Cape Breton Regional Municipality

Council Meeting

AGENDA

TUESDAY, AUGUST 24TH, 2021

TIME:

6:00 PM

Centre 200
Main Concourse
481 George Street, Sydney, NS

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Cape Breton Regional Municipality

Council Meeting

Tuesday, August 24, 2021

6:00 pm

AGENDA ITEMS

Land Acknowledgement

Roll Call

O' Canada

Moment of Silent Reflection

1. **APPROVAL OF MINUTES** (Previously Circulated)

   - **Council – July 6, 2021**

2. **APPROVAL OF AGENDA:** (Motion Required)

3. **PROCLAMATIONS & RESOLUTIONS:**

   3.1 **Acadian Day - August 15, 2021** ***(for ratification)*****:**
   Councillor Darren O'Quinn (See page 6)

   3.2 **Arthritis Awareness Month:**
   Councillor Steve Gillespie (See page 7)

4. **PRESENTATION:**

   4.I **Cape Breton Local Immigration Partnership:** Norma Jean MacPhee, Program Director; and Kailea Pedley, Program Manager - Cape Breton Partnership (See page 8)

Continued…

5. PROTECTIVE SERVICES ISSUE:

5.1 New Staff Appointments - Bylaw Enforcement Officers: Paul Burt, Manager of Building Planning & Licensing Laws (See page 21)

6. CORPORATE SERVICES ISSUE:

6.1 Bid to Host 2023 Brier: Kirk Durning, Manager of Recreation (See page 22)

7. BUSINESS ARISING:

7.1 Council Meeting – June 15, 2021:

a) Washbrook Flood Mitigation Project Update:

i) Staff Issue Paper: Wayne MacDonald, Director of Engineering & Public Works, and Matt Viva, Manager of Waste Water (See page 24)

ii) Community Consultation Report: Mike Targett, Community Consultation Coordinator (See page 108)

7.2 Council Meeting – July 6, 2021:

a) Public Report: Citizen Appointments to Various Committees: Deborah Campbell Ryan, Municipal Clerk (See page 145)

7.3 Nominating Committee Meeting – August 17, 2021:

a) **Citizen Appointments to Various Committees:** Deborah Campbell Ryan, Municipal Clerk (See page 148)

Continued…

8. BY-LAWS & MOTIONS:

8.1 By-Laws:

a) **Second / Final Reading – Public Hearing:**

i) **T-300 - Provision of Tax Information By-Law:**
Jennifer Campbell, Chief Financial Officer (See page 152)

b) **First Reading:** N/A

8.2 Motions: N/A

9. PLANNING ISSUES:

9.1 CBRM Wildlife Feeding Bylaw Request: Michael Ruus, Director of Planning & Development (See page 160)

10. FINANCIAL STATEMENTS: Jennifer Campbell, Chief Financial Officer

10.1 CBRM to June 30, 2021: (See page 174)

For Information Only.

10.2 Port of Sydney Development Corporation to July 31, 2021:
(See page 198)

For Information Only.

11. Review of Action Items from the Meeting: Mayor Amanda M. McDougall

ADJOURNMENT

PROCLAMATION
"2021 Acadian Day"

Whereas:	August 15th is National Acadian Day in observance of the first permanent French settlement in North America in 1607;
And Whereas:	2021 marks the 137th anniversary of the Acadian Flag, designed by Bishop Marcel-François Richard in 1884 as a symbol of Acadian cultural identity;
And Whereas:	Acadians are the descendants of the seventeenth-century French colonists who settled in Acadia located in the Canadian Maritime provinces – Prince Edward Island, Nova Scotia, New Brunswick, as well as in Quebec and Maine;
And Whereas:	Acadians, in view of their origin, history and development, constitute the first permanent settlement from France in Canada;
And Whereas:	The Acadian people have contributed, for some 400 years, to the economic, cultural and social vitality in Canada;
And Whereas:	It is in the interest of all Canadians to be able to share in the rich historical and cultural heritage of Acadians and to become more familiar with all its aspects, both traditional and contemporary;
And Whereas:	It is important to encourage Acadians to be proud of their heritage;
Be It Therefore Resolved:	That Mayor Amanda M. McDougall and Council of the Cape Breton Regional Municipality proclaim Sunday, August 15th, 2021, as "Acadian Day" and encourage all residents to celebrate the rich heritage and culture of all Acadians in Nova Scotia and Canada.

Mayor Amanda M. McDougall

August 16th, 2021

Cape Breton Regional Municipality
PROCLAMATION
"Arthritis Month 2021"

Whereas: More than 210,000 Nova Scotians of all ages live with the devastating effects of arthritis. Most people are unaware that children as young as one year old can be struck with this disease or that 60% of those diagnosed are still in the workforce and struggling to balance work, family, and their pain;

And Whereas: Arthritis will continue to limit lives unless there are dramatic changes in attitude, research, and treatment. The Arthritis Society is working to overcome Canada's most pervasive chronic health condition;

And Whereas: Arthritis is a collection of conditions affecting joints and other tissues. It causes pain, restricts mobility, and diminishes quality of life. It is serious and presently there is no cure. 6 million – 1 in 5 Canadians (1 in 4 Nova Scotians) live every day with arthritis. Without a greater spotlight on this growing issue, the number of Canadians with arthritis will rise to 9 million by 2040;

And Whereas: September is Arthritis Awareness Month across Canada, and encourage everyone who lives with arthritis to stand up and boldly declare "*Arthritis Won't Stop Me*";

And Whereas: We seek to raise voices and awareness – one million voices for the 6 million Canadians whose lives have been significantly impacted by arthritis, including 210,000 Nova Scotians. Together we can meet our vision to live in a world where people are free from the devastating effects of arthritis;

Be It Therefore Resolved: That CBRM Mayor Amanda M. McDougall and Council proclaim the month of September 2021 as *"Arthritis Month"* and encourage all residents of the CBRM to support the efforts of the Arthritis Society helping to reach Nova Scotians with their message and to support those living with the disease.

Councillor Steve Gillespie - CBRM District #4

August 24th, 2021


CAPE BRETON
LOCAL IMMIGRATION
PARTNERSHIP
Funded by:
Immigration, Refugees and Citizenship Canada
Financé par :
Immigration, Réfugiés et Citoyenneté Canada
CapeBreton Partnership

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Adult Learning Association of Cape Breton County
Atlantic Canada Opportunities Agency
Cape Breton Regional Chamber of Commerce
CBDCI
Cape Breton Regional Municipality
Cape Breton Regional Police
Cape Breton University
Immigration Francophone
Canada's Musical Coast
Marine Atlantic
Marine Atlantique
Northside Rising
Nova Scotia
room
nscc
Port Hawkesbury
Opportunities Await
Strait Area
United Way Cape Breton
Victoria County
YMCA of Cape Breton
Nova Scotia Works
YREACH
Funded by:
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Financé par :
Immigration, Réfugiés et Citoyenneté Canada
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Strategic Priorities 2019-2022

- Raising Awareness
- Improving Coordination
- Fostering Welcoming Communities
- **Supporting Research & Planning**

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Survey Respondents:

- **111** newcomers
- **197** other community members

Cape Breton Partnership

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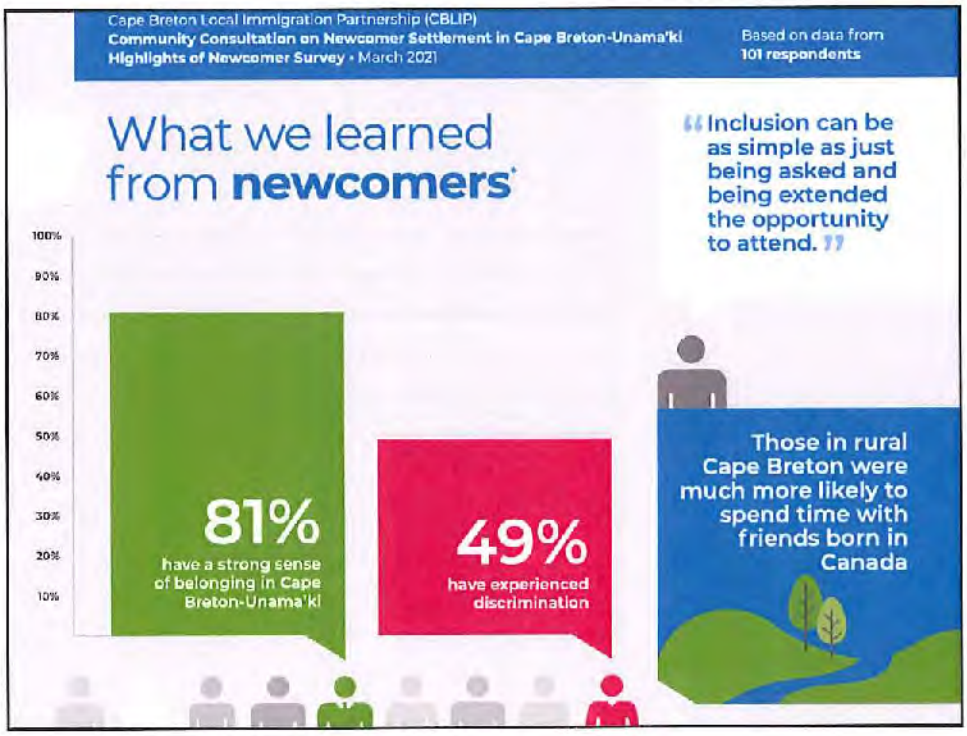
Cape Breton Local Immigration Partnership (CBLIP)
Community Consultation on Newcomer Settlement in Cape Breton-Unama'ki
Highlights of Newcomer Survey • March 2021
Based on data from
101 respondents
What we learned from newcomers
"Inclusion can be as simple as just being asked and being extended the opportunity to attend."
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
81%
have a strong sense of belonging in Cape Breton-Unama'ki
49%
have experienced discrimination
Those in rural Cape Breton were much more likely to spend time with friends born in Canada

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What we learned from newcomers
What have been the biggest challenges?
1. Finding or maintaining work
2. Making friends & maintaining healthy relationships
3. Finding affordable housing
What helps the most?
1. Making friends
2. Exploring the Island
3. Finding work
What changes will help newcomers in the future?
1. More affordable housing options
2. More (or better) programming for newcomers to find work
3. Education for employers on the value and ways of hiring and retaining newcomers
Cape Breton Partnership

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Cape Breton Local Immigration Partnership (CBLIP)
Community Consultation on Newcomer Settlement in Cape Breton-Unama'ki
Highlights of Community Survey • March 2021
Based on data from 197 respondents
What we learned from the community
"Inviting someone to go for a walk on the beach is much better than telling them we have great beaches"
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
67% have witnessed discrimination against newcomers
95% recognized diversity as beneficial to their community
59% perceive Cape Breton-Unama'ki as a welcoming community
66% have friends who are newcomers

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What we learned from the community
Friendships with newcomers are valued. Community members are mostly forming friendships with newcomers:
1. At work (57%)
2. Through mutual friends or acquaintances (49%)
3. In their neighbourhood (40%)
What changes will help newcomers in the future?
1. More affordable housing options
2. Actions to improve the social connectedness of newcomers
3. More cultural festivals
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What's Next?

- *CBLIP Strategic Plan (2023-2025)*
- Further research
- Initiatives in development:
  - Public Awareness Campaign - *Belonging is for Everyone*
  - Workplace Inclusion Charter & Recognition Program
  - Welcome to Cape Breton Website Redevelopment

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Belonging is for Everyone Campaign

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CAPE BRETON LOCAL IMMIGRATION PARTNERSHIP

Workplace Inclusion Charter & Recognition Program

- New program to support local employers to make changes that foster more welcoming workplaces for everyone - including newcomers.
- **2021-2022:** Collaborative charter development process and pilot with small number of employers.
- **2022-2023:** Roll-out to more employers and provide ongoing support.

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CAPE BRETON LOCAL IMMIGRATION PARTNERSHIP

Welcome to Cape Breton Website

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CAPE BRETON
LOCAL IMMIGRATION
PARTNERSHIP
What Municipalities Can Do
Read and share the report
Maintain active engagement on the CBLIP Council
Continue to build on the key elements of welcoming municipalities:
Inclusive leadership
Welcoming communications
Equitable access
Connected and inclusive communities
Economic development, business and employment
Civic engagement and participation
Welcoming public spaces
Culture and identity
Cape Breton Partnership

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CAPE BRETON
LOCAL IMMIGRATION
PARTNERSHIP
Contact
Kailea Pedley
CBLIP Program Manager
kailea@capebretonpartnership.com
www.newtocapebreton.com
902-258-7331
Cape Breton Partnership

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CAPE BRETON
WELCOME NETWORK
Here to welcome you home
Funded by:
room
Cape Breton Partnership

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CAPE BRETON WELCOME NETWORK
Genesis of the Cape Breton Welcome Network
> Community Requests <
CAPE BRETON LOCAL IMMIGRATION PARTNERSHIP
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CAPE BRETON WELCOME NETWORK

Spreading the Word, Recruiting Volunteers August, 2020

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CAPE BRETON WELCOME NETWORK

Welcome Groups of the Cape Breton Welcome Network

St. Peter's and Area	Victoria County
Port Hood	Judique
Cape Breton Regional Municipality	Chéticamp
Inverness	Louisdale

Cape Breton Partnership

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CAPE BRETON WELCOME NETWORK

Let the Welcoming Continue!

Welcome Groups connect with newcomers Fall, 2020

CALLING ALL
newcomers

New to Cape Breton? We want to meet you!

The Cape Breton Welcome Network wants to help you settle into your new community.

Contact: welcomenetwork@capebretonpartnership.com
Website: welcometocapebreton.ca/welcomenetwork

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CAPE BRETON WELCOME NETWORK

What are Welcome Groups doing to Welcome?

- *In-person (safely-distanced) tea/coffee chats*
- *Hikes*
- *Welcome Baskets*
- *Virtual chats*
- *Emails*
- *Phone calls*
- *Individualized to each Welcome Group*

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Why Welcoming Matters

The Cape Breton Partnership acknowledges that communities are healthier, happier and more productive when newcomers are supported, welcomed and can fully participate in society and the local economy.

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Importance of a Welcome Network:

- We as an Island provide a cohesive mechanism to make new folks here feel connected and part of the community.
- The Cape Breton Welcome Network is also designed for the Welcome Group volunteers to collaborate, share ideas and learn from each other.

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CAPE BRETON WELCOME NETWORK

Activities to date:

- *Close to 80 volunteers across the eight Welcome Groups*
- *84 Newcomers have been welcomed by volunteers within the Cape Breton Welcome Network*
- *Cultural Competency training for volunteers*
- *Welcome Group meetings along with Welcome Network chats*
- *COVID-19 adjustments*

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CBRM Welcome Group
Welcomes You!

Open Hearth Park,
Thursday, July 22 from 5 p.m. – 7 p.m.

CAPE BRETON WELCOME NETWORK

Cape Breton Partnership

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How you can help:

- *Join or Create a Welcome Group in your area*
- *Spread the word - be a Welcome Network Ambassador*
- *Tell Friends, family and newcomers about the Cape Breton Welcome Network*
- *Continue to promote and encourage welcoming municipalities*

CAPE BRETON WELCOME NETWORK

Cape Breton Partnership

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CAPE BRETON WELCOME NETWORK

Contact

Megan Ringer
CBRM Welcome Group Chair
cbrmwelcomegroup@gmail.com

Norma Jean MacPhee
Cape Breton Welcome Network Coordinator
normajean@capebretonpartnership.com
902.202.9405

welcometocapebreton.ca/welcomenetwork

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Paul Burt,
Manager Building, Planning & Licensing Laws

CBRM *A Community of Communities*

Cape Breton Regional Municipality

320 Esplanade, Room 103
Sydney, NS B1P 7B9
Phone: 902-563-5175
Fax: 902-563-0833
Email: pdburt@cbrm.ns.ca

TO: CBRM Municipal Council

FROM: Paul Burt, Manager Building, Planning & Licensing Laws

DATE: Monday, August 9, 2021

RE: New Staff Appointments- Bylaw Enforcement Officers

Introduction

The position of Bylaw Enforcement Officer is responsible for the administration and enforcement of several CBRM bylaws and sections of the Motor Vehicle Act (MVA) pertaining to parking. We recently had two vacancies to fill, and we hired Troy Baker and Brittany McLeod for these positions.

Both candidates come from the Cape Breton SPCA and have enforcement experience and are fitting in well with the team and have been working diligently to learn the duties of the position.

Recommendation

1 am requesting that CBRM Municipal Council pass a motion appointing Troy Baker and Brittany McLeod as By-Law Enforcement Officers responsible for the Administration and Enforcement of the CBRM P-100 Parking Bylaw, T-100 Taxi Bylaw, V-100 Vending Machine Bylaw, V-200 Vendors Bylaw and the relevant sections of the Motor Vehicle Act pertaining to parking.

Respectfully Submitted,

Original Signed By

Paul Burt, QBO2
Manager Building , Planning & Licening Laws

CBRM A Community of Communities

Cape Breton Regional Municipality

MEMO

Date: August 19, 2021

To: Mayor and Council

From: Kirk Durning – Manager of Recreation

Re: Bid to Host 2023 Brier

Purpose

The purpose of this report is to request that Council approve the submission of the bid for the 2023 Brier and the financial requirements necessary to host the event. The proposed dates for the event are March 3-12, 2023.

Background

Since meeting with Curling Canada representatives at the Canadian Sport Tourism Alliance Sport Event Congress, staff have been working with Destination Cape Breton to put together a bid package for the 2023 Brier.

The Brier is regarded as the world's premier curling event and is by far the best supported curling competition in terms of paid attendance, attracting large crowds in-venue, along with a television audience through a national broadcast with TSN. The Brier is supported through the efforts of 500 volunteers. The event is projected to attract over 100,000 spectators with an estimated economic impact of between $10M and $15M. Visitor expenditures, combined with the operational expenditures and revenues of the host committee, members of the media, and others, contribute to a net increase in economic activity throughout the host community.

Within Nova Scotia, the Brier has never been hosted outside of Halifax. Curling Canada recently lowered seating requirements for the event, which allows Centre 200 to meet the venue requirements to host. Following a very successful hosting of the 2019 Scotties Tournament of Hearts, the Brier is an ideal next step for CBRM in major event hosting. The event will leave a legacy on the community through both economic impact and the promotion of the sport locally and throughout Cape Breton.

FINANCIAL CONSIDERATIONS

The fee to host the event is $750,000, which is expected to be covered by contributions from the municipality, and the Provincial and Federal government. Given the competitive nature of the bid process it may be necessary to consider further cash and value-in-kind contributions to enhance the bid to host the event.

RECOMMENDATION

Staff recommends that Council approve the bid submission and financial requirements to host the 2023 Tim Hortons Brier.

Respectfully submitted by:

Kirk Durning
Manager of Recreation

Baille Ard Trail Flood Mitigating Project

Motion:
Moved by Councillor Paruch, seconded by Councillor Cyril MacDonald, that staff be requested to prepare an issue paper on the progress of the Baille Ard Trail flood mitigation project and an update on what benefits and impacts are expected in the affected areas, and request all movement towards the next phase be paused until the issue paper comes back to Council for further discussion and additional considerations.

Discussion:
Council discussion included:

- Mitigation Project will reduce chances of flooding – no guarantee of stopping it
- The benefits of the forest in the Baille Ard Trail
- Flooding of homes, schools, ballfield, and churches
- Timeframe for regulatory approvals
- Providing education on the project, including the pros and cons, and input from various groups and ecologists
- Status of government funding for mitigation project
- Recirculate engineer reports and links to previous meetings on this issue to Council
- Baille Ard Trail is a community asset that attracts families from across CBRM
- Baille Ard Trail group had suggested an altered plan to the original Mitigation Project
- Stakeholders to meet with Mayor and staff
- Majority of trail will remain untouched
- Location of the 3 berms

Motion Carried.

CBRM

Cape Breton Regional Municipality

ISSUE PAPER

August 24th, 2021

To: Mayor and Council

Re: Flood Mitigation Project – Wash Brook Watershed

Project History & Progress

2004 – 2018

Action in order to reduce risks associated with flooding in the Washbrook (WB) Watershed was first adopted by CBRM council on August 25th, 2004 as part of CBRM's Municipal Planning Strategy (attachment 1). During that timeframe, significant repairs between Townsend Street and Brookland Street were taking place to repair extensive damage from the early 2000's. From 2004 until the major storm event on October 10th, 2016, known as the Thanksgiving Day flood, the focus of work in the WB Watershed consisted of annual maintenance and structural upgrades of the channel in the downtown area (attachment 2). The Thanksgiving Day flood received the attention of the Federal and Provincial governments as well as the CBRM Mayor, Council, and staff to evaluate flood risks and develop a mitigation plan moving forward. Four months after the Thanksgiving Day flood, on February 17th, 2017, CBRM council approved a study under the Flood Risk Infrastructure Investment Program (FRIIP) – a provincial funding program to help NS municipalities invest in infrastructure to reduce flood risks and community vulnerability (attachment 3). Staff then retained the services of CBCL Limited to embark on a comprehensive flood risk investigation in the WB Watershed that was aimed to manage flood risks rather than focus on any given historical event. The 2017-18 study called the Wash Brook Floodwater Containment and Intensity Mitigation Project (The Project) was finalized in June 2018. The final report is available on the CBRM website (https://www.cbrm.ns.ca/studies-and-reports.html). At the May 29th, 2018, council meeting, a representative from CBCL, Alexander Wilson presented the results of the study including an introduction to the National Disaster Mitigation Program framework which is used by Canadian municipalities as a mechanism to identify and manage risks associated with community flooding (attachment 4). A video recording of Alexander Wilsons presentation is available on the CBRM website http://archive.isiglobal.ca/vod/cbrm/archive_2018-05-29.mp4.html. Council requested that staff coordinate a public engagement process to better

inform the public on the project findings and objectives moving forward. On June 16th, 2018, CBRM hosted a public engagement meeting at C200. CBRM Mayor, Councillors, staff, and representatives from CBCL were present for discussion and questioning from CBRM residents and stakeholders. The engagement process included conversations with representatives from the Baille Ard Recreation Association (BARA) as well as a survey whereby residents voted in favor of CBRM proceeding with flood mitigation efforts in the WB Watershed. Following the public engagement process, staff presented an issue paper at the July 10th, 2018, council meeting that recommended a multiyear phased approach to install CBCL's recommended flood mitigation "Option Fifteen" as funding becomes available (attachment 5). "Option Fifteen" includes three components, referred to as Pond 5, the Gilhomes Lake Flow Control Structure (FCS) and the Mud Lake FCS. From that point forward as per direction from Council, practicable concerns raised by representatives of BARA were to be incorporated into the final design of Pond 5. This shifted the focus of the project from maximizing flood reduction potential, to maximizing flood reduction potential while making efforts to minimize disturbances to the Baille Ard Trail system & forested area. Also in 2018, CBRM was successful in acquiring funding from the Province of Nova Scotia's Flood Risk Infrastructure Improvement Program (FRIIP) to help fund the construction of the Mud Lake FCS ($217,000). In addition, $2.5M from the Federal Governments Disaster Financial Assistance Program was issued to CBRM to fund the construction of Pond 5 and the Gilhomes Lake FCS (attachment 6).

