas, GIS Analyst – “Drone Operation Presentation”

ORRSC recently purchased a drone capable of taking high definition video and images from long distances, especially in hard to access areas. Jordan Thomas, GIS Analyst, showed some of the photos taken which were used in the preparation of the Municipality of Crowsnest Pass Municipal Development Plan. Drone applications include: documents, site evaluations, flood mapping, geo-referencing for addition to orthophotos, council reports, promotional work, economic development, etc.

Drone service (operated by our GIS staff) will soon be offered to ORRSC member municipalities, upon request, as a fee-for-service. A brochure including possible applications and the associated hourly tech fee services will be forthcoming.

5. REPORTS

(a) Executive Committee Report

- Chair Gordon Wolstenholme asked if there were any questions regarding the Executive Committee Report for the meetings of April 9 and June 11, 2020 which was circulated with the agenda (there were none). He also noted that the Commission amicably parted ways with the County of Newell on September 1.

6. BUSINESS

(a) Draft ORRSC 2019 Annual Report and Financial Statements

- Director Lenze Kuiper summarized work performed by ORRSC staff during 2019:

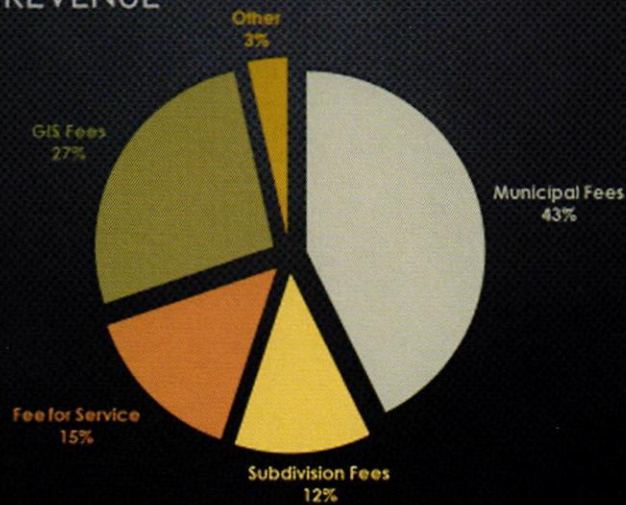


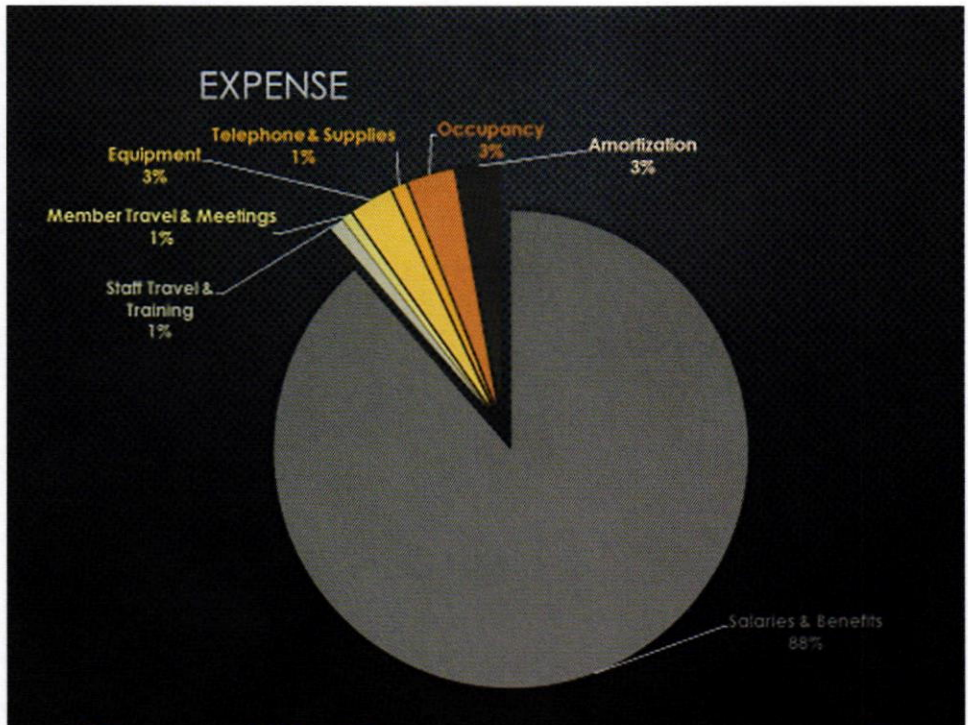
- Expenditures for 2019 exceeded revenues by \$42,313. Highlights of the audited financial statements are as follows:

HIGHLIGHTS

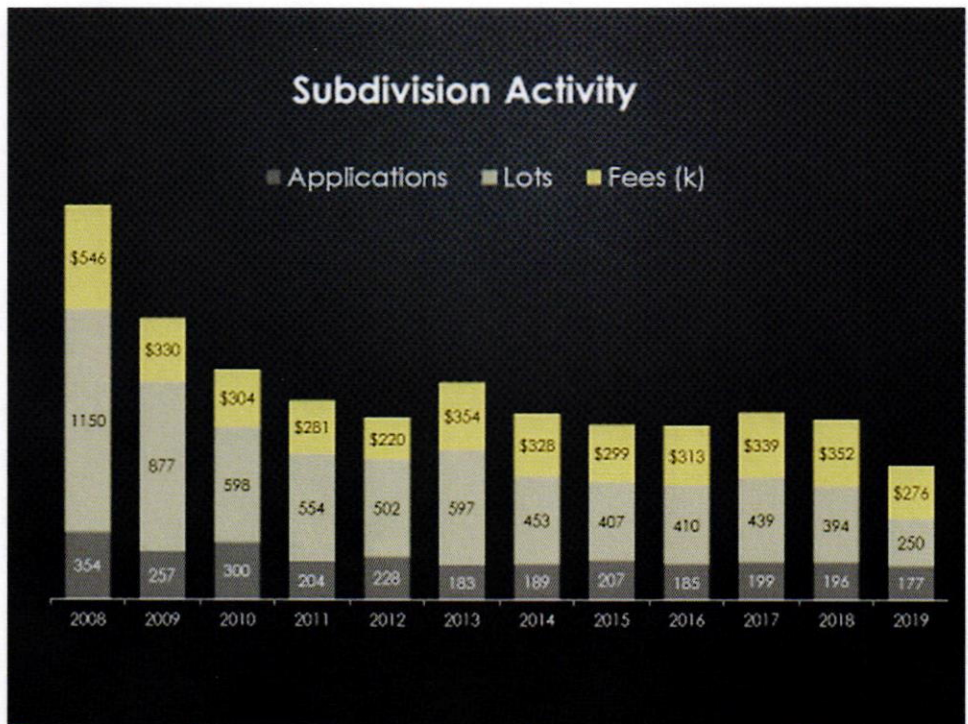
	2018	2019
Net Revenues	2,398,371	2,232,357
Membership (Planning & GIS)	1,531,393	1,547,470
Subdivision	352,688	276,180
Fee-for-Service	445,603	329,623
Net Expenses	2,217,155	2,283,137
Salaries & Benefits	1,881,894	1,963,921
Excess of Revenues over Expenditures	185,032	(42,313)
Internally Restricted Net Assets (Reserves)	199,905	336,762
Total Equity	1,251,256	1,228,803

REVENUE





- Subdivision activity was the lowest it has been since 2008, as shown below:



Moved by: Ed Weistra

THAT the Board of Directors have reviewed and ratified the Executive Committee approval of the ORRSC Annual Report and Financial Statements for the year ending December 31, 2019. **CARRIED**

(b) Regional Services Commission – Amendments to Part 15.1 of the MGA

- Amendments to Part 15.1 of the Municipal Government Act came into force on September 1, 2020 resulting from the Red Tape Reduction initiative:
 - No significant changes to powers and duties of regional services commissions
 - More streamlined and reduced provincial approvals for operations
 - Some governance implications with respect to meetings and bylaws
 - Alignment of financial management with municipal financial processes including:
 - addressing financial shortfalls
 - requirements for capital budgets
 - use of borrowed money
- The required compliance date is September 1, 2021. Review and update of ORRSC bylaws will commence shortly.

(c) Staff Update

- Barb Johnson (Executive Secretary), will be retiring on September 23, 2020 after 45 years with the Commission. In addition, both Erin Graham (Assistant Planner) and Bonnie Andres (Municipal Clerk) resigned over the summer.
- The Executive Assistant and Municipal Clerk positions have been posted in the Lethbridge Herald and interviews will be held following the September 11 deadline for applications. The Assistant Planner position will stay vacant for the time being.

(d) COVID-19 Update

- COVID office protocols continue and compliance with the City of Lethbridge's Bylaw 6239—Temporary Mandatory Face Coverings Bylaw—has occurred. As of August 10, 2020, all staff must wear a mask indoors when dealing with the public (masks are not required when in your own work area provided that physical barriers or physical distancing practices are observed).
- The public must wear a mask when entering our office (a sign has been posted at the front entrance notifying the public of this requirement). Masks and hand sanitizer have been provided for at the front counter. The specified City of Lethbridge penalty for contravention of this Bylaw is \$100.

(e) Subdivision Activity – 2020

- 112 subdivision applications have been submitted as of August 31 this year with revenue totalling \$160,109.50. This compares to 121 applications and \$199,232.50 in revenue for the same period last year. In spite of fee increases, subdivision revenue continues to decrease.

7. ACCOUNTS

- (a) Summary of Balance Sheet and Statement of Income for the 7-month period:
January 1 - July 31, 2020

Moved by: Richard Bengry

THAT the Board of Directors approve the Summary of Balance Sheet and Statement of Income for the 7-month period: January 1 - July 31, 2020. **CARRIED**

8. ADJOURNMENT

Moved by: Gordon Wolstenholme

THAT we adjourn the Annual General Board of Directors' Meeting of the Oldman River Regional Services Commission at 7:46 p.m. until Thursday, December 3, 2020 at 7:00 p.m. **CARRIED**

/bj

CHAIR: 

Meeting Minutes
of the
Agricultural Service Board – Municipal District of Pincher Creek No. 9
December 2, 2020 – MD Council Chambers
Via GoToMeeting

Present: Councillor Bev Everts, Councillor Terry Yagos, Vice Chair Martin Puch, Members David Robbins, and Anna Welsch.

Also Present: Director of Development and Community Services Roland Milligan, Agricultural Fieldman Shane Poulson, and Executive Assistant Jessica McClelland.

Not Present: Member Frank Welsch

Martin Puch called the meeting to order at 1:30 pm.

A. ADOPTION OF AGENDA

Anna Welsch 20/124

Moved that agenda be approved as presented.

Carried

B. MINUTES

David Robbins 20/125

Moved that the minutes of November 5, 2020 be approved as presented.

Carried

C. DELEGATION

D. BUSINESS ARISING FROM THE MINUTES

a) C-AES-604 Agricultural Pest Policy

Councillor Bev Everts 20/126

Moved that policy C-AES-604 be approved by the ASB with the addition on page 2 of “add in Waterton Biosphere and other relevant stakeholders by name”,

AND THAT the amended policy be referred to Council for their consideration and approval.

Carried

b) C-AES-006 Conservation Project Funding

ASB was updated on policy C-AES-006, conservation project funding, that Council rescinded the policy at their November 25, 2020 meeting.

c) Weed and Soil Erosion Concerns

Shane Poulsen updated ASB that he has been working with the landowner with the area of concern, and will continue to monitor the situation until Spring.

d) Summer Crews 2021

Anna Welsch 20/127

Moved that the weed mapping presented by Shane Poulsen be received as information.

Carried

E. UNFINISHED BUSINESS

F. 2020 AES DEPARTMENT REPORT

David Robbins 20/128

Moved to accept the departmental report from the Agricultural Fieldman for November and December 2020 as information.

Carried

C. DELEGATION

Foothills Forage and Grazing Association

Laura Gibney, General Manager with Foothills Forage and Grazing Association (FFGA), attended the meeting virtually at this time. She presented an update to ASB on the past year and future plans the FFGA has with all the changes with COVID-19 precautions.

Councillor Bev Everts and Laura Gibney left the meeting, the time being 2:50 pm.

G. CORRESPONDENCE

1. FOR ACTION

2. For Information

David Robbins 20/129

Moved that the following be received as information:

- a. Insect Survey Results – 2020
- b. Marginal Lands and Hidden Opportunities Webinar
- c. Results Driven Agriculture Research Paper

Carried

H. NEW BUSINESS

- a) Mental Health in First Aid

ASB was updated that the MD of Pincher Creek will be hosting a 2 day virtual seminar on Mental Health from the DoMoreAg Foundation on April 14 and 15, 2021. Anna Welsch offered Heritage Acres can assist if there was anything that the MD needed.

I. NEXT MEETING

January 6, 2021 *as the offices are closed from December 24, 2020 to January 4, 2021, an email will be circulated to the board to see if there is enough of an agenda to hold the meeting.

J. ADJOURNMENT

Councillor Terry Yagos

20/130

Moved to adjourn the meeting, the time being 3:27 pm.

Carried

ASB Chairperson

ASB Secretary

THE CROWSNEST/PINCHER CREEK LANDFILL ASSOCIATION
MINUTES
November 18, 2020

The regular meeting of The Crowsnest/Pincher Creek Landfill Association was held at 9:30 am Wednesday November 18, 2020 at the Cowley Hall 216 6th St Cowley, AB

Present: Brian Hammond, Municipal District of Pincher Creek #9
 Dean Ward, Municipality of Crowsnest Pass
 Dave Filipuzzi, Municipality of Crowsnest Pass
 Doreen Glavin, Municipality of Crowsnest Pass
 Brian McGillivray, Town of Pincher Creek
 Mary Kittlaus, Village of Cowley
 Emile Saindon, Landfill Manager
 Dean Bennett, Landfill Operations Supervisor
 Jean Waldner, Landfill Office Supervisor

AGENDA

Mary Kittlaus

Moved the agenda be adopted as presented.

Carried. 11.18.20-1335

MINUTES

Brian McGillivray

Moved the minutes of October 21, 2020 be adopted as circulated.

Carried. 11.18.20-1336

MANAGER'S REPORT

1. MSW steady.
2. Industrial cell is slow, with a few small jobs due in.
3. Cardboard is steady.
4. Working on budget numbers.
5. Completed MD Pincher Creek Transfer station proposal.
6. Scrap metal is all cleaned up and shipped 450 tonnes.

Brian Hammond

Moved that the Manager's report be accepted as information.

Carried. 11.18.20-1337

FINANCIAL REPORT

The Income Statement and Balance sheet to November 12, 2020 was reviewed. Administration went over the reports and answered all the financial questions.

Brian Hammond

Moved the financial statements be accepted as information.

Carried. 11.18.20-1338

Management presented the 2021 Operational Budget to the Landfill Director's. Each line item was explained in detail. All the Landfill Director's were satisfied with the efforts put forth.

Brian McGillivray

Moved that the 2021 Operational Budget be approved, with Tipping Fee increases of 2.3% Regional, 4.6% Non-Regional, and 4.9 % Out of Province. Also, a 2% Employee wage increase.

Carried. 11.18.20-1339

BYLAW DEFICIENCIES

A Letter from Alberta Registries was distributed to the Board of Directors. It stated a number of deficiencies in the bylaws that were submitted. The bylaw committee stated their disappointment in Brownlee LPP. An e-mail was sent to Brownlee LPP to address these issues, administration hasn't received a response yet. The Bylaw committee will schedule a meeting to address these issues, Administration will make sure Brownlee LLP gets in contact with the committee.

Doreen Glavin

Moved the Bylaw committee schedule a meeting to address these issues. And table this issue to the December meeting.

Carried. 11.18.20-1340

RECYCLING PROPOSAL /TOWN OF PINCHER CREEKS QUESTION ON MUNICIPAL WASTE PICKUP

The Landfill Manager said he did a proposal for a new transfer station for the MDPC it was delivered to their administration for consideration. Brian McGillivray said he would like to see The Landfill possibly take over residential waste pickup for the Town of Pincher Creek. The Chairman of the Board told Brian this idea was discussed years ago with no success. The Landfill Manager said it could still be a consideration if all the members came together.

Brian Hammond

Moved that this proposal be tabled to the December meeting.

Carried. 11.18.20-1341

DONATION REQUEST FROM THE FAMILY AND COMMUNITY SUPPORT SERVICES

A donation request from The Family and Community Support Services for the 2020 Christmas Food Hampers.

Dave Filipuzzi

Moved that a Donation of \$500.00 be given for the Christmas Hampers.

Carried. 11.18.20-1342

DONATION REQUEST FROM THE CROWSNEST PASS S P C A

A donation request from The Crowsnest Pass SPCA was submitted. The Board of Directors felt it doesn't fit our donation criteria. No funds were given for this donation request.

Carried. 11.18.20-1343

OPERATION SUPERVISOR REQUEST TO ADDRESS THE BOARD

Dean Bennett addressed the Landfill Board of Director's and thanked them for accepting his request to become the Landfill Manager upon Emile Saindon's retirement. Dean said he is Looking forward to Managing the Landfill and working with the Landfill Board and Staff.

MUNICIPAL ORGANIZATIONAL MEETING UPDATE

With the reorganization of all of our regional members boards. We are pleased to announce that there was no change in our Landfill Board of Director’s. A motion was made to go forward with all the assigned positions that were appointed at our June 1st, 2020 AGM meeting.

Representing the Municipality of the Crowsnest Pass

Dean Ward - Chairman of the Board, Dave Filipuzzi - Landfill Director, Doreen Glavin – Landfill Director

Representing the Municipal District of Pincher Creek

Brian Hammond - Landfill Director, Terry Yagos - Alternate - Landfill Director.

Representing the Town of Pincher Creek

Brian McGillivray – Vice Chairman of the Board, Mark Barber - Alternate - Landfill Director.

Representing the Village of Cowley

Mary Kittlaus - Landfill Director, Warren Mickels - Alternate - Landfill Director.

Mary Kittlaus

Moved that there will be no change in Landfill Board of Directors positions. Carried. 11.18.20-1344

REQUEST BY DIRECTORS TO MOVE INTO A CLOSED SESSION WITH LANDFILL MANAGER

Brian McGillivray moved to go into a closed session at 10:26 am Carried. 11.18.20-1345

Doreen Glavin moved to come out of this closed session 10:45 am Carried. 11.18.20-1346

REQUEST BY DIRECTORS TO MOVE INTO A CLOSED SESSION

Brian McGillivray moved to go into a closed session at 10:48 am Carried. 11.18.20-1347

Brian Hammond moved to come out of this closed session 10:58 am Carried. 11.18.20-1348

TABLED ITEMS

Recycling Concerns. / Bylaw deficiencies.

NEXT MEETING DATES


November 27, 2020 *Bylaw Committee Only*

December 16, 2020


ADJOURNMENT

Mary Kittlaus

Moved the meeting adjourn at 11:00 am Carried. 11.18.20-1349



CHAIRMAN



ADMINISTRATION



M.D. OF PINCHER CREEK NO. 9

OPERATIONS REPORT

1.0 Upcoming Meetings:

- Meeting with Spring Point Colony on Monday, February 8, 2021.
- Meeting with Joint Worksite Health Safety Committee on Wednesday, February 10, 2021.

2.0 Discussion:

- Meeting with CAO, on weekly meeting with Operations Monday, February 1, 2021.
- Meeting with Superintendent on Operations Monday, February 1, 2021.
- Meeting with Consultant on Beaver Mines Waste Water Treatment, Tuesday, February 2, 2021.
- Meeting with Consultants on Beaver Mines Water/Waste Water Collection on Thursday, February 4, 2021

2.0 Public Works Activity Includes:

- Road Maintenance & Winter Clean up – Roads are being graded in all Divisions. The Public Works has grader (8) graders out on the roads with staff repairing and doing permanent snow fence.
- Reviewing the permeant snow fence inventory on what has been completed for 2021.
- Reviewing the gravel pits on resident's land to make sure there is a viable option.
- Reviewing reclamation work for the small gravel pit at Carbondale.