2019

With funding in place, staff presented a capital plan that was approved during the 2019-20 capital budget deliberations to construct the Gilhomes Lake FCS and a 'portion' of Pond 5 (attachment 7). The Majority of work in 2019 consisted of the construction of the Mud Lake FCS, regulatory assessments, Aboriginal Consultation efforts with Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO) (attachment 8), and consultations with representatives from BARA on the design development of Pond 5. Collaboration efforts with BARA resulted in significant changes to the original concept design and functionality of Pond 5. On November 4th, staff presented a project update to General Committee (attachment 9) to advise Council that alterations to Pond 5 were on track and the revised layout will be brought forward to Council at a later date.

2020

An additional workshop with BARA occurred on January 29th to allow for final input on the revised Pond 5 drawings prior to presenting it to council. At the workshop, Dr. Nick Hill (Fern Hill Institute of Plant Conservation) and Alexander Wilson (CBCL Ltd) had a detailed discussion about alternate flood mitigation strategies brough forward by Dr. Hill. Suggested projects included alternate locations for smaller berms, constructed wetlands, bio-swales, and raingardens. Alexander noted that using natural drainage systems were explored first and that these devices are particularly useful when dealing with normal rainwater management. Alexander continued to explain that the Pond 5 berms will serve a significant purpose when major rain events occur. A few days after the workshop, BARA representatives expressed their appreciation with CBRM and CBCL in the Cape Breton Post (attachment 10). At the February 18th council meeting, staff presented a project update to highlight the significant changes to the conceptual design of Pond 5 (attachment 12). Key points of the modified Pond 5 were discussed, such as; (1) the reduced impact to the Baille Ard Trial system and forested area, (2) the reduced cost to construct modified

Pond 5 fits within the available funding, (3) the corresponding reduction in flood mitigation potential, (4) the ability to further enhance flood reduction still exists should council decide to implement that in the future, and (5) a commitment to continue to work with BARA as design efforts continued. A video recording of this presentation is available on the CBRM website (http://video.isilive.ca/cbrm/2020-02-18.mp4.html). Shortly after this meeting, BARA once again expressed their appreciation in the collaborative efforts to reduce the impact on the trail system (attachment 13). In February aboriginal consultation efforts continued with KMKNO. In June, representatives from CBCL, CBRM and BARA walked through the Baille Ard Trails and forested area to identify sensitive areas of concern that the trail group members wished to avoid. This process further refined the detailed design of Pond 5 which is evident in the most recent layout of the berms compared to layout that had been presented to council earlier that year (attachment 14). In August CBRM awarded a construction tender to build the Gilhomes Lake FCS and Pond 5 within the optimal construction window of late August to September 30th which is derived from the bird nesting season and the seasonal low flow period. Construction did not take place in 2020 due to regulatory approval delays. In September, Aboriginal Consultation efforts continued with KMKNO, specifically a site tour of the Pond 5 area.

2021

Thus far in 2021, the primary focus of the project continues to revolve around regulatory approvals, most notably a Fisheries Act Authorization through the Department of Fisheries and Oceans Canada (DFO). Other agencies include Transport Canada (TC), the Department of National Defense (DND), Nova Scotia Environment (NSE) and Nova Scotia Department of Lands and Forestry. To date CBRM has fulfilled TC requirements related to the project and has received approval from NS Department of Lands and Forestry to access the Pond 5 site to construct the berms. On March 2nd, aboriginal consultation efforts continued with a follow up letter to KMKNO (attachment 15). Outstanding approvals include a DFO Fisheries Act Authorization, DND Licence Agreement and NSE Approvals. DFO had originally committed to finalizing their approval review process by August 7th, however in July, concerns raised by KMKNO and Membertou First Nations regarding potential impacts on Fish and Flora (plant life) has extended the DFO review process (attachment 16). In the event that the 2021 construction window is missed, staff have applied for a second funding extension to capture the 2022 construction window.

Impacts & Benefits

Both benefits and impacts will be realized by the community during and after construction of the proposed flood mitigation infrastructure. Some prevalent impacts and benefits are described below.

Impacts

The most recognized impact will occur within the forested area of the Baille Ard Nature Trail system. Information about the trail system can be found online at http://baillcardnaturetrails.com/. Construction activity of Pond 5 will result in developing 7 acres of the 70 acre forest and the disturbance or alteration of 100 meters of the total 3000 meter trail system. Mitigations have been incorporated into the construction contract such as reuse of native organic material on top of the finished berms and the installation of 1100 meters of additional trails on top of the berms.

Restoration of all impacted sections of the trail system will also be included in the scope of work. The construction of the Pond 5 berms also raised concerns about the creation of ATV access to the natural trail system. Accordingly, the project will include the installation of large armor rock and maintenance access gates at the berm entry points within the forest area. For public safety reasons, the construction of Pond 5 will result in the temporary closure of trails. Trails will reopen when the project is completed.

Disruption of fish habitat will occur within the tributaries of Washbrook, however the regulatory approval process for the project takes into consideration numerous measures to avoid and mitigate the harmful alteration and disruption of fish habitat. Such mitigations consist of compliance with Federal and Provincial permits and authorizations, compliance with standards and codes, timing of work, and contemporary construction techniques. The project will also include the development and implementation of a three to one (3:1) fish habitat offsetting plan to create and enhance fish habitat elsewhere in the Washbrook and local waterways.

Benefits

As demonstrated at the February 2020 council session that highlighted the effects of modified option 15, the proposed structures have the ability to reduce overland flooding by thirty (30) percent during a 1:20 year storm event and by eleven (11) percent during a 1:100 year storm event.

Underground infrastructure lies in close proximity to the entire Washbrook in developed areas, such as sanitary sewers and water mains. Reducing the severity of overland flooding during major storm events will subsequently reduce the likelihood of drinking water disruptions, sanitary sewer backups, treatment plant disruptions and sanitary sewer overflows into the environment.

Well known infrastructure such as the Sports fields off Cottage Rd, the Baille Ard Trail system, public roads, St. Marguerite Bourgoeys Parish, and the Brookland St. Elementary School, will benefit from a reduction in the severity of overland flooding during major storm events.

A reducing in the severity of flooding will reduced the likelihood of floodwater overtopping roadways, improving emergency response during major storm events.

Summary

The Washbrook Flood Mitigation Project was initiated to build resilience to flooding in Sydney's Washbrook Watershed to ultimately reduce risks to vulnerable residents, critical public infrastructure, the environment, and the economy. It was determined through the aforementioned technical study that the best defense against future flooding is accomplished by increasing water storage upstream in the natural reservoirs, installing flood mitigation infrastructure at the upper edge of the community, and to educate the public on property-level flood protection techniques and awareness.

Recommendation

It is the recommendation of staff that Council passes a motion directing staff to continue with the construction of the remaining portions of ***Option Fifteen (15)***, which includes Pond 5, and the Gilholmes Lake FCS.

Wayne MacDonald, P.Eng
Director, Engineering & Public Works

Matt Viva, P.Eng
Manager, Wastewater Operations

Attachment I

Excerpt from:

MUNICIPAL PLANNING STRATEGY

of the

CAPE BRETON REGIONAL MUNICIPALITY

Adopted by CBRM Council August 25th, 2004
Effective Date is September 17th, 2004

WASH BROOK

The drainage basin of Wash Brook begins nearly 6 kilometers southwest of its mouth at the watersheds of Gilholmes and Middle Lake. The Creek itself begins at Middle Lake, southeast of the community of Mira Road. It meanders for a distance of more than 7 kilometers towards its mouth just north of Prince Street in downtown Sydney. A little more than 2.5 kilometers from Middle Lake it traverses through the Charlestown Subdivision in the community of Mira Road. Four kilometers from Middle Lake, it intersects with its major tributary, a brook flowing from Gilholmes Lake. Less than ½ of a kilometer north of this confluence, it emerges into the urban area of Sydney. From here to its mouth (*a distance of approximately 3 kilometers*), the development density in the Creek's natural drainage basin gradually increases.

Prior to the construction of the steel plant, Wash Brook was one of two brooks that discharged into Sydney Harbour at a large marsh pond. This marsh pond separated the north end of downtown Sydney from the neighbourhood of Whitney Pier. The other brook is now infamously known as the Coke Ovens Brook.

Today, after 100 years of steel making, this marsh pond is known as the Tar Ponds. Although substantially reduced in size from prior to the steel plant, it is comprised of about 74 acres.

9.11

Flooding into built up neighbourhoods within the floodplain of the most northerly sector of Wash Brook in Sydney now generally occurs at least once a year and often more frequently. At peak, the flooding reaches elevations between 6 and 7 meters above sea level. Why does Wash Brook regularly flood? A river, brook or creek floods when the volume of water entering it exceeds its capacity to channel it to its discharge point. During peak rain storms there are three factors that lead to flooding.

1. Wash Brook flows through one of the most densely developed urban sectors of Sydney where the percentage of soil covered by material impervious to storm water absorption (*e.g. buildings, parking lots, streets*) is significantly high. As it approaches its discharge point, the development density gradually gets higher and consequently the percentage of soil covered by impervious materials increases.

2. The inherent problems caused by the soil's inability to absorb the storm water are compounded because Wash Brook is used as a storm water runoff conduit (*as are all of the streams flowing through the urban areas of Sydney*). This tends to severely tax the capacity of the Creek during peak rainstorms.

3. Added to this compilation of problems is the Creek's shallow and narrow channel in the most densely urbanized neighbourhoods. The low volume of water tolerance before it overflows into its floodplain caused by this exacerbates the problem to the degree that flooding occurs regularly. Once the storm water escapes the channel, it spills into a vast, gently sloping floodplain.

A comparison with the adjacent watershed of Wentworth Creek puts this in perspective. Wentworth Creek starts at Reservoir Lake just south of Highway 125 and discharges into Wentworth Pond between George Street and Silicon Island.

The Wash Brook watershed is 11.9 square kilometers in area and over 25% urbanized. The Wentworth Creek watershed is 11.5 square kilometers in area but less than 16% urbanized.

The overwhelming percentage of urban development in the Wash Brook watershed occurs in the 1/3rd closest to its discharge point. Within this urban area, as the Creek meanders towards its discharge point, the density of development gradnally increases as it approaches the Tar Ponds until most of the storm water does not contact the soil. More than 3/4^{ths} of the surface of the watershed north of Townsend Street (*approximately 57 acres*) is impervious to the natural absorption of storm water. By comparison, the concentration of urban development within Wentworth Creek's watershed is divided into four separate urban concentrations, none of which approaches the development density of the northern part of Wash Brook.

Where much of the flooding occurs in the Wash Brook watershed north of Park Street, the Creek channel has a depth of just about 1 meter and a width of approximately 8 feet. Beyond the channel the rise in elevation is very gradual. Within a radius of a 1,000 feet from the Creek, the average slope is 1%. On the other hand, where urban development is most concentrated in the Wentworth Creek watershed (*between the northern sector of Rotary Drive and the eastern sector of Argyle Street*), the Creek has a channel depth that is approximately 5 to 6 meters lower in elevation than the nearest significant buildings and a channel width averaging over 30 meters. It is encompassed within a steep slope that averages approximately a 40% incline.

At peak, flooding along Wash Brook reaches 6 and 7 meters above sea level. There are approximately 390 significant structures (*excluding accessory garages*) at an elevation of less than 7 meters in the Wash

Brook watershed, including the Sydney Shopping Centre, Centre 200, more than 50 apartment buildings, about 260 one and two unit residential dwellings, and several commercial buildings. In the Wentworth Creek watershed, two homes and a convenience store are the only significant structures at an elevation less than 7 meters.

What makes the flooding problems associated with Wash Brook unique are what will guarantee it will continue unless measures are taken by the Regional Municipality to alleviate the flooding.

The problems will also be exacerbated unless the Regional Municipality imposes development constraints at least within the area now used as a natural storm water floodplain by storm water during peak storm periods. Although Wash Brook's floodplain north of Whitney Avenue, and for nearly ½ a mile south of Royal Avenue, is very gently sloping in the vicinity of its channel, between Whitney Avenue and Royal Avenue the Creek flows through a severely sloped gorge. Actually, between Rigby Road and Whitney Avenue the Creek is enclosed within an underground culvert. This results in the creation of two separate floodplains during peak storm periods.

The floodplain north of Whitney Avenue has no significant tracts of undeveloped land and is too vital a part of the urban core of Sydney to impose rigorous development restrictions that could prevent exacerbating the flooding problem in any significant manner. On the other hand, the floodplain south of Royal Avenue is sparsely developed, primarily owned by the Regional Municipality, and much of this is used as a vital low density outdoor recreational complex. Arguably, this is the highest and best use of this floodplain. The Regional Municipality will refrain from considering development proposals that would reduce the amount of permeable ground surface in this sector of the Wash Brook floodplain.

POLICIES

3.a It shall be a policy of Council to recognize the severe flooding problems associated with the floodplain of the Wash Brook as the primary flood risk area in the CBRM. The CBRM shall endeavour to hire a consultant engineer to offer solutions to alleviate the flooding problems occurring with more and more regularity within the Wash Brook watershed. More specifically, the terms of reference should include a combination of direct engineering solutions and site design solutions for new development.

3.b As an interim solution, the CBRM shall endeavour to continue reconstructing the supporting structure of the Wash Brook channel between Whitney Avenue and its mouth to deepen, widen, and strengthen it.

3.c It shall be a policy of Council to adopt a land use policy which prevents any development that would result in a significant reduction in the amount of permeable ground surface on lands within the Wash Brook watershed south of Royal Avenue with an elevation of 7 meters or less.

3.d It shall be a policy of Council to adopt a land use policy which, when implemented, will ensure a lower development density in the Wash Brook

watershed than normally would be imposed in on urban oreo. This will be implemented by including provisions in the Lond Use By-law that:

- encourage imaginative development proposals that trade density threshold obligations with dedication of lands for public recreational purposes along the shore of the Creek and its major tributary or the establishment of storm water retention ponds;
- impose lot sizes significantly larger than the norm in an urban oreo;
- award increases in the number of storeys to achieve the desired floor area with reduced minimum lot sizes
- regulate the amount of land that can be impervious to storm water absorption.

3.e The CBRM shall endeavour to work with the Federal Government and the Province of Novo Scotia to ensure the rehabilitation of the Tar Ponds doesn't reduce its retention capacity and exacerbate the flooding problems associated with Wash Brook.

3.f To help in the cost of implementing the recommendations of the consulting engineer pursuant to Policy 3.a of this Part, the CBRM shall endeavour to seek funding:

- from the Province of Nova Scotia because the Province is obliged to contribute to flood relief compensation efforts and as a gesture of good faith to facilitate the implementation of a Provincial Statement of Interest from the Municipal Government Act; and
- from the Federal Government via the Green Municipal Enabling Fund because the Wash Brook empties into the Tar Ponds.

End of section.

Attachment 2

Structural Upgrades - Washbrook

Attachment 3

Excerpt from:

CBRM Annual Budget Deliberations 2017-18

February 17th, 2017

Flood Risk Infrastructure Investment Program (FRIIP)

GENERAL CAPITAL 2017/2018 – "WASTEWATER"

1) **Sanitary Sewer Pumping Facility Replacement – CWWF** — **Year 1 of 1 = $952,000**

CBRM has placed a focus on old problematic sewer pumping facilities throughout the municipality. The scope of this project is to replace five small pumping facilities that have a high maintenance cost associated with its operation. These pumping facilities are duplex pump systems with very basic control systems. The objective is to install a system that includes high efficiency pumps, accessible valves, backup power to prevent unnecessary sewer discharge into the environment and remote monitoring to improve response times associated with mechanical failure resulting in overflow events.

2) **Stormwater Inflow & Infiltration – CWWF** — **Year 1 of 1 = $2,844,000**

CBRM has placed a focus on lowering stormwater inflow and infiltration (I&I) with the intent on lessening the burden on operating costs. Lower flow results in less power consumption, chemical usage, equipment wear, and overflows. The stormwater infiltration project will utilize a number of techniques including repairs and replacements of manholes, catch basins, and redirecting stormwater flows where applicable. There are two components to this project. The first is a manhole replacement program that will target approximately 100 leaking manholes across the CBRM for replacement. The second component focuses on sewer separation work within four of the twelve defined catchment areas throughout the Municipality for which an engineering consultant will provide investigation, conceptual design, survey data, pre-design, detailed design, inspection, and contract administration services. This project will form part of the Municipality's ongoing efforts to reduce combined sewer overflows and reduce operating costs associated with pumping and treatment.

3) **Sanitary Sewer/Stormwater Separation Mitigations** — **Year 1 of 1 = $1,000,000**

Stormwater Inflow and Infiltration Separation Project — ***$700,000***

This project will continue sewer separation work within six to eight of the remaining defined catchment areas described in the CWWF project above. The engineering consultant will provide investigation, conceptual design, survey data, pre-design, detailed design, inspection, and contract administration services. This project will form part of the Municipality's ongoing efforts to reduce combined sewer overflows and reduce operating costs associated with pumping and treatment.

Flood risk assessments under the National Disaster Mitigation Program (NDMP) — ***$100,000***

CBRM has identified areas in Central, North and East that are prone to flooding. The proposed risk assessments will be conducted in a number of communities that have a history of flooding during heavy rainfall events. Completing these risk assessments will establish a basis for CBRM to prioritize capital works to resolve flooding problems where it is feasible to do so.

Flood Risk Infrastructure Investment Program (FRIIP) — ***$200,000***

This project will focus on river training and floodway improvements, floodwater containment and flood intensity mitigation study work including: mapping of flood prone areas and identification of potential solutions to mitigate flood impacts.

The end result of the flood assessments described above will provide remedial work that will inform a long term flood mitigation plan in CBRM.

Attachment 4

CBCL Presentation to Council - July 29th, 2018

CBCL LIMITED
Consulting Engineers

National Disaster Mitigation Program (NDMP) Framework for Managing Flood Prone Areas in Cape Breton Regional Municipality

CAPE BRETON
REGIONAL MUNICIPALITY

Overall Steps to Managing Flood Risk

Risk Assessment

- Identify Potential Hazards (i.e. flooding)
- Assess Likelihood of Occurrence
- Assess Potential Impacts on People/Property
- Determine Risk Threshold

Flood Line Mapping

- Identify boundaries of flooding event
- Identify structures, people and assets at risk of impact

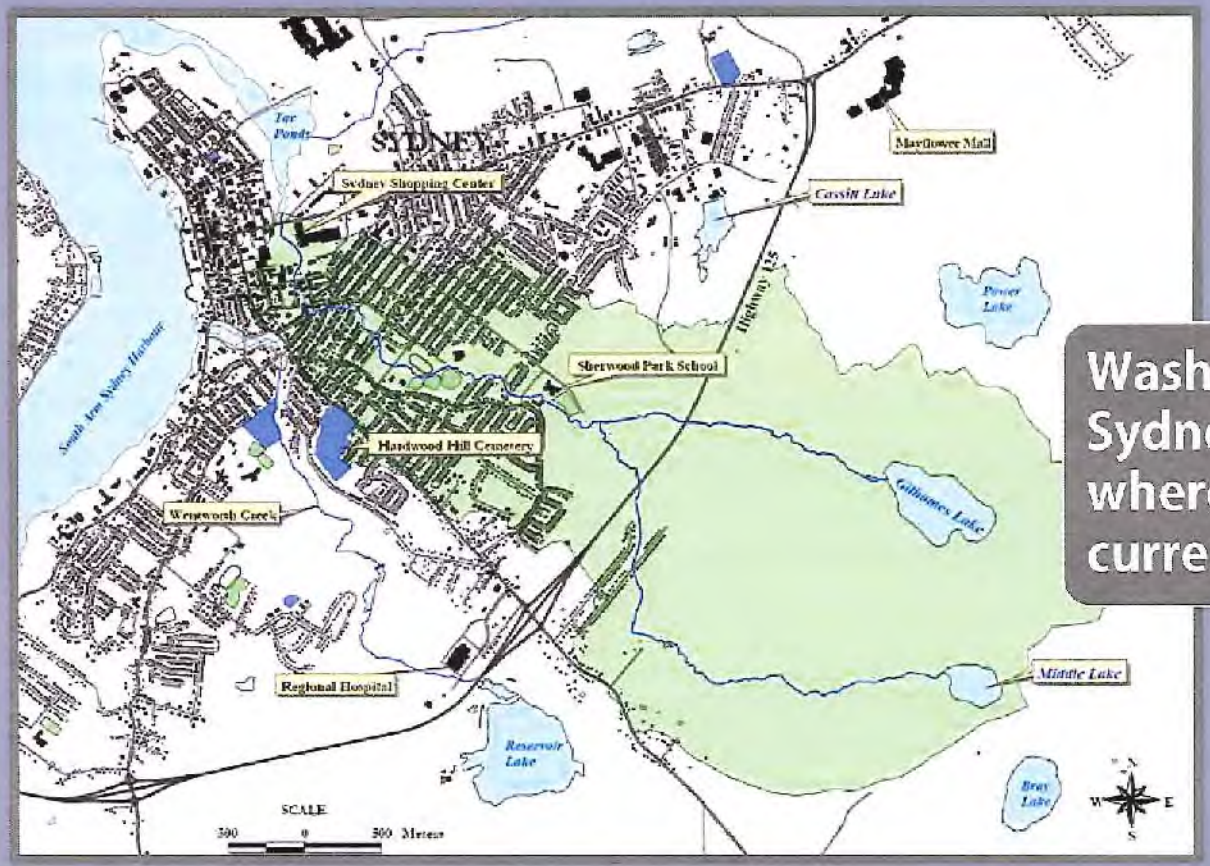
Mitigation Planning

- Identify mitigation goals
- Identify objectives/strategies to meet goals
- Identify activities to achieve objectives

Investment in Non-Structural or Structural Mitigation Measures

- Non-structural mitigation measures
  - (public awareness programs, insurance incentives, etc.)
- Structural mitigation measures
  - (flow regulation, flood proofing, channel improvement, etc.)

Wash Brook Watershed



Wash Brook Watershed in Sydney is an example area where the NDMP Framework is currently being applied

Wash Brook Watershed Flood management

- ✓ Risk Assessment completed
- ✓ Consultant engaged (CBCL Limited) to assist with Flood Mapping & Mitigation Planning Stage

Wash Brook Watershed Example

- ✓ Computer model constructed to simulate flood lines during the 1:20 and 1:100 year return frequency storms

- ✓ Computer model can predict flood lines resulting from implementation of structural measures such as storm water retention ponds, flow diversions and flow control structures.

Wash Brook Example

Existing 1 in 100 Year Flood Lines

Wash Brook Example

Existing 1 in 100 Year Flood Lines

Wash Brook Example

Existing 1 in 100 Year Flood Lines

Wash Brook - what can be done to mitigate flooding?

Big Picture Options:

Approaches:
- Do nothing
- Protect
- Mitigate
- Retreat

Holistic or Targeted Plan:
- Planning (Zoning, By-laws)
- Design (Engineered Protection)
- Construction (Runoff control for lot construction, forestry)

Engineering Measures:
- Stormwater Control (Best Management Practices, Low Impact Development)
- Stormwater Storage / Diversions
- Channel and Structure Upgrades
- Dykes

Possible Structural Measures Currently Being Reviewed for Wash Brook Watershed

1 **Stormwater Retention Ponds at the following locations:**

- South of Whitney Avenue near former Hospital site;
- South of Royal Avenue near former site of South End Community Center below Brookland Elementary School;
- At the current location of the walking track at Cabot Street;
- South of and behind the Centennial Area;
- South of the SPEC School in the area of the Baille Ard Trail system;
- South of Highway 125 on watercourse from Mud Lake near end of Duffell Drive.

2 **Flow control structures at the following locations:**

- At the headwaters of Gilholmes Lake;
- At the headwaters of Mud Lake

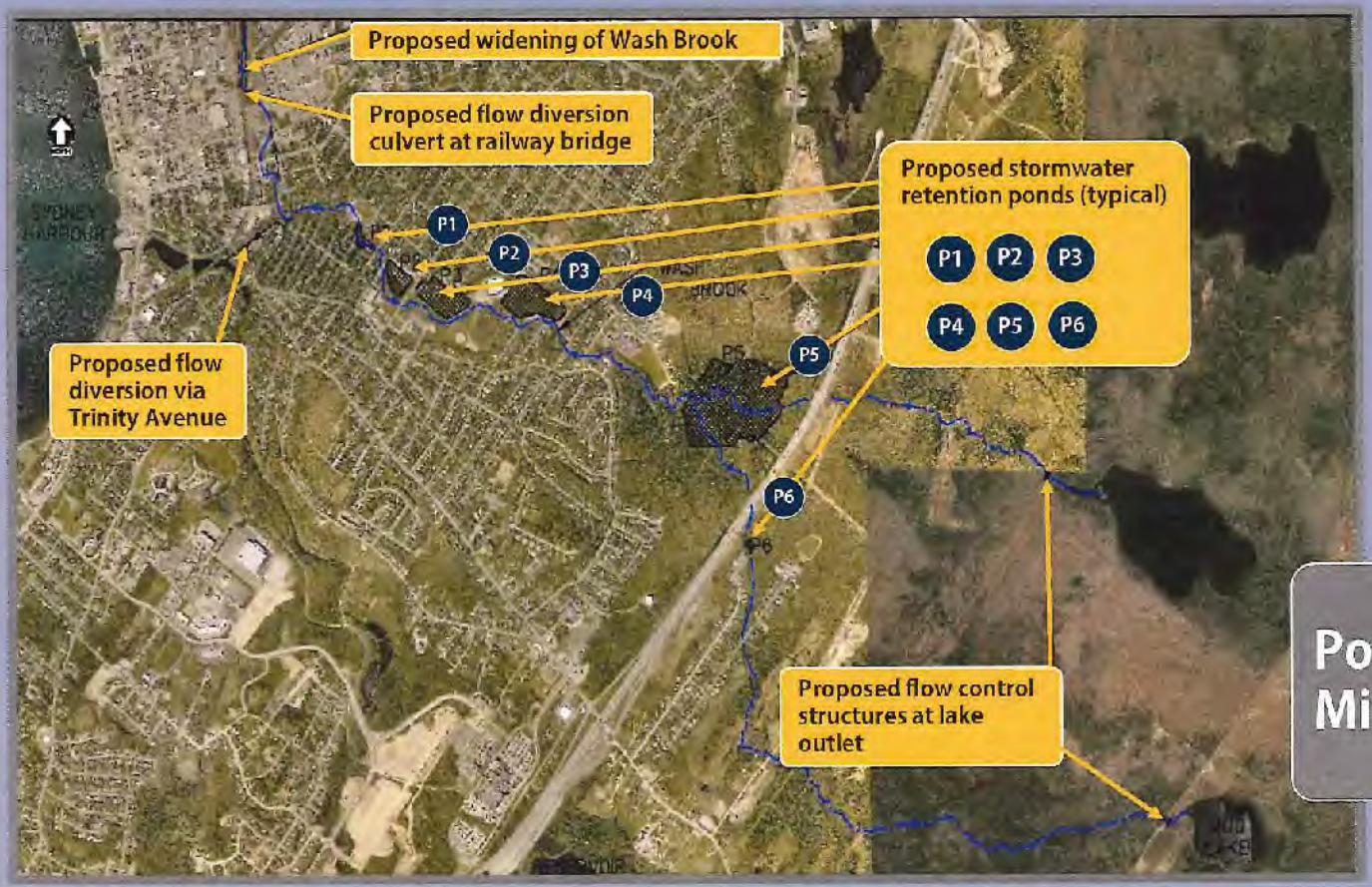
Possible Structural Measures Currently Being Reviewed for Wash Brook Watershed

3. Flow diversion of some percentage of Wash Brook flows to Wentworth Creek via a large culvert routed through Trinity Avenue;

4. Expansion of the existing channel between Prince and Townsend to 25m wide to match the capacity of the channel installed for the Tar Ponds;

5. Installation of a flow diversion culvert beneath the railway bridge near Prince Street.

Wash Brook Example



Potential Flood Mitigation Options

Floodwater Mitigation Measures Evaluation

Floodwater Mitigation Option #	Floodwater Mitigation Option Description	Opinion of Probable Design and Construction Costs (Including 15% HST)	Relative Effectiveness for Floodwater Mitigation (Low, Medium or High)
1	Stormwater Retention Pond #1	$105,000	Low
2	Stormwater Retention Pond #2	$863,000	Low
3	Stormwater Retention Pond #3	$1,210,000	Low
4	Stormwater Retention Pond #4	$2,732,000	Low
5	Stormwater Retention Pond #5A	$2,146,000	High
6	Stormwater Retention Pond #5B	$2,975,000	Medium
7	Stormwater Retention Pond #6	$168,000	Low
8	Flow Control Structure @ Gilholmes Lake	$109,000	Low
9	Flow Control Structure @ Mud Lake	$401,000	Low
10	Flow Diversion to Wentworth Creek	$1,760,000	Low
11	Widen Channel @ Prince Street	$706,000	Low
12	Flow Diversion @ Railway Bridge	$152,000	Low
13	Combined Stormwater Retention Ponds #2, #3 and #4	$4,805,000	Low
14	Combined Flow Control Structures @ Gilholmes Lake and Mud Lake and Stormwater Retention Pond #5A	$2,656,000	High
15	Combined Flow Control Structures @ Gilholmes Lake and Mud Lake and Stormwater Retention Pond #5B	$3,485,000	High

Floodwater Mitigation Measures Evaluation

Floodwater Mitigation Option #	Floodwater Mitigation Option Description	Effectiveness for Floodwater Mitigation (Low, Medium or High)	Cost (Low, Medium or High)	Ease of Property Access (Low, Medium or High)	Ease of Regulatory Approval (Low, Medium or High)	Expected Acceptance by Stakeholders (Low, Medium or High)
1	Stormwater Retention Pond #1	Low	Low	Medium	High	Medium
2	Stormwater Retention Pond #2	Low	Medium	High	High	High
3	Stormwater Retention Pond #3	Low	High	High	High	Low
4	Stormwater Retention Pond #4	Low	High	High	Medium	Medium
5	Stormwater Retention Pond #5A	High	High	Medium	Low	Low
6	Stormwater Retention Pond #5B	Medium	High	Medium	Medium	Medium
7	Stormwater Retention Pond #6	Low	Low	Medium	High	Medium
8	Flow Control Structure @ Gilholmes Lake	Low	Low	Low	High	High
9	Flow Control Structure @ Mud Lake	Low	Medium	Medium	High	High
10	Flow Diversion to Wentworth Creek	Low	High	High	Low	Low
11	Widen Channel @ Prince Street	Low	Medium	Medium	Medium	High
12	Flow Diversion @ Railway Bridge	Low	Low	Medium	High	High
13	Combined Stormwater Retention Ponds #2, #3 and #4	Low	High	High	High	Medium
14	Combined Flow Control Structures @ Gilholmes Lake and Mud Lake and Stormwater Retention Pond #5A	High	High	Medium	Low	Low
15	Combined Flow Control Structures @ Gilholmes Lake and Mud Lake and Stormwater Retention Pond #5B	High	High	Medium	Medium	Medium

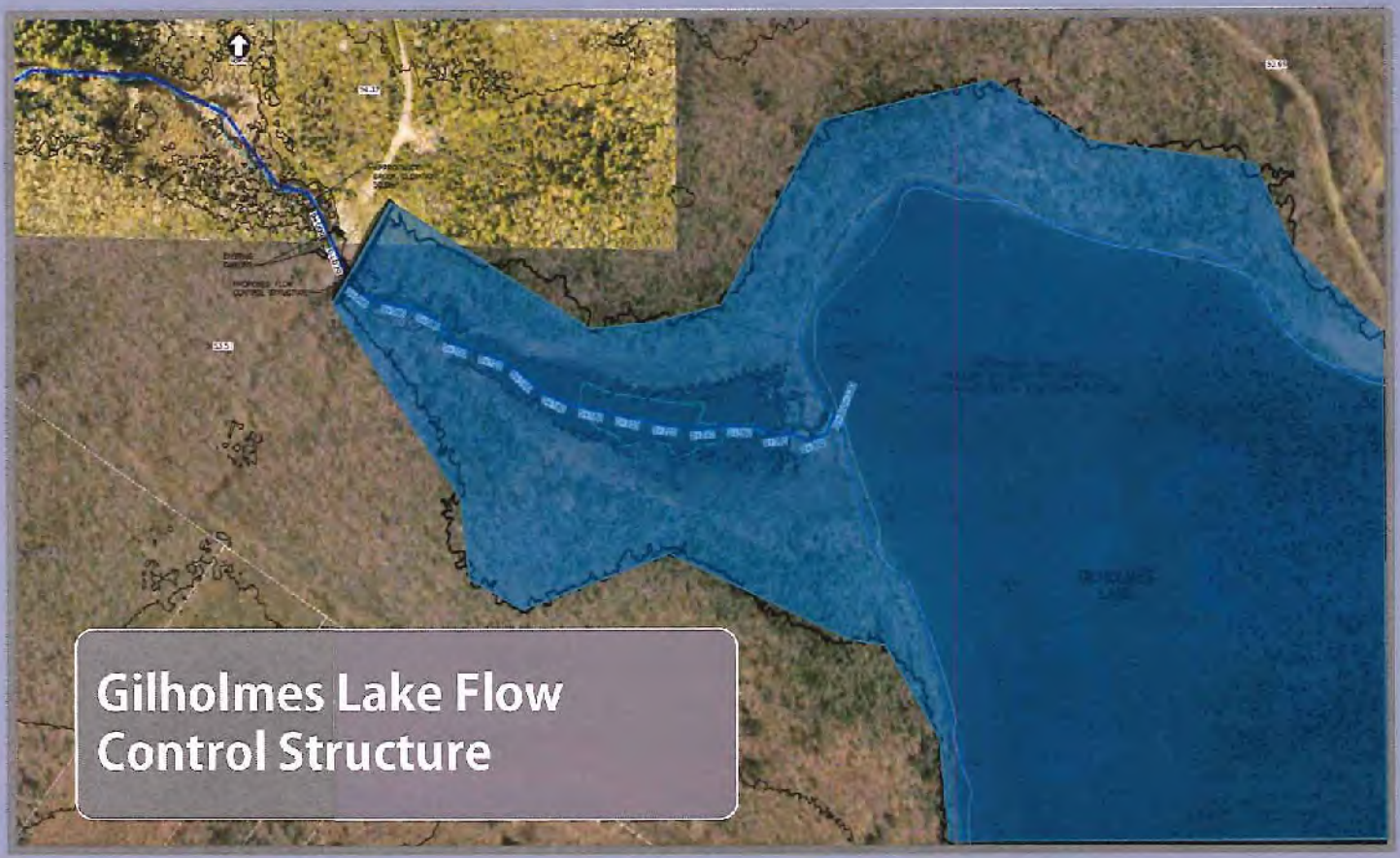
Wash Brook Example

Stormwater Retention Area #4

Wash Brook Example

Stormwater Retention Area #5

Wash Brook Example



Wash Brook Example

Mud Lake Flow Control Structure

Wash Brook Example

Flood Lines - Flow Control at Mud Lake / Gilholmes Lake and Retention Area 5

Wash Brook Example

Flood Lines - Flow Control at Mud Lake / Gilholmes Lake and Retention Area 5

Wash Brook Example

Next steps for Wash Brook Watershed Floodwater Mitigation

1. Finalize selection of structural or non-structural flood mitigation measures for implementation / further investigation
2. Seek Council approval for installation of mitigation measures
3. Make application for funding for structural or non-structural flood mitigation measures
4. Implement selected flood mitigation measures contingent upon funding

Implementation of structural floodwater mitigation measures

1. Carry out topographical survey at each site (with the property owner's permission);
2. Carry out geotechnical investigation / desktop geotechnical review at each site (with the property owner's permission);
3. Begin negotiations with owners of properties and stakeholders at each site to secure easements or acquire property as required to construct, operate and maintain the mitigation measure structures;
4. Carry out detailed design and construction document preparation for each mitigation measure structure;

Implementation of structural floodwater mitigation measures

5. Issue tenders and engage qualified construction contractors to construct each mitigation measure structure;

6. Oversee construction to ensure the mitigation measure structures and features are constructed in accordance with the design documents; and

7. Make arrangements for on-going operation and maintenance of the mitigation measures in perpetuity.

CBCL LIMITED

Consulting Engineers

Questions / Discussion

Attachment 5

Issue Paper - Option Fifteen (15)
July 10th, 2018

CBRM

Cape Breton Regional Municipality

ISSUE PAPER

July 10th, 2018

To: Mayor and Council

Re: Flood Mitigation Structures – Wash Brook Watershed

Background:

On Friday June 15th, CBRM received the Final Report from our consultant on the findings of the Wash Brook Flood Water Containment and Intensity Mitigation Project. The objective of this assignment was to determine the level of flood risk within the watershed and to identify and evaluate floodwater mitigation measures.

Using a comprehensive hydraulic model developed by CBCL, numerous structural mitigation measures were analyzed to determine their effectiveness in various rain events. Of the potential mitigation measures identified, option number 15 appears to have the most significant impact on flood line reduction resulting in the highest protection of public and private infrastructure in the upper and middle areas of the Wash Brook watershed. This option includes flow control structures at Mud Lake and Gilholmes Lake as well as floodwater detention in the Baille Ard Nature Trails area.

On May 29th, CBCLs Alexander Wilson presented these findings to Council, which were also displayed at a public information session held on June 15th at C200. This session allowed CBRM to share information and for the public to express their concerns regarding flood risks in the Wash Brook watershed and to provide input in terms of public spending on structural mitigations. Concerns were raised about the impact Option 15 could have on the Baille Ard Nature Trails but the consensus amongst the residents that attended that day was in favor of CBRM spending public money on option number 15.

Due to the Provincial (FRIIP) funding application deadline of April 26th, the 2018-19 capital budget included $500,000 for the construction of structural mitigations identified in the Wash Brook study. The NS Department of Municipal Affairs released a statement on June 22nd that CBRM will receive $217,500 to fund the construction of a portion of option 15, specifically the flow control structure at Mud Lake. The remaining components of option 15 would be constructed in a phased approach contingent upon receiving additional funding through a suitable funding program, such as: The 2018 *Investing in Canada Plan*, designed specifically for public

infrastructure or the *Disaster Mitigation & Adaptation Funding* program (DMAF). To qualify for DMAF, projects must have a minimum cost of $20M. To meet this threshold, CBRM would need to partner with other municipalities to submit a province wide Expression of Interest (EOI) Application by 10:00PM on July 31st, 2018.

Recommendation:

That council passes a motion directing staff to proceed with a multi-year phased approach to install option number fifteen (15) from the CBCL Wash Brook Floodwater Containment and Intensity Mitigation Project Report.

To fully complete option number 15, project delivery including timelines, estimated costs and funding programs (if known) is summarized below:

1. **Mud Lake flow control device $473,000: Provincial Flood Risk Infrastructure Investment Program (50/50) – Year 1.**

2. **Gilholmes Lake flow control device $128,498: Future funding program – Years 2 to 5.**

3. **Retention Pond #5B $3,507,184: Future funding program – Years 2 to 5.**

Wayne MacDonald, P.Eng
Director, Engineering & Public Works

Attachment 6

Federal Funding Issued to CBRM

Public Safety Canada
Disaster Financial Assistance Program

t- #MeToo a year later (/opinion/columnists/meto a-year-later-245905/)

Six Indigenous Cape Bretoners to receive (/news/local/six-indigenous-cape-bretoners-to-receive-treaty-day-

Federal funding available for CBRM flood mitigation measures

Cape Breton Post
Published: 1 hour ago
Updated: 1 hour ago

A view above the flood zone in Sydney's south end neighbourhood a day after the Oct. 10, 2016, Thanksgiving Day flood.

Province to work with municipality on how to best spend the estimated

$2.5 million in disaster assistance funding

SYDNEY, N.S. – Residents of a south end Sydney neighbourhood devastated by the 2016 Thanksgiving Day floods are applauding news that $2.5 million in federal funding appears be available to prevent similar disasters in the future.

On Monday, almost two years after 225 millimetres of rain fell in a matter of hours submerging much of the area surrounding the brook that runs through the low-lying community, Sydney-Whitney Pier MLA Derek Mombourquette and Sydney-Victoria MP Mark Eyking returned to grounds of the now-relocated South End Community Centre (the former Woodill school) for a news media briefing.

Related:

- Cape Breton's Thanksgiving Day storm one for the record books (http://www.capebretonpost.com/news/local/cape-bretons-thanksgiving-day-storm-one-for-the-record-books-12981/)
- Memories of 2016 Thanksgiving Weekend come flooding back in Cape Breton (http://www.capebretonpost.com/news/local/memories-of-2016-thanksgiving-weekend-come-flooding-back-in-cape-breton-206071/)

Mombourquette, who is also Nova Scotia's Minister of Energy and Mines, told reporters that the province qualifies for the flood mitigation funding for Cape Breton Regional Municipality under the federal government's Disaster Financial Assistance program.

He said the province plans to continue working with the CBRM to identify and fund key infrastructure projects aimed at reducing the threat of flooding to prevent recurrences of the 2016 catastrophe that resulted in the eventual demolition of more than 20 homes in south end Sydney alone. All told, Mombourquette said the province processed more than 1,100 claims and paid out about $15.5 million to flood victims.

Sydney-Victoria MP Mark Eyking, left, listens as Sydney-Whitney Pier MLA Derek Mombourquette makes a point about flood mitigation initiatives for the Cape Breton Regional Municipality. The locally-elected politicians held a news briefing Monday morning

"I am pleased that we are in the final phase of our flood response and are turning our attention to mitigation efforts," he said. "We believe that the $2.5 million will go a long way toward helping CBRM complete major infrastructure projects that were identified in a recent flood mitigation study."

The Monday morning briefing was also attended a number of area residents who were affected by the flood. They told reporters that the federal funding announcement is good news and that they hope it will prevent future flooding disasters.

"This is good news – things are happening, so that's good," said Gordie Rhymes, a St. Peters Road resident, who managed to save his house, but watched as his next-door neighbours

on the grounds of a now-demolished former school and community centre to announce that as much as $2.5 million is likely available to help prevent future floods like the 2016 Thanksgiving Day disaster that devastated the south end Sydney neighbourhood.

lost their homes in the 2016 flood.

Meanwhile, work crews have begun tearing up the asphalt of a parking lot on the south side of Whitney Avenue to facilitate the removal of a large culvert that has a history of backing up when the flow of the Wash Brook becomes excessively voluminous. The new engineering is expected to allow the stream's water to more easily flow on its journey to Sydney Harbour.