3.0 Capital Projects Update:

- Bridge File 75009 – Wild Cat Ranch. Tendering of the work will happen in the spring of 2021.
- Bridge File 75377 – Local Road over Screwdriver Creek. Tendering of the work will happen in the spring of 2021.
- Bridge File 02488 – Fisher Bridge. Maintenance repairs are scheduled in the spring of 2021.
- Bridge File 74119 – Pony Truss Bridge. The proposed tender is scheduled for the end of January 2021.
- Bridge File 2224 – Lank Bridge. The proposed tender is scheduled for the end of January 2021.
- Bridge File 75265 – Local Road over Heath Creek. – The proposed engineering and design of the road are being reviewed and is in progress.
- Bridge File 07743 – Local Road over Gladstone Creek. – The proposed engineering and design of the road are being reviewed and in progress.
- Lundbreck – 1st, 2nd, & 3rd Street. – The proposed tender will happen in the spring of 2021.
- Bruder Hill – The engineering and design are in progress with a proposed tender in early spring 2021.

- Gladstone road – The proposed road construction on the road is to happen in the summer of 2021.
- Cabin Hill – The proposed engineering and design of the road is in progress.
- Hucik Hill – The proposed work is to happen in the summer of 2021.
- Landfill Road – RR 1-5. The proposed engineering and design of the road is in progress.
- Lundbreck Lagoon Aerated System – The proposed construction of a new aeration system is in the early spring of 2021.
 - We are gathering pricing to flush water and camera the collection system.
- **Castle Area Regional Water Supply Contracts 1 (Pipeline) & Contracts 2 (Mechanical)**
 - The MD will be having the ribbon-cutting ceremony held at Castle Mountain Resort parking lot celebrating its success at 10:00am on February 11, 2021.
- **Beaver Mines Water Distribution, Collection and Wastewater Treatment System.**
 - On February 3, 2021, a letter was sent to AEP regarding the public engagement process to date, including the statement of concerns to support the request for adequate dialogue by AEP. The MD is requesting that the Director consider the responses provided to AEP on November 18, 2020, and are to the Director’s satisfaction from a technical perspective by Tuesday, February 9, 2021. Should the responses be considered satisfactory, the MD hopes that a Draft Approval is issued to proceed with the approval process.
 - The next step is for the MD will follow up with AEP on February 9, 2021, to update where the Director is at with his decision.
 - If the project has addressed all of AEP’s concerns to the Director’s satisfaction: AEP will issue draft approval and the MD will review the draft approval, either provide a request for changes or a letter of acceptance, followed by the issuance of the final approval signed by the Director. Upon issuing the final approval, notice of approval will be sent to the statement of concern filers, who will then have a 30 day period to appeal.
- **Beaver Mines Forcemain**
 - The wastewater forcemain will be incorporated into the Beaver Mines Water Distribution and Wastewater Collection project for tendering and construction. – In progress.
- **Beaver Mines Lift Station**
 - Process design is complete, structural, and electrical and HVAC designs are underway. A scheduled meeting with the consultant and the MD to review the lift station is scheduled for February 4, 2021.
 - The Beaver Mines Lift Station will be tender ready by the end of February 2021.

Attachments

Program Capital Projects Status
Call Logs

Recommendation:

That the Operations report for the period January 22, 2020 to February 4, 2020, which includes the Program Capital Projects Status update and the call log, is received as information.

Prepared by: Aaron Benson

Date: February 4, 2021

Reviewed by: Troy MacCulloch

Date: February 4, 2021

Submitted to: Council

Date: February 9, 2021

2021 Capital Budget Summary

Project #	Service Area	Description	Total Cost	Sources of Project Funding				Total Revenue
				Grants	Debt	Reserves	Operations	
Infrastructure								
PW-BF-1	Bridges	Bridge File #75009 Wild Cat Ranch	580,000	580,000				580,000
PW-BF-2	Bridges	Bridge File #75377 Local Road over Screwdriver Creek	370,000	370,000				370,000
PW-BF-3	Bridges	Bridge File #74119 Pony Truss Bridge	170,500	170,500				170,500
PW-BF-4	Bridges	Bridge File #2224 Lank Bridge	198,000	198,000				198,000
PW-BF-5	Bridges	Bridge File #75265 Local Road Over Heath Creek	53,000			53,000		53,000
PW-BF-6	Bridges	Bridge File #7743 Local Road over Gladstone Creek	46,000			46,000		46,000
PW-R-1	Roads	Lundbreck - 1st, 2nd & 3rd Street	605,000			605,000		605,000
PW-R-2	Roads	Bruder Hill	470,000	470,000				470,000
PW-R-3	Roads	Gladstone	250,000	250,000				250,000
PW-R-4	Roads	Cabin Hill	64,000	64,000				64,000
PW-R-5	Roads	Hucik Hill	50,000			50,000		50,000
PW-R-6	Roads	Landfill Road - RR 1-5	20,000			20,000		20,000
	Water/Wastewater	Lundbreck Lagoon Aerated System	180,000			180,000		180,000
BMDC	Water/Wastewater	Beaver Mines Distribution and Collection	4,119,994	4,119,994				4,119,994
BMLF	Water/Wastewater	Beaver Mines Lift Station and Forcemain	1,950,745	1,950,745				1,950,745
BMWW	Water/Wastewater	Beaver Mines Waste Water Treatment Facility	1,903,335	1,903,335				1,903,335
Infrastructure Total			11,030,574	10,076,574	-	954,000	-	11,030,574
Equipment								
	Public Works	Mulcher Attachment	40,000			40,000		40,000
	Public Works	Disc Harrow	25,000			25,000		25,000
	Public Works	Wobbly Compactor	25,000			25,000		25,000
	Public Works	Air Compressor and Lines	25,000			25,000		25,000
	Public Works	Dump Trailer	25,000			25,000		25,000
	Public Works	Tri-Axle Pup	35,000			35,000		35,000
	Public Works	Scissor Neck Tri-Axle	90,000			90,000		90,000
	Agriculture	Truck mounted intelligent sprayer	20,000			20,000		20,000
Equipment Total			285,000	-	-	285,000	-	285,000
Fleet								
	Public Works	3/4 Tonne Truck	50,000			50,000		50,000
	Public Works	3/4 Tonne Truck	50,000			50,000		50,000
Fleet Total			50,000	-	-	50,000	-	50,000
Community Services								
		Park Improvement - Lundbreck Dog Park	25,000			25,000		25,000
Community Services Total			25,000	-	-	25,000	-	25,000
Grand Total			11,390,574	10,076,574	-	1,314,000	-	11,390,574

Legend

- █ Proposed Preliminary Engineering Costs
- █ Projects in Planning & Design Stage
- █ Projects in Planning & Tender Stage
- █ Projects in Construction Stage
- █ Projects in Close Out Stage
- █ Projects on hold

MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
BYLAW NO. 1326-21

Being a bylaw of the Municipal District of Pincher Creek No. 9 in the Province of Alberta, to amend Bylaw No. 1289-18, being the Land Use Bylaw.

WHEREAS Section 639 of the Municipal Government Act, Revised Statutes of Alberta 2000, Chapter M-26, as amended, provides that a municipality must pass a Land Use Bylaw; and

WHEREAS The Municipal District of Pincher Creek No. 9 desires to change the land use designation of lands legally described as:

Block 19, Plan 8111307

And as shown on Schedule ‘A’ attached hereto, from “Urban Fringe - UF” to “Parks and Open Space - POS”; and

Lot 2 Block 18 Plan 8111307

And as shown on Schedule ‘A’ attached hereto, from “Hamlet Transitional / Agricultural - HTA” to “Parks and Open Space - POS”; and

WHEREAS The Municipal District of Pincher Creek No. 9 desires to change the Hamlet of Lundbreck boundary to include Block 19, Plan 8111307;

WHEREAS The purpose of the proposed amendment is to allow for the development of a dog park, to clarify the zoning for Patton Park, and revise the Hamlet boundary;

NOW THEREFORE, under the authority and subject to the provisions of the *Municipal Government Act*, Revised Statutes of Alberta 2000, Chapter M-26, as amended, the Council of the Municipal District of Pincher Creek No. 9, in the Province of Alberta, duly assembled does hereby enact the following:

1. This bylaw shall be cited as “Land Use Bylaw Amendment No. 1326-21”.
2. Amendments to Land Use Bylaw No. 1289-18 as per “Schedule A” attached.
3. This bylaw shall come into force and effect upon third and final passing thereof.

READ a first time this _____ day of _____, 2021.

A PUBLIC HEARING was held this _____ day of _____, 2021.

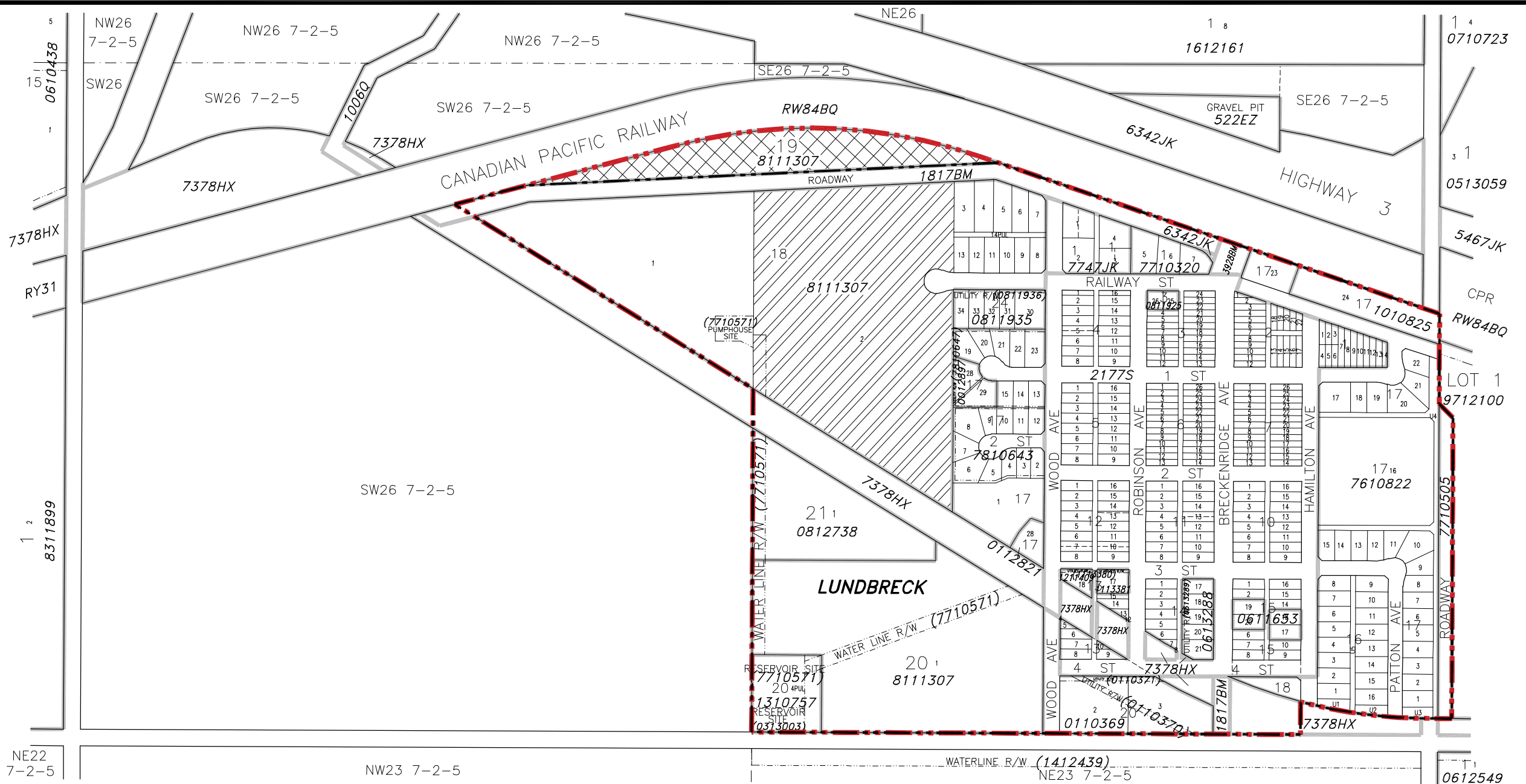
READ a second time this _____ day of _____, 2021.

READ a third time and finally PASSED this _____ day of _____, 2021.


Reeve
Brian Hammond

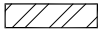
Chief Administrative Officer
Troy MacCulloch


Attachment
- "Schedule A"




**LAND USE DISTRICT REDESIGNATION
SCHEDULE 'A'**

 BLOCK 19, PLAN 8111307
FROM : Urban Fringe 'UF'
TO: Parks and Open Space 'POS'

 LOT 2, BLOCK 18, PLAN 8111307
FROM : Hamet Transitional / Agricultural 'HTA'
TO: Parks and Open Space 'POS'

 LUNDBRECK CURRENT HAMLET BOUNDARY

 LUNDBRECK PROPOSED HAMLET BOUNDARY



ALL WITHIN S 1/2 SEC 26, TWP 7, RGE 2, W 5 M
MUNICIPALITY: MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
DATE: JANUARY 14, 2021



Bylaw #: 1326-21
Date: _____





**LAND USE DISTRICT REDESIGNATION
SCHEDULE 'A'**

-  BLOCK 19, PLAN 8111307
FROM : Urban Fringe 'UF'
TO: Parks and Open Space 'POS'
-  LOT 2, BLOCK 18, PLAN 8111307
FROM : Hamlet Transitional / Agricultural 'HTA'
TO: Parks and Open Space 'POS'

-  LUNDBRECK CURRENT HAMLET BOUNDARY
-  LUNDBRECK PROPOSED HAMLET BOUNDARY

ALL WITHIN S 1/2 SEC 26, TWP 7, RGE 2, W 5 M
MUNICIPALITY: MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
DATE: JANUARY 14, 2021

AERIAL PHOTO DATE: 2015

Bylaw #: 1326-21

Date:



AES, January, 2021

- January 1 – 17, vacation time taken
- January 18 – 20, general shop & office (bringing things up from vacation time taken)
- January 19, SWIM meeting
- January 21, Provincial Conference (virtual)
- January 22, mapping & records
- January 25, 26, budget & billing
- January 27, ASB Meeting Package
- January 28, deadstock (budget, year end report, bins and program)
- January 29, shop and equipment work

Sincerely,

Shane Poulsen,
Agricultural Fieldman

AES, February, 2021

- February 1, dams and Intensive Livestock Operation (ILO) list for deadstock program
- February 2, equipment, safety, dams
- February 3, ASB Meeting, reporting, file management
- February 4, meeting follow up (next season contract/notice discussions), toxicant reporting, seed cleaning plant visit
- February 5, vacation day
- February 8 – 10, personnel & hiring
- February 8, Bistrainer (safety), contractor management
- February 9, mapping, GIS prep
- February 10, JHS meeting, deadstock bin repairs
- February 11, 12, 15 – 19, STAT & vacation time taken
- February 22, general shop & office (bringing things up from vacation time taken), SWIM meeting
- February 23, premix & rental equipment procedure for 2021
- February 24, ASB Package, policies, strategic plan
- February 25, meeting with CFIA, provincial reporting (if out yet)
- February 26, seed samples, equipment & budget

Sincerely,

Shane Poulsen,
Agricultural Fieldman

CHIEF ADMINISTRATIVE OFFICER'S REPORT

Jan 27, 2021 – Feb 09, 2021

DISCUSSION:

Jan 27	Post Council follow-up with SMT (Senior Mgmt Team) and Exec Asst Pincher Creek Emergency Services Commission follow up
Jan 28	Beaver Mines Project follow up with Dir Ops Red Tape Reduction Meeting for MSP Grant
Jan 29	Finalize ICF with Crowsnest Pass Conference Call for Rec Master Plan with Town of Pincher Creek Conference Call with MD of Ranchland regarding proposed changes to the Oldman Water Allocation by the Province of Alberta
Feb 01	Meeting with Dir Ops Drafting of Joint Letter with MD Ranchland Vision Zero Safety Message
Feb 02	Covid Conference Call with Gov. of Alberta, AHS and Dr. D. Hinshaw Fire Response Process/Billing review with Dir of Finance Subdivision and Municipal Planning Commission Meeting Special Meeting for Joint Letter with MD Ranchland
Feb 03	PCESC Fire Response review with Dir of Finance and neighboring municipalities Ag Services Board Meeting
Feb 04	Public Main Yard Inspection with JHSC Council Package Day Beaver Mines Lift Station & Forcemain Project Review with Engineers
Feb 08	Recreation Master Plan Conference Calls with both Councils
Feb 09	Module 5 of my CMML (Certified Municipal Mgmt and Leadership) Committee and Council Meetings

- Numerous other meetings throughout this period to address any issues or tasks from the Jan 26th meeting.
- Sen


Upcoming Meetings

- Feb 10 – Emergency Advisory Committee
- Feb 10 – Joint Health & Safety
- Feb 11 – Emerging Trends in Municipal Law
- Feb 11 – Castle Water Project Commissioning
- Feb 18 – Airport Meeting

RECOMMENDATION:

That Council receive for information, the Chief Administrative Officer's report for the period Jan 27, 2021 – Feb 09, 2021.

Prepared by:

Troy MacCulloch, CAO 


Date: Feb 03, 2021

Respectfully presented to:

Council

Date: Feb 09, 2021

Recommendation to Council

TITLE: PINCHER CREEK FOUNDATION – FUNDING FORMULA			
PREPARED BY: Jessica McClelland		DATE: February 3, 2021	
DEPARTMENT: Administration			
		ATTACHMENTS:	
Department Supervisor	Date		
APPROVALS:			
Department Director	Date	CAO	Date

RECOMMENDATION:

That the Pincher Creek Foundation revised funding formula be phased in over a five (5) year plan, the first percentage change to take place in 2022, with the final funding formula being 60% MD and 40% Town by 2025.

BACKGROUND:

In January 2021, the ICF Committee discussed the following formula for the Pincher Creek Foundation:

Year:	MD/Town %
2021	77/23 – no change – status quo
2022	75/25
2023	70/30
2024	65/35
2025	60/40

FINANCIAL IMPLICATIONS:

With the phased decrease in our share this will move favorably for the MD’s over the next 5 years, at which point, we will continue to press for a 50/50 share as this is recognized as a truly regional asset that both municipalities benefit from equally. The Town will be reviewing if there are any costs they bear that are not represented in a budget, but rather a service via inkind with the foundation. If a cost is determined, this will be one of the factors that may keep it from ever becoming 50/50 but it will be a true representation and recognition of their costs for services rendered that are not shared with the MD.

December 31, 2020

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

Ladies and Gentlemen:

Objective and scope

You have requested that we audit the financial statements of the Municipal District of Pincher Creek No. 9, which comprise the consolidated statement of financial position as at December 31, 2020, and the consolidated statement of operations, change in net financial assets (debt), and cash flow for the year then ended, and a summary of significant accounting policies and other explanatory information. We are pleased to confirm our acceptance and our understanding of this audit engagement by means of this letter. Our audit will be conducted with the objective of our expressing an opinion on the financial statements.

Our responsibilities as auditor

We will conduct our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, there is an unavoidable risk that some material misstatements may not be detected, even though the audit is properly planned and performed in accordance with Canadian generally accepted auditing standards.

In making our risk assessments, we consider internal control relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. However, we will communicate to you in writing concerning any significant deficiencies in internal control relevant to the audit of the financial statements that we have identified during the audit.

Management's responsibilities

Our audit will be conducted on the basis that management and those charged with governance acknowledge and understand that they have responsibility:

- (a) For the preparation and fair presentation of the financial statements in accordance with Canadian public sector accounting standards,



Reeve and Council
Municipal District of Pincher Creek No. 9
Page 2
December 31, 2020

- (b) For such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; and
- (c) To provide us with:
 - (i) Access to all information of which management is aware that is relevant to the preparation of the financial statements such as records, documentation and other matters;
 - (ii) Additional information that we may request from management for the purpose of the audit; and
 - (iii) Unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence.

As part of our audit process, we will request from management and, where appropriate, those charged with governance written confirmation concerning representations made to us in connection with the audit.

We look forward to full cooperation from your staff during our audit.

Working papers

We will ask that your personnel, to the extent possible, prepare various schedules and analyses in order to minimize your investment in the audit process. The working papers, files, other materials, reports and work created, developed or performed by us during the course of the engagement are the property of our Firm, constitute confidential information and will be retained by us in accordance with our Firm's policies and procedures.

File inspections

In accordance with professional regulations, our client files may periodically be reviewed by practice inspectors and by other file quality reviewers to ensure that we are adhering to professional and our Firm's standards. File reviewers are required to maintain the confidentiality of client information.