More to come.

Top Stories in News

Six Indigenous Cape Bretoners to receive Treaty Day Awards

483 views

(http://www.capebretonpost.com/news/six-indigenous-cape-bretoners-to-receive-treaty-day-awards-245908/)

Thomas Barrett of Glace Bay gets time served in Laura Jessome homicide case

147 views

(http://www.capebretonpost.com/news/thomas-barrett-of-glace-bay-gets-time-served-in-laura-jessome-homicide-case-158342/)

Mother of man accused in New Glasgow murder says son 'made a mistake'

109 views

(http://www.capebretonpost.com/news/mother-of-man-accused-in-new-glasgow-murder-says-son-made-a-mistake-240084/)

SPECIAL REPORT: New Waterford woman changes career paths and lands job with Marine Atlantic

91 views

(http://www.capebretonpost.com/news/special-report-new-waterford-woman-changes-career-paths-and-lands-job-with-marine-atlantic-237003/)

Attachment 7

Excerpt 2019-20 Captial Budget Plan

Floodwater Intensity Mitigation Project (DFA Funding)

Gilhomes Lake & Detailed Design of Pond 5 (DFAA) $600,175
New Project

The purpose of this funding is to construct the **Gilhomes Lake Flow Control Structure** and part of **Pond 5B** which are part of CBCLs recommended flood reduction option number 15 established through the 2017 Wash Brook Flood Containment and Intensity Mitigation Project.
2019-20 estimated expenditure = $ 600,175
2020-21 estimated expenditure = $2,006,975

Funding Source	Amount	Percentage	Current Fiscal Breakdown Amount
Public Safety CA (DFA)	$2,500,000	96	$585,617
Federal (Gas Tax)	$107,150	4	$14,558
CBRM	-	-	-

Attachment 8

Initial Aboriginal Consultation Letter

December 9th, 2019

CBRM *A Community of Communities*

Cape Breton Regional Municipality

Office of Matt Viva, P.Eng.
Manager Wastewater Operations
mdviva@cbrm.ns.ca

320 Esplanade
Sydney, Nova Scotia
B1P 6R7
Tel: (902) 563-5268
Fax: (902) 564-0481

December 9, 2019

Twila Gaudet
Director of Consultation
KMKNO
Millbrook Office
By Email: twilagaudet@miknaqrights.com

Re: Wash Brook Floodwater Mitigation Project – Stormwater Retention Pond #5 Project, Sydney, NS

Dear Mrs. Gaudet:

The Cape Breton Regional Municipality (CBRM) is currently in the process of implementation of the Stormwater Retention Pond #S Project (the Project) as part of the Wash Brook Floodwater Mitigation Project. The Project involves the design and construction of a stormwater retention pond (Pond #S) in the Wash Brook Watershed in Sydney, NS between the end of Terrace and Highway 125 (please see attached **Figure 2.1 – Potential Flood Mitigation**).

The CBRM is seeking to construct this stormwater retention area in an effort to reduce flooding of downstream developed areas in Sydney during extreme rainfall events. Construction work would involve removal of trees in selected areas and construction of earthen berms as well as flow control structures at selected locations of Wash Brook. CBRM would seek the relevant approvals from Nova Scotia Environment (NSE) for any watercourse or wetland alterations required as a result of the work. A concept-level layout of the proposed Pond #S features is shown on the attached **Drawing COSC**. I also wish to note that the CBRM is currently consulting with the Baille Ard Recreational Association with regard to revisions to design layouts of the berms and other pond features such that the impact on the Baille Ard Nature Trail System in the project area is minimized.

Upcoming Project activities include the following:
→ Completing the preliminary design;
→ Completing the topographical survey;
→ Completing the geotechnical investigation;
→ Completing the detailed design; and
→ Submission of applications for approval to construct to NSE.

The CBRM is committed to building effective and respectful relationships with First Nations Communities.

We would like to better understand your interest, if any, in this Project.
I would be happy to discuss the project in further detail and I am available to provide additional information to help address any questions or concerns you may have at this time. I can be reached by email at mdviva@cbrm.ns.ca or by telephone at 902-563-5268.

Sincerely,

ORIGINAL SIGNED BY

Matt Viva, P.Eng.
Manager of Wastewater Operations

attach/

Cape Breton Regional Municipality

No.	Description	Date
A	ISSUED FOR REVIEW	JAN 15/18

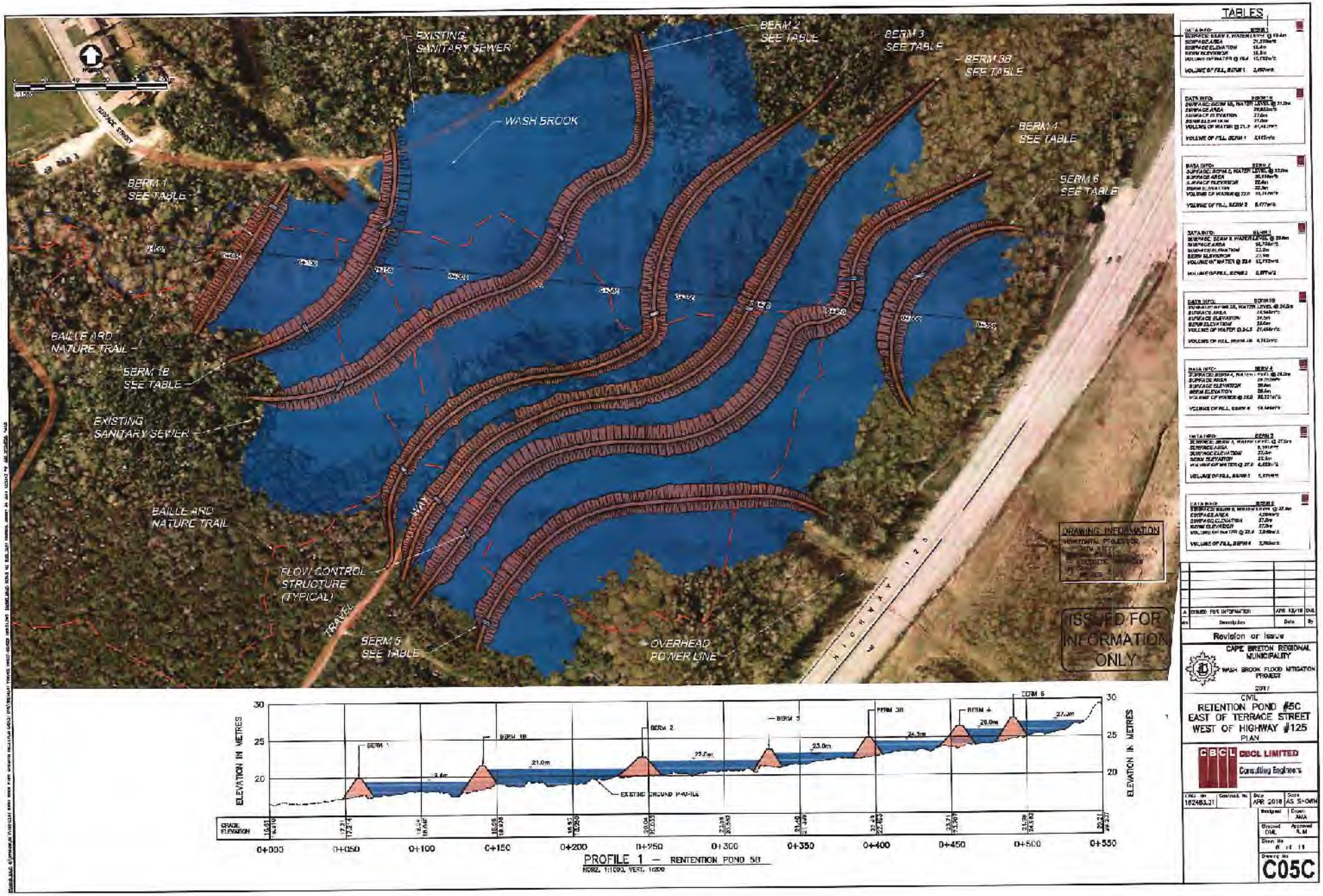
CBCL LIMITED Consulting Engineers

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JAN 15/18	1:15,000	DML	PJC	DML	RJM	162483.01	

WASH BROOK FLOODWATER MITIGATION PROJECT

POTENTIAL FLOOD MITIGATION

Figure 2.1


EXISTING SANITARY SEWER
WASH BROOK
BERM 2 SEE TABLE
BERM 3 SEE TABLE
BERM 3B SEE TABLE
BERM 4 SEE TABLE
BERM 6 SEE TABLE
BERM 1 SEE TABLE
BERM 1B SEE TABLE
BAILLE ARD NATURE TRAIL
EXISTING SANITARY SEWER
BAILLE ARD NATURE TRAIL
FLOW CONTROL STRUCTURE (TYPICAL)
BERM 5 SEE TABLE
OVERHEAD POWER LINE
TRAVEL WAY
HIGHWAY 125
TOPSAIL STREET
DRAWING INFORMATION
ISSUED FOR INFORMATION ONLY
TABLES
ELEVATION IN METRES
BERM 1
BERM 1B
BERM 2
BERM 3
BERM 3B
BERM 4
BERM 6
EXISTING GROUND PROFILE
0+000
0+050
0+100
0+150
0+200
0+250
0+300
0+350
0+400
0+450
0+500
0+550
PROFILE 1 — RETENTION POND 5B
HORZ. 1:1000, VERT. 1:200
Revision or Issue
CAPE BRETON REGIONAL MUNICIPALITY
WASH BROOK FLOOD MITIGATION PROJECT
2017
CIVIL
RETENTION POND #5C
EAST OF TERRACE STREET
WEST OF HIGHWAY #125
PLAN
CBCL LIMITED
Consulting Engineers
APR 2018
AS SHOWN
AMA
DML
R.M
C05C

Attachment 9

Project Update to General Committee

November 4th, 2019

Cape Breton Regional Municipality

General Committee Meeting

ADDENDUM

MONDAY, NOVEMBER 4TH, 2019

9:30 A.M.

Council Chambers
2nd Floor, City Hall
320 Esplanade, Sydney, NS

Cape Breton Regional Municipal Council

General Committee Meeting

Monday, November 4th, 2019

9:30 a.m.

ADDENDUM ITEM

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6. CORPORATE SERVICE ISSUES:

6.3 Federal/Provincial Floodwater Mitigation Projects:
Matt Viva, Manager of Wastewater (See page 3)

CBRM

Cape Breton Regional Municipality

PROJECT UPDATE

November 4th, 2019

To: Mayor and Council

Re: Federal / Provincial Floodwater Mitigation Projects

Project Status & Milestones:

The purpose of this update is to provide council with first hand information regarding the current status and future milestones of flood mitigation work taking place throughout the municipality.

Two projects will be discussed:

1. Disaster Financial Assistance Arrangements (DFAA) Flood Enhancement Work – Wash Brook Watershed.

2. NDMP Flood Risk Assessment Project

Regards,

Matt Viva, P.Eng
Manager of Wastewater Operations

Cc. Wayne MacDonald, P.Eng., Director of Engineering and Public Works.

Attachment 10

Cape Breton Post Article

Baille Ard Recreation
Association

RECREATION

Happy trails

Popular Sydney forest and trail system safe after CBRM changes flood prevention plan

CHRIS CONNORS
CAPE BRETON POST

SYDNEY — It's happy trails for a group of Cape Breton Regional Municipality residents who have been fighting to save a popular system of pathways and the urban forest that surrounds it.

On Wednesday, members of Save the Baille Ard Forest and the Baille Ard Recreation Association met with CBRM staff and engineers from CBCL Ltd. to discuss changes to the municipality's flood prevention plan for the area.

Wayne McKay, who formed the Save the Baille Ard Forest group, said the meeting went "surprisingly well." While he didn't attend, he said people who were at the meeting reported that the CBRM drastically altered its preliminary plan, which called for as many as eight large embankments, or berms — each eight feet high, 50 feet wide and between 300 and 400 metres long — to criss-cross the 70-acre woodland and four-kilometre trail system.

McKay

Instead, the new plan calls for three berms that would be placed in specific areas of forest where they will have a minimal impact on the trails and the two brooks that run through it.

CONTINUED ON A4

FROM A1: HAPPY

"I think we were all relieved," McKay told the Cape Breton Post on Thursday. "I don't think any of us expected it to go that way at all. A lot of people who were going into the meeting said to me that they weren't very optimistic going in, and everybody was pretty optimistic coming out and expressed that it was a turning point, that things had changed. I'm personally kind of relieved because it's been a lot of energy and time and focus. We're back on a good track and there is communication happening and collaboration, and I think that's all positive."

The Post reached out to CBRM wastewater operations manager Matt Viva for comment on the new plan but did not receive a response by Thursday evening.

McKay said the municipality deserves credit for listening to the community and changing the plan.

"I think they do definitely deserve credit for that. I think it's a really positive thing and all the credit to them because for a while there they weren't in communication with us," he said.

"Once the community spoke up and spoke up loudly they actually did listen and did allow for some opportunity to change what they were intending to do. I think that's definitely a positive thing."

McKay said the CBRM's new approach to reducing flooding is a positive sign for the Wash Brook Greenway, a proposed pathway that would connect five kilometres of walkways in the Cossitt Heights subdivision on Sydney's outskirts, the Baille Ard Trail system, the Ashby neighbourhood near downtown and, eventually, the Sydney boardwalk.

Nick Hill, the wetland ecologist hired by Save the Baille Ard Forest to come up with alternative ways to control flooding in Sydney's south end, noted in his report that much of the soil in the area is sandy loam, and not the so-called "clay bowl" it was often described as. That means landscaping features such rain gardens and bioswales near Brookland Elementary School and the Centennial Arena, as well as restored wetlands, could further prevent flooding by slowing down, collecting and filtering water that previously overwhelmed municipal storm sewers.

"It sounds like a real willingness to collaborate and look at the whole future of the Wash Brook and the watershed and what that's going to look like, and also focusing on some of those green initiatives that will really improve the whole system," said McKay.

"Our whole idea has always been around environmental stewardship and working with the watershed and recognizing that it's a flood plain, so when we develop that greenway we were always cognizant of how we can do it in such a way that we're enhancing the features naturally to help with flooding and help with environmental stewardship and education."

Members of Save the Baille Ard Forest and the Baille Ard Recreation Association are scheduled to present to CBRM council at an upcoming meeting.

McKay said he has to meet with his organizing committee to discuss the matter, but he believes that presentation will still take place, although the tone is likely to be quite different.

"In my mind we're still going to go ahead but we might take a different approach to it — it might be less about advocating for them to change because they've made a significant proposal for a change to their plans. It may become more about focusing on some of those other possibilities and how we move forward collaboratively to make sure that we develop the watershed in a way that really works for the community and with the community, and with the Wash Brook as well, to make it work as best as possible so that it minimizes flooding but also becomes a treasure in the city for outdoor education and environmental conservation."

christopher.connors@cbpost.com

Attachment 12

Project Update to Council

Re: Pond 5 modifications

February 18th, 2020

DISCUSSION PAPER

TO: **MAYOR AND COUNCIL**

From: **Matt Viva, Manager Wastewater Operations**

RE: **Wash Brook Flood Mitigation Project Update – Pond 5**

Date: **February 18th, 2020**

Background

Following a project update provided to General Committee on November 4th, 2019, a request was made for staff to update council with the Pond 5 conceptual design once it was completed.

This discussion paper describes project milestones with a focus on the completion of the pond 5 conceptual design.

Project milestones

In February 2017 with council approval, a flood risk study of the Wash Brook watershed was initiated. For the next sixteen months, CBCL, following the National Disaster Mitigation Program Framework, conducted a thorough analysis and mapping exercise with the aid of sophisticated flood models in order to develop a flood mitigation plan. The study was completed in June 2018 and included conceptual drawings of the recommended option number 15. Option 15 included three structures; (1) Mud Lake Flow Control Structure, (2) Gilhomes Lake Flow Control Structure, and (3) Pond 5.

Residents that attended the June 2018 Citizen Information Session at C200 were very much in favor of CBRM proceeding with the construction of the recommended option, however concerns were raised by the Baille Ard Nature Trail Association members that attended that day. At the July 2018 council session, option 15 was endorsed with direction from council to staff to include the Baille Ard Association through the design development of Pond 5.

In 2019, detailed design and tender specifications were completed for the Mud Lake and Gilhomes Lake flow control structures, along with the construction of the Mud Lake flow control structure, see attachment A. Construction of the Gilhomes Lake flow control structure will commence immediately following site access approval from the Department of National Defense. Construction is expected to take place in 2020.

Pond 5 update

Additionally, in 2019 design development conversations for Pond 5 started with the assistance of the Baille Ard Association. The original Pond 5 concept consisted of six (6) berms that would result in eleven (11) crossings of the trail system, see attachment B. At a design workshop held in October, the Baille Ard Trail association presented a concept drawing that would result in less disturbance or crossings of the trail system. CBRM then directed the consultant to use this modified version of pond 5 as a template to develop a conceptual drawing of modified berms along with an evaluation of its flood reduction potential, see attachment C. A second workshop with the Baille Ard Association was held on Wednesday January 29th to review and discuss the modified version of Pond 5 which was very well received by the group.

Summary

To determine the course of the project, a number of variables were considered when comparing the original Pond 5 to the modified Pond 5, see attachment D. Some key findings are described below:

- The modified Pond 5 shows less but similar flood reduction potential as the original concept,
- The modified Pond 5 shows approximately 12 meters of disturbance to the trail system compared to 360 meters of disturbed trail with the original concept,
- The modified Pond 5 can be fully constructed at no cost to CBRM under the DFA funding program, while the original concept will require CBRM financial assistance,
- With the constructing of modified Pond 5, opportunities will exist to provide enhanced flood protection should the need arise into the future.

As directed by council in 2018, staff has considered all stakeholders throughout the conceptual design process of Pond 5 and are now able to use the modified Pond 5 concept as a basis for detailed design and construction. To adhere to Public Safety Canada's Disaster Financial Assistance funding criteria, the Gilhomes Lake and Pond 5 flood mitigation structures must be completed during the 2020-21 fiscal year.

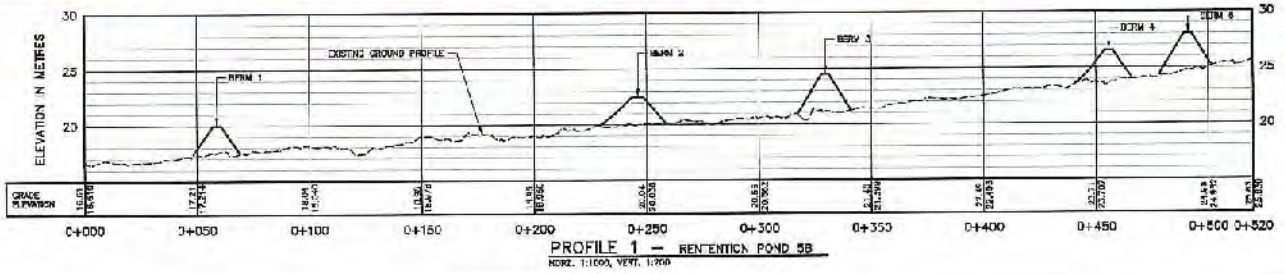
Regards,

Matt Viva, P.Eng
Manager of Wastewater Operations

Cc. Wayne MacDonald, P.Eng., Director of Engineering and Public Works
Ray Boudreau, P.Eng., Senior Manager, Public Works

Attachment A – Mud Lake Flow Control Structure.

Attachment B - Original Pond 5 Concept



PROFILE 1 – RETENTION POND 5B
HORZ. 1:1000, VERT. 1:200

DRAWING INFORMATION
HORIZONTAL PROJECTION:
– NAD 1927
VERTICAL DATUM:
– GEODETIC – CGVD28
UNITS:
– METRES

ISSUED FOR REVIEW ONLY

No.	Description	Date	By
D	ISSUED FOR REVIEW	JAN 27/16	JML
A	ISSUED FOR INFORMATION	APR 12/15	JML

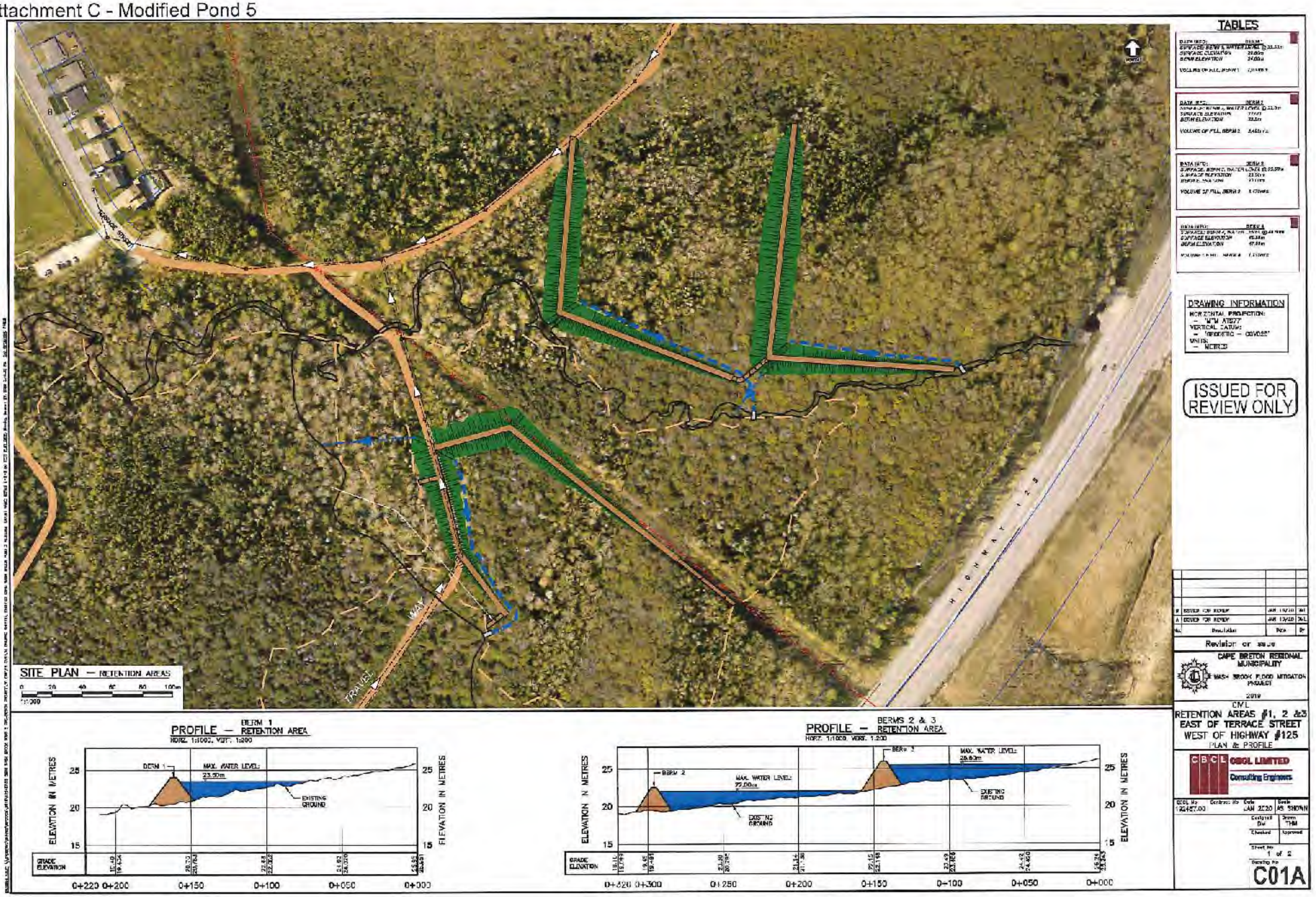
Revision or Issue

CAPE BRETON REGIONAL MUNICIPALITY
WASH BROOK FLOOD MITIGATION PROJECT
2017
CML
RETENTION POND #5B
EAST OF TERRACE STREET
WEST OF HIGHWAY #125
PLAN

CBCL LIMITED
Consulting Engineers

Project No.	Scale
162483.01	AS SHOWN
Designed CML	Drawn AMA
Checked CML	Approved RJM
Sheet No. 8 of 11	
Drawing No. C05B	

Attachment C - Modified Pond 5



Attachment D - Original Pond 5 Concept compared to Modified Pond 5 Concept

CBCL LIMITED
Consulting Engineers

Project Name:	Wash Brook Pond 5 Pre-Design Project
CBCL Project Number:	192457.00
Sheet Name:	Pond 5 Configuration Options Evaluation Matrix

Parameter	1:20 Year Return Period Storm					1:100 Year Return Period Storm				
	No Flood Mitigation Measures	Original Pond 5B Concept + Lake Flow Controls	Percent Reduction	Revised Pond 5 Concept (3 Berms Only) + Lake Flow Controls	Percent Reduction	No Flood Mitigation Measures	Original Pond 5B Concept + Lake Flow Controls	Percent Reduction	Revised Pond 5 Concept (3 Berms Only) + Lake Flow Controls	Percent Reduction
Approx. Area of flooding between Bernard Lind Dr. and Hwy. 125 (m^2) (Upper Reaches)	89,302	126,212	-41%	123,513	38%	92,834	139,945	-51%	138,630	-49%
Approx. Area of flooding between Whitney Ave and Bernard Lind Dr. (m^2) (Middle Reaches)	99,452	39,344	60%	69,829	30%	140,585	102,184	27%	125,791	11%
Approx. Area of flooding between Prince Street and Whitney Ave. (m^2) (Lower Reaches)	58,420	48,706	17%	53,803	8%	69,655	61,155	12%	67,861	3%
Approx. Length of Baille Ard Trails impacted due to construction (m)	0	360		12		0	360		12	
Approx. Area of Baillie Ard Trail System impacted due to construction (m^2)	0	35,000		14,200		0	35,000		14,200	
Estimated Capital Cost (including net taxes)	$0	$2,989,000		$1,588,000		$0	$2,989,000		$1,588,000	

Attachment 13

CBC New article

Baille Ard Recreation Association

Nova Scotia

New flood-mitigation plan pleases Sydney trail group

Modified design reduces impact on Baille Ard Trail system and surrounding forest

Holly Conners · CBC News · Posted: Feb 19, 2020 4:30 PM AT | Last Updated: February 19, 2020

David Gabriel, president of the Baille Ard Trail Recreation Association, is pleased that a modified flood-mitigation plan for the Sydney Wash Brook watershed will have a reduced impact on the urban forest. (Tom Ayers/CBC)

Cape Breton Regional Municipality has revised its flood mitigation plan for the Sydney Wash Brook watershed in an effort to lessen the impact on an urban forest.

Supporters of the Baille Ard Trail worried the plan would devastate the well-used trail system and surrounding forest.

The municipality commissioned the flood-protection plan from CBCL in the months following the Thanksgiving Day flood of 2016. At that time, the only variable under consideration was optimal flood reduction, said Matt Viva, manager of wastewater operations.

"The concept on the table today ... does show slightly less flood-reduction potential," he said Tuesday. "However, it's considering all the variables. It's considering the importance of the trail system."

Matt Viva, manager of wastewater operations for Cape Breton Regional Municipality, said the new plan shows slightly less flood-reduction potential, but takes in the concerns of all stakeholders. (Tom Ayers/CBC)

The original conceptual design included the construction of six large berms to hold back water in big rain events, reducing flooding to residential neighbourhoods downstream. The plan showed the berms snaking across the forest and crossing the trail in 11 places.

The new modified version shows three roughly L-shaped berms, covering a shorter total distance, and mostly avoiding the trail footprint.

"We will have one instance where the trail system does cross over the berms, however the impact is much less than it was with the original concept," said Viva, who presented the plan to CBRM council.

CBCL used a proposal submitted by the Baille Ard Trail Recreation Association as a template for the modified design.

Gabriel hopes to work with CBRM and CBCL to maintain the integrity of the forest. (Tom Ayers/CBC)

"We can't help but being pleased," said David Gabriel, president of the trail association. "Pleased that they were willing to bend and come up with something that we would find more acceptable."

The group is also happy the municipality and CBCL have offered to involve the trail group in the process going forward.

"We still are concerned about the integrity of the forest, to make sure that everything is done with as light a hand as possible," said Gabriel.

The modified plan comes with an added benefit to the municipality, in that it can be fully constructed under Public Safety Canada's disaster financial assistance funding, whereas the original concept would have required a financial contribution from CBRM.

MORE TOP STORIES

- VIDEO **Banks do little to help consumers resolve their complaints, review finds**
- VIDEO **'Fed up' shipping line diverts cargo from Halifax over rail shutdown**
- **Fire station relocation sparks parking concerns in downtown Sydney**
- **Province announces forestry innovation rebate program**
- VIDEO **Barho parents offer 'deepest gratitude' to Nova Scotians a year after deadly fire**

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With files from Information Morning Cape Breton

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1111 reading now

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890 reading now

4 **Ex-cop finally paid $630K in lost wages due to PTSD after years of living in poverty**

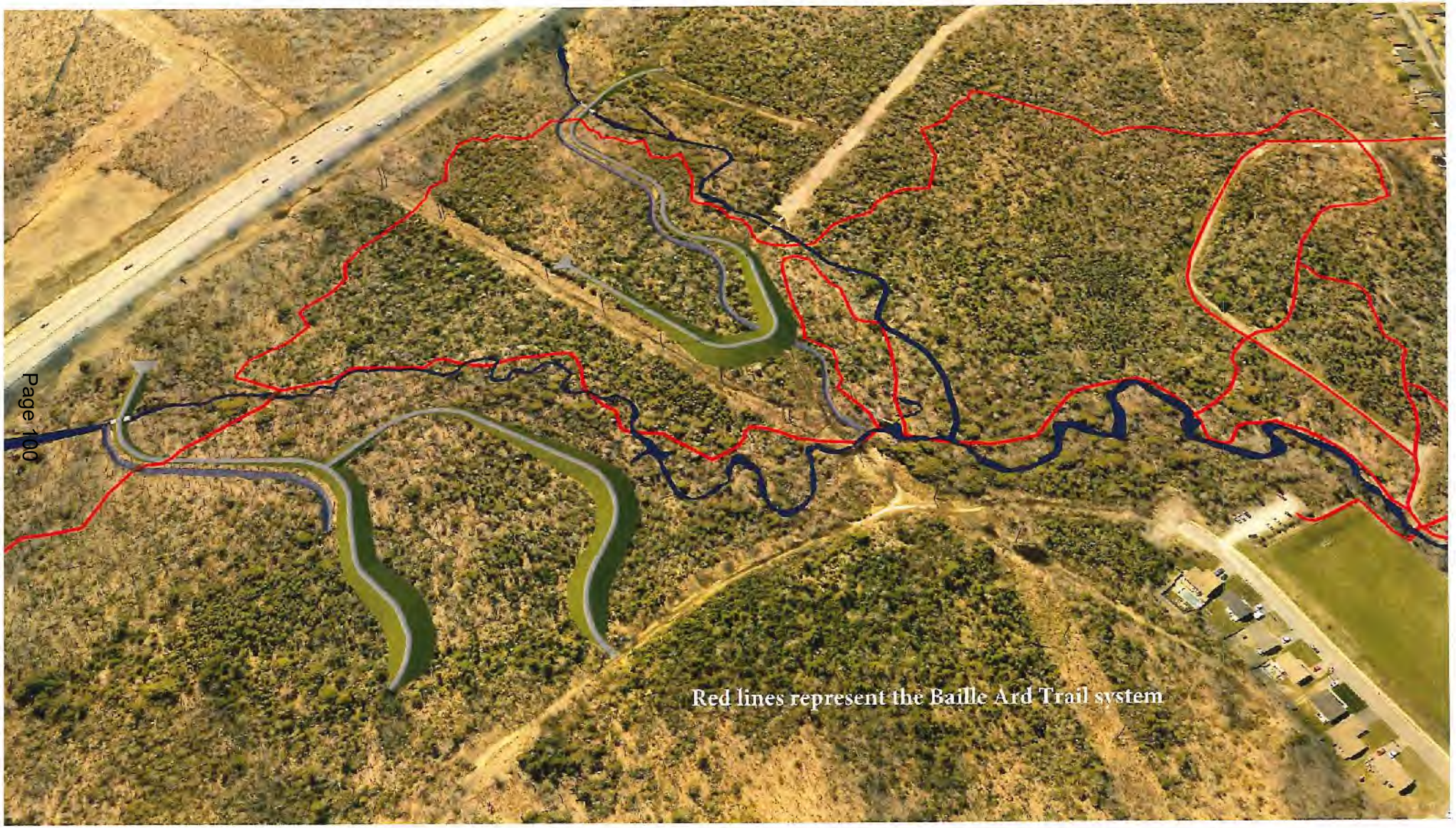
695 reading now

5 **Border restrictions for fully vaccinated Canadians begin to loosen**

578 reading now

Attachment 14

Final Pond 5 Layout


Red lines represent the Baille Ard Trail system

Attachment 15

Aboriginal Consultation Letter

March 1st, 2021

CBCL
Solutions today | Tomorrow IN mind
Maritime Centre, 1505 Barrington Street, Suite 901
Box 606, Halifax, NS B3J 2R7
902-421-7241 | CBCL.ca | info@CBCL.ca

March 1, 2021

Twila Gaudet & Mise'l Abram
Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO)
75 Treaty Trail,
Millbrook, NS B6L 1W3

Attn: Twila Gaudet and Mise'l Abram

RE: Notification Letter to the Mi'kmaq of Nova Scotia
Construction of the Gilholmes Lake Flow Control Structure and Stormwater Detention Pond 5 Flow Diversion Structures

On behalf of the Cape Breton Regional Municipality (CBRM), CBCL Limited (CBCL) would like to notify the Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO) of a proposed project (the Project) that will take place in Wash Brook on the Department of National Defence (DND) Sydney Rifle Range and between the southern end of Terrance Street and Highway 125 in Sydney (see Figure 1). The proposed Project consists of two separate components: The Gilholmes Lake Flow Control Structure and the Stormwater Detention Pond 5. These two components of the Project are flood mitigation measures to reduce the impacts of flooding in the downstream developed areas of Sydney. As you may be aware, some areas around Wash Brook in Sydney were devastated in October 2016 as a result of extreme flooding resulting in massive property damage. The two flood mitigation measures are briefly described below.

1. Stormwater Detention Pond 5 involves construction of floodwater containment berms just south of the Sherwood Park Education Centre (SPEC) school in the area of the Baille Ard Trail System (Stormwater Detention Pond 5). This includes two flow diversion structures and several flow diversion channels.
2. Gilholmes Lake Flow Control Structure involves construction of a floodwater containment berm and a box culvert with fish baffles to reduce flow on the outflow from Gilholmes Lake during extreme storm events.

The Project is proposed to be constructed between August 16, 2021 and December 31, 2021.

Since the Gilholmes Lake Flow Control Structure is occurring on Federal Crown Lands, an Environmental Effects Determination has been prepared and submitted to meet the DND requirements under Section 82 of the Impact Assessment Act (IAA). The Project also involves the following federal agencies:

- Transport Canada: The project is considered a work in a non-scheduled water under the Canadian Navigable Waters Act (CNWA). A notice is being posted for a 30-day comment period (https://common-project-search.canada.ca/) via the Public Resolution Process.
- Fisheries and Oceans Canada (DFO): Because the project involves work that may result in a harmful alteration, disruption or destruction of approximately 500 m^2 of fish habitat, CBRM is applying to DFO for Authorization under the *Fisheries Act*.

Please advise whether the KMKNO has concerns or comments on the proposed project. A response by March 30, 2021 would be appreciated. In light of the global coronavirus (COVID-19) pandemic, the CBRM recognizes that many Indigenous groups' capacity to engage may be affected. If you view the current timeline as insufficient, you are encouraged to notify us as soon as possible to consider extending timelines. If there are any changes to the process, the KMKNO will be kept informed.

Yours very truly,

CBCL Limited

ORIGINAL SIGNED BY

Carrie Bentley, B.Sc., M.Sc.
Senior Fisheries and Wildlife Biologist
Direct: 902-266-7996
E-Mail: cbentley@cbcl.ca

Attachments

Figure 1: Project Location

CC: Matthew Viva, CBRM

Project No: 202415.00

KEY MAP

LEGEND

- DND Sydney Rifle Range Property Boundary
- Stormwater Retention Pond 5
- Gilholmes Lake Control Structure

CBCL

CBRM Wash Brook Pond 5
Design & Construction Support

Project Location

DATE: 2021-02-24	PROJ Nº: 202415	FIGURE: 1
DRAWN BY: ST	CHECKED BY: CB	APPROVED:

NOTES:

0 165 330 660 m

SCALE: 1:12,500 Coordinate System: NAD 1983 UTM Zone 20N
Units: Meter

Attachment 16

DFO Memo

Review Period Ceased

Fisheries and Oceans Canada | Pêches et Océans Canada

Bedford Institute of Oceanography
1 Challenger Drive
P.O. Box 1006, Station P510
Dartmouth, Nova Scotia, B2Y 4A2

July 8, 2021

CBCL file *Votre référence*
202415.00

Our file *Notre référence*
20-HMAR-00436

Matthew Viva
Manager of Wastewater Operations
Cape Breton Regional Municipality
320 Esplanade Street
Sydney, NS B1P 7B9

Subject: Wash Brook Floodwater Mitigation Project – Time Limit Ceased to Apply to the Review of your Application for a *Fisheries Act* Authorization

Dear Matthew Viva:

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) has been reviewing your application for an authorization under paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act*.

This is to notify you that, pursuant to the *Authorizations Concerning Fish and Fish Habitat Protection Regulations* (the Regulations), the time limit for the review of your application has ceased to apply due to the following circumstance:

- Under paragraph 8(1)(d) of the regulations, continuing consultation with the Assembly of Nova Scotia Mi'kmaq Chiefs, the Kwilmu'kw Maw'klusuaqn Negotiation Office (KMKNO), and Membertou First Nation on your application for authorization for the Wash Brook Flood Mitigation Project is required.

The Program will notify you in writing of the next steps once the above-noted requirements are addressed.

If your plans have changed during the review of your application, you should contact this office to avoid any unnecessary delays in the review of your application.

If you have any questions, please contact Kelley Fraser at our Dartmouth office at 902-441-3671 or by email at Kelley.Fraser@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Wambolt, Michael Digitally signed by Wambolt, Michael Date: 2021.07.08 14:46:21 -03'00'

Michael Wambolt
A/ Manager, Ecosystems Management-Regulatory Reviews
Maritimes Region

c.c. Joe Williams and Andy Smith, Department of National Defence
Carrie Jardine and Darrin McLean, CBCL Consulting
Joseph MacCormick, Nova Scotia Environment and Climate Change

REPORT TO: Mayor and Council

RE: "Wash Brook floodwater containment and intensity mitigation project" group consultation

PREPARED BY:
Mike Targett
Community Consultation Coordinator
CBRM — Mayor's Office
mwtargett@cbrm.ns.ca

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Introduction

On Monday, August 16, I facilitated a group consultation to discuss the proposed "Wash Brook floodwater containment and intensity mitigation project". In attendance were homeowners affected by the disastrous flood of October 2016, members of the Baille Ard Recreation Association, members of the Save The Baille Ard Forest group, CBRM Engineering staff (Wayne MacDonald, Matt Viva), consulting engineers from CBCL Ltd (Darren McLean, and Alexander Wilson (via Teams)), Councillor Glenn Paruch, and Mayor Amanda McDougall. In the two weeks leading up to the group consultation, I also met one- on-one with each individual participant (minus the CBCL consultants). Some of the affected homeowners lost their homes in the 2016 flood. Some, and I think I can say this without exaggeration, nearly lost their lives. Others narrowly saved their homes but now live in a state of constant fear and anxiety as a result of that event which can only be described as traumatic for them. Some of the homeowners who lost their homes have relocated elsewhere in the area, or, in one case, rebuilt on the same property. Still others who lost their homes have since moved out of the flood plain.

I think it's important to dwell for a moment on the flood of 2016, to acknowledge the severity of the event, and the struggle that some homeowners experienced afterwards in trying to relocate, repair, or rebuild their homes. I empathize with those who lost so much. I struggle to imagine the experience of nearly drowning trying to save your neighbour, and the ongoing fear that, every time it rains, it's going to happen again.

In our one-on-ones, and in the group meeting, I tried to be sensitive to the experience of flood victims, and I will try to do so here as well. But having acknowledged the severity of the 2016 flood, and with respect to those still understandably traumatized by it, I will try to set it aside in the following discussion. The reasons being, first, the 2016 flood was an outlier, the result of a 1-in-2000-year rainfall. (This, as we all know from previous presentations, doesn't mean that it won't happen for another 2000 years. It means that, statistically speaking, every year there is only a 1 in 2000 chance of it happening again. Not impossible in any given year, only improbable.) But secondly, and perhaps more importantly for the purposes of the floodwater containment and mitigation project: the 2016 flood resulted from rainfall of a magnitude that this project does not seek to mitigate. In fact, 2016 saw rainfall of a magnitude that perhaps no reasonably affordable design project could effectively protect homes from. Any mitigation project will provide benefits and storm protection to some extent, by helping the Wash Brook react better to precipitation events. But the proposed project we are talking about seeks to *effectively* mitigate damage from storms involving 1-in-20-year or 1-in-100- year rainfalls.

Scope of this report

It is not within the scope of this report to suggest alternative solutions to the one proposed by CBCL and recommended in CBRM Engineering staff's issue paper. Nor is it within the scope of this report to debate the effectiveness of that proposed solution.

The main purpose of this report is to show that the consultative process used to arrive at the current solution was lacking, and to suggest – with 20/20 hindsight – how projects in the future might proceed differently. In other words, this report is about policy and process, not about people. This report is not meant as a criticism of CBRM staff or its consultants, seeing as it really wasn't anyone's job to consult the public – the way it is my job now. So I hope that, going forward, you will hold me to the high standard that I am about to describe, but not think that I am trying to hold anyone else to this standard retroactively. This is simply to illustrate how we got to where we are, and to imagine how we might avoid arriving at a similar place with future projects. This report is primarily concerned with the processes used by CBRM Staff and Council when listening to, and communicating with, and working with, the public. So while it takes the form of a critique of the community consultation process done specifically in relation to the "Wash Brook floodwater containment and intensity mitigation project", it should be read as making general recommendations on how to develop policy around community consultation and engagement in the future.

Where Are We?

So, first, where are we? And how did we get here?

The bulk of the public consultation that was done consisted of one "Town Hall" held in 2017 at Centre 200 shortly after the disastrous flood of 2016. At that meeting, a potential solution involving building floodwater containment infrastructure in the forest area of the Baille Ard trails was already in draft form. Members of government (municipal, provincial, and federal) were present to assure attendees that funding was forthcoming, and something would be done to protect their homes in the future from the kind of damage that they were, in most cases, still reeling from.

At this meeting, conceptual drawings of the proposed solution were shared with the public. Later, these or similar drawings were shared with Council. (I will return to why it was problematic from the start to share conceptual drawings.)

Some homeowners who were affected by the flood and who, at the time, still lived in the area were in favour of any plan that would address the flooding.

Members of the Baille Ard Recreation Assocation, and other affected homeowners in the area (including some who had also lost their homes) who use the trails, were shocked to see the plan involved turning the Baille Ard forest and trail system into a retention pond.

Based on the proposed solution, CBRM began to pursue funding, and apply for provincial and federal approvals and permits. The Baille Ard Recreation Association continued to lobby for a reduction of the size of the proposed berms and at the beginning of 2020, CBRM Engineering Staff met with the Baille Ard Recreation Association and came to a compromise that saw the construction scaled back by half. This reduction simultaneously brought the project in line with the CBRM's budget.