Confidentiality

One of the underlying principles of the profession is a duty of confidentiality with respect to client affairs. Each professional accountant must preserve the secrecy of all confidential information that becomes known during the practice of the profession. Accordingly, we will not provide any third party with confidential information concerning the affairs of Municipal District of Pincher Creek No. 9 unless:

- a) We have been specifically authorized with prior consent;
- b) We have been ordered or expressly authorized by law or by the Rules of Professional Conduct; or
- c) The information requested is (or enters into) public domain.

In delivering our service to you, we may use and have access to software and/or services that facilitate and complement our accounting services we have available to you. Unless you advise us to the contrary, you authorize us to disclose to the providers of those software's and/or services your details solely to enable us to facilitate those services to you without obligation. Your Personal information will only be provided to such organizations if they agree



Reeve and Council
Municipal District of Pincher Creek No. 9
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December 31, 2020

to use the information solely for the purposes instructed to them and can provide a comparable level of security and privacy protection as our own.

Please note that confidential information may be shared within the Avail group of companies in order to serve you better. Please visit our website at availcpa.com to obtain a copy of our detailed Privacy Policy.

In performing our services, we will send messages and documents electronically. You acknowledge that electronic communication carries the possibility of inadvertent misdirection, interception or non-delivery of confidential material, or infection by a virus. If you do not consent to our use of electronic communications, please notify us in writing.

We do not accept responsibility and will not be liable for any damage or loss caused in connection with the interception or corruption of an electronic communication.

Indemnity

We will use all reasonable efforts to complete the engagement as described in this letter within the agreed upon time frames. However, we shall not be liable for failures or delays in performance that arise from causes beyond our control, including the untimely performance by the Municipal District of Pincher Creek No. 9 of its obligations.

Billing

It is understood and agreed that accounts for services rendered by Avail LLP Chartered Professional Accountants will have G.S.T. added where applicable, and are payable upon receipt of invoice. It is understood and agreed that the Municipal District of Pincher Creek No. 9 will pay to Avail LLP Chartered Professional Accountants the principal amount reflected on all invoiced accounts for services rendered together with interest on any unpaid balance thereof, commencing 30 days following the invoice date at the rate of 1.5% per month or 19.562% per annum. In the event accounts go unpaid, Avail LLP Chartered Professional Accountants reserves the right to discontinue work on behalf of the client at any time.

Fees paid in advance

In the event you pay all or a portion of your fees in advance, the firm agrees to the following:

- (a) To render invoices on a periodic basis and/or upon the completion of the engagement.
- (b) To render statements to you on a periodic basis detailing issuances of invoices and applications of advance fees paid.
- (c) To retain as a credit in your account to be applied against fees for future engagements any advance fees paid in excess of the rendered invoices for this engagement, unless you request a refund.
- (d) To refund the excess of advance fees on hand in the event the firm determines the agreed professional services cannot be completed.



Reeve and Council
Municipal District of Pincher Creek No. 9
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Costs of responding to government or legal processes

In the event we are required to respond to a subpoena, court order, government agency or other legal process for the production of documents and/or testimony relative to information we obtained and/or prepared during the course of this engagement, you agree to compensate us at our normal hourly rates for the time we expend in connection with such response, and to reimburse us for any direct out-of-pocket costs, including applicable G.S.T.

Other services

In addition to the audit services referred to above, we will, as allowed by the Rules of Professional Conduct, prepare your federal and provincial income tax returns and other special reports as required. Management will provide the information necessary to complete these returns/reports and will file them with the appropriate authorities on a timely basis.

Use of information

It is acknowledged that we will have access to all personal information in your custody that we require to complete our engagement. Our services are provided on the basis that:

- (a) You represent to us that management has obtained any required consents for the collection, use and disclosure to us of personal information required under applicable privacy legislation; and
- (b) We will hold all personal information in compliance with our Privacy Statement.

Reporting

Unless unanticipated difficulties are encountered, our report will be substantially in the following form:

<p>To: The Reeve and Council of Municipal District of Pincher Creek No. 9</p> <p><i>Report on the Audit of the Financial Statements</i></p> <p><i>Opinion</i></p> <p>We have audited the financial statements of the Municipal District of Pincher Creek No. 9, which comprise the consolidated statement of financial position as at December 31, 2020, and the consolidated statement of operations, change in net financial assets (debt), and cash flow for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.</p> <p>In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Municipal District as at December 31, 2020, and its results of operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.</p>



Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Municipal District in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Municipal District's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Municipal District or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Municipal District's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:



- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Municipal District's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Municipal District's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Municipal District to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

[Firm location]

[Date of the auditor's report]

AVAIL LLP

Chartered Professional Accountants



Reeve and Council
Municipal District of Pincher Creek No. 9
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December 31, 2020

Depending on the results of our audit findings, the form and content of our report may need to be amended.

The terms of our engagement as outlined above will continue in effect from year to year until amended or terminated in writing.

If the above terms are acceptable to you, please sign and return this letter to indicate your acknowledgement of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

AVAIL LLP

Chartered Professional Accountants

Acknowledged and agreed on behalf of the Municipal District of Pincher Creek No. 9 by:

Name and Title: _____

Date: _____

From: Theresa Lynn <Theresa.Lynn@telus.com>
Sent: February 2, 2021 7:47 AM
To: Troy MacCulloch <AdminCAO@mdpincercreek.ab.ca>
Cc: Matt Mosby <Matt.Mosby@telus.com>
Subject: Pincher Creek / TELUS

Hi Troy,

I hope you're doing well and staying sane in this crazy world we live in. I'd like to take a moment to introduce myself as the general manager for Southern Alberta for TELUS

One of the hats I wear as general manager, is being the advocate and liaison for the communities and municipalities in my region, to help them accomplish their goals – this quite often is related to infrastructure and rural connectivity, but it can be anything from helping you address a customer complaint, to solving an account challenge you may be having, to supporting your needs during a high attendance event (whenever those may be permitted again). The other hats I wear are community sponsorship and non for profit financial support, and day to day operations of the field technician team.

The reason I am reaching out is to let you know that TELUS is seeking to submit an application to the universal broadband fund to see if we can get some funding to improve mobility coverage in and around your municipality, and as such, launch wireless high speed internet access and improved cellular connectivity in the area. We are seeking a letter of support from the municipality for us to attach to the submission. I've attached a template for you to review. Applications close Feb 14, and we are aiming to be in well before the deadline. There is no request for capital investment from the municipality to support this endeavour, and I commit to following up once the outcome of the funding decisions are rolled out by the funding agency.

I would also like to offer for my team and I to engage with your community leaders (hopefully someday soon in person) to share what TELUS is doing to help support your residents and businesses, and to hear any concerns that you may have that I can assist with. I have also included Matt Mosby on this letter who is our local Manager, Community and Service Excellence, and is available for any local area matters you may have.

Let me know if you have questions or concerns, and I'd be happy to help.

Theresa Lynn
General Manager, Alberta South
TELUS
Mobile +1 587 877 8175

Healthcare in your hands.

[Download the app](#) today!

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January 26, 2021

Pincher Creek No. 9
1037 Herron Avenue, Pincher Creek,
AB T0K 1W0
Attn: Troy MacCulloch
CAO@mdpincercreek.ab.ca

**SUBJECT: Universal Broadband Fund – Letter of Support
TELUS Sites in Pincher Creek No. 9.**

TELUS is currently in the process of applying to the Canadian Government’s Universal Broadband Fund for a financial contribution to improve access to wireless services within **Pincher Creek No. 9**.

Improving connectivity within rural communities enables residents to engage in numerous aspects of the digital economy, including those residents from underrepresented groups. Internet has become an essential service and provides access for residents to numerous benefits such as tele-health, distance learning, and telework. Today, reliable internet access has become a virtual requirement for commercial and industrial businesses, whether small or large, to operate and develop.

Access to reliable internet also provides social services within the municipality valuable avenues to serve the residents. The internet has made connecting key social service institutions with the residents who use those institutions much easier. Furthermore, this access, expedited through the Universal Broadband Fund, will contribute to a multitude of government strategies that have become easiest to access via the internet.

Please indicate **Pincher Creek No. 9’s** support of TELUS submitting applications to improve wireless service within your Municipality by signing in the indicated area below.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,

Theresa Lynn
General Manager
Alberta South, Customer Solutions
Delivery
TELUS Communications Inc.
587-877-8175
Theresa.Lynn@TELUS.com

Authorized Signatory,	
Signed: _____	Date: _____
Name:	
Title:	



309B Macleod Trail SW
High River, Alberta Canada T1V 1Z5
P: 403.652.2110 F: 403.652.2396
www.highriver.ca

February 3, 2021

OFFICE OF THE MAYOR

VIA E-MAIL: info@mdpincercreek.ab.ca

Office of the Reeve,
M.D. of Pincher Creek No. 9
PO Box 279
Pincher Creek, AB TOK 1W0

Attention: Reeve Brian Hammond

RE: Reinstatement of the 1976 Coal Development Policy

Dear Reeve:

In June of 2020, the Government of Alberta rescinded the Coal Development Policy (Coal Policy) without adequate consultation with First Nations, environmental groups, residents, property owners and local governments. This policy was originally developed with the intended purpose to guide coal extraction along the eastern slopes of the Rockies based upon a land use classification system and dictated where and how coal leasing, exploration and development could occur.

The Coal Policy introduced in 1976, guided coal extraction in one of the most important landscapes in Alberta and Canada. The Eastern Slopes provides water to users from the Rockies to the Hudson Bay. For 44 years, the policy provided essential protection of valuable water resources, ensuring downstream communities had access to clean drinking water, that farmers had access to irrigation water to protect their livelihoods and that ecosystems that tourists come to experience remained in their pristine state.

The rescindment of any policy that affects public lands and/or water resources, requires public consultation with First Nations, environmental groups, residents of Alberta, property owners and local municipalities. Without that consultation, our democratic processes are undermined.

In response to the Government of Alberta's action, the Town of High River's Council adopted the following resolution at its Regular Meeting of Council on January 11, 2021:

BE IT RESOLVED THAT Council direct Administration to draft a letter to Premier Jason Kenney, requesting the immediate reinstatement of the 1976 Alberta Coal Policy which was rescinded on June 1, 2020;

AND THAT the letter requests that the Government of Alberta begin public consultation with Indigenous groups, environmental groups and all stakeholders in Alberta on any proposed revisions or replacement to this policy;

AND FURTHER THAT this letter be sent to the Minister of Environment & Parks Honorable Jason Nixon, Minister of Energy Honourable Sonya Savage as well as the MLA for Livingstone-Macleod Roger Reid.

This letter was sent to the Premier and Ministers on January 12, 2021 and a meeting has been requested with the Premier. To date, the Town of High River has neither received a response to our letter nor a meeting with the Premier.

Other local governments, public officials and Albertans have called upon the Government of Alberta to reinstate the Coal Policy. In response, the Government of Alberta has cancelled some of the coal leases but this is not adequate in order to protect water resources for downstream communities, such as High River.

Therefore, at the February 1, 2021 Special Meeting of Council, the following resolution was adopted:

WHEREAS Council adopted resolution #RC 14 -2021 requesting the Province of Alberta immediately re-instate the 1976 Coal Development Policy;

AND WHEREAS coal exploration and open pit mining will impact water resources for downstream communities affecting businesses, residents, ranchers, farmers and ecosystems;

AND WHEREAS coal exploration is causing irreparable damage to the landscapes and watersheds as well as adversely affecting the public's access, use and enjoyment of Crown lands on the Eastern Slopes of Alberta;

AND WHEREAS local First Nations groups, municipalities, landowners and ranchers are legally challenging the Province's rescindment of the 1976 Coal Policy in the Courts;

BE IT RESOLVED THAT Council request all coal exploration be immediately ceased on the Eastern Slopes of Alberta and cease issuance of any new exploration permits on the Eastern Slopes of Alberta until public consultation has taken place regarding the future of coal mining on the Eastern Slopes of Alberta;

AND THAT Council request the Government of Alberta & Premier Jason Kenney issue an immediate stop work order for all existing coal exploration permits on the Eastern Slopes of Alberta and cease issuance of any new exploration permits on the Eastern Slopes of Alberta until public consultation has taken place regarding the future of coal mining on the Eastern Slopes of Alberta;


AND THAT Council direct Administration to investigate legal options relating to the damage caused due to exploration on Alberta's Eastern Slopes.

AND FURTHER THAT Council direct Administration to prepare a letter with a copy of this resolution to all members of the Federation of Canadian Municipalities, Alberta Urban Municipalities Association, Rural Municipalities of Alberta, Municipalities of Saskatchewan, Saskatchewan Association of Rural Municipalities and Association of Manitoba Municipalities requesting their support to re-instate the 1976 Coal Development Policy.

In light of this resolution, the Town of High River is respectfully requesting that you consider drafting a letter of support to the Government of Alberta for the immediate Exploration Stop Work Order as well as the reinstatement of the Coal Policy.

Thank you for considering our request,

Sincerely,

A handwritten signature in black ink, appearing to read "Craig Snodgrass", enclosed within a large, loopy circular scribble.

Craig Snodgrass
Mayor

CS/cp/kr



Ild
RECEIVED
JAN 28 2021
M.D. OF PINCHER CREEK

January 20, 2021

Municipal District of Pincher Creek
PO Box 279
Pincher Creek, AB T0K 1W0

Attn: Reeve and Council

RE: Need for a Stronger Western Canadian Municipal Advocate

The past few years have presented convincing evidence of the continued lack of advocacy and blatant disregard at the federal level for Western Canada's needs and one of its highly significant industries that impacts us all: the natural resources industry. Our Council here at the Municipal District of Bonnyville (M.D.) is beyond frustrated with this lack of effective representation that Western Canadian municipalities receive.

Currently, our only voice at the national table is that of the Federation of Canadian Municipalities (FCM). From their website, FCM states they "...advocate for municipalities to be sure their citizens' needs are reflected in federal policies and programs. Year after year, our work benefits every municipal government and taxpayer in Canada, and our programming delivers tools that help municipalities tackle local challenges."

Question: Do you feel that FCM advocates for the needs of your municipality or western Canada?

Question: Does the annual FCM Conference agenda/tours provide relevant value for your municipality?

Question: Are the needs of western Canada different than those of eastern Canada, and if so, is it time we entertain the idea of a WCM (Western Canadian Municipalities)?

To their credit, FCM did add a Western Economic Solutions Taskforce as one of their 15 program areas. Unfortunately, this initiative – which was created to mitigate the genuine alienation and hostility western Canadian municipalities experienced at the 2019 FCM Annual Conference held in Quebec City – has not produced any real results.

Our hope is that this letter will spark the much-needed conversation and potential solution to this long-standing issue. We sincerely request that you and your Council take the time to truly reflect on the level of service you are receiving from your current federal advocate. Are they truly the federal voice advocating for your citizens and your municipality?



The M.D. and many other communities across Alberta and western Canada are proud supporters and partners of the oil and gas industry. We wish to be a part of a solution that supports industry competitiveness rather than be forced to absorb Ontario's and Quebec's concepts of crippling changes that impact our municipal sustainability.

Thank you in advance for your Council's reflection on this topic and we look forward to hearing any feedback you may have.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "G. Sawchuk", is written over the closing text.

Greg Sawchuk
Reeve

cc: Mr. Barry Morishita, President, Alberta Urban Municipalities Association
Mr. Paul McLauchlin, President, Rural Municipalities of Alberta

/eq



County of Stettler No. 6

Box 1270 I2a

6602 – 44 Avenue

Stettler, Alberta TOC 2L0

T:403.742.4441 F: 403.742.1277

www.stettlercounty.ca

January 21, 2021

Honourable Ric McIver
320 Legislature Building
10800-97 Avenue
Edmonton, AB T5K 2B6

EMAIL: transportation.minister@gov.ab.ca

Dear Honourable Ric McIver,

RE: Uncollectable Property Taxes in the County of Stettler/Seniors Housing Requisitions

Thank you for the ongoing work the Municipal Affairs ministry has continued with the County of Stettler and with rural municipalities. We appreciate both the time taken and the detail in which the Assessment Tax Model was dissected in 2020. We are sincerely thankful for the understanding exhibited of both rural municipalities' difficult situation as well as the position of our partners in the oil and gas industry.

We are writing today to bring back to the forefront, our frustration, a frustration we share with many rural municipalities, as we once more deal with substantial losses attributed to uncollectable property taxes from oil and gas properties for the 2020 year.

At the December 9, 2020 Council Meeting County of Stettler Council was once again put in the position to write off another \$58,000 in bad debts due to oil and gas. In addition to these bad debts, we are responsible to submit requisitions on behalf of the County of Stettler Housing Authority, 'Seniors Housing Requisition' on behalf of these defunct oil and gas companies.

Between 2015 and 2020, we have paid out of our operating budget, \$178,280.00 in Seniors Housing Requisitions. Seniors Housing authorities budget each year on equalized assessment. At the end of the year, our municipality has been left bailing out the shortfalls due to unpaid oil and gas taxes. We cannot let our senior citizens needs suffer by not submitting these shortfalls, which cover budgeted items, in our case for the County of Stettler Housing Authority. However, it remains our position that municipalities, and ratepayers in our municipalities, should not be left funding uncollectable requisitions and covering shortfalls for private industry.

We respectfully request further engagement with your ministry regarding this ongoing issue, and intervention from Municipal Affairs in seeking resolution.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Clarke". The signature is fluid and cursive, with the first name "Larry" written in a more compact, looped style and the last name "Clarke" written in a more extended, flowing style.

Larry Clarke
REEVE

LC/nt

CC

Honourable Sonya Savage, Minister of Energy

Honourable Josephine Pon, Minister of Seniors and Housing

Mr. Nate Horner, MLA for Drumheller-Stettler

Mr. Paul McLauchlin, President, Rural Municipalities of Alberta

All Alberta Rural Municipalities

January 31, 2021

To: Municipal District of Pincher Creek Council

Email: info@mdpincercreek.ab.ca

From: Constituents of the Municipal District of Pincher Creek

Dear MD of Pincher Creek - Reeve Brian Hammond and Councillors,

As constituents of the Municipal District of Pincher Creek, we applaud your resolution to direct the Government of Alberta to reinstate the 1976 Coal Policy.

We fully support this resolution in the face of the proposed open pit, mountain-top removal coalmines in our precious headwaters, and to the beauty, health and function of this iconic foothills and Rocky Mountain ecosystem. We also recognize this resolution as a safeguard for the long-term sustainability of local agriculture, water security, and the growing potential in tourism and recreation that will help support innovative and resilient communities in SW Alberta.

The Government of Alberta's decision to rescind the 1976 Coal Policy was done without any public consultation with Albertans and First Nations, and as such is a travesty to a functional democracy.

We thank you for your careful deliberations on this critical issue, looking at all aspects, and subsequently coming up with a sound decision and resolution. Well done.

With appreciation and support for this resolution, we thank you.

Connie Simmons (connaught.simmons@gmail.com) on behalf of MD of Pincher Creek residents:

Phil Hazelton

Helen Du Bois

Neil Kathol

Cody Johnson

Barbara Boyer

John Lawson

Gordon Petersen

Karin Buhrmann

Cathy Scrimshaw

Hans Buhrmann

Norma Dougall

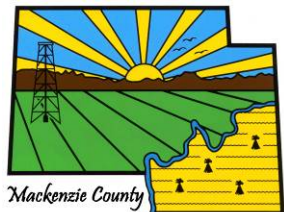
Anja Van Der Heijden

Bobbi Lambright

Andrea Hlady

Hilah Simmons

Livingstone Landowners Group



Mackenzie County

P.O. Box 640, 4511-46 Avenue, Fort Vermilion, AB T0H 1N0
 P: (780) 927-3718 Toll Free: 1-877-927-0677 F: (780) 927-4266
www.mackenziecounty.com
office@mackenziecounty.com

January 27, 2021

The Honourable Jason Kenney
 Premier of Alberta
 307 Legislature Building
 10800-97 Avenue
 Edmonton, AB
 T5K 2B6

Dear Premier:

RE: REOPENING RECREATIONAL AND BUSINESS SERVICES

While we appreciate the work the government has done to ensure the safety of Albertans, we recognize the extreme toll the pandemic has taken on our residents, businesses and recreational centres.

We strongly urge the Provincial Government to reopen access to indoor recreational facilities, such as arenas, to the public and establish additional supportive public health guidelines. These could include allowing facility rentals for private functions.