This is a highly abridged version of events, I concede. It doesn't do justice to the time and effort that Wayne MacDonald and Matt Viva have put into meeting with members of the Baille Ard Recreation Association and later the Save The Baille Ard Forest group. But the general consensus from those groups, especially the former who have been stewards of the Baille Ard trails for decades, is that they were always only able to react to more-or-less finished plans at every stage of the project, rather than being included as true stakeholders in the creative solution-making and democratic decision-making processes.

In fact, the Save The Baille Ard Forest group formed as a result of the Baille Ard Recreation Association, and other affected members of the community, feeling excluded from these processes. The Save The Baille Ard Forest group included and consulted with representatives of ACAP and community members with backgrounds in ecology and natural resource management, as well as social sciences and education, and – yes – water resource engineering

and hydrogeology. The group included neighbours living in the flood zone, including some who lost their homes in 2016. Some members work for various levels of government or other consulting firms and wished to remain unnamed and in the background. Granted, that makes it hard to fully evaluate its legitimacy. But whatever the case may be, they brought to the table community members with expertise they felt was missing from the conversation. The group took what they termed a "watershed-level", holistic approach to the problem that combined the following: holding water in residential yards and businesses, as well as public spaces; no-build zones; protecting individual areas and moving vulnerable buildings; wetland restoration and large-scale tree planting; updates to land-use policy and limits on forest activity and development that increases runoff. (Cf. Municipal Planning Strategy, 2004: the Regional Municipality will "impose development constraints" and "refrain from considering development proposals that would reduce the amount of permeable ground surface," and, "regulate the amount of land that can be impervious to stormwater absorption."") The Save The Baille Ard Forest group even felt compelled to hire, with the help of a crowdfunding campaign, their own consultant, an ecologist Dr Nicholas Hill. Dr Hill worked with a local scientist (a Master's student at the Dalhousie School for Resource Management and Environmental Studies) to produce a report, which is included as an Appendix to this report. It is included not as an endorsement of an alternative solution to staff's recommendation, but as evidence that a legitimate stakeholder group felt their input wasn't being heard and sought outside assistance to more vigourously convey their message. Whether this report ever made its way to Councill, I'm not sure. In any case, we have one group of stakeholders, the CBRM Engineering staff, assuring that all alternative solutions were in fact considered and subsequently rejected with sufficient reason; and on the other hand, we have the Save The Baille Forest group which disagrees.

While this was happening, several other homeowners – who were in favour of the construction project, and at this point in the process thought, rightly so, that it was a done deal – felt shut out from what they perceived to be negotiations exclusively between the CBRM and the Baille Ard Recreation Association. Negotiations which appeared to them to result in compromise after compromise and do nothing but, forgive the pun, water down the efficacy of the project, even unreasonably changing the stated goal of the original plan, namely flood mitigation, to a new and less effective strategy that sought to balance maximizing flood protection with minimizing damage to the forest. This felt like a slap in the face for the affected homeowners who were in favour of the construction: how could the demands of what effectively amounts to a lobby group for the forest and trail system trump the needs of homeowners whose lives continue to be affected on a regular basis by flooding? It also wasn't effectively communicated to these stakeholders, nor I suppose the public in general, that the timeline for the project, which the homeowners found frustratingly, even infuriatingly, slow, was not the result of negotiations with the Baille Ard Recreation Association and the Save The Baille Ard Forest group, but

rather had to do with the provincial and federal approval and permitting processes. Nor was it effectively communicated to them or the public that the project may very well not go ahead, even as is, due to that same approval and permitting process.

So, the Baille Ard Recreation Association felt they were always on the defensive, trying to protect as much ground (literally) as possible while being forced to concede to what they felt was the best bad option; whereas the affected homeowners in favour of the construction only saw the Baille Ard Recreation Association receiving concession after concession, while their own needs were ignored.

The result is, arguably, a plan that no one is happy with: according to one group, it still does too much in the way of damage to the forest area where the Baille Ard trails are located; and according to the other, it doesn't do enough in the way of preventing and mitigating potential floodwater damage to their homes and businesses. It is a fine example of the saying that a good compromise is one where everyone is equally dissatisfied (which, like most quotes, is either from Winston Churchill or Larry David). On top of all this is an as-yet unmentioned stakeholder group, namely business owners in the Townsend Street area, around and including the Steel City, who continue to be under the impression that the proposed project will significantly improve flood conditions, whereas the Engineers estimate an average improvement somewhere around 8%. And, of course, in the middle of all this are

Wayne MacDonald and Matt Viva, whom I simultaneously pity and commend for their perseverance and attempts to appease all sides, whether or not those attempts are fully appreciated.

Community Consultation

Now imagine, not an alternative solution, but an alternative process for arriving at a solution. Instead of directing Staff to proceed in the direction they did, what if Council had struck a multi-stakeholder, multi-disciplinary working group from the beginning. Council's first order of business in striking such a group would be to identify who needs to be at the table.

- Obviously, you would include affected homeowners and business owners. (Note we are no longer categorizing affected homeowners into for or against the construction, since no solutions have been considered at this early, hypothetical stage.)
- Obviously, since the Baille Ard forest and trail system is an integral part of the watershed, and it has been a valued community asset for decades, and there is a stewardship group that manages it, you would include the Baille Ard Recreation Association. (Note we are not concerned with the Save The Baille Ard Forest group since they wouldn't have existed at this early, hypothetical stage.)
- Obviously, you would include staff from CBRM Engineering & Public Works.
- Also, staff from Parks, Grounds & Buildings since there are CBRM facilities like Centennial Arena located in the centre of the flood zone.
- Also, staff from Recreation -- since now might be a good time to look at how flood mitigation efforts like restoring wetlands and reducing impermeable surfaces might tie into your active transportation plan.
- Also, the Councillors for the areas within the watershed/flood plain.
- A representative from St Marguerite Bourgeoys church.
- A representative from Brookland Elementary.
- An educator from Brookland Elementary who might occasionally bring students to observe, or even participate in, the group: science students could learn about watershed management while social science students could witness firsthand how democratic, inclusive decision-making happens at the community level.
- In addition to the Engineering Sciences already mentioned, you would include expertise from other sciences, such as ecology, habitat management, biodiversity, and related industrial fields. These experts would likely come from CBU and the Verschuren Centre, respectively.
- Representatives from ACAP and the Clean Foundation which are working at the intersection of many of these fields.
- Indigenous representation, because even though the Municipality doesn't have a legal obligation to consult First Nations the way provincial governments must, we have an ethical obligation if we are going to effectively put any action behind the words of land statements and the like.
- A representative from the insurance industry. Arguably, no one has a better grasp on what's in store for us all as a result of unfolding climate chaos.
- And a communications person, like myself, whose job it would be to communicate back to Council and to the public.

Beyond this core group, you would have representatives from the other levels of government, and representatives from the provincial and federal departments that are responsible for approvals, permits, First Nations consultation, etc. Lastly, you might include fire and rescue officials, since first-responders were the ones floating people out of their homes in 2016. And this group would bring in consultants, for example CBCL Engineers, wherever additional expertise was needed.

It should be noted here many of these stakeholders were in fact present at the 2017 Town Hall mentioned earlier. But without a formal process for engaging and including them in the solution-making and decision-making processes, it is unclear how much of a contribution they were expected or allowed to make.

Now that you've identified who needs to be at the table, and after this group has done the self- reflection necessary to see if anyone is still missing, you can imagine going around the table and the conversation going a little like this:

"Part of our plan is surely going to involve storing excess rainwater by constructing large containers. Where could we put such containers?"

The representative from the church then says, "Well, you can't very well bulldoze the church and build the container there, so I suppose the church is off the table."

The representative from the school says, "Well, you can't move the school, so I suppose that's off the table."

The representative from the Baille Ard Recreation Assocation says, "The Baille Ard is a beloved social asset that we've stewarded for three decades, so that's obviously off the table."

And so on.

Once everything that needs to be is "off the table", what's left is a set of constraints within the group must work toward a creative solution. It then says, "We are a group of brilliant problem solvers. What creative solutions can we come up with within the identified constraints? This is a complex problem requiring multiple solutions. Let's get to work."

This is obviously an extreme, if not absurd, oversimplification, and indeed anything might be *put back* on the table, but only through deliberation by and consultation with the directly affected stakeholders. It is a proven fact of community engagement practices that when people feel heard and valued and *part of* the process, as opposed to *apart from* the process, and when they trust that all parties are operating in good faith, they are more likely to make unselfish sacrifices for the common good. In fact, this multi-stakeholder multi-disciplinary working group may have arrived at the same conclusion you currently have — that the Baille Ard area is the only place to physically contain a sufficient amount of rainwater to mitigate flood damage in the area, and that this approach is the only physically possible, fiscally possible, and legally possible solution. But if the solution had been arrived at via an open, transparent, democratic process, it's less likely you would also have the acrimony and frustration you currently have.

As the communications expert in the group, I might start by developing a survey to determine whether the affected homeowners we've identified, or who have self-identified, as stakeholders, are representative of the broader affected community, and to what extent. For example, before trying to gauge the general level of community support for any proposed project, it might be useful to start with this question: How many homes are we talking about, that were (a) affected by the 2016 flood, (b) are still standing, and (c) continue to experience flooding? And (d) what extent or severity of flooding do those homes continue to experience, and how often? And (e) what property-level non-structural flood risk mitigation measures have those homeowners taken, such as those included in the appendices to the CBCL report and mentioned on page 26, section 4.2, item 2) which recommends a "Public Education Campaign to provide residents in potentially flooded areas with information they can use to flood-proof their properties and prepare for, respond to and recover from flooding conditions."

This is not to diminish the pain and suffering of any of the affected homeowners: but presumably if it were only one homeowner, the conversation might never have moved beyond how best to relocate that individual? Of course, we know we're talking about homeowners plural, but how many? And where is the threshold at which we stop considering the option that CBCL Engineers called "retreat"?

A community consultation process might start with this survey or one like it. It would further develop into a plan for communicating with Council, and a strategy for communicating with the public. I, or another facilitator, might also be engaged to help the group shape its terms of reference. For example, in addition to understanding its

Council-mandated goal, how does the group build consensus? And what does it do if it can't reach consensus? In addition to the question of how it reports to Council and the public, how does it communicate internally? What are the principles the group and its members aspire to? For example, one such principle might be 'civility', which I mention solely as an excuse to share this brilliant definition from the Institute for Civility in Government: "Civility is claiming and caring for one's

identity, one's needs, and one's beliefs, without degrading someone else's in the process."

All of this would happen before a draft scenario was shared with the public.

I realize, at the time, in 2017 shortly after the flood, you were dealing with distraught and even traumatized individuals who were desperate for a solution, anything, asap. I also realize that what I have just described represents a different opinion of how projects might go forward, and that in addition to it being purely theoretical as it applies to this particular issue at this late stage of the process, it is also simply a philosophically different approach, one with which staff may disagree, one with which Councillors may disagree. Depending on how you look at it, it represents either a new way of doing things, or a very old way, but either way, it is a different way compared to the way things were done in this instance. This doesn't make it the right way, or even necessarily a better way. But I suspect that if we disagree it will be on this philosophical point, namely how much, or how little, to involve the community in the solution-making and decision-making process.

But however you feel about this ideal, hypothetical scenario, it matters who is at the table.

"Purely Topographical"

I mentioned earlier that the conceptual drawings of the proposed floodwater containment and mitigation infrastructure were shared with the public prematurely. This is for two reasons: one, if more people had been around the solution-making and decision-making table from the start, as described in the 'ideal scenario', perhaps those drawings would never have been produced in the first place if the group had agreed not to go in that direction. Maybe they would, maybe they wouldn't, of course we'll never know.

But, perhaps more importantly, a multi-stakeholder, multi-disciplinary working group might not have gone in that direction for another reason, namely that the berms, at the scale described in the original conceptual drawings, were unlikely to be approved by the provincial regulators. Had the table included those ultimately reponsible for funding, approvals, and permits, this conceptual solution may never have been seen by the public.

In reality, the Baille Ard Recreation Association, who have been stewards of the trails for 30+ years, naturally felt sideswiped. Why hadn't they been consulted from the beginning if the plan was to enter, disturb, disrupt, possibly even damage or destroy, parts of the forest and trail system.

What, in fact, was the value of sharing conceptual drawings which the consultants themselves described, at the time, as "all essentially a sketch on a piece of paper" and "of course there hasn't been any involvement of the community yet" and therefore "has no value other than how much it can reduce those flood lines" from a purely technical standpoint.

The Engineers took what they themselves described as a "purely topographical" analysis, meaning they looked at the land and its physical features. Based on elevation, slope, and similar factors, they found an area – where the Baille Ard forest and trails just happen be – that they judged to be the ideal location to store excess rainwater. Purely topographical.

Again, I'll ask you to imagine a counter-factual scenario, where instead of the Baille Ard forest and trail system there was instead a housing development, or an apartment complex, or a shopping mall. It's unlikely (though I

supposed not impossible?) that the engineers would have said something to the effect of: 'We've found the perfect place to store rainwater, right under these buildings, we just need to move them out of the way.'

You could argue that this would be more due to the cost of moving buildings than the notion that the built environment is valued more than the natural environment. But it seems the point at which we find ourselves, where the various stakeholders have reached an incommensurable difference, is not around a technical question, but a question of value, by which I mean, what the stakeholders value.

I don't think it would surpirse anyone to learn that engineers don't necessarily see the forest as having implicit value – as being valuable in and of itself. And I'm not arguing that they'd be right or wrong in their assessment. This is not a judgement so much as an observation: that when they repeatedly call the Baille Ard "undeveloped", it implies the forest is a housing-subdivision-in-waiting, an apartment- complex-in-waiting, or a shopping-mall-in-waiting. Granted, they might simply argue that 'developed' vs 'undeveloped' are technical terms meaning 'there are buildings here, and none there'. But for those speaking on behalf of the forest and trail system, the Engineering evaluation of the area as "undeveloped" appears to extend beyond mere semantics.

To extend this point, very little has been made of the Baille Ard forest and trail system's explicit value, namely the natural services the forest provides such as air filtration and air temperature cooling, water filtration, habitat for fish and birds and other animals, and of course the recreational benefits, physical- health benefits, and mental-health benefits that the forest and trail system provide together.

And virtually nothing has been said about the economic value a forest may provide in the future in the form of carbon offsetting and carbon credits, considerations which are sure to become increasingly prominent and important with each passing report from the Intergovernmental Panel of Climate Change.

When one stakeholder lists these assets of the forest and trail system, other stakeholders call it "bias". Another word for it is perspective. You might also call it a lens. Or you might call simpy call these facts.

Regardless of what you call it, for the engineers and certainly for those seeking to protect their homes at any cost, the Baille Ard forest and trail system has very little comparative value (i.e., when measured against their homes). Again, this is not a judgement, simply an observation -- and one that I for one find very easy to understand! Even if you disagree, imagine if it were your home, and you too will easily see where they are coming from! I would so hate to be in their position. Whereas for those seeking to protect the Baille Ard forest and trail system, its value is immeasurable. I can also easily understand their position. If you disagree that the forest has economic value and explicit value, let alone implicit value, just think of whichever place in the world you call sacred or mystical, and swap that place for Baille Ard, in your mind, and you'll perhaps get a sense of where the proponents of the Baille Ard are coming from.

But so if we have come to an incommensurable disagreement, it's because we simply can't put the homes of affected homeowners on one side of a scale, and the forest and trail system on the other, and even if we could I'm not suggesting they would balance each other out. The point is that the two can't usefully be compared at all precisely because the results of our measurement are contingent on what we value. And so, it matters greatly who is at the solution-making and decision-making table, not just for the expertise they bring, but for the 'lens' through which they see the world.

Community Engagement Principles

This is where, finally, the principles of community engagement are useful, and I will briefly summarize them:

We start from the position that everyone involved cares deeply about their communities, and wants to make them better. We also recognize that this is an extremely complex problem and requires multiple solutions. Therefore we

need people from all backgrounds to contribute, not just because it's the ethical thing to do, but because we will need multiple perspectives, multiple lenses.

When everyone is included, at the appropriate stage of the process, and their relevant expertise is valued, everyone benefits. Otherwise, people who are shut out of the process try to find their way in somehow anyway, and everything tends toward confusion, both for those already at the table and those excluded from the table. By coming to the table together, a multi-stakeholder multi-disciplinary working group develops relationships, from which develops trust, and when working relationships and working trust combine, new ideas emerge that otherwise wouldn't have. Different – and differing – points of view can lead to a common ground that would otherwise have been missed, leading to better solutions that would never have otherwise even been considered.

By giving voice to the affected stakeholders, not just a narrow selection of civil servants, you create a sense of community ownership and autonomy, which might lead to more and bigger actions down the road, changing our community for the better at scale.

Purpose Going Forward

In the one-on-one meetings and in the group consultation, I heard anecdotal testimony from affected homeowners who were in favour of the construction that there were many others like them; I likewise heard anecdotal testimony from affected homeowners who were against the construction that there were many others like them. And I heard anecdotal testimony from the Baille Ard Recreation Association members that there are countless users of the trails who are against the construction, but it should be asked how many of them would be willing to measure their enjoyment of the trails versus the health and safety of the the homeowners affected by frequent flooding? Eighty percent? Twenty percent? Who knows. So without having performed the kind of surveying described earlier, it is impossible to know to what extent the community members interviewed were actually representative of the wider stakeholder community. I think they were. They think there were. I assume the Mayor and the Councillor present think they were. But we're all sort of guessing.

What I also heard from stakeholders on all sides of the issue was that they have been in constant contact with their Councillor, or in some cases, that they have been in frequent contact with all of the Councillors, so as for the opinions of the individuals at this consultation meeting you probably already know where they stand. My job isn't, as I see it, to report to you the individual desires and preferences of your constituents, which would simply be to replicate the job you are already doing. My job, going forward, is, in part, to help develop processes wherein Staff, Councillors, and community members can work together to develop solutions to the difficult problems that affect our community, in a way that doesn't result in Councillors receiving phone calls from upset constituents on every side of the issue.

Does that mean the consultations performed over the last two weeks and as a group last Monday were a waste of time? Honestly, quite possibly. I know some of the participants at least, on all sides of the issue, were disappointed. Was it too late in the process? Definitely. If anything was accomplished, it was, first, some stakeholders were finally able to get answers to questions they had for the CBCL Engineers, CBRM Engineering staff, Councillor Paruch, and Mayor McDougall. And second, I think it made clear to all in attendance, in one way or another, that the community wasn't sufficiently, or at the very least effectively, involved along the way.

AN INTEGRATIVE WATERSHED APPROACH TO REDUCE FLOOD RISK AND RESTORE ECOLOGICAL HEALTH TO WASH BROOK

Submission to Cape Breton Regional Municipality by Dr. Nicholas Hill
on contract with the Save the Baille Ard Forest Community Group

January 10, 2020

Floodplain

Baille Ard Trail

Headwater Streams at Highway

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EXECUTIVE SUMMARY

Cape Breton Regional Municipality is at a watershed moment in flood management. Sydney can concentrate solely on conventional hard engineering approaches and ignore the more complex bio-regenerative natural world or it can recognize that a combined ecological and engineering approach will reduce flooding and pay multiple other dividends that might otherwise be lost:

- water infiltration, filtration and cooling for a healthy stream
- a relieved storm sewer system that does not back up after minor rains
- air temperature cooling from urban trees
- recreation in nature in tree-cooled trails (e.g. the urban trail system and Baille Ard Forest)
- carbon credits (potential from tree planting and designation of forest protected area)
- availability of funding for wetland restoration, Green infrastructure or tree plantings
- brook trout in Wash Brook that monitor stream health and get kids out and about
- destination and ecotourism to observe how a Green or a Sponge city works
- increased property values
- civic involvement and pride

This report does documents loss of flood control (e.g. the urban core has become largely impervious, wetlands have been infilled, and substantial clearcutting occurred in the upper watershed forest) but it focuses on solutions. The community can regain control through installation of green engineering solutions (e.g. green roofs, bioswales), wetland restoration, and wetland creation using berms. It can protect and champion the Baille Ard Forest, a haven for biodiversity, carbon capture, flood mitigation and recreation; and it can develop a plan to conserve or sustainably manage the upper watershed forests. The 2020s can belong to Sydney if it takes this opportunity and challenge and makes itself a climate change resilient urban area.

> "Our eyes do not divide us from the world, but they unite us to it…Let us abandon the simplicity of separation and give unity its due. Let us abandon the self-mutilation which has been our way and give expression to the potential harmony of man-nature … Man is that uniquely conscious creature who can perceive and express. He must become the steward of the biosphere. To do this, he must design with nature." Ian McHarg (1969, in Fleming et al, 2019)

INTRODUCTION

We live in watersheds (Figure 1). Watersheds capture rain or snow and funnel it to streams or rivers and beyond. Watersheds have a natural (pre-development) hydrological character where the fate of rainfall—whether it soaks in (infiltrates), is evaporated by trees (transpired), or runs off causing flooding —is influenced by:

- trees and plant community
- soil organic matter and soil texture
- wetlands
- bedrock or parent material
- position in and shape of the watershed

At Wash Brook, the watershed has lost its natural capacity to store and infiltrate water in the Urban Core and the Tar Ponds/Open Hearth Park. The upper watershed, the headwaters, around the Baille Ard Trail and above the highway, still has ecological integrity that should be conserved and restored. This report suggests that we should work on making Sydney a regional leader in green engineering as it was in industrial engineering at this date a hundred years ago. There is little to gain strategically in undoing the ecological function of the Baille Ard Trail but much to gain from developing green engineering solutions that will refresh the Urban Core, increase property values, attract business and tourism, and conserve the forest areas for flood protection and recreation.