Additionally, we urge the Provincial Government to reopen all business services as many are at risk of closing permanently and losing their livelihood. In our rural remote northern location, services such as restaurants are extremely limited. Reinstating in-person service will assist in sustainability into the future.

Again, we thank you for your efforts in keeping Albertans safe, and we look forward to having a conversation with you to discuss the specific needs of our communities. Please feel free to contact me at (780) 926-7405 or by email to josh@mackenziecounty.com.

Yours sincerely,

Josh Knelsen
 Reeve

Premier of Alberta

Page 2

January 27, 2021

c: Dr. Deena Hinshaw, Chief Medical Officer of Health
Mr. Dan Williams, MLA Peace River
Rural Municipalities of Alberta – Member Municipalities
Alberta Urban Municipalities Association – Member Municipalities
Mackenzie County Council
La Crete Chamber of Commerce
Fort Vermilion & Area Board of Trade
High Level Chamber of Commerce



Municipal District of Spirit River No. 133

Box 389 Spirit River, Alberta T0H 3G0
E-mail: mdsr133@mdspiritriver.ab.ca

Telephone (780) 864-3500
Fax (780) 864-4303

January 27, 2021

Honourable Premier Kenney
Alberta Premier

Email: premier@gov.ab.ca

Dear Honourable Premier Kenney,

Thank you for your response to our letter regarding our position on the handling of COVID-19 restrictions. We appreciate the tenuous position the government is in when making decisions surrounding the containment of COVID-19.

The MD of Spirit River appreciates the importance of preserving life, however we also recognize that the loss of lives during the shutdown will not be limited to those who die from COVID-19.

The aftermath of the lockdown as identified in the paper *COVID-19: Rethinking the Lockdown Groupthink*, by Ari R Joffe MD, FRCPC with the Stollery Hospital, clearly outlines the massive cost both financially and to human lives if we continue with the lockdowns.

In the paper Joffe states, "... lockdowns are far more harmful to human health than COVID-19 can be." We have attached a copy of his paper.

There are numerous other Physicians and papers, including the Great Barrington Declaration (gbdeclaration.org), a statement written by three public health experts from Harvard, Stanford and Oxford, that back the findings of Joffe.

Our council wishes to publicly state that we support the governments steps to reopening the economy and choosing a balanced approach to ensure a quick return to our economy and our wellbeing. We commend the leadership role you are taking.

Sincerely,

Tony Van Rootselaar, Reeve
Municipal District of Spirit River

Cc: Honourable Tyler Shandro Minister of Health
Honourable Nate Glubish, Minister of Service Alberta
Honourable Doug Schweitzer, Minister of Jobs, Economy and Innovation
Todd Loewen, MLA Central Peace Notley
Dan Williams, MLA Peace River

*****To all RMA and AUMA Members*****

AIRDRIE	MOUNTAIN VIEW COUNTY	CASTOR	RAYMOND
BEAUMONT	NEWELL, COUNTY OF	CLARESHOLM	REDCLIFF
BROOKS	NORTHERN LIGHTS, COUNTY OF	COALDALE	REDWATER
CALGARY	NORTHERN SUNRISE COUNTY	COALHURST	RIMBEY
CAMROSE	OPPORTUNITY NO. 17, M.D. OF	COCHRANE	ROCKY MOUNTAIN HOUSE
CHESTERMERE	PAINTEARTH NO. 18, COUNTY OF	CORONATION	SEDGEWICK
COLD LAKE	PARKLAND COUNTY	CROSSFIELD	SEXSMITH
EDMONTON	PEACE NO. 135, M.D. OF	DAYSLAND	SLAVE LAKE
FORT SASKATCHEWAN	PINCHER CREEK NO. 9, M.D. OF	DEVON	SMOKY LAKE
GRANDE PRAIRIE	PONOKA COUNTY	DIDSBURY	SPIRIT RIVER
LACOMBE	PROVOST NO. 52, M.D. OF	DRAYTON VALLEY	ST. PAUL
LEDUC	RANCHLAND NO. 66, M.D. OF	DRUMHELLER	STAVELY
LETHBRIDGE	RED DEER COUNTY	ECKVILLE	STETTLER
LLOYDMINSTER	ROCKY VIEW COUNTY	EDSON	STONY PLAIN
MEDICINE HAT	SADDLE HILLS COUNTY	ELK POINT	STRATHMORE
RED DEER	SMOKY LAKE COUNTY	FAIRVIEW	SUNDRE
SPRUCE GROVE	SMOKY RIVER NO. 130, M.D. OF	FALHER	SWAN HILLS
ST. ALBERT	SPIRIT RIVER NO. 133, M.D. OF	FORT MACLEOD	SYLVAN LAKE
WETASKIWIN	ST. PAUL NO. 19, COUNTY OF	FOX CREEK	TABER
CROWNEST PASS, MUNICIPALITY OF	STARLAND COUNTY	GIBBONS	THORSBY
JASPER, MUNICIPALITY OF	STETTLER NO. 6, COUNTY OF	GRIMSHAW	THREE HILLS
LAC LA BICHE COUNTY	STURGEON COUNTY	HANNA	TOFIELD
MACKENZIE COUNTY	TABER, M.D. OF	HARDISTY	TROCHU
STRATHCONA COUNTY	THORHILD COUNTY	HIGH LEVEL	TURNER VALLEY
WOOD BUFFALO, REGIONAL MUNICIPALITY OF	TWO HILLS NO. 21, COUNTY OF	HIGH PRAIRIE	TWO HILLS
ACADIA NO. 34, M.D. OF	VERMILION RIVER, COUNTY OF	HIGH RIVER	VALLEYVIEW
ATHABASCA COUNTY	VULCAN COUNTY	HINTON	VAUXHALL
BARRHEAD NO. 11, COUNTY OF	WAINWRIGHT NO. 61, M.D. OF	INNISFAIL	VEGREVILLE
BEAVER COUNTY	WARNER NO. 5, COUNTY OF	IRRICANA	VERMILION
BIG LAKES COUNTY	WESTLOCK COUNTY	KILLAM	VIKING
BIGHORN NO. 8, M.D. OF	WETASKIWIN NO. 10, COUNTY OF	LAMONT	VULCAN
BIRCH HILLS COUNTY	WHEATLAND COUNTY	LEGAL	WAINWRIGHT
BONNYVILLE NO. 87, M.D. OF	WILLOW CREEK NO. 26, M.D. OF	MAGRATH	WEMBLEY
BRAZEAU COUNTY	WOODLANDS COUNTY	MANNING	WESTLOCK
CAMROSE COUNTY	YELLOWHEAD COUNTY	MAYERTHORPE	WHITECOURT
CARDSTON COUNTY	ATHABASCA	MCLENNAN	ACME
CLEAR HILLS COUNTY	BANFF	MILK RIVER	ALBERTA BEACH
CLEARWATER COUNTY	BARRHEAD	MILLET	ALIX
CYPRESS COUNTY	BASHAW	MORINVILLE	ALLIANCE
FAIRVIEW NO. 136, M.D. OF	BASSANO	MUNDARE	AMISK
FLAGSTAFF COUNTY	BEAVERLODGE	NANTON	ANDREW
FOOTHILLS COUNTY	BENTLEY	NOBLEFORD	ARROWWOOD
FORTY MILE NO. 8, COUNTY OF	BLACK DIAMOND	OKOTOKS	BARNWELL
GRANDE PRAIRIE NO. 1, COUNTY OF	BLACKFALDS	OLDS	BARONS
GREENVIEW NO. 16, M.D. OF	BON ACCORD	ONOWAY	BAWLF
KNEEHILL COUNTY	BONNYVILLE	OYEN	BEISEKER
LAC STE. ANNE COUNTY	BOW ISLAND	PEACE RIVER	BERWYN
LACOMBE COUNTY	BOWDEN	PENHOLD	BIG VALLEY
LAMONT COUNTY	BRUDERHEIM	PICTURE BUTTE	BITTERN LAKE
LEDUC COUNTY	CALMAR	PINCHER CREEK	BOYLE
LESSER SLAVE RIVER NO. 124, M.D. OF	CANMORE	PONOKA	BRETON
LETHBRIDGE COUNTY	CARDSTON	PROVOST	CARBON

MINBURN NO. 27, COUNTY OF
CAROLINE
CHAMPION

CHAUVIN
CHIPMAN
CLIVE
CLYDE
CONSORT
COUTTS
COWLEY
CREMONA
CZAR
DELBURNE
DELIA
DONALDA
DONNELLY
DUCHESS
EDBERG
EDGERTON
ELNORA
EMPRESS
FOREMOST
FORESTBURG
GIROUXVILLE
GLENDON
GLENWOOD
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HAY LAKES
HEISLER
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HINES CREEK
HOLDEN
HUGHENDEN
HUSSAR
HYTHE
INNISFREE
IRMA
KITSCOTY
LINDEN
LOMOND

CARSTAIRS
LONGVIEW
LOUGHEED

MANNVILLE
MARWAYNE
MILO
MORRIN
MUNSON
MYRNAM
NAMPA
PARADISE VALLEY
ROCKYFORD
ROSALIND
ROSEMARY
RYCROFT
RYLEY
SPRING LAKE
STANDARD
STIRLING
VETERAN
VILNA
WARBURG
WARNER
WASKATENAU
YOUNGSTOWN
ARGENTIA BEACH
BETULA BEACH
BIRCH COVE
BIRCHCLIFF
BONDISS
BONNYVILLE BEACH
BURNSTICK LAKE
CASTLE ISLAND
CRYSTAL SPRINGS
GHOST LAKE
GOLDEN DAYS
GRANDVIEW
GULL LAKE
HALF MOON BAY

RAINBOW LAKE
HORSESHOE BAY
ISLAND LAKE
ISLAND LAKE
SOUTH
ITASKA BEACH
JARVIS BAY
KAPASWIN
LAKEVIEW
LARKSPUR
MA-ME-O BEACH
MEWATHA BEACH
NAKAMUN PARK
NORGLENWOLD
NORRIS BEACH
PARKLAND BEACH
PELICAN NARROWS
POINT ALISON
POPLAR BAY
ROCHON SANDS
ROSS HAVEN
SANDY BEACH
SEBA BEACH
SILVER BEACH
SILVER SANDS
SOUTH BAPTISTE
SOUTH VIEW
SUNBREAKER COVE
SUNDANCE BEACH
SUNRISE BEACH
SUNSET BEACH
SUNSET POINT
VAL QUENTIN
WAIPAROUS
WEST BAPTISTE
WEST COVE
WHISPERING HILLS

CARMANGAY
WHITE SANDS
YELLOWSTONE

I.D. NO. 04 (WATERTON)
I.D. NO. 09 (BANFF)
I.D. NO. 12 (JASPER NATIONAL PARK)
I.D. NO. 13 (ELK ISLAND)
I.D. NO. 24 (WOOD BUFFALO)
I.D. NO. 25 (WILLMORE WILDERNESS)
IMPROVEMENT DISTRICT NO. 349
KANANASKIS IMPROVEMENT DISTRICT
SPECIAL AREAS BOARD

Rethinking the Lockdown Groupthink

COVID-19: Rethinking the Lockdown Groupthink

Author: Ari R Joffe MD, FRCPC*

Affiliation: Department of Pediatrics, Division of Critical Care Medicine, University of Alberta and Stollery Children's Hospital, Edmonton, Alberta, Canada; John Dossetor Health Ethics Center, University of Alberta, Edmonton, Alberta, Canada.

Corresponding Author: Ari R Joffe MD; Email: ari.joffe@ahs.ca ORCID: <http://orcid.org/0000-0002-4583-707X>

Keywords: Cost-benefit analysis; COVID-19; Groupthink; Lockdowns; Public Health

Abstract: The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has caused the Coronavirus Disease 2019 (COVID-19) worldwide pandemic in 2020. In response, most countries in the world implemented lockdowns, restricting their population's movements, work, education, gatherings, and general activities in attempt to 'flatten the curve' of COVID-19 cases. The public health goal of lockdowns was to save the population from COVID-19 cases and deaths, and to prevent overwhelming health care systems with COVID-19 patients. In this narrative review I explain why I changed my mind about supporting lockdowns. First, I explain how the initial modeling predictions induced fear and crowd-effects [i.e., groupthink]. Second, I summarize important information that has emerged relevant to the modeling, including about infection fatality rate, high-risk groups, herd immunity thresholds, and exit strategies. Third, I describe how reality started sinking in, with information on significant collateral damage due to the response to the pandemic, and information placing the number of deaths in context and perspective. Fourth, I present a cost-benefit analysis of the response to COVID-19 that finds lockdowns are far more harmful to public health than COVID-19 can be. Controversies and objections about the main points made are considered and addressed. I close with some suggestions for moving forward.

Rethinking the Lockdown Groupthink

Introduction

The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) initially caused Coronavirus Disease 2019 (COVID-19) in China in December 2019, and has caused a worldwide pandemic in 2020. In response, most countries in the world implemented lockdowns, restricting their population's movements, work, education, gatherings, and general activities in attempt to 'flatten the curve' of COVID-19 cases. Even now, as the so-called 'second-wave' of COVID-19 cases is occurring, governments are considering and some implementing another lockdown to again 'flatten the curve'. The public health goal of lockdowns is to save the population from COVID-19 cases and deaths, and to prevent overwhelming health care systems with COVID-19 patients. I was a strong proponent of lockdowns when the pandemic was first declared.¹

In this narrative review I explain why I changed my mind. First, I explain how the initial modeling predictions induced fear and crowd-effects [i.e., groupthink]. Second, I summarize important information that has emerged relevant to the modeling. Third, I describe how reality started sinking in, with information on significant collateral damage from the response to the pandemic, and on the number of deaths in context. Fourth, I present a cost-benefit analysis of the response to COVID-19. I close with some suggestions for moving forward.

An important point must be emphasized. The COVID-19 pandemic has caused much morbidity and mortality. This morbidity and mortality have been, and continue to be, tragic.

1. The initial predictions induce fear

1.1 How it started: modelling

Early modeling made concerning predictions that induced fear (Table 1). Kissler et al. predicted the need for intermittent lockdowns occurring for a total of 75% of the time, even after July 2022, to avoid "overwhelming critical care capacity."²⁻⁴ In their discussion they wrote that the response "is likely to have profoundly negative economic, social, and educational consequences... We do not take a position on the advisability of these scenarios given the economic burden...."² On March 16, 2020, the Imperial College COVID-19 Response Team published modelling of the impact of non-pharmaceutical interventions (NPI) to reduce COVID-19 mortality and healthcare demand in the United States (US) and United Kingdom (UK).⁵ They wrote that suppression "needs to be in force for the majority [$>2/3$ of the time] of the 2 years of the simulation," without which there would be 510,000 deaths in Great Britain and 2.2 million deaths in the United States by mid-April, surpassing ICU demand by 30 times.⁵ In their discussion they wrote that "we do not consider the ethical or economic implications [page 4]... The social and economic effects of the measures which are needed to achieve this policy goal will be profound [page 16]...."⁵ The Imperial College COVID-19 Response Team extended this to the global impact of the pandemic on March 26, 2020,⁶ and estimated that without lockdowns there would be "7.0 billion infections and 40 million deaths globally this year."⁶ In their discussion they wrote "we do not consider the wider social and economic costs of suppression, which will be high and may be disproportionately so in lower income settings."⁶ In a later publication, this group modeled that "across 11 countries [in Europe], since the beginning of the epidemic [to May 4], 3,100,000 (2,800,000 – 3,500,000) deaths have been averted due to [NPI] interventions...."⁷ Another group similarly claimed that, in 5 countries [China, South Korea, Iran, France, US], NPIs "prevented or delayed [to April 6] on the order of 62 million confirmed cases."⁸

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1.2 How it took off: Crowd Effects [Groupthink]

There ensued a contagion of fear and policies across the world.⁹⁻¹² Social media spread a growing sense of panic.¹³ Popular media focused on absolute numbers of COVID-19 cases and deaths independent of context, with a “sheer one-sided focus” on preventing infection.¹² There was an appeal of group hysteria; “everyone got a break from their ambitions and other burdens carried in normal life”, and became united in crowds, which have a numbing effect.⁹ There was talk of “acting together against a common threat”, “about seeming to reduce risks of infection and deaths from this one particular disease, to the exclusion of all other health risks or other life concerns”, with virtue signaling to the crowd, of “something they love to hate and be seen to fight against.”⁹ A war effort analogy is apt, with the “unquestioning presumption that the cause is right, that the fight will be won, that naysayers and non-combatants [e.g., not wearing a mask] are basically traitors, and that there are technical solutions [e.g., vaccine and drugs] that will quickly overcome any apparent problem or collateral damage.”⁹ This was associated with a “disregard and disinterest on the part of individuals in the enormity of the collateral damage, either to their own kids, people in other countries, their own futures...”⁹ The crisis was framed as a “war against an invisible enemy,” presenting the false choice between “lives and livelihood,” spreading fear and anxiety while ignoring the costs of the measures taken - this resulted in conformity and obedience.^{12,13} There has been a strong positive association between new daily and total confirmed COVID-19 cases in a country and support for the heads of government, reflecting the “rally ‘round the flag’” effect [“the perception that one’s group is under attack and hence unity is required to defend the group”].¹⁴

The NPIs spread to ~80% of OECD countries within a 2-week period in March 2020.¹⁵ A main predictor of a country implementing NPIs was prior adoptions of a policy among spatially proximate countries, i.e., the number of earlier adopters in the same region.¹⁵ Variables not predicting adoption of NPIs included the number of cases or deaths, population >65 years old, or hospital beds per capita in the country.¹⁵ It seems we were all “stuck in this emotional elevation of COVID-19 deaths and suffering above everything else that could possibly matter.”¹⁶ There was the unquestioned assumption that “there were and are no alternatives to extreme measures implemented on entire populations with little consideration of cost and consequences [externalities].”¹⁰ Even now, how a country ‘performed’ is measured by COVID-19 cases and deaths without denominators, without other causes of deaths considered, without considering overall population health trade-offs “that cannot be wished away” [e.g., the future of our children from lack of education and social interaction, and “changes to our wealth-generating capacity that has to pay for future policies”],⁹ and without considering how sustainable current policies are [protection is temporary and leaves us susceptible; “there is no exit from the pandemic; there is only an exit from the response to it”¹⁰].

All of this, even though in October 2019 the WHO published that for any future Influenza pandemic: travel-related measures are “unlikely to be successful... are likely to have prohibitive economic consequences”; “[measures] not recommended in any circumstances: contact tracing, quarantine of exposed individuals, border closure”; social distancing measures [closures of workplace, avoiding crowding and closing public areas] “can be highly disruptive, and the cost of these measures must be weighed against their potential impact”; and “border closures may be considered only by small island nations in severe pandemics... but must be weighed against potentially serious economic consequences.”¹⁷ Referring to the 2009 influenza pandemic, Bonneux and Van Damme wrote that “the culture of fear” meant that “worst-case thinking replaced balanced risk assessment” on the part of influenza “experts”.¹⁸ But “the modern disease expert knows a lot about the disease in question, but does not necessarily know much about general public health, health economics, health policy, or public

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policy, which are much more about priority setting and hence resource allocation between competing priorities [because resources are limited, wise allocation saves lives].”¹⁹

Some of this crowd effect is related to cognitive biases, “the triumph of deeply human instincts over optimal policy.”²⁰ Identifiable lives bias included the identifiable victim effect [we ignore hidden ‘statistical’ deaths reported at the population level], and identifiable cause effect [we prioritize efforts to save lives from a known cause even if more lives would be saved through alternative responses]. Present bias made us prefer immediate benefits to even larger benefits in the future [steps that would prevent more deaths over the longer term are less attractive].²⁰⁻²² The proximity and vividness of COVID-19 cases (i.e., availability and picture superiority bias), and anchoring bias [we adhere to our initial hypothesis, and disregard evidence that disproves our favorite theory] affected our reasoning.^{21,23} Superstitious bias, that action is better than non-action even when evidence is lacking, reduced anxiety.¹² Escalation of commitment bias, investing more resources into a set course of action even in the face of evidence there are better options, made us stand by prior decisions.²⁴ We need to take an “effortful pause”, reflecting on aspects of the pandemic that don’t fit with our first impressions.²⁵ The groupthink [“the tendency for groups to let the desire for harmony and conformity prevail, resulting in dysfunctional decision-making processes... becoming less willing to alter their course of action once they settle on it”] needs to be replaced by deliberative consideration of all the relevant information.²⁴

2. Important New Information Emerging

2.1 The Infection Fatality Rate (IFR)

Based on seroprevalence data as of September 9, 2020, including 82 estimates from across 51 locations in the world, Ioannidis found that the median corrected IFR was 0.23% [range 0.00 to 1.54%].²⁶ Among those <70 years old the median crude and corrected IFR was 0.05% [range 0.00 to 0.31%]. He estimated that for those <45 years old the IFR was almost 0%, 45-70 years old about 0.05-0.30%, and ≥70 years old ≥1%, rising to up to 25% for some frail elderly people in nursing homes.²⁷ He estimated that at that point there were likely 150-300 million infections that had occurred in the world, not the reported 13 million, most being asymptomatic or mildly symptomatic.^{26,27} The WHO recently estimated that about 10% of the global population may have been already infected, which, with a world population of 7.8 billion, and 1.16 million deaths, would make a rough approximation of IFR as 0.15%.²⁸

Even these numbers are most likely a large *over-estimate* of the IFR. First, in serosurveys the vulnerable [e.g., homeless, imprisoned, institutionalized, disadvantaged people], who have higher COVID-19 incidence, are more difficult to recruit. Second, there is likely a healthy volunteer bias in serosurvey studies. Third, and most importantly, there is a lack of sensitivity of serology.²⁹⁻³⁴ Many reports now document there is often a rapid loss of antibody in COVID-19 patients that were less severely ill.²⁹⁻³⁶ Moreover, at least 10% of COVID-19 patients never seroconvert, and many more may only develop a mucosal IgA response,^{37,38} or only a T-cell response [which may be the case in up to 50% of mild infections].^{39,40} Finally, most data come from unusual epicenters where “infection finds its way into killing predominantly elderly citizens” in nursing homes and hospitals,²⁶ and where “[in Italy, Spain, France] an underfunded, understaffed, overstretched and increasingly privatized and fractured healthcare system contribute to higher mortality rates... [Lombardy] has long been an experimental site for healthcare privatization.”¹⁰ With “precise non-pharmacological measures that selectively try to protect high-risk vulnerable populations and settings, the IFR may be brought even lower.”²⁶

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A serology-informed estimate of the IFR in Geneva, Switzerland put the IFR at: age 5-9 years 0.0016% (95% CrI 0, 0.019), 10-19 years 0.00032% (95% CrI 0, 0.0033), 20-49 years 0.0092% (95% CrI 0.0042, 0.016), 50-64 years 0.14% (95% CrI 0.096, 0.19), and age 65+ outside of assisted care facilities 2.7% (95% CrI 1.6, 4.6), for an overall population IFR 0.32% (95% CrI 0.17, 0.56).⁴¹ Similarly, a large study from France found an inflection point in IFR around the age of 70 years [see their Figure 2D].⁴²

2.2 High-risk groups

Ioannidis et al. analyzed reported deaths from epicenters, in 14 countries and 13 states in the United States, to June 17, 2020.⁴³ They found that in those age <65 years the relative risk of death was 30-100X lower in Europe and Canada, and 16-52X lower in the USA, compared to those ≥65 years old.⁴³ They estimated that those age 40-65 years old have double the risk of the overall <65 year old group, and females have 2X lower risk than males.⁴³ This is compatible with a steep inflection point in the IFR around the age of 70 years old. Older adults in nursing homes accounted for at least half of the COVID-19 deaths in Europe and North America, and over 80% in Canada.^{44,45} In nursing homes the usual median survival is ~2.2 years, with a yearly mortality rate >30%, even without COVID-19.⁴⁶ Outbreaks of the seasonal respiratory coronavirus in adults living in long-term care facilities are common, with case-fatality rates of 8%.⁴⁷ Ioannidis et al estimated that the average daily risk of COVID-19 death for an individual <65 years old was equivalent to the risk from driving between 12-82 miles/day during the pandemic period, higher in the UK and 8 states [106-483 miles/day], and only 14 miles/day in Canada.⁴³

By far the most important risk factor is older age.⁴¹⁻⁴³ There is a ~1000 fold difference in death risk for people >80 years old versus children.⁴³ In the largest observational study I am aware of, the OpenSAFELY population in the UK, including over 17 million people with 10,900 COVID-19 deaths, compared to those age 50-59 years old, the Hazard Ratio for death from COVID-19 ranged from 0.06 for those age 18-39 years, to >10 for those age >80 years.⁴⁸ In comparison, even important co-morbidities such as severe obesity, uncontrolled diabetes, recent cancer, chronic respiratory or cardiac or kidney disease, and stroke or dementia rarely had HR approaching ≥2.⁴⁸ Those co-morbidities with HR>2, including hematological malignancy, severe chronic kidney disease, and organ transplant, affected only 0.3%, 0.5%, and 0.4% of the total population.⁴⁸

A rapid systematic review found that only age had a “consistent and high strength association with hospitalization and death from COVID-19... strongest in people older than 65 years...”⁴⁹ Other risk groups for mortality had either a low-moderate effect [obesity, diabetes mellites, male biological sex, ethnicity, hypertension, cardiovascular disease, COPD, asthma, kidney disease, cancer] and/or were inconsistently found to have an effect in the literature [obesity, diabetes mellites, pregnancy, ethnicity, hypertension, cardiovascular disease, COPD, kidney disease].⁴⁹ Even with these risk factors, the absolute risk may still be low, given the overall IFR in the population at that age.

2.3 Objection: Is This Age Discrimination?

An objection may be that singling out the elderly as high risk is age discrimination. This is false on two counts. First, pointing out the truly high-risk group is the elderly is only emphasizing that this is the group that requires protection from severe COVID-19 outcomes. Second, as Singer has pointed out, “what medical treatment does, if successful, is prolong lives. Successfully treating a disease that kills children and young adults is, other things being equal, likely to lead to a greater prolongation, and thus do more good, than successfully treating a disease that kills people in the 70’s, 80’s, and 90’s.”⁵⁰ In fact, when we try to stay healthy “what we are trying to do is to live as long as we can, compatibly with

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having a positive quality of life for the years that remain to us. If life is a good, then, other things being equal, it is better to have more of it rather than less.”⁵⁰ We should count every quality adjusted life year equally, whether it is in the life of a teenager or a 90-year old.^{50,51} This was also the conclusion of “The Fair Priority Model” for global vaccine allocation, prioritizing preventing premature death using a standard expected years of life lost metric.⁵²

Different from discrimination such as racism [“no one who is black was ever white”], in this case “everyone who is old was once young”, i.e., there is an impartial age-neutral perspective from which we can all see that it is in everyone’s interests to save the lives of younger people.⁵¹ In a thought-experiment, Singer asks us to imagine that you have just become a parent, at some stage in your child’s life she is likely to be infected with a dangerous virus, and her chances of being infected and dying from the infection are the same in any year of her life. Now imagine that curative drug A, effective if <40 years old, and drug B, effective if >40 years old, are so costly that the government cannot afford both to be produced. Which drug should be produced? It is clearly contrary to your child’s interests to vote for drug B: this would increase her risk of dying before her 40th birthday; to improve her chances of living a longer life, we vote for drug A.⁵¹

Veil of ignorance reasoning is a widely respected and transparent standard for adjudicating claims of fairness. A fair distribution of resources is said to be one that people would choose out of self-interest, without knowing whom among those affected they will be: what would I want if I didn’t know who I was going to be? In an experimental study participants were asked to decide whether to give the last available ventilator in their hospital to the 65 year old who arrived first and is already being prepped for the ventilator, or the 25 year old who arrived moments later, assuming whoever is saved will live to age 80 years old. In the veil of ignorance condition, the participant was asked to “imagine that you have a 50% chance of being the older patient, and 50% the younger.”⁵³ Asked if “it is morally acceptable to give the last ventilator to the younger patient”, 67% in the veil of ignorance condition vs. 53% in control answered ‘yes’ (odds ratio 1.69; 95% CI 1.12, 2.57); compared to younger age participants (18-30 years), older participants (odds ratio 3.98) and middle age participants (odds ratio 2.02) were more likely to agree.⁵³ Asked if “you want the doctor to give the ventilator to the younger patient”, 77% answered ‘yes’, maximizing the number of life-years saved rather than the number of lives saved.⁵³

2.4 The Herd Immunity Threshold

The classical herd immunity level is calculated based on the basic reproduction number (R_0) as $(1 - 1/R_0)$, and is the proportion of the population that must be immune to a virus before the effective reproduction number (R_e) is <1, and thus the virus cannot perpetuate itself in the population. This calculation assumes a homogeneously mixing population, where all are equally susceptible and infectious. For R_0 2.5, the threshold is ~60% of the population. However, the assumption is not valid, as there is heterogeneity in social mixing and connectivity, with higher and lower levels of activity and contacts. One model incorporating heterogeneity of social mixing found the threshold, for R_0 2.5, to be 43%, and likely lower as other heterogeneity in the population was not modelled [e.g., sizes of households, attending school or big workplaces, metropolitan versus rural location, protecting the elderly, etc.].⁵⁴ A model that incorporated variation in connectivity compatible with other infectious diseases found that for R_0 3, the threshold is 10-25% of the population developing immunity.⁵⁵ Another model that “fit epidemiological models with inbuilt distributions of susceptibility or exposure to SARS-CoV-2 outbreaks” calculated “herd immunity thresholds around 10-20% [because]... immunity induced by infection... [contrary to random vaccination] is naturally selective.”⁵⁶ In support of this heterogeneity,

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it is now known that there is overdispersion of transmission of SARS-CoV-2, with 80% of secondary infections arising from just ~10% of infected people.⁵⁷⁻⁵⁹

2.5 Objection: consider Sweden

It has been claimed that Sweden's strategy of achieving herd immunity failed, with excess deaths and a suffering economy. However, that is not clear. First, cases and deaths fell consistently in later July/August, with deaths continuing at a very low level into October despite no lockdown.⁶⁰ Second, serosurveys in mid-July found 14.4% of the population may be seropositive; thus, with 5761 deaths as of August 1, in a population of 10.23 million, the crude IFR may have been 0.39%, and even lower considering the sensitivity of serology discussed above.⁶¹ Early on, Sweden did not adequately protect those in nursing homes, a failing that also inflates the IFR.⁶² The excess all-cause mortality per 100,000 up to July 25, 2020 in Sweden was 50.8, lower than in England and Wales, Spain, Italy, Scotland, Belgium, Netherlands, France, and the US.^{62,63} Third, in a globalized world, with entangled webs of supply, demand, and beliefs, "what we do here will devastate people not just here, but also elsewhere and everywhere."⁶⁴ Compared to Denmark, with an economy heavily dependent on pharmaceuticals, Sweden's recession looks bad. However, compared to the European Union, Sweden looks good; the European Commission forecasts a better 2020 economic result for Sweden (GDP -5.3%) than many other comparable European countries (e.g., France -10.6%, Finland -6.3%, Austria -7.1%, Germany -6.3%, Netherlands -6.8%, Italy -11.2%, Denmark -5.2%).⁶⁵

2.6 The Exit Strategy

Herd immunity appears to be the only exit from the response to COVID-19. This can be achieved naturally, or through vaccine. For the reasons given here, it is very possible that the lockdowns are only delaying the inevitable.

There are problems with the natural herd immunity approach involving the currently projected and implemented waves of lockdowns. First, this will take years to occur, causing economic and social devastation. This also assumes immunity is long-lasting such that cycles of shutting down can be successful over 2 or 3 years, and without which it is more likely COVID-19 will be an annual occurrence.² Second, the less devastating test-trace-isolation/quarantine strategy seems not feasible. In the United States it was estimated that there would be a need to train an extra 100,000 public health workers, and to do >5 million SARS-CoV-2 tests per day, necessitating the building of many new very large testing factories.⁶⁶ Countries would still need to keep borders closed and maintain physical distancing (e.g., no large events) in order to make contact tracing feasible; this would be for years, during which people may become very reluctant to be tested. Modeling suggests that to be successful, because asymptomatic and pre-symptomatic individuals may account for 48-62% of transmission (even in nursing home residents),⁶⁷ contact tracing and quarantine would have to occur within 0.5 days for >75% of contacts, necessitating mobile app technology that has its own feasibility and ethical problems.⁶⁸⁻⁷⁰

Vaccine induced herd immunity involves many assumptions. First, there will be the discovery of an effective and safe vaccine that does not cause antibody-dependent (or other immune) enhancement; this, even though the problem in severe COVID-19 may be the host response, especially in the elderly and children.⁷¹⁻⁷³ Second, the immune response will be durable, not last for only months, and have little immunosenescence [reduced response to vaccine with rapid decline of antibody levels] in the elderly.^{72,74} Third, that mass production and delivery of the vaccine will occur very soon, and be done equitably to all humans on Earth; otherwise, there is the risk of conflict, war, and terrorism in response

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to gross inequity in vaccine distribution.⁵² In response to the 2009 pandemic of H1N1 Influenza the United States achieved a weekly vaccination rate of only 1% of the population.⁷² Vaccine refusers may include 30% of the population in North America and globally,^{72,75} and if they have “increased contact rates relative to the rest of the population, vaccination alone may not be able to prevent an outbreak.”⁷² There is already competition among high income countries, and likely crowding out of low-income countries that represent about half of the human population.⁷⁶ The only globally eradicated human disease is smallpox, which took “30 years to achieve”, and the “fastest historical development of a [new] vaccine was 4 years (Merck: mumps), while most take 10 years.”⁷⁷

3. Reality Sinking In

3.1 Iatrogenic Collateral Harms: lockdown as a ‘drug’ with dangerous side-effects when its use is prolonged

The COVID-19 response has threatened to make, and likely has already made, several Sustainable Development Goals for the most vulnerable among us in low-income countries out of reach.⁷⁸⁻⁸² The numbers involved are staggering, and in the many millions (Table 2). The response has had major detrimental effects on childhood vaccination programs, education, sexual and reproductive health services, food security, poverty, maternal and under five mortality, and infectious disease mortality.⁷⁸⁻⁹³ The effect on child and adolescent health will “set the stage for both individual prosperity and the future human capital of all societies.”⁹⁴ The destabilizing effects may lead to chaotic events (e.g., riots, wars, revolutions).^{95,96}

In high-income countries, the collateral damage has also been staggering (Table 3), affecting visits to emergency departments and primary care for acute (e.g., myocardial infarction, stroke) and ‘non-urgent’ (‘elective’ surgery, and cancer diagnosis and treatment) conditions, intimate partner violence, deaths of despair, and mental health.^{12,97-112} Of excess deaths occurring during the pandemic in high-income countries, 20-50% are not due to COVID-19.^{62,113-115} There was an unexplained 83% increase of 10,000 excess deaths from dementia in England/Wales in April, and an increase in non-COVID-19 Alzheimer disease/dementia deaths in the US, attributed to lack of social contact causing a deterioration in health and wellbeing of these patients.^{115,116}

COVID-19 “Is a disease of inequality and it also creates even more inequality.”⁹⁵ Unequal structural determinants of health meant that disadvantaged minorities have experienced a greater toll from the COVID-19 “Great Lockdown”,¹¹⁷ with contributors including lower income (e.g., economic and job insecurity), homelessness or crowding at home (and in transportation), worse health care (and pre-existing health disparities), and inability to work from home (e.g., for essential, manual, and temporary workers).^{45,95,118,119} COVID-19 policing has involved “racial profiling and violence, crippling punishments for those living in poverty, and criminalization of mental health.”¹²⁰ Refugees are particularly vulnerable, undertaking “arguably the most essential form of travel... with little access to water, space or health care.”¹²⁰ The effect on the health of women and girls is particularly severe, disproportionately affecting sexual and reproductive health services, income, and safety.^{121,122}

3.2 Numbers in Context

Numbers without denominators and without context are deceiving. Some data in this section may put the COVID-19 pandemic numbers in perspective.

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Assuming all deaths *with* COVID-19 are deaths *from* COVID-19, in the USA as of August 22, 2020, COVID-19 was the cause of 9.24% of overall deaths; this means that >90% of deaths are not a focus of our attention (ETable 1, see Additional file 1).¹²³ Similarly, in Canada, COVID-19 was the cause of 5.96% of estimated deaths over the first 6 months of 2020, again meaning >94% of deaths are not a focus of our attention, and not being reported daily in the press as are COVID-19 deaths (ETable 2, see Additional file 1).^{124,125} A similar analysis in the UK found that, during 16 weeks of the pandemic, the risk of death was “equivalent to experiencing around 5 weeks extra ‘normal’ risk for those over [age] 55, decreasing steadily with age, to just 2 extra days for schoolchildren... [and in those] over 55 who are [detected as] infected with COVID-19, the additional risk of dying is slightly more than the ‘normal’ risk of death from all other causes over one year.”¹²⁶

Across the world in 2019 there were 58,394,000 deaths, >4.87 million deaths/month and >159,983 deaths/day; COVID-19 deaths are shown relative to these underlying deaths in Table 4.^{127,128} The number of deaths is highly unequal, with far more deaths at earlier ages in low-income countries and Sub-Saharan Africa.¹²⁷ If all countries were to achieve the Sustainable Development Goal of Under 5 Mortality Rate <25 deaths/1000 by 2030, from the year 2015 this would avert 12.8 million deaths.¹²⁹ From 2000-2017, if all units had an Under 5 Mortality Rate that matched the best performing unit in each respective country, this would have averted 58% of deaths in those under 5 years, that is, 71.8 (68.5 to 74.9) million deaths.¹³⁰ A realistic projection was that if the pandemic takes 5 years for “full cycling”, 60% of the global population is infected, and the IFR is 0.19%, COVID-19 will account for 2.9% of global deaths. If only 10% of the high-risk population are infected, COVID-19 will account for 0.6% of global deaths over 5-years.⁹⁵

Some causes of death in the world are given in Table 5; COVID-19 deaths (~3500/day up to September 4, 2020) are also shown.¹³¹⁻¹⁴³ For example, there are an estimated 4110 deaths/day from Tuberculosis,¹³³ 3699 deaths/day from motor vehicle collisions,¹³¹ 21,918 deaths/day due to use of tobacco,¹³² >3400 deaths/day from Under 5 cases of pneumonia or diarrhea,^{137,138} and 30,137 deaths per day from dietary risk factors.¹³⁹ The WHO has estimated that if all people would adopt a vegan diet this would avert 13.7 M (95% CI 7.9, 19.4) deaths by 2030.⁸⁴ Some of these deaths are preventable if we were to take appropriate action, and some we as a society have decided we are willing to accept in trade-off for our freedom and wellbeing.

4. An Informed Cost-Benefit Analysis of Lockdowns

4.1 The Corona Dilemma

The economist Paul Frijters has asked us to consider “The Corona Dilemma” (Figure 1a and 1b) modelled after the so-called “Trolley Problem” in philosophy.¹⁴⁴ He asks us to imagine “you are the decision maker who can pull the lever on the train tracks to avoid the coming train from going straight.”¹⁴⁴ Our options are to divert the train or not. “If you do not divert the train – you are letting the virus rage unchecked [i.e., COVID-19 deaths].”¹⁴⁴ On the other hand, “if you pull the lever – the diverted train will put whole countries into isolation, destroying many international industries and thus affecting the livelihood of billions, which through reduced government services and general prosperity will cost tens of millions of lives [i.e., COVID-19 reaction].”¹⁴⁴ The world pulled the lever, and the unintended health consequences of these measures did not play a part in modelling or policy.