We need ecology and engineering to make a liveable city. The green infrastructure—rain gardens, bioswales, wetlands, parks, gardens, berms, green roofs, trees, permeable pavement, green roofs—is ecological and engineering. The goals are to evaporate, store and slow down water; to do this we need trees, soil organic matter and infiltration ability. Throughout the watershed, I met long time homeowners by the brook, walkers in the Baille Ard Trail, a real estate broker, community people who knew the floodplain 60-70 years ago and those who know it now. The challenge of restoring the watershed is hard but doable. Rising to this challenge is what some noteworthy cities have done to tackle their stormwater/flooding issues and to make them leaders. Walking through Portland OR is an eye-opener: roof gutters feed into bioswales along sidewalks and schools have wetland playgrounds in a system where water is infiltrated at every opportunity. Portland dodged a multimillion dollar bullet of having to engineer a separate stormwater network mandated by the EPA; they infiltrated stormwater so it was filtered through the soil and engineered bioswales (City of Portland, 2016). Berlin, Germany, is tackling heat and flooding problems brought on by cement and asphalt surfaces (Waterbucket.ca. 2017). A "Sponge City" approach means it will work on green roofs, adding in green strips, trees and using permeable paving.

Pittsburgh received funding through the US EPA to use green infrastructure in its clay soils (Environmental Protection Agency, 2014). We are fortunate; the soils of Sydney are sandy loam tills, well drained in the headwaters and imperfectly drained in the urban area (Figure 5C). We have the community support to plan a Green Watershed Works program for the long-term health of Cape Breton Regional Municipality.

This is a transition time. The modern age of urban planning focused on the car and urban design aimed at speeding the transit of water from paved surfaces to the nearest stream using a storm sewer network. Sydney's industrial history rivals other Maritime centres and the current state of the Wash Brook's

watershed belongs to a time when the importance of the natural in the urban was not understood. Cities were for commerce and the natural world was for resource extraction or escape. The successful cities of the future, however, will be healthy cities where green spaces protect against flooding, provide good air quality and cooling, and places for walking and recreation. Ian McHarg growing up in Glasgow between the industrial city and countryside, first revolutionized city planning and landscape architecture with his book "Design with Nature" (McHarg 1969). We need to maintain and restore ecological function more than ever since climate change brings the threat of extreme rainfall (Witze, 2018). Over the past 70 years, the natural floodplain width of Wash Brook was narrowed by housing and infrastructure from almost a kilometer in width to 30 meters. Traditional infrastructure—roads, sidewalks, parking lots, drains, sewer pipes—reduced the ability of the landscape to absorb water. Areas that used to infiltrate became impervious. Impervious surfaces are the one common factor uniting urban flooding around the world (see Section 1). Many factors are at work— the unregulated flows at the newly twinned highway, long street flows to sewer drains, loss of wetland function, deforestation around Mud Lake—and all are fixable. We are addressing a multigenerational issue but we would be missing an opportunity not to take on the challenge.

This report is a preliminary assessment conducted after two days of field work with a soil auger in the watershed and a few weeks of desk work. The community of Sydney increasingly values natural areas. The community can take part in solving the flooding problem by installing bioswales and rain gardens, planting trees, and restoring backyard wetlands (Section 2). The Baille Ard Forest area is the model system of a natural area that provides the ecological functions we need as it slows water down, infiltrates and provides habitat for trout and recreation for the community (Section 6). We can work southward with infiltration solutions along the Peacekeepers Highway that will further reduce flood risk and show off Sydney's integrative watershed approach (Section 3). Above the highway, CBRM might want to create a municipal protected area for the woodlands in Zone 4 (Section 4). Finally, an engineering solution should be investigated for the area below Mud Lake (Section 5). This area is more suitable and appropriate for a water detainment behind berms. I have been fortunate to work and to interact with individuals committed to the region and its ecological function. This will be an on-going program and it ties into the efforts made to improve the habitat for Speckled Trout; this is the bio-indicator that ecological health is improving. As the trout population recovers, it means water is being infiltrated, filtered and cooled, the spawning beds are healthy and flood risk is reduced (Section 7). This submission provides an overview and the start of some practical solutions to the flooding and the runoff issue. There is time to get this right: to maintain what is good and what is working, to restore what is working against us, and to provide attractive and progressive examples for the region and other urban areas.

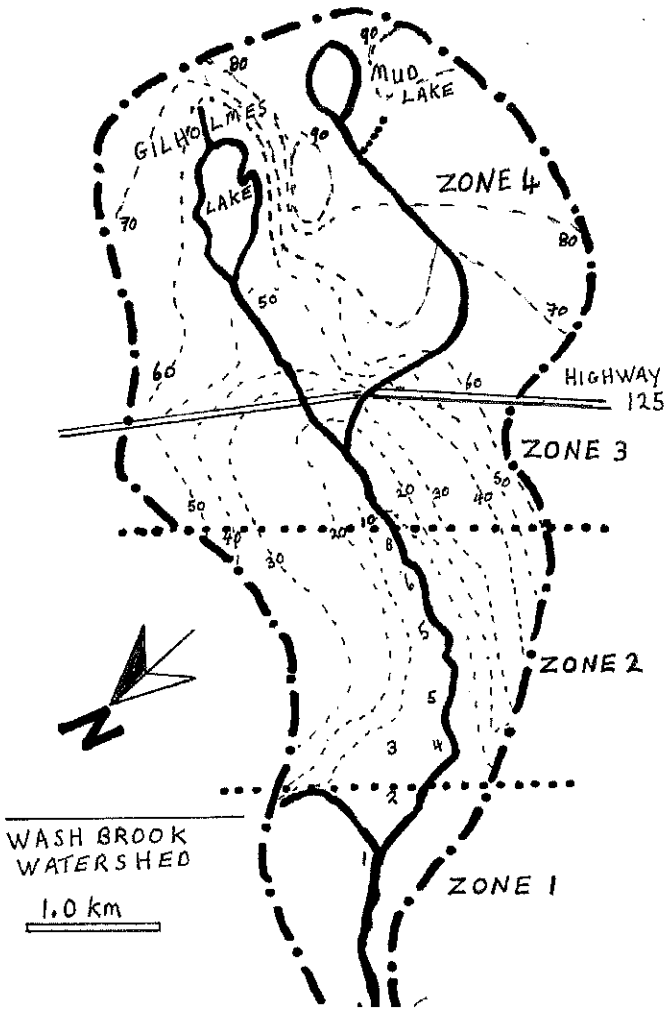

Figure 1. Wash Brook watershed showing 4 zones used to classify ground surface. Contour lines show ten metre intervals; maximum elevation is 95m in headwater area between Mud and Gilholmes Lakes streams

SECTION ONE: THE WATERSHED ZONES AND IMPERMEABLE SURFACES

"Flooding in urban areas is not just related to heavy rainfall and extreme climatic events; it is also related to changes in the built-up areas themselves. Urbanization restricts where floodwaters can go by covering large parts of the ground with roofs, roads and pavements, thus obstructing natural channels, and by building drains that ensure that water moves to rivers more rapidly than it did under natural conditions." (Douglas et al., 2008: 187)

"The critical hydrological changes which take place are an increase in the percentage of the surface ground area which is made impervious, together with increases in the size and density of drainage networks through the construction of storm sewers (Beaumont, 1975)"

By 2050, 75% of people may live in urban areas but this does not mean that cities must give up the ecological services provided in natural areas (Ziter, 2016). Healthy cities will maintain and add in rain gardens, bioswales, wetlands, backyard trees and green spaces to benefit mental health, recreation, biodiversity and ecosystem services. The main one we are concerned with is the impact that the above features have on water storage and infiltration. Sydney has many opportunities to restore ecological function in its urban core, Zone 2 of the watershed (Figure 1). These are described in Section Two and as these are installed or restored, runoff (flooding) will decrease and the health of the brook and its bioindicator, the Speckled Trout (Section 5), will increase. The 2016 storm deposited 219 cm of rainfall over a 24 hour period on Sydney and resulted in destructive flooding, the losses of homes and a call for a solution. As the town developed into a city over the past century, there was a steady increases in impervious surface at the expense of infiltration. Runoff (flooding) increases as a linear function of percent of the watershed that is impervious (Figure 2).

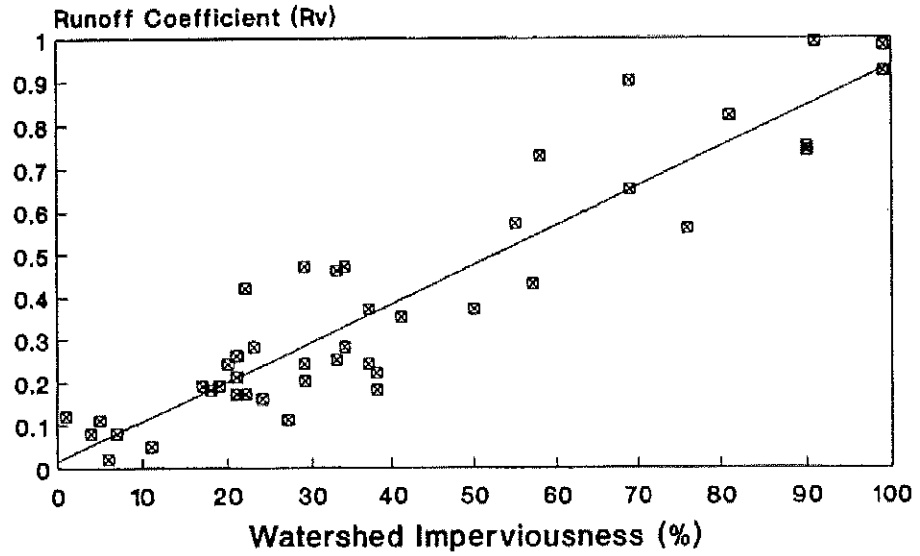

Figure 2. Watershed imperviousness drives runoff and flooding. Data points from across USA fit a line where fraction of Runoff = 0 where imperviousness = 0 and Runoff = 1 (total) where imperviousness = 100% cover. (Schueler, 2000)

Wash Brook was used to wash clothes in the early 20th Century and as the town grew, houses and roads were established further up the bowl-shaped lower watershed. In the mid 20th Century, there was still, however, a wide undeveloped zone around the brook (1949 aerial survey; see Section 3, Figure 4). By the late 20th Century, the main streets were widened, parking lots and malls developed and a system of stormwater pipes was introduced to handle the surface water flows from the hardseape—the roads, the roofs and parking lots. In this same time period, the natural area in the middle of the bowl—a traditional playing field area that always flooded and was surrounded by wetland—was developed to provide a skating arena (Centennial arena), a walking track and soccer field, and the Susan MeEachern Memorial baseball field in 2015. These developments were made in an area that was largely wetland: a flat area surrounded by sloping sides. The state of the land surface today is a multigenerational product and Figure 3 shows how the two watershed zones nearest the harbour and city have a large cover of impermeable surface (black bars) which causes flooding.

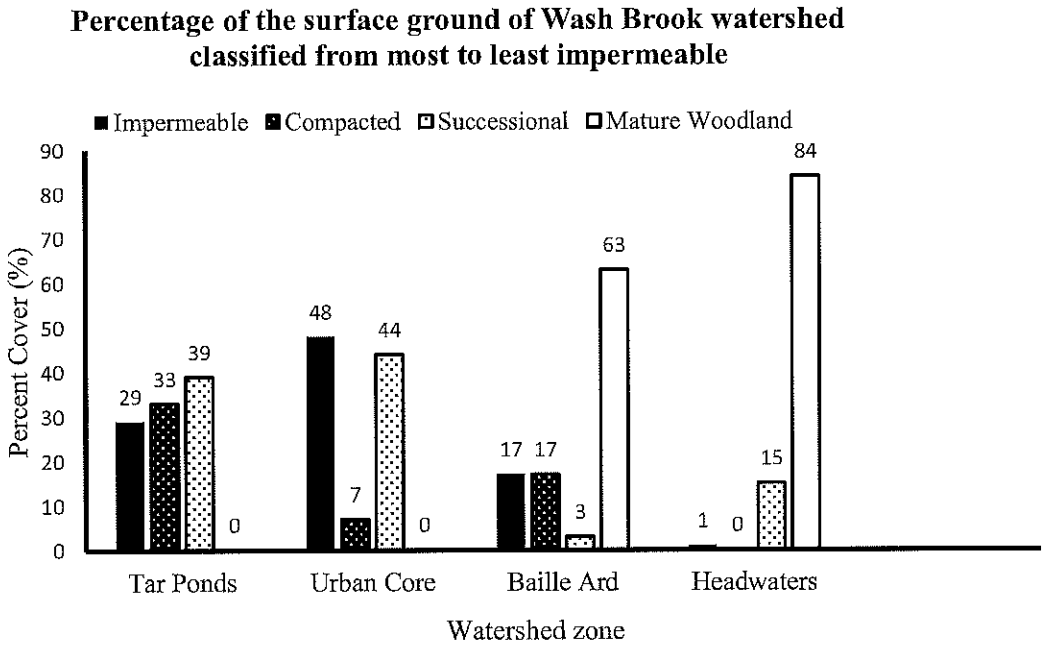

Figure 3 . Ground surface in four zones of the watershed assessed from GoogleEarth imagery. Twenty transects acrosss the watershed were spaced at 300m intervals and each surveyed at 10 intervals.

The four zones assessed for surface ground cover (Figure 1 and 3) are fitted onto a watershed integrity gradient (Arnold and Gibbon, 1996) based on percent imperviousness. The Headwater zone 4 above Highway 125 is rated as protected (Green symbol) and therefore highly functional in terms of ecosystem services (water storage, evapotranspiration and infiltration and wildlife habitat) but the Urban Core (Zone 3 between Open Hearth and Baille Ard Forest, Figure 1) fits the top right, highly degraded state (Red symbol). These are guides to watershed health and the potential for flooding and likelihood for polluted waters but they are not absolutes. The state of the watershed and its health is reversible and Sections 3-6 offer some practical opportunities.

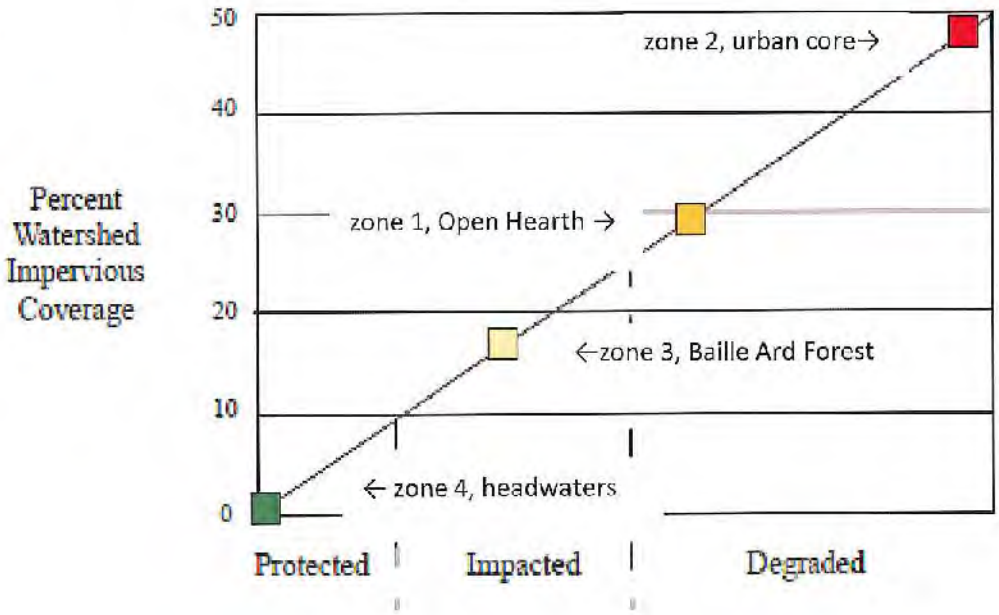

Figure 4. from Arnold and Gibbons (1996)

When a record rain— 219 cm in one day—fell on Sydney on October 10, 2016, it fell on a watershed that had lost its original ability to intercept, evaporate, store and infiltrate. The most ecologically healthy headwater zones (3 and 4) had lost substantial tree cover (deforestation Section 5) around Mud Lake, and the Highway 125 twinning had added a large area of paved surface (4-7 ha, Section 3) which disrupted drainage. The waters contributed by the headwaters dropped down 20 and 40m in elevation just above Highway 125. The headwater stream water received further water from Zone 3 and dropped another 20m into the Urban Core. The Urban Core with almost 50% impermeable surface, sent water running down the long streets into a floodplain that had also lost its ability to store or infiltrate runoff. The storm sewers from George Street to the west and past Lisgard to the east were were speeding the delivery of water to the brook or were backed up. As all these water sources combined in the floodplain between Hospital and Cottage Streets, water pooled and houses were lost.

The following sections examine the potential for restoration in the Urban Core (Section 2), the Peacekeepers Highway (Section 3).

SECTION TWO: CHANGES IN THE URBAN CORE AND RESTORATION POTENTIAL

The slopes draining toward the Urban Core of Wash Brook from northeast and southwest are long and 70 years ago, most of the map below was not yet urban (Figure 5A and 5B). Water infiltrated into soils that were sand loam tills (Figure 5C) before it was released into the brook. Today, almost all of the map below is urban (add the white area of 1947 urban to the hatched area). This means water now runs down streets to the brook or runs down streets into drains and sewer to the brook. We need to slow it down and make sure it infiltrates into the soil rather than flows down paved surface or through pipes. A previous report had suggested that the flooding problem of Sydney was inevitable given rainfall and the local soil conditions in Zones 1 and 2, the floodplain zones of the watershed. But the floodplain zone is not a "clay bowl" (soils are sandy loam till Springhill Series, Fig. 5C) which means we can work with them using green engineering solutions to reduce the flooding problem.

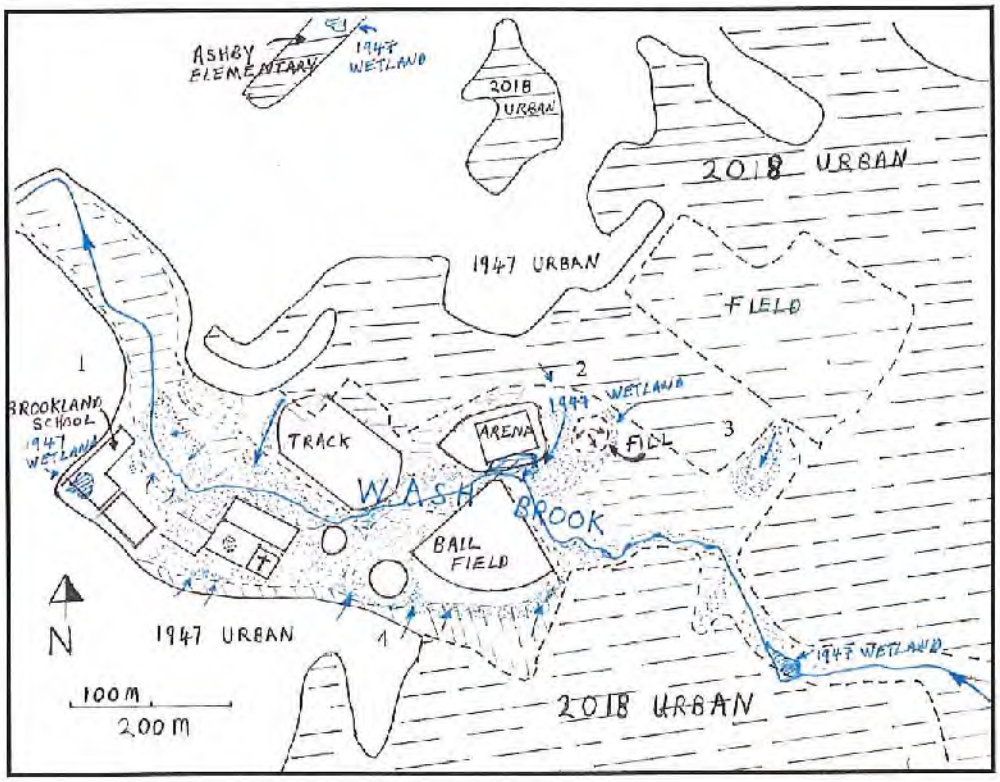

Figure 5A. Increase in urban area from 1947 (no fill: white areas) to present day (black hatched) in Zone 2 Urban Core. Note that the recreation facilities, two schools and rubble fill are in the flood zone and/or former (1947 Wetland) wetland areas.

Figure 5A was produced from the ortho-rectified 1947 aerial photo which is shown for the current urban core below (Figure 5B).

Figure 5B. Aerial photograph of the current urban core (Zone 2 of Figure 1) in 1947 (Natural Resources Canada.

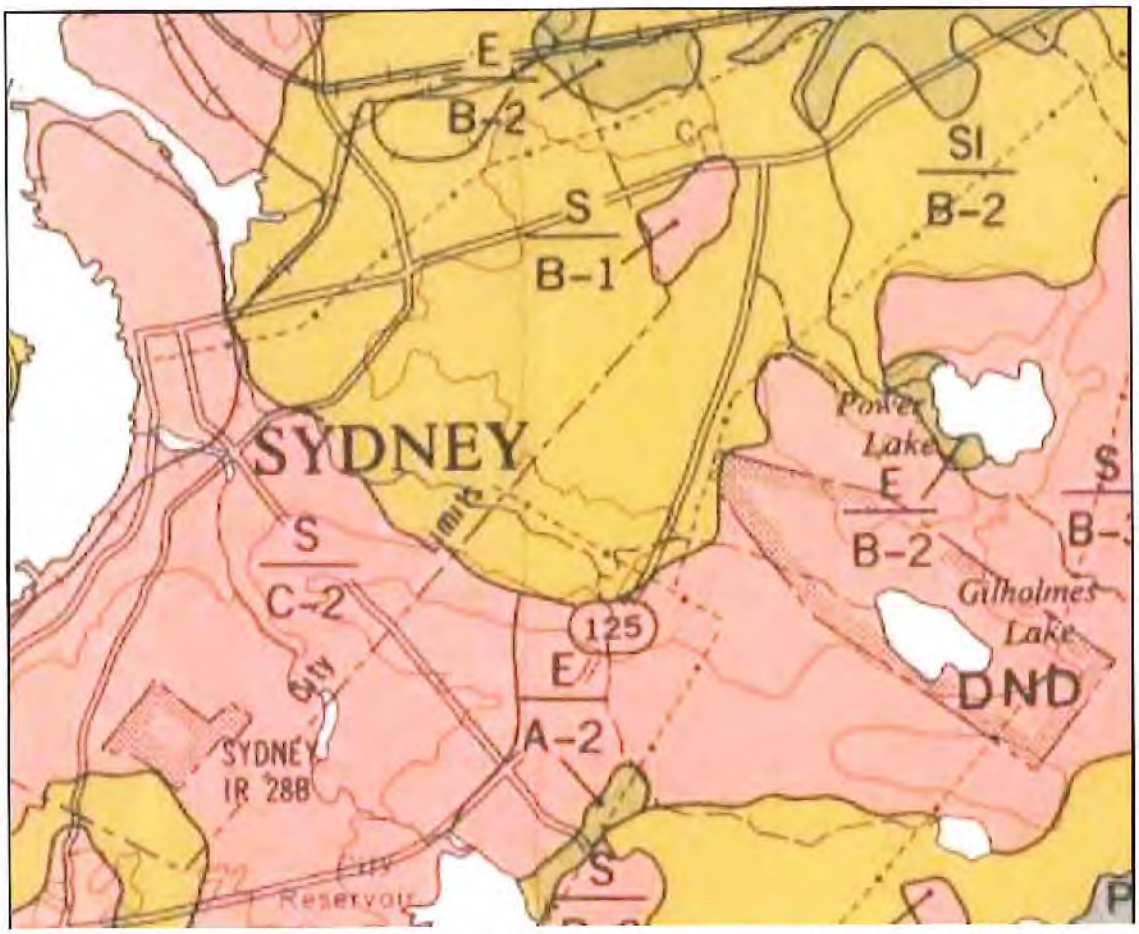

Figure 5C. Soil survey of Canada map showing Mud and Gilholmes Lake at the lower right (headwaters) in well-drained Shulie (pink areas) soil and the lower watershed (brown areas) in imperfectly drained Springhill soils (NS Department Agriculture and Agriculture Canada, 1959). Note that these are sandy loam tills as shown in Photo 1 and as cored throughout the Urban Core.

Photo 1: Typical soil core in wetland, brookside (St. Marguerite Bourgoeys). Note the generally crumbled appearance of a sandy silt loam. Organic staining at surface layer gives way to low chroma (grey) sediment with redox concentrations of iron, both indicating wetland (hydric) soils.

Examples of infiltration and run-off storage solutions

1) Brookland School and gardens across the brook

The school is embedded in wetland. The 1947 aerial photo (Figure 5) shows open water where the school now sits. The soccer field has Path Rush (*Juncus tenuis*) where disturbance is greatest in centre field; the path from the east below the field has wetland on either side and a culvert to allow flow. Developing wetland areas around the school will teach the children about the importance of wetlands for wildlife and to prevent flooding. Students can plant and look after trees, plant wetlands plants in the rain garden and bioswales, and play in structures built into the wetlands (bridges, downed trees).

Figure 6 shows the relationship of the current infrastructure to existing water flows and wetland, and it suggests practical remediation and restoration actions:

- install bioswale between bus lane and school (1) to harness flow from: watershed north of George Street which flows unchecked down Milton Street into storm drains, and the school roof
- install bioswale system into and around school parking lot (2) as a demonstration project
- restore and enhance wetlands on north and south sides of Wash Brook (3)

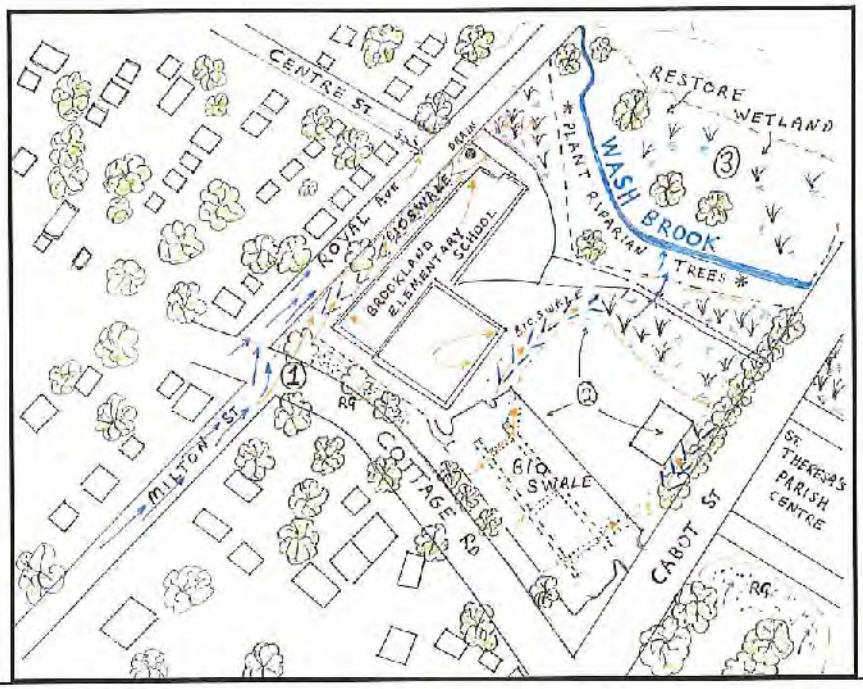

Figure 6: Brookland Elementary existing water flows (blue arrows) and possible solutions (orange arrows)

Photo 2: (Left) A rain garden can be made by constructing an infiltration depression for overflows, at the front of the school.

Photo 3 (Right) The water from the roof and from Milton Street will be directed down a stepped bioswale system at the side of the school. This bioswale widens out at the lower end of school (Photo 3)

Photo 4 (at left) shows side lawn of school which will be developed to infiltrate water. Note the depression and note that at present these waters flow into a drain that is frequently plugged with leaves).

Photo 5 (above) shows what will become a receiving wetland for the bioswale that will run on the side of the school (Photo 4). Students will learn about wetlands and watersheds and the fish in the brook.

Bioswale to wetland storage: System 2. This east school side is already saturated and design can help dry out the soccer field and maximize infiltration in the parking lot and slope zone. The wetland can increase infiltration and serve as temporary storage for run-off

Photo 6: School parking lot.

start of a bioswale system to slow and filter runoff. Swale system directs water down the slope (Photo 7) to meet wetlands that will be restored (Photo 8)

Photo 7: School Basketball court and soccer field.

Bioswale system will direct parking lot and other water to swales on either ends of the soccer goals as well as on the street edge of the basketball court.

Photo 8: School lower path

The saturated lawn on either side of flooded school path is wetland that doesn't work well in winter for children or for slowing down and filtering water. The swale system will work to infiltrate and direct flows but the wetland areas will also be restored as shrub swamps that grow Canada holly or dogwood or highbush blueberry. Directing flows away from the soccer field will make this upper central area more usable and students can play and participate in the new wetlands which could have bridges and timber structures to make a challenging play area (cf. Cobequid Consulting constructs such playground infrastructure). Tree planting will further the infiltration potential of these sandy silt loam soils..

2. The Centennial Arena area

The second opportunity to restore infiltration and wetland function and design water storage solutions presents on the north side of Wash Brook below Hospital and Herbert Streets. This area has seen urban expansion into the floodplain as well as the major recreation infrastructure of Centennial Arena and Bi-Centennial Gym (ca. 0.75ha impervious surface). In addition to urban expansion, in recent years the floodplain edge to the east of the Arena has been used as a dumping zone for construction debris (e.g. asphalt and concrete rubble). In 1947, the bend in the river was 200m from the last houses on Atlantic Avenue and 300m from those at the end of Herbert Street. A wetland pooled area is shown in the 1947 areal (see Figure 5 note). Replacement of wetland with urban development is linked to flooding (https://www.theguardian.com/world/2017/sep/02/flood-waters-rising-urban-development-climate-change)

Figure 7 shows the relationship of the current infrastructure to existing water flows and wetland, and it suggests practical remediation and restoration actions:

- design of bioswales and a rain garden around the Arena (1)
- removal of urban rubble from 0.2 ha of wetland (2) and restoration of wetland
- design of a run-off storage zone using earthern/rubble berms (2)
- redirection of run-off away from drains (cf overflowing drain at end of Mayflower Terrace)

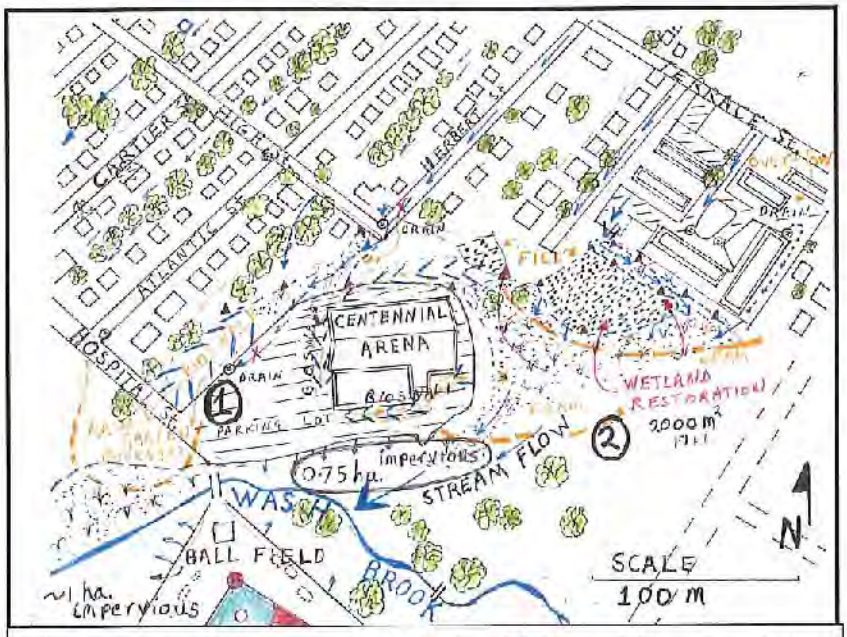

Figure 7. Floodplain zone around Centennial Arena. Blue arrows are current water flows and blue stipple is wetland. Possible bioswale installation areas are represented in blue herringbone and berms and a rain garden are suggested as orange dashed lines. Wetland areas around the arena and fill were surveyed on November 25, 2019.

Photos 9 and 10: Herbert Street. The long (800m) urban slope of Herbert Street and further up to Lisgard St, flows down pavement (Photo 9) and over the embankment (Photo 10) into the back of the Centennial Arena (Photo 11).

Photo 11 and 12. Wetland areas north and east of the Arena.

Photo 13 and 14. Urban rubble in front of housing complex (13). Overloaded storm sewer flows down walkway of Dahlia Terrace (14) the day after a rain. Wetland restoration and drainage redirection can alleviate this chronic neighbourhood issue.

SECTION THREE: INTERCEPTING FLOWS ALONG PEACEKEEPERS HIGHWAY

The Peacekeepers Highway, #125, was built in the late 1960s and twinned in 2014-2015. The width of the paved surface is approximately 22m, the total width of pavement, gravel edge and fill, ranges between 30 and 35m. There is about a 2km length of highway that crosses the watershed of Wash Brook. This 2000m length represents 4.4 ha of impervious paved surface and 7 ha of relatively impervious surface (taking 32.5m as total width).

Photo 15 and 16. Peacekeepers Highway 125. At left (12), shows the highway divider, the paved twin lane highway, the gravel verge and the embankment above the surrounding woodland. At right (16) is the highway edge and the downstream flow from Gilholmes Lake stream. Note the central stream and water in the ditch zone that contributes to that stream flow. Figures 8-10 give example cases of how such flows can be intercepted and infiltrated relatively cheaply using berms and diversions at the woodland edge.

There is an opportunity to capture, redirect, store and infiltrate the highway runoff and to do the same for drainages that may have been disrupted or brought to the surface after highway construction. There are many surface flows along the highway edge that flow in ditches, down ATV trails or powerline right of ways that can be easily diverted or bermed. Intercepting these flows would mean that this runoff, after a storm, would not immediately contribute to the flows of Mud Lake or Gilholmes Lake streams which feed Wash Brook. The following maps show three area preliminary designs of how to capture unchecked runoff flows and interrupted drainage flows on the west edge of the highway. These are partial solutions working to reduce runoff flow and to restore function in an area within 50m of the Highway 125 edge at the northern boundary of Baille Ard Trail. These partial solutions— and there are others that should be identified—would allow water to infiltrate and allow sediment to settle and be filtered in the berm swamp areas; this would reduce flow, slow the flow and improve the water quality entering the Brook Trout spawning habitats in the Baille Ard Trail area.

Photo 17-20. Four photos show unrestricted flows in the right of way zone of Highway 125. Flows were observed on the afternoon of November 26, 2019, 24h after the rainfall (17mm) of the previous day. These are normal flows for this time of year given historical rainfall data for Sydney These flows would have been an order of magnitude greater on the flood event of October 2016. Figures 12-14 show opportunities to restrain and infiltrate this runoff before it reaches the brooks.

Opportunities to divert, store and infiltrate runoff around: A) Gilholmes lake stream (Fig. 8), B) Mud Lake stream (Fig. 9) and C) a culvert stream between A and B (Fig. 10).

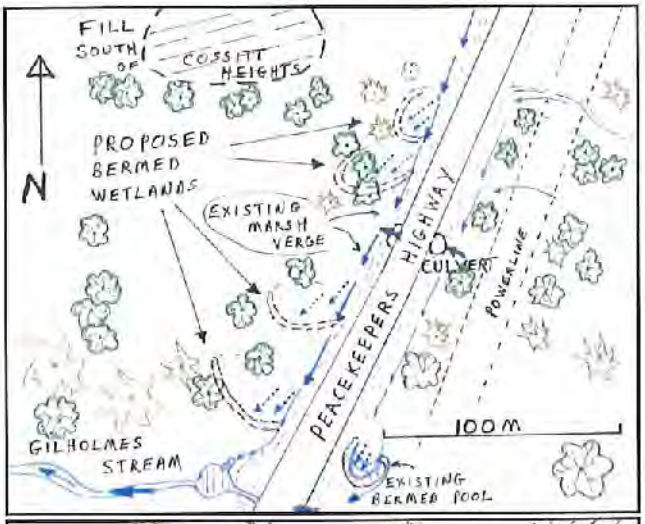

Figure 8. A stream on the west of the highway through the ditch marsh down to Gilholmes Lake stream is runoff from both sides of the highway as a culvert contributes a stream from the east. The Figure shows how the stream can be diverted into bermed enclosed areas that will transform about 1500m^2 of forest into swamps along the treed edge within 40m of the right of way.

Similar opportunity may exist on the east side of the highway above the existing berm that is constructed of gravel and stone and forms an overflowing pool.

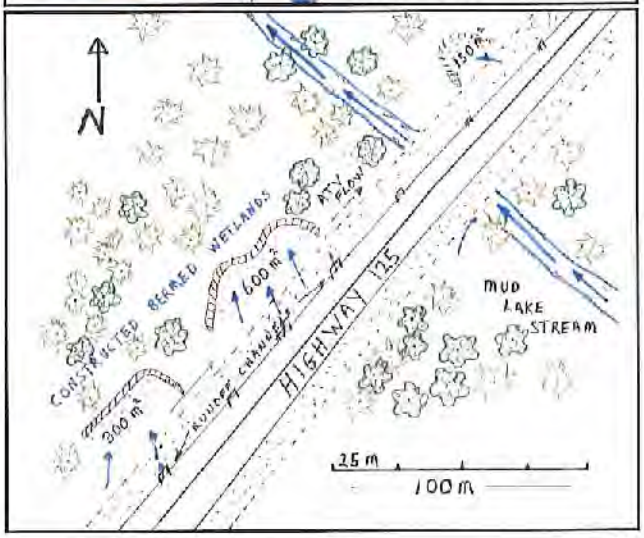

Figure 9. Bermed wetland opportunities above Mud Lake stream. Flows on the west of the highway originate from highway runoff which now flows down ATV pathways into the stream.

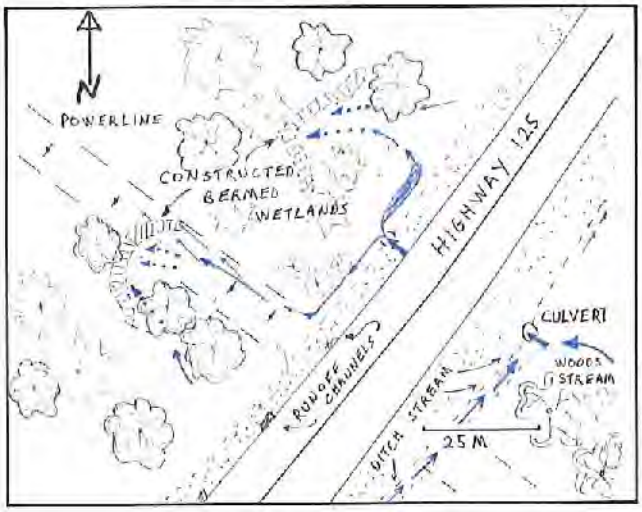

Figure 10. Berm opportunities between Mud Lake and Gilhomes Lake intercepts flows that originate from disrupted drainage east of the highway (see the wood's stream) and flow through the culvert. The culvert stream divides into a forest flow and a powerline flow and each can be bermed as illustrated.

SECTION 4: DEFORESTATION AND PROTECTION FOR ZONE 4

Forest cover reduces runoff and flood risk because trees intercept rainfall (increasing evaporation), trees transpire (release water vapour back to atmosphere as they photosynthesize), develop root channels increasing soil permeability, and add leaf and woody debris to soils making it spongey (Brown, 2005, Bathhurst, 2011). Tree cover is important throughout the watershed for these reasons but on slopes, maintaining tree cover holds the soil together to reduce erosion and prevent mud slides. While the upper Wash Brook watershed is heavily forested (77% and 82% of Zones 3 and 4 cover according to Global Forest Watch), the substantial amount (16% of the area >35% forest loss) of recent deforestation (red polygons of Figure 11) means that that less water is evaporated and less water is absorbed and infiltrated. Together, this means that after a rain event, runoff will be more intense and immediate. The deforestation around Mud Lake (Figure 11) also raises concerns about the possibility of a concentrated runoff in winter and spring through rain on snow events. The multilayered evergreen canopy of conifers traps snow and much of this evaporates throughout the winter. After clearcutting, the snow forms a single layer on the ground and it accumulates so that during a rain event, a large volume of water flows over frozen ground and can cause greater flooding (Franklin, 1992).

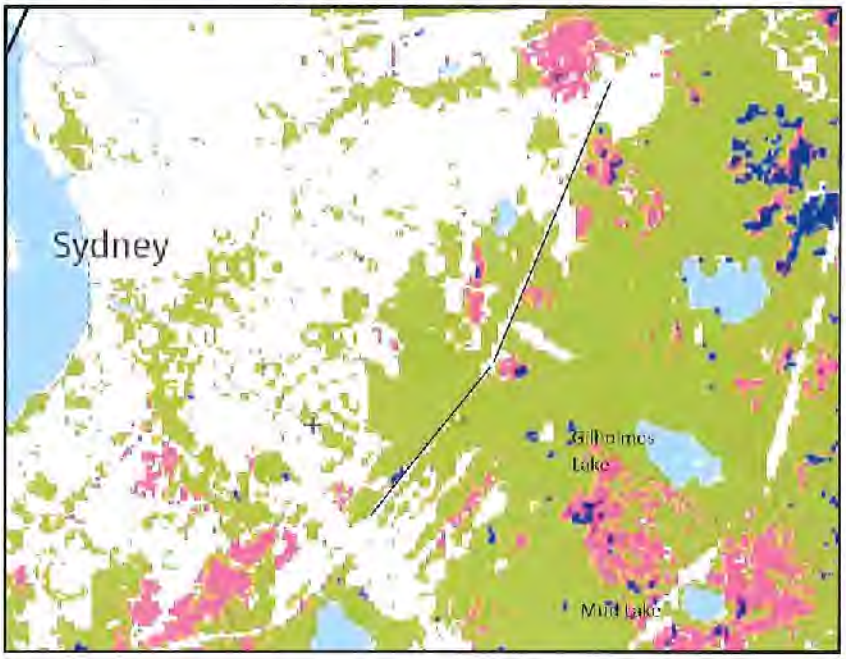

Figure 11: Forested areas (green) in the Wash Brook watershed. Note the polygons of red (>30% deforestation) are in Zone 4 above Highway 125 (black line). Screenshot from Global Forest Watch, January 8, 2020.

Because of the positive role of forested land in intercepting (the canopy), reducing (via evapotranpiration) and slowing (through infiltration into organic soils) water, a conservation plan for Zone 4 would be part of an overall integrative watershed management to reduce flood risk and to maintain watershed health. CBRM could consider making Zone 4 a municipal protected area or a regulated forestry zone open to selective cutting.

SECTION 5: BERMED STORAGE BELOW MUD LAKE

The objective of the CBCL bermed storage design for the Baille Ard Trail was to develop the capacity to store flood runoff in the event of an extreme storm. The selection of the Baille Ard Trail area has been questioned (see Section 6) for ecological and community recreation reasons. There is great concern over the possible impact of another rain event of the magnitude of the October 10, 2016 storm and with that in mind, possible sites should be considered above Highway 125.

The subwatershed of Mud Lake and Gilholmes Lake have high slope areas (e.g,. between the lakes, and above the Highway) and low slope areas. From a desk viewpoint, the flat area above Patnik Avenue presents as an area that could be bermed to store runoff. The advantage of this site is it can captures water runoff from a large area that includes the recently cleared zones (see Section 4). Areas above the yellow lines in Figure 12 could be investigated.

Figure 12. Possible areas between Mud Lake and Highway 125 to investigate for bermed wetlands to serve as storage for storm runoff.

SECTION 6: ECOLOGICAL LESSONS FROM THE BAILLE ARD FOREST –THE EDGE EFFECT

In Sections 2 and 3 there were many opportunities to restore storage and infiltration capability in the Wash Brook watershed. In general, planting trees is one of the best strategies because the trees promote evapotranspiration