4.2 Cost-Benefit Analysis

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Medical and Public Health experts are not expert in this type of analysis.^{18,19} Health resources are finite. We all take health risks to ensure a better future for ourselves, family, children, and society. “Wellbeing of the population is the ultimate goal of government.”^{145,146} To compare outcomes of policies we need a common single metric of measurement to weigh trade-offs and make rational decisions. The goal is to maximize the sum of years lived by the population,⁵² weighted by the health quality of those years [i.e., Quality Adjusted Life Years, QALY] or the wellbeing quality of those years [i.e., Wellbeing Years, WELLBY]. The QALY misses some important things that are valued by individuals, including joy, status, and things that give fulfillment like jobs. The WELLBY measures the value of anything that makes life enjoyable, and captures almost everything that is important to people. It is measured by life satisfaction, asking “overall, how satisfied are you with your life nowadays?” and rated on a Likert Scale from 0 [“not at all”] to 10 [“completely”]; the usual healthy level is ‘8’, and those indifferent between living on or not at all score ‘2’ – 1 regular year of happy life (1 QALY) is worth 6 WELLBY.^{145,146} Despite some limitations, cost and benefit should be measured in terms of human welfare in the form of length, quality, and wellbeing of lives, and “to make no assessment is just to make policy in a vacuum.”¹⁴⁷

First, consider the benefits of lockdown, preventing COVID-19 deaths. Using the age distribution of deaths and comorbidities, in the UK the average person who died due to COVID-19 had 3-5 healthy years left to live; that is, 3-5 QALY, or 18-30 WELLBY.^{95,144,147} This number was even lower in Italy.¹⁴⁴ We can calculate that lockdowns ‘saved’: 50% infected to herd immunity X 0.3% IFR X 7.8 Billion people X 5 QALY lost per death = 11.7 million deaths, 58.5 million QALY, or 360 million WELLBY. The number is likely much lower than this for several reasons: it is likely <40% to herd immunity, the IFR is likely <0.24%, some deaths would occur even with lockdowns [that might prevent at most 70% of deaths; in Sweden it was estimated lockdown could have prevented one-third of deaths],¹⁴⁸ with focus on retirement and nursing homes we might avoid many of the excess deaths, and we cannot stay locked down forever [if no ‘exit strategy’ exists, then lockdown is not really a ‘strategy’¹⁰]. A more realistic number is at least 2X lower, well fewer than 5.2 million deaths ‘saved’. It is also worth mentioning that the efficacy of lockdown has been questioned in several studies, reducing the benefit of lockdown potentially markedly further (ETable 3, see Additional file 1).¹⁴⁹⁻¹⁵⁵

Second, consider the costs of lockdown.^{144,156-158} An important point must be made here. We are not comparing COVID-19 deaths vs. economy as prosperity. Rather, it is COVID-19 deaths vs. recession deaths – it’s lives versus lives, as the economy is about lives. “It’s horrible either way... [we’re] advocating for the least people to die as possible.”¹⁵⁹

Expected costs of the recession in lives can be calculated based on two methods. One uses historical evidence of a strong long-run relation between government spending [economic development] and life expectancy.^{144,156-158} Government expenditures on healthcare, education, roads, sanitation, housing, nutrition, vaccines, safety, social security nets, clean energy, and other services determines the population wellbeing and life-expectancy.¹⁴⁴ If the public system is forced to spend less money on our children’s future, there are statistical lives lost [people will die in the years to come]. The social determinants of health, including conditions of early childhood, education, work, social circumstances of elders, community resilience (transportation, housing, security), and fairness (economic security) determine lifespan.¹⁶⁰ As a general rule, US\$10K/year GDP buys an additional 10 years of life, so in a life of 75 years, US\$750K buys 10 years in life expectancy = US\$75K/QALY.^{144,156-158} This is a maximum cost; in India US\$25K/QALY is appropriate [most effect occurs for vulnerable and marginalized groups].¹⁴⁴ The other method is based on government numbers that are used to estimate how much health and life expenditures buy. Since the lockdown is a government public health policy, “it is saving lives which is what the lockdown was for... we are treating decisions on how to face COVID-19 in the same way as

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decisions... are made about resources to apply to the treatment of cancer, heart disease, dementia, and diabetes.”¹⁴⁷ Based on research on how costly it is to save people from illness (how government services maintain health), in the UK it is US\$20K/QALY, and using consumer willingness to pay it is US\$80K/QALY.¹⁴⁴⁻¹⁴⁶ This again is a maximum cost, as this is for Western countries, who are at least 3X wealthier than the average country in the world; you can save a life in poor countries with US\$2-3K, and lives are saved more cheaply with the first few billions spent.^{144,161} It is estimated that in 2020-2021 the world economy will shrink by at least US\$8-9 trillion (about 6% of GDP), and this will take many years to recover (Figure 2).^{144,156,157,162,163} The loss in terms of GDP will be “easily US\$50 trillion over the coming decade”,^{144,156} with lockdowns ordering businesses and workplaces to stop functioning, ports closed, business bankruptcies, and resultant disrupted supply and demand chains.^{64,164,165} We can calculate that the recession resulting from lockdowns ‘cost’: US\$50 trillion X 40% as government expenditure ÷ US\$100K/QALY = 200 million QALY, or 1.2 billion WELLBY. This is an underestimate, and the actual figure is likely at least 12X higher for several reasons: the number US\$100K/QALY was used when it is far less than this for half the world population residing in low-income countries and may be much lower even in high-income countries, and a conservative estimate of world GDP loss during the pandemic was used, particularly if there is another prolonged period of lockdown.

Another cost of lockdown is the loneliness and anxiety effect on individuals. It is estimated that loneliness from isolation costs 0.5 WELLBY/person/year.^{145,146} If lockdowns last for 2 months to 4 billion people, this results in a cost of 333 million WELLBY.¹⁵⁶ The cost is likely far higher, as this assumes only 2 months of lockdown, and does not include the effect of loneliness on life-span (i.e., early mortality) and disease that occurs particularly to young people.¹⁶⁶⁻¹⁷²

The last cost considered here is the effect of unemployment. It is estimated that unemployment costs 0.7 WELLBY/unemployed person/year.^{145,146} Since it is estimated there will be 400 million additional unemployment years due to the lockdowns, the cost is 280 million WELLBY/year.^{156,173} The cost is likely at least 3X higher, as recovery from unemployment will occur over several years, we do not consider the effect on wellbeing to the families of the unemployed, and we do not consider the effect on deaths of despair in young people or on loss of health insurance.

The effects of loneliness and unemployment on life-expectancy are not considered in the costs above, only the loss of life-satisfaction in WELLBYs. Recent literature has summarized the major effect of individual income, social network index (i.e., integration in a social network), and adverse childhood experiences on life-span, early mortality, risk of chronic diseases (including heart disease, diabetes, kidney disease, stroke, cancer, lung disease, Alzheimer’s, substance use, depression), and suicide rates.¹⁶⁶⁻¹⁷² Recent financial difficulties, history of unemployment, lower life satisfaction, and history of food insecurity are associated with mortality in the United States.¹⁶⁷ Actual or perceived social isolation is one of the top 3 risk factors for death due to cardiovascular disease, increases risk of death in the next decade by 25-30%, and “risks creating cohorts of individuals who are less socially functional.”^{168,174} Unemployment is associated with a mean adjusted hazard ratio for mortality of 1.63.¹⁷⁵ Life stress is associated with development and exacerbation of asthma, rheumatoid arthritis, anxiety disorders, depression, cardiovascular disease, chronic pain, HIV/AIDS, stroke, certain types of cancer, and premature mortality.¹⁷⁶ Especially concerning are the effects on children during “the early years” of life, increasingly recognized as the period of greatest vulnerability to, and greatest return on investment from, preventing adverse long-term outcomes that can have lasting and profound impacts on future quality of life, education, earning potential, lifespan, and healthcare utilization.¹⁶⁹⁻¹⁷² The early years of life are a critical period when a child’s brain develops from social interaction and experiences, thus providing the foundation for their entire future life potential. During the pandemic children are being

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exposed to increased intimate partner violence, family financial crises, disrupted education, an increasing achievement gap (i.e., low-income families who do not have access to computer, internet, space, food, and parental support cannot participate in online learning), loneliness, physical inactivity, lack of support services (e.g., school lunches, access to early childhood services and aids for those with disability), etc.^{87,88,104,107,177-179} These adverse childhood experiences have permanent impacts that cannot be compensated for by later improvements in social situations.

The cost-benefit analysis is shown in Table 6, finding on balance the lockdowns cost a minimum of 5X more WELLBY than they save, and more realistically, cost 50-87X more. Importantly, this cost does *not* include the collateral damage discussed above [from disrupted healthcare services, disrupted education, famine, social unrest, violence, and suicide] nor the major effect of loneliness and unemployment on lifespan and disease. Frijters and Krekel have estimated that “the [infection] fatality rate should be about 7.8% to break-even and make a radical containment and eradication policy worthwhile, presuming that would actually eliminate the disease.”¹⁸⁰ A similar cost-benefit analysis for Canada is shown in ETable 4 (see Additional file 1), with the cost at least 10X higher for lockdowns than the benefit. A different analysis for Australia is shown in Table 7, estimating the minimum cost is 6.6X higher than the benefit of lockdown.^{181,182} Another cost-benefit analysis for the UK used National Institute for Health and Care Excellence guidelines for resource decisions, that 1 QALY should cost no more than US\$38.4K. Assuming lockdown could save up to 440K people [although more likely at most: 66.65 million population X 40% to herd immunity X 0.24% IFR = 64K people] of 5 QALY each, and a minimum GDP loss of 9% [i.e., assuming lost output comes back quickly, and not including any health costs of unemployment or disrupted education], “the economic costs of the lockdown... is far larger than annual total expenditure on the UK national health service... the benefits of that level of resources applied to health... would be expected to generate far more lives saved than is plausibly attributable to the lockdown in the UK... The cost per QALY saved of the lockdown looks to be far in excess... (often by a factor of 10 and more) of that considered acceptable for health treatments in the UK.”¹⁴⁷ The authors estimated the benefit of easing restrictions for over the next 3 months outweighs the cost by 7.3-14.6X.¹⁴⁷ “A cost-benefit analysis of 5 extra days at COVID-19 alert level 4” for New Zealand found that the cost in QALY was 94.9X higher than the benefit.¹⁸³ Finally, a cost-benefit analysis for the US is shown in Table 8, finding the cost of lockdown would be at least 5.2X the benefit.^{184,185}

4.3 Objection: the economic recession would happen without lockdown

This is unlikely, particularly if the fear is appropriately controlled with clear communication on risk, numbers with denominators and context, and important trade-offs, as this information becomes available. The resources and attention should be directed towards protecting the most vulnerable (i.e., the elderly). The evidence for policy impact on total human welfare should be based on a wide range of expertise, including economists, and not only health experts. The CIDRAP group published suggestions for communication during a crisis, which included advice to not over-reassure (i.e., be realistic about the course post-lockdown – cases and deaths will climb), to express uncertainty (i.e., explain the difficult dilemmas and trade-offs, and why we choose which course; explain that the initial reaction was temporary, buying time to figure out next steps); to validate emotions (i.e., admit waves of disease will occur and there may be economic devastation); and to admit and apologize for errors (i.e., we must resurrect a devastated economy in order to save lives).¹⁸⁶

The severity of mandated lockdowns was directly linked with the severity of the economic collapse.^{147,181,187-191} These were direct commands to halt work, restrict travel, restrict the number of people inside dwellings, close factory floors, stay at home, etc. Economic activity, GDP loss, and

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unemployment were temporally, within weeks, related to lockdown orders.¹⁸¹ There was a dramatic decline in employment, consumer spending, and economic outcomes largely accounted for by different degrees of restrictions in different countries.^{181,188,189} The consensus, for example by the Bank of England, the Reserve Bank of Australia, the Organization for Economic Co-operation and Development, the International Monetary Fund (e.g., the “calamitous Great Lockdown”), and the Chief Medical Officer of Health in Canada (e.g., “the extensive slowdown in the Canadian economy as a result of public health emergency measures” on p. 29), is that the economic recession is a result of the lockdowns.^{45,117,190,191,192}

4.4 Objection: consider the ‘long-haulers’

The long-term effects of COVID-19 illness need to be studied and clarified. Much of the current information is based on anecdotes (i.e., single cases) in the press. It may be expected that survivors of ARDS due to COVID-19 will have significant quality of life sequelae similar to ICU survivors from other causes of ARDS, or even lower given the lower cytokine levels in COVID-19.^{193,194} It may also be expected that some survivors of COVID-19 that did not require hospitalization will have significant lingering symptoms for months similar to what occurs with other causes of community acquired pneumonia.¹⁹⁵ The few studies reported to date do not well quantify the severity and duration of long-term symptoms such as fatigue, breathlessness, ‘foggy thinking’, etc., making it difficult to interpret the impact on cost-benefit analyses.¹⁹⁶⁻²⁰⁰ The highest rates of ‘long-COVID-19’ are from crowdsourced online data where there is likely a strong selection bias in participation.²⁰¹⁻²⁰³ In addition, most of these reports do not compare to contemporary controls during the pandemic, controls who are often experiencing social isolation, unemployment, and loneliness. For example, one survey of people without COVID-19 in the United States found a high prevalence of anxiety (25.5%), depressive (24.3%), and trauma and stressor related (26.3%) disorders, with 13.3% who started or increased substance use to cope, and 10.7% who seriously contemplated suicide in the last 30 days.²⁰⁴ The Household Pulse Survey in the US found that in 2019 11% of adults had symptoms of anxiety or depressive disorder, while in April-August 2020 35-40% did.²⁰⁵ Another survey in US adults found the prevalence of depression symptoms was more than 3-fold higher during COVID-19 than before, and worse for those with lower social and economic resources.²⁰⁶ A survey in Australia found worse exercise (47.1%), mental wellbeing (41%), weight gain (38.9%), screen time (40-50%), and life satisfaction (down by an average of 13.9%) during the pandemic.²⁰⁷ In Canada, 57% of children 15-17 years old reported their mental health was “somewhat worse” or “much worse” than it was prior to physical distancing measures during the pandemic, and Canadians ≥ 15 years old had a 23% decrease in reported “excellent or very good self-perceived mental health”.^{177,208} Although there will likely be many ‘long-haulers’, the incidence, severity, and duration of long-term symptoms would need to be very high to change the cost-benefit balance. Given that at a generous minimum the cost-benefit balance is at least 5X against lockdowns, the sequelae of COVID-19 would need to cost well over 200 million QALY worldwide, and likely $>10X$ that number, to make the cost-benefit analysis in need of reconsideration.

4.5 Objection: Low-income countries are particularly susceptible and need protection

The Imperial College COVID-19 Response Team modeled the effect on low-income countries.²⁰⁹ These countries were hypothesized to be more susceptible to COVID-19 deaths, even with markedly lower population over age 65 years (about 3%), due to several factors: larger size of households [i.e., more homogeneous contact patterns], far fewer hospital and ICU beds, lower quality of health care, and unique co-morbidities [e.g., HIV in $>1\%$, tuberculosis in $>25\%$, and malnutrition in $>30\%$ of the population].²⁰⁹ For suppression to have benefit, it was estimated to need to be in force 77% of the time [compared to 66% in high-income countries] over the 18 months of modeling [and “well beyond the

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time window of our simulations”].²⁰⁹ However, modeling inputs were overestimated, with >90% of the population infected, and baseline IFR at in high-income countries 1.03%. Moreover, low-income countries are more vulnerable to lockdown adverse effects for several reasons: lower ability to work from home, more household based transmission (when confined to home), economic vulnerability [a higher degree of informal labor markets, and marginal capacity to provide support for ensuring livelihoods], slower build-up of herd immunity [given limited health care capacity], little testing capacity, wider health risks from diverting all attention to a single disease, and future health system failure once suppression measures are lifted (also see Table 1).^{209,210} The effects of a recession on government spending is magnified when this spending was already insufficient to improve the social determinants of health. In India, the desperation is leading to an increase in child trafficking.²¹¹ Surveys in Africa indicate a very low IFR; for example, in Kenyan blood donors 5% were seropositive yet the country reported only 100 deaths, in Bantyre, Malawi, a serosurvey found 12.3% of healthcare workers were seropositive yet only 17 deaths were reported, and in two cities in Mozambique seropositivity was 3% and 10% yet only 16 deaths were reported.²¹² It is extremely likely the cost-benefit analysis is even more against lockdown in low-income countries for these reasons.

5. Discussion:

5.1 What to do now: change the trolley track

5.1.1 Other calls for a change in response priorities

Several other groups and individuals have made calls for a change in COVID-19 response priorities (Table 9).²¹³⁻²²⁰ In an open letter on July 6, 2020, to the Prime Minister and Premiers of Canada signed by many former deputy ministers of health, chief public health officers, and medical deans, the authors called for “A Balanced Response.”²¹³ They write that the current approach “carries significant risks to overall population health and threatens to increase inequalities... Aiming to prevent or contain every case of COVID-19 is simply no longer sustainable...”²¹³ In an open letter to the National Cabinet in Australia signed by many economists and medical experts with the Australian Institute for Progress, the authors make similar points.²¹⁴ They write that “to analyze the COVID-19 effect it is necessary to understand it as shortening life. But the lockdowns and the panic have also had a cost in shortening life for others.”²¹⁴ Ioannidis called for evidence to guide policy, noting many of the collateral and recession effects discussed above.²¹⁵⁻²¹⁹ “Shutdowns are an extreme measure. We know very well that they cause tremendous harm.”²¹⁶ A resignation letter by an economist in the Australian Treasury wrote that “the pandemic policies being pursued in Australia... are having hugely adverse economic, social and health effects... The need for good policy process does not disappear just because we face a public health crisis...”²²⁰ The “Great Barrington Declaration” written on October 4, 2020, by infectious disease epidemiologists and public health scientists recommends “Focused Protection.”²²¹ The declaration writes that “current lockdown policies are producing devastating effects on short and long-term public health... leading to greater excess mortality in years to come...”²²¹

A caveat to quoting these open letters is that “petitions cannot and should not be used to prove that the positions of the signatories are scientifically correct,” as this would be based on the fallacies of ‘argument ad populum’ and ‘invoking authority’, and have other drawbacks.²²² These open letters are used only to show that many have expressed views similar to those expressed here, and this might open the door to serious consideration of the empirical evidence and arguments presented above.

5.1.2 Objection: Herd Immunity Is a Dangerous Idea

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There are several objections that have been made to the idea of opening up society to achieve natural herd immunity.²²³⁻²²⁶

First, an objection is that natural herd immunity assumes the immunity is long lasting, and this may not be the case.²²³⁻²²⁶ If immunity is short-lived, then COVID-19 may become an endemic and likely yearly viral infection as predicted by Kissler.² In the event of short-lived immunity it will still be important to achieve natural herd immunity to protect the high-risk groups (i.e., the elderly) now and yearly (until a vaccine is widely available) without recurrent and prolonged lockdowns that devastate the economy and thus population life-expectancy and wellbeing. Notably, if immunity is not long-lasting this will be a problem for possible vaccine induced herd immunity as well, as the world population will need vaccines to be produced and delivered everywhere at least each year.

Second, another objection is that the costs in deaths, mental and physical health and suffering, socioeconomic inequities, and harming the economy will be too high.^{223,224} This objection ignores the discussion above of the trade-offs involved that include not only COVID-19 direct effects, but also indirect effects of the response to COVID-19, the collateral damage and cost-benefit analysis where it was shown that the costs of all these effects is in fact much higher with lockdowns.

Third is the objection that uncontrolled transmission in younger people would inevitably result in infections in high-risk groups with high mortality.²²³⁻²²⁶ The ability to successfully shield continuing care facilities and hospitals from COVID-19 is questioned.^{223,224} Prolonged isolation of high-risk groups is said to be “unethical”.²²³ The objection is odd, as if we cannot protect those in nursing homes nor hospitals, why are we using personal protective equipment at all? In addition, prolonged isolation of *all* groups is what has occurred now, and based on the cost-benefit analysis this is what is unethical by causing far more harm to all, including the high-risk elderly. Of course, infection *can* still spread to high-mortality populations; however, the goal is to reduce this risk. Moreover, <10% of the population is at high-risk, accounting for >90% of potential deaths; surely we can focus on protecting this subgroup of people.²¹⁹ Monitoring in Europe shows that despite increasing COVID-19 cases, excess mortality has only shown a slight increase, suggesting protection of the most vulnerable may be feasible.²²⁷ Modelling has also suggested that social distancing of those over 70 years of age would prevent more deaths than a fixed duration of social distancing of the entire population.²²⁸

Fourth is the objection that healthcare systems will be overwhelmed by uncontrolled spread.^{223,224} This is a worrisome possibility, as health-care providers may be forced to make painful rationing decisions. If a healthcare system is overwhelmed, the effects would have to be extreme to make the benefit of lockdowns to save ICU capacity comparable to the long-term costs. There are several ways to minimize this possibility, including a focus on protecting those at high-risk (see below), information dissemination to cause fast awareness of voluntary sensible self-imposed use of handwashing and (in crowded areas) masks,^{229,230} limiting very large gatherings, and expanding critical care capacity when necessary. Forecasting of healthcare capacity needs in the short or medium term, even when built directly on data and for next day predictions, has consistently failed, and most healthcare systems were not overwhelmed despite sometimes being stressed with high peaks of cases.^{219,231} Forecasting failure led to elderly patients being discharged to nursing homes (where there was high mortality), and largely empty wards (unnecessarily affecting hospital utilization for other serious conditions); in Canada “overall ICU occupancy rates did not exceed 65% (p. 12)”.^{45,219} Lockdowns in anticipation of forecast healthcare incapacity should not be done, especially if based on forecasting that is not released for public scrutiny nor repeatedly fit to real-time data to verify accuracy. In addition, if there are insufficient ICU beds for

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the population due to underfunding, the effects of the recession on government healthcare spending in the future will markedly adversely worsen this situation in the long-term.

Fifth is the objection that natural herd immunity is not achievable.²²³⁻²²⁶ This is based on the few case reports of re-infection, the Brazilian city of Manaus where seroprevalence was up to 66% yet there is currently a resurgence of COVID-19 cases, and the claim that natural herd-immunity has never occurred. The seven published case reports of re-infection, four with symptoms [one requiring hospitalization, and one death in an immunocompromised 89 year old with few details reported], when 10% of the world population has likely been infected over the past 10 months cannot yet provide evidence that severe reinfection and contagion is at all common.²³²⁻²³⁷ Regarding Manaus, the high seroprevalence likely reflected the special situation of a relatively homogeneous cohort of people in overcrowded low socioeconomic urban situations, with reliance on crowded long riverboat travel; now there seems to be a different demographic cohort of young wealthy individuals being exposed.²³⁸⁻²⁴⁰ In addition, the peak seroprevalence in blood donors in Manaus was 51.8% in June, while another study of household seroprevalence in Manaus on May 14-21 found this to be 12.7% [the respective numbers for Sao Paulo were closer, at 6.9% and 3.3% in the two serosurveys].^{240,241} Even correcting for a possible lower sensitivity of capillary blood used in the household survey does not explain the difference, as the corrected seroprevalence might be up to 19.3%.²⁴² Regarding historical natural herd-immunity, it is likely that this was achieved for several infections, with outbreaks that occurred as births added sufficient numbers of new susceptible young individuals (e.g., for Measles, Mumps, Rubella).

Finally, an important point to emphasize is that the information in this review does *not* depend on natural herd immunity being achieved. The collateral damage, and the cost-benefit analysis showed that lockdowns are far more harmful than a risk-tailored population specific response. “Public health is the science and action of promoting health, preventing disease, and prolonging life... ensuring that Canadians can live healthy and happier lives (p. 59-60);”⁴⁵ some suggestions for how to do this is discussed below.

5.1.3 Some suggestions: What can we do?

5.1.3.1. Focus on protecting those at high risk: A risk-tailored, population-specific response.²⁴³ This starts with better public understanding of the risks and trade-offs involved.¹⁸⁶ Protection should focus on high-risk groups: those hospitalized [e.g., prevent nosocomial infection],²¹⁶ in nursing homes [e.g., staff work in only one facility, adequate personal protective equipment supply, more staff, equitable pay],²⁴⁴ prisons, homeless shelters, and certain demographics [e.g., age ≥ 70 years, those with multiple severe co-morbidities].²⁴³ There should be investment in improving the social determinants of health [e.g., “invest in strategies that address health inequities and better serve the elderly, people experiencing homelessness, and those living with limited means”²⁴³].^{45,160,245} Don’t lock everyone down, regardless of their individual risk, as this will cause more harm than benefit.²¹⁶ It is not true that “no one is protected until everyone is protected.”⁴⁵

5.1.3.2. Open schools for children:^{87,246} School provides essential educational, social, and developmental benefits to children.²⁴⁷ Children have very low morbidity and mortality from COVID-19,¹⁷⁴ and, especially those ≤ 10 years old, are less likely to be infected by SARS-CoV-2^{57,249-251} and have a low likelihood to be the source of transmission of SARS-CoV-2.^{178,252} Children account for 1.9% of confirmed cases worldwide.²⁴⁸ School closures don’t seem to have an impact on community outbreaks.^{178,253} Modelling predicted that school and university closures and isolation of younger people would increase the total number of deaths [postponed to a second and subsequent waves].²²⁸ Modelling also predicted that

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school closures alone would prevent only 2-4% of deaths.²⁵⁴ We need to educate parents and teachers regarding their low risk, and focus teachers with greater vulnerability due to age or multiple co-morbidity on remote learning. Until schools open, education is lacking especially for those with the fewest opportunities, worsening social disparities that education systems are intended to level. Similarly, allow visitation in children's hospitals and pediatric long-term care facilities, where the risk even with co-morbidities is so low as to not warrant the tragedy of sacrificing our most vulnerable in the false hope of protecting them.^{43,48,49,178}

5.1.3.3. Build back better: Maybe we have learned that the “government can intervene decisively once the scale of an emergency is [or seems] clear and public support is present.”²⁵⁵ Maybe we can “recalibrate our sense of omnipotence seeing the ability of ‘natural’ forces to shock the global economy.”²⁵⁵ Maybe we can tip “energy and industrial systems towards newer, cleaner, and ultimately cheaper modes of production that become impossible to outcompete.”²⁵⁵ This would involve investment in clean technologies [e.g., renewable energy, green construction, natural capital, carbon capture and storage technologies], and conditional [on measurable transition] bailouts. This is because climate change, like the COVID-19 response, will involve market failures, externalities, international cooperation, and political leadership: the devastation is just in slow motion and far graver. The aggregate fiscal stimuli aimed at alleviating the consequences of the COVID-19 crisis for 149 countries amount to US\$12.2 trillion.²⁵⁶ Climate experts have estimated that “the additional investment needed to shift low-carbon energy investment onto a Paris-compatible pathway thus amounts to about US\$300 billion per year globally over the coming 5 years... 12% [of total pledged stimulus to date] when considered over the entire 2020-2024 period...”²⁵⁶ Moreover, “subtracting divestments from high-carbon fossil fuels... indicates that the overall increase in net annual investments to achieve an ambitious low-carbon transformation in the energy sector are notably small... 1% [of the total announced stimulus to date] over the 2020-2024 period.”²⁵⁶ A green recovery may be a driver of employment, spur innovation and diffusion of technologies, reduce stranded assets, and result in a more sustainable and resilient society.^{117,256}

5.2. Some Research Priorities

More information will help to optimize responses to the pandemic. This particularly applies to possible prevention, prophylaxis, and treatment of COVID-19. How effective cloth masks are at preventing infection, or at reducing severity of infection needs more study.^{257,258} The safety, efficacy, and durability of protection from vaccines, particularly in high-risk groups, must be determined in large Phase III randomized controlled trials.²⁵⁹ Novel treatments are in clinical trials, with dexamethasone having benefit on mortality in those with severe COVID-19 requiring oxygen treatment.²⁶⁰ Research is also required to determine the frequency and severity of reinfections.²⁶¹ The frequency, duration, and severity of ‘long-COVID’ requires better study. The impact of influenza on COVID-19 morbidity and mortality requires study, as both viruses may compete for the same susceptible individuals.²⁶¹ Importantly, research on “the impending authoritarian pandemic... [the] toll being inflicted on democracy, civil liberties, fundamental freedoms, [and] healthcare ethics...” (e.g., due to those responses that were not strictly necessary nor proportionate, largely copied from the “authoritarian example of others”) is required to prevent regression and “erosion of rights-protective democratic ideals and institutions”²⁶² across the globe.²⁶²⁻²⁶⁴

6. Conclusion

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“The destruction of lives and livelihoods in the name of survival will haunt us for decades.”¹⁰ The decisions we made entailed “trade-offs that cannot be wished away.”¹⁰ The most affected by the pandemic response are “the poor, the marginalized, and the vulnerable,” while we in high-income countries have shifted “negative effects... to places where they are less visible and presumably less serious.”¹⁰ We must open up society to save many more lives than we can by attempting to avoid every case (or even most cases) of COVID-19. It is past time to take an effortful pause, calibrate our response to the true risk, make rational cost-benefit analyses of the trade-offs, and end the lockdown groupthink.

Abbreviations

COVID-19: Coronavirus Disease 2019

GDP: Gross Domestic Product

IFR: Infection Fatality Rate

ICU: Intensive Care Unit

NPI: Non-pharmaceutical Intervention

QALY: Quality Adjusted Life Years

SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus 2

UK: United Kingdom

US: United States

WELLBY: Wellbeing Adjusted Life Years

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Declarations**Ethics approval and consent to participate:** Not applicable**Consent for publication:** Not applicable**Availability of data and materials:** All data generated or analyzed during this study are included in this published article (and its supplementary information file).**Competing interests:** The author declares that he has no competing interests.**Funding:** none**Author's contributions:** ARJ wrote the manuscript, and approved the final version.**Figure Titles and Legends****Figure 1(A).** The Trolley Dilemma using numbers compatible with the Corona Dilemma.

Legend: Modified with permission from Frijters P, reference 144.

Figure 1(B). The Corona Dilemma choices explicitly explained.

Legend: Modified with permission from Frijters P, reference 144.

Figure 2. Explanation of how acute GDP loss of 6-7% will accumulate over the decade to a loss of at least US\$50 trillion.

Legend: Reproduced with permission from Frijters P [Personal Communication].

Additional Files**Additional file 1.pdf****Title: ETables**

ETable 1. Total and COVID-19 deaths in the USA, as of August 22, 2020

ETable 2. COVID-19 deaths in Canada as of August 30, 2020 compared to deaths in 2018.

ETable 3. Studies suggesting that the efficacy of nonpharmaceutical interventions to prevent spread of COVID-19 are not as high as some predicted.

ETable 4. Cost-benefit analysis in WELLBYs for Canada's response to COVID-19.

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Table 1. Initial modeling predictions that induced fear and crowd-effects

Reference	Statements and Predictions from the modeling
Kissler et al. ²⁻⁴	“prolonged or intermittent social distancing may be necessary into 2022 [to avoid overwhelming critical care capacity]... expanded critical care capacity... would improve the success of intermittent distancing and hasten the acquisition of herd immunity”
	“projected that recurrent wintertime outbreaks of SARS-CoV-2 will probably occur after the initial, most severe pandemic wave [if immunity wanes over 40 weeks]”
	With a baseline reproductive number (Ro) 2.5, no seasonality to viral transmission, and the current intensive care capacity of the USA they projected the need for intermittent lockdowns occurring for a total of 75% of the time, even after July 2022.
Imperial College modeling of non-pharmaceutical interventions in USA and UK ⁵	“suppression [effective reproductive number (Re)<1] will minimally require a combination of social distancing of the entire population, home isolation of cases and household quarantine of their family members. This may need to be supplemented by school and university closures... [and] Will need to be maintained until a vaccine becomes available.”
	“we show that intermittent social distancing – triggered by trends in disease surveillance – may allow interventions to be relaxed temporarily in relative short time windows....[Suppression] needs to be in force for the majority [>2/3 of the time] of the 2 years of the simulation.”
	The modeling assumed an IFR of 0.9%, hospitalization rate of 4.4%, and that 81% of the population would be infected before herd immunity, resulting in 510,000 deaths in Great Britain and 2.2 million deaths in the United States by mid-April, surpassing ICU demand by 30X, if lockdowns did not occur.
Imperial College modeling of non-pharmaceutical interventions globally ⁶	“we estimate that in the absence of interventions, COVID-19 would have resulted in 7.0 billion infections and 40 million deaths globally this year... healthcare demand can only be kept within manageable levels through the rapid adoption of public health measures... to suppress transmission... sustained, then 38.7 million lives could be saved.”
	“[Suppression] will need to be maintained in some manner until vaccines or effective treatments become available.”
Imperial College estimate of lives saved so far in Europe ⁷	Used a “model [that] calculates backwards [infections] from observed deaths... [and] relies on fixed estimates of some epidemiological parameters [Ro 3.8; attack rates in different age groups from 60-99%; infection fatality rate in different countries of 0.91-1.26%]....”
	Concluded that “we find, across 11 countries [in Europe], since the beginning of the epidemic [to May 4], 3,100,000 (2,800,000 – 3,500,000) deaths have been averted due to [NPI] interventions....”
Hsiang et al. ⁸	In 5 countries [China, South Korea, Iran, France, US], using “reduced-form economic methods”, NPIs “prevented or delayed [to April 6] on the order of 62 million confirmed cases, corresponding to averting roughly 530 million total infections... we estimate that all policies combined slowed the average growth rate of infections [from 43%/day, a doubling time ~2 days] by -0.252 per day....”

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Table 2. Some effects of the COVID-19 response that put Sustainable Development Goals out of reach.

Sustainable Development Goal	Effect of COVID-19 Response: some details
Childhood vaccination	Programs stalled in 70 countries [Measles, Diphtheria, Cholera, Polio]
Education	School closures: 90% of students (1.57 Billion) kept out of school <u>-Early primary grades are most vulnerable, with effects into adulthood</u> : effects on outcomes of intelligence, teen pregnancy, illicit drug use, graduation rates, employment rates and earnings, arrest rates, hypertension, diabetes mellites, depression <u>-Not just education affected</u> : school closures have effects on food insecurity, loss of a place of safety, less physical activity, lost social interactions, lost support services for developmental difficulties, economic effects on families
Sexual and reproductive health services	Lack of access: estimated ~2.7 Million extra unsafe abortions For every 3 months of lockdown: estimated 2 Million more lack access to contraception, and over 6 months, 7 Million additional unintended pregnancies
Food security	Hunger pandemic: undernourished estimated to increase 83-132 Million (>225,000/day; an 82% increase) - from disrupted food supply chains [labor mobility, food transport, planting seasons] and access to food [loss of jobs and incomes, price increases]
End poverty	Extreme poverty (living on <US\$1.90/day): estimated to increase >70 Million - Lost “ladders of opportunity” and social determinants of health
Reduce maternal and U5M	Estimated increase of 1.16 Million children (U5M) and 56,700 maternal deaths, if essential RMNCH services are disrupted (coverage reduction 39-52%) for 6 months in 118 LMIC - mostly (~60%) due to affected childhood interventions [wasting, antibiotics, ORS for diarrhea]; and childbirth interventions [uterotonics, antibiotics, anticonvulsants, clean birth]
Infectious Disease Mortality	Tuberculosis: in moderate and severe scenario, projected excess deaths (mostly from reduced timely diagnosis and treatment) 342,000-1.36 Million over 5 years (an increase of 4-16%) Malaria: in moderate and severe scenario, projected excess deaths (mostly from delayed net campaigns and treatment) 203,000 to 415,000 over 1 year (an increase of 52-107%, with most deaths in children <5yo). HIV: in moderate projected excess deaths (mostly due to access to antiretrovirals) 296,000 (range 229,000-420,000) in Sub-Saharan Africa over 1 year (an increase of 63%). Also would increase mother to child transmission by 1.6 times.

LMIC: low- and middle-income countries; ORS: oral rehydration solution; RMNCH: Reproductive Maternal Newborn and Child Health; U5M: under 5 mortality.

References: 78-93

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Table 3. Some effects of the COVID-19 response on public health in mostly high-income countries.

Effect of COVID-19 Response	Some Details
Delayed/avoided/disrupted medical care	<p>Visits to emergency departments for myocardial infarction or stroke declined in USA by ≥ 20-48%</p> <p>Delayed cancer care and 'non-urgent' procedures</p> <ul style="list-style-type: none"> -weekly presentations with cancer diagnoses down 46% in USA and UK -90% reduction in non-cancer surgeries in Ontario in March/April -surgery backlog in Ontario March 15 to June 13: 148,000; clearance time estimated to take 84 weeks -in Canada at least \$1.3 billion additional funding is required to return to pre-pandemic wait times for six procedures (CABG, cataract surgeries, hip and knee replacements, MRI and CT scans) within 1 year <p>Of excess deaths in high-income countries during pandemic, 20-50% are <i>not</i> from COVID-19</p> <p>Unexplained 83% increase (10,000 excess) deaths from dementia in England/Wales in April [lack of social contact causing a deterioration in health and wellbeing]</p>
Violence against women [household stress; disrupted livelihoods, social/protective networks, support services]	<p>Intimate Partner Violence: estimated effect from 3 months lockdown is 20% increase [>15 Million additional cases]</p> <p>Female Genital Mutilation: 2 Million more cases over next decade</p> <p>Child Marriages: 13 Million more cases over next decade</p> <p>Increased police reports [France, UK, Ontario] and support line calls [China, Italy, Spain, Vancouver, Alberta] by 20-50%</p>
Deaths of despair [related to unemployment, and due to drugs, alcohol, and suicide]	<p>In USA alone: 68,000 (from 27,000 – 154,000) suicide deaths predicted</p> <p>Mental Health effects of 3 months [suicide, depression, alcohol use disorder, childhood trauma due to domestic violence, changes in marital status, social isolation]: Years of Life Lost in USA 67.58 Million, Canada 7.79 Million, UK 13.62 Million, etc.</p> <p>Surge in Canada in opioid deaths (by 40-50%), alcohol consumption (by 19%), cannabis use (by 8%), tobacco smoking (by 4%), and suicidal thoughts.</p>

References: 97-119

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Table 4. World mortality data 2019, with COVID-19 mortality to Sept 4 in 2020 for comparison.

Region	Annual deaths in thousands (per day)	Infant mortality Rate/1000	Under 5yo mortality Rate/1000 (% of deaths)	Age 15-60 mortality Rate/1000 (% of deaths)	Age 65+ (% of deaths)
World	58,394 (160)	28	38 (10%)	140 (32%)	(57%)
COVID-19 on Sept 4, 2020	865 (3.5)	(0%)	(0.06%)	(26%)	(74%)
High-income	11,161	4	5 (1%)	81 (19%)	(80%)
Middle-income	41,551	27	35 (9%)	144 (36%)	(55%)
Low-income	5,665	46	68 (31%)	234 (42%)	(27%)
Sub-Saharan Africa	9,052	49	74 (31%)	281 (46%)	(23%)
Canada	291	4	5 (1%)	62 (17%)	(82%)

References: 127,128. Effect of COVID-19 is in bold for emphasis.

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Table 5. Selected causes of death in the world, with deaths per year and day, compared to COVID-19 in 2020.

Cause of death	Deaths/year (/day)	Case Fatality Rate	Age Group predominant
COVID-19 on Sept 4, 2020	864,618 (3500)	0.24%	≥65-70 years old
Malaria	405,000 (1110)	0.2%	Children
Tuberculosis	1,500,000 (4110)	<15%	-
Measles	140,000 (384)	1.46%	Children
Influenza	389,213 (range 294-518K) ^a	0.01-0.02% for pH1N1	Children 34,800 [13-97K], and ≥65 years old. Respiratory deaths only
HIV	690,000 (1890)	-	Access to treatment for 67%
Motor Vehicle Collisions	1,350,000 (3699)	-	Young 5-29 years old, mostly in Low- to Middle-Income Countries
Tobacco	>8,000,000 (21918)	-	-
Childhood (U5M) pneumonia	808,920 (2216)	-	<5 years old
Childhood (U5M) diarrhea	533,768 (1462)	0.08% U5M	<5 years old
Dietary risk factors	11,000,000 (30137)	-	-

a. The 1957-1959 Influenza pandemic, when the world population was 2.87 billion, was estimated to cause 4 deaths/10,000 population totaling 1.1 million excess deaths due to respiratory disease, with the greatest excess mortality in school-aged children and young adults. If COVID-19 is of similar severity, given the world population of 7.8 billion, we would expect ~3 Million deaths, mostly in the elderly.¹⁴³

K: thousands; U5M: under 5 mortality. Effect of COVID-19 in bold for emphasis. References: 131-143

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Table 6. Cost-Benefit analysis in WELLBYs for the world’s response to COVID-19

Factor in World	Benefit	Cost
COVID-19 deaths	360M WELLBY	-
Recession	-	1.2B WELLBY
Unemployment	-	280M WELLBY
Loneliness	-	333M WELLBY
Disrupted health services, disrupted education, famine, social unrest, violence, suicide	-	Not counted
TOTAL	360M WELLBY	1.813B WELLBY
BALANCE		5X [minimum]-87X [maximum]

B: Billion; M: Million; WELLBY: wellbeing years. See text for details of the calculations.
Maximum: benefit reduced in half; recession effect increased 12X, unemployment effect increased 3X, and still not counting the disruption of health services, education, life-span effects of loneliness, etc.

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Table 7. Cost-benefit analysis in Quality Adjusted Life Years for Australia's response to COVID-19

Consideration	Cost/month	Benefit overall	Comment
Wellbeing (immediate)	83,333 QALY	-	Attributes half of reduction (of 0.5 WELLBY) to lockdown
Reduced economic activity (government services)	25,812 QALY	-	Attributes half of yearly 6% loss in GDP to lockdown, and only government expenditure (not private) buys welfare (36% of GDP), at \$100,000/QALY
Increased suicides	600 QALY	-	Expected to rise 25% over next 5 years, and attributes only 40% of this to lockdown
Disrupted non-university schooling	740 QALY	-	Foregone wages of children: each year of schooling yields approximately 9% more future earnings; assumes 80-90% equivalence of disrupted to normal school days
Disrupted health services, future mental stress and violence	-	-	Not included. Also does not consider bad habits inculcated (reduced physical activity, increased weight gain (for 40%), increased alcohol intake)
Reduced COVID-19 deaths		50,000 QALY	This is for lockdown 'ad infinitum' (not per month); 0.04% of population saved
Total over 3 months of lockdown	331,485 QALY	50,000 QALY	Minimum cost is 6.6X any benefit

QALY: Quality Adjusted Life Years; WELLBY: Wellbeing Years. References: 181,182

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Table 8. A cost-benefit analysis for lockdown in the US, modified from Cutler & Summer.^{184,185}

Factor	Quoted ¹⁸⁴	Revised	Explanation of revision
COST			
GDP loss	\$7.592 Trillion	\$7.592 Trillion ^a	No revision made. Note that, as the US accounts for 15% of world GDP, this translates to the global loss of \$50.6 Trillion (as estimated in Table 6).
Mental Health	0	\$0.8 Trillion	Assuming that 50% of the mental health effect is from lockdowns
BENEFIT			
Deaths avoided	\$4.4 Trillion	\$0.3125 Trillion	Assuming the 625,000 deaths lose 5 QALY each at \$100,000 per QALY. This is better than assuming each death, regardless of age or comorbidity, is the loss of the entire value of a statistical life. This is also how the cost on mental health was calculated.
Health impairment	\$2.6 Trillion	\$0.4875 Trillion	Assuming 35% of quality of life is lost <i>for the remaining years left</i> [likely 15 remaining years of 80 on average in a statistical life].
Mental Health	\$1.6 Trillion	\$0.8 Trillion	Assuming 50% of the mental health effects are due to not having lockdowns to prevent COVID-19 cases.
Cost-benefit balance	Benefit 1.3X Cost	Cost 5.2X Benefit	A minimal estimate: the GDP loss will likely be higher; willingness to pay for QALY is usually <\$100,000/QALY, and NICE uses \$30,000/QALY; not all deaths could be avoided by lockdown; at least 20% of excess deaths are not due to COVID-19 (i.e., are more likely from the response); severe cases (i.e., those that do not need intensive care, and may only need oxygen) likely have lower risk for health impairment of the severity modeled.

a. If the Value of a Statistical Life is accepted as used in the reference at \$7 million, and the US economy will lose \$7.592 Trillion in GDP over the decade, that is equivalent to the loss of 1,084,571 whole (statistical 80-year duration) lives = 86,765,680 years of lost life; that is equivalent to (assuming 5 QALY lost per COVID-19 death) **17,353,136 COVID-19 deaths**.

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Table 9. Other calls for a change in COVID-19 response priorities

Reference	Content of the call for adjusting COVID-19 response priorities
Open letter on July 6, 2020, to the Prime Minister and Premiers of Canada ²¹³	The current approach “carries significant risks to overall population health and threatens to increase inequalities... Aiming to prevent or contain every case of COVID-19 is simply no longer sustainable... We need to accept that COVID-19 will be with us for some time and to find ways to deal with it.”
	The response risks “significantly harming our children, particularly the very young, by affecting their development, with life-long consequences in terms of education, skills development, income and overall health.”
	Suggest that we need “to focus on preventing deaths and serious illness by protecting the vulnerable while enabling society to function and thrive... While there is hope for a vaccine to be developed soon, we must be realistic about the time... We need to accept that there will be cases and outbreaks of COVID-19.”
	“Canadians have developed a fear of COVID-19. Going forward they have to be supported in understanding their true level of risk... while getting on with their lives – back to work, back to school, back to healthy lives and vibrant, active communities....”
	COVID-19 “is not the only nor the most important challenge to the health of people in Canada... The fundamental determinants of health – education, employment, social connection and medical and dental care – must take priority...”
Open letter to National Cabinet of Australia ²¹⁴	“exposure to COVID-19 is only temporarily avoidable”; “to analyze the COVID-19 effect it is necessary to understand it as shortening life. But the lockdowns and the panic have also had a cost in shortening life for others.”
	Some of these costs include that the lockdown: “will decrease national income... and this will have a measurable effect on the length of the average lifespan”, “[has] disrupted normal health services... estimated an increase in cancer deaths over the next 12 months of 20%”, [and will cause] future suicides by the unemployed and others whose lives have been ruined.”
	Urge for “a cost-benefit analysis, including lives saved versus lives lost, both directly and consequentially... [and] weekly or daily non-epidemic death figures should be posted as well as deaths from the epidemic...”
Ioannidis, JPA ^{95,215-219}	Called for evidence to guide policy, noting many of the collateral and recession effects discussed above.
	“Shutdowns are an extreme measure. We know very well that they cause tremendous harm.”
	“the excess deaths from the measures taken is likely to be much larger than the COVID-19 deaths... learning to live with COVID-19 and using effective, precise, least disruptive measures is essential to avoid such disasters and to help minimize the adverse impact of the pandemic” ⁹⁵
	“When major decisions (e.g., draconian lockdowns) are based on forecasts, the harms (in terms of health, economy, and society at large) and the asymmetry of risks need to be approached in a holistic fashion, considering the totality of the evidence.” ²¹⁹

Rethinking the Lockdown Groupthink

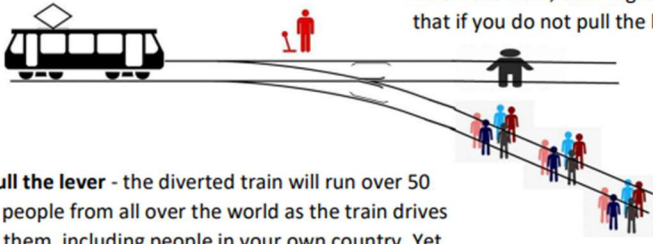
Resignation letter by economist in Victorian Treasury ²²⁰	<p>“the pandemic policies being pursued in Australia... are having hugely adverse economic, social and health effects... The need for good policy process does not disappear just because we face a public health crisis... the elderly are many times more vulnerable to a serious outcome than the young. It was necessary, therefore, to work out a targeted age-based strategy... The direct and indirect costs imposed by regulatory approaches may not be... immediately obvious. Risk regulation that is poorly targeted or costly will divert resources from other priorities... needed to commission a cost-benefit analysis of alternative policy options....”</p> <p>Governments should have realized “they are hostage to chronic groupthink and actively sought alternative advice... instead of performing its taxpayer-funded duty of providing forthright analysis of alternatives... can (even now) be managed by isolating the elderly and taking a range of voluntary, innovative measures.”</p>
The Great Barrington Declaration ²²¹	<p>“current lockdown policies are producing devastating effects on short and long-term public health... leading to greater excess mortality in years to come... keeping students out of school is a grave injustice... The most compassionate approach that balances the risks and benefits of reaching herd immunity, is to allow those who are at minimal risk of death to live their lives normally to build up immunity to the virus through natural infection, while better protecting those who are at highest risk.”</p>

Rethinking the Lockdown Groupthink

Figure 1a and 1b

The Corona Dilemma

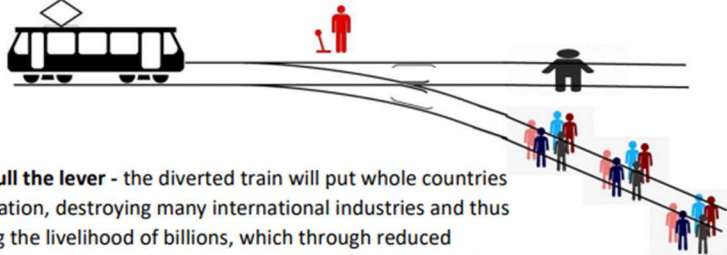
If you do not divert the train - one person, John, will get run over. He is elderly and suffering from many diseases. You know him personally and all his friends and family are watching you. They are all shouting at you to divert the train, claiming it is the moral and safe thing to do. You know that if you do not pull the lever, your life in the society you live in is over.



If you pull the lever - the diverted train will run over 50 random people from all over the world as the train drives through them, including people in your own country. Yet these people and their friends won't know where the train came from that hit them.

The Corona Dilemma

If you do not divert the train -you are letting the virus rage unchecked (**COVID deaths**).

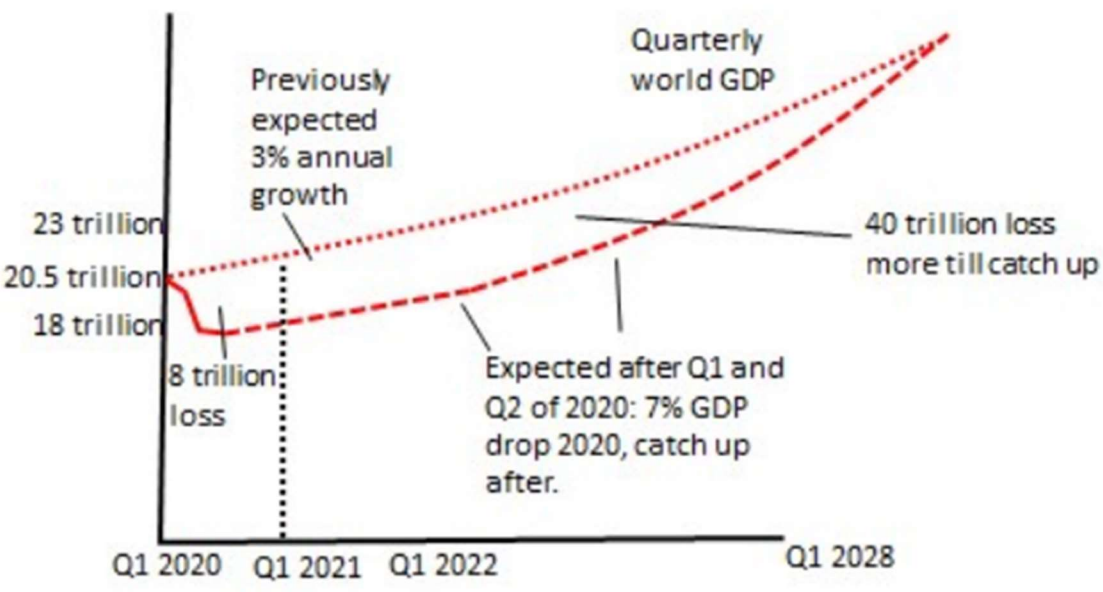


If you pull the lever - the diverted train will put whole countries into isolation, destroying many international industries and thus affecting the livelihood of billions, which through reduced government services and general prosperity will cost tens of millions of lives (**COVID reaction**).

Rethinking the Lockdown Groupthink

Figure 2

Previously projected GDP and later projected GDP: one-year loss versus cumulative loss



Rethinking the Lockdown Groupthink

ETable 1. Total and COVID-19 deaths in the USA, as of August 22, 2020.

Age group	COVID deaths in 6 months to Aug 22	Deaths from all causes to Aug 22	COVID as % of deaths in 2020
0-14	57	14679	0.39%
15-24	280	18594	1.51%
25-44	4558	93066	4.90%
45-54	8648	100926	8.57%
55-64	20655	231983	8.90%
65-74	34980	351806	9.94%
75-84	43392	430582	10.08%
85+	51710	537185	9.63%
TOTAL	164280	1778821	9.24%

Assumes all deaths *with* COVID-19 are deaths *from* COVID-19.

Reference: 123

Rethinking the Lockdown Groupthink

ETable 2. COVID-19 deaths in Canada as of August 30, 2020 compared to deaths in 2018.

Age group	COVID deaths in 6 months of 2020	Deaths in all of 2018	COVID as % of deaths over 6 months of 2020
0-19	1	3092	0.06%
20-29	9	3273	0.55%
30-39	15	4455	0.67%
40-49	50	7287	1.35%
50-59	211	19959	2.07%
60-69	651	40231	3.13%
70-79	1635	60143	5.16%
80+	6420	146266	8.07%
TOTAL	8992	283706	5.96%

In 2018 there were 23642 deaths/month and 777 deaths/day in Canada.

References: 124, 125

Rethinking the Lockdown Groupthink

ETable 3. Studies suggesting that efficacy of nonpharmaceutical interventions to prevent spread of COVID-19 are not as high as some predicted.

Study	Details of efficacy of non-pharmaceutical intervention
Luskin DL ¹⁴⁹	Using “highly detailed anonymized cellphone tracking data provided by Google... tabulated by the University of Maryland’s Transportation Institute into a ‘social distancing index’”, it was found that lockdown severity correlated with a greater spread of the virus, even when excluding states with the heaviest caseloads, and not with population density, age, ethnicity, prevalence of nursing homes, or general health, suggesting that “[heavy] lockdowns probably didn’t help.”
	This analysis also found that states that subsequently opened-up the most tended to have the lightest caseloads, suggesting that “opening up [a lot] didn’t hurt.”
Atkeson A, et al. ¹⁵⁰	An analysis across 23 countries and 25 states each with >1000 deaths by July 22 found that the growth rates of daily deaths from COVID-19 fell rapidly [from a wide range of initially high levels - doubling every 2-3 days] within the first 30 days after each region reached 25 cumulative deaths, and has hovered around zero or slightly below since.
	Epidemiological models found that this implied both the Re and transmission rates fell rapidly from widely dispersed initial levels [$Re \geq 3$], and the Re has hovered around 1 after the first 30 days of the epidemic virtually everywhere in the world.
	The authors suggest that there must be “an omitted variable bias” accounting for this finding [and similar findings in previous pandemics], that the role of region-specific NPI’s implemented in the early phase of the pandemic is likely overstated, and that the removal of lockdown policies has had little effect on transmission rates.
Chaudhry R, et al. ¹⁵¹	A study using data from the top 50 countries ranked by number of cases found that “rapid border closures, full lockdowns, and wide-spread testing were not associated with COVID-19 mortality per million people.”
Wood SN ¹⁵²	A mathematical model using “a Bayesian inverse problem approach applied to UK data on COVID-19 deaths and the disease duration distribution” suggested that “infections were in decline before the full UK lockdown (March 24), and that infections in Sweden started to decline only a day or two later.”
Chin V, et al. ¹⁵³	The model for Europe used in [7] was based on circular reasoning [i.e., having modelled Re “as a step function and only allowed to change in response to an intervention”]. Using a model allowing for gradual changes over time and better fitting the data, complete lockdown had “no or little effect, since it was introduced typically at a point when Rt was already low.” For example, when lockdown was adopted in the UK, “Rt had already decreased to 1.46.” In fact, “lockdown and event ban had similar effect sizes on the reduction of Rt”. Overall, “one cannot exclude that the attribution of benefit to complete lockdown is a modelling artefact.”
Homburg S, Kuhbandner C. ¹⁵⁴	The model in [7] used circular reasoning [“the purported effects are pure artefacts”] by “using as an a priori restriction that Rt may only change at those dates where interventions become effective.” In the UK “the growth factor had already declined... strongly suggests that the UK lockdown was both superfluous... and ineffective.” In addition, the attribution of the decline in Sweden’s Rt to banning of public events is odd because that was an “NPI that they found ineffective in all other countries.”
Islam N, et al. ¹⁵⁵	Implementation of any physical distancing intervention [including lockdown] was associated with an overall reduction in COVID-19 incidence of only 13% [IRR 0.87, 95% CI 0.85 to 0.89] in 149 countries. There was no effect on this estimate of days since the first reported case of COVID-19 until the first implementation of physical distancing policies.

Rethinking the Lockdown Groupthink

ETable 4. Cost-benefit analysis in WELLBYs for Canada's response to COVID-19

Factor in Canada	Benefit per month	Cost per month
COVID-19 deaths	37.59M X 0.5 for herd X 0.003 IFR X 5 QALY/ 12 months = 23,494 QALY = 140,963 WELLBY	-
Recession	-	(1.713T GDP/12 months X 0.15 GDP loss X 0.4 government spending)/100K = 85,650 QALY = 513,900 WELLBY
Unemployment	-	2M X 0.7/12 months = 116,667 WELLBY
Loneliness (if we end half of lockdown)	-	37.59M/2 X 0.5/12 months = 783,125 WELLBY
Disrupted health services, disrupted education	-	Not counted
TOTAL	0.141M WELLBY	1.41M WELLBY
BALANCE		10X [minimum]

IFR: infection fatality rate; K: thousands; M: Million; QALY: quality adjusted life years; WELLBY: wellbeing years

NOTES**PINCHER CREEK,****POLICE ADVISORY COMMITTEE****WEDNESDAY, January 20, 2021 AT 7:00 P.M.****Virtual Meeting****962 St. John Avenue**

Committee Members Present: Troy MacCulloch, Kim Hurst, Mark Barber, Sgt. Ryan Hodge, Greg Freer, Lynne Tennycke, Shelly-Anne Dennis.

Staff present: David Green

1. Call to Order: David called the meeting to order at 7:05 PM
2. Agenda Approval:

Motion / Hodge

**That the agenda be approved as circulated
Carried**

3. Notes from November 18 Police Advisory Committee Meeting

Motion / MacCulloch

**That the notes from the November 18 PAC meeting be approved as
circulated.
Carried**

4. RCMP Update: Sgt. Hodge provided summary charts illustrating Crime Statistics and trends and a “Crime Gauge” to the end of 2020 (attached to these notes) He also provided staffing numbers at both the Pincher Creek and Piikani Detachments (the Pincher Creek detachment is losing two members which leaves the detachment three members short)

Sgt Hodge emphasized the importance of community communication the RCMP. The “Wellness Check” numbers are up indicating a need for wider mental health support in the community.

5. Ranchlands Victim Services: Shelly-Anne Dennis reported that the RVS is operating under a new structure and has hired new personnel. RVS currently has a full complement of volunteers in place.

6. Bylaw Department Update: CPO John Herasemluk was not available this evening.

7. Citizen On Patrol (COP) Update: Kim Hurst provided an update on COP. The Covid situation has meant a discontinuation of patrols (each vehicle must have two volunteers).

Kim also indicated that a Rural Crime Watch chapter is to be formed in our area. An Executive is in place but they are needing more members. The M.D. has been instrumental in funding the new group. Detachments from Pincher Creek, Crowsnest Pass and Piikani will partner in the new agency. When available, brochures and information will be distributed to Town and MD residents and made available on social media.

8. Group Group Youth: unable to get through to the meeting.

9. School Updates: Greg Freer, Principal at Matthew Halton School, provided an update. He indicated that the school is meeting expectations given the pandemic. Issues related to mental health have increased. The school has installed CCTV cameras and new locks.

Karen Schmidt, Principal at St. Michael's School was unavailable this evening.

10. Roundtable:

- It was agreed to continue to advertise the PAC meetings on facebook.
- Shelly-Anne emphasized that RCMP interdetachment cooperation continues to be very effective.

11. Frequency of Meetings and Next Meeting Date: The next meeting will take place on **March 31 at 7:00 PM**. It is assumed at this time that the meeting will be virtual. Notices and reminders will be sent out well ahead of time, but please mark your calendar!!

12. Adjournment: There being no further business, the meeting adjourned at 8:00 PM



December 2020

Grant Specialist report for general circulation.

A fairly quiet few weeks, but Christmas usually is, with January usually being a rush to get Provincial Lottery grants in for the January 15 deadline.

Spring is on its way, and what that means to me is a wealth of opportunities such as the TD Green Spaces grant, the FCC Agrispirit grant and several more. While these grants can be difficult to get due to a small budget offered and the fact that there are no matching requirements, they are certainly worth a go no matter how over subscribed they are.

I will be working with SASCI as they go through their Strategic Planning session starting mid January, with the broad spectrum of directors they now have and knowledge of the non-profit sector in Pincher Creek I feel it will be very valuable, and hopefully I can give them some guidance too through my experiences and knowledge.

Ready for the pandemic to be over so we can all just get back to normal.

Fast Facts

Total Applications made	Funding received to date (banked)	Funding outstanding.
\$ 3,862,112.00	\$ 985,662.00	\$ 1,286,351.00

Stay Safe everyone,

Liza Dawber

Pincher Creek Community Grant Specialist – Grants@pccdi.ca or 403-682-7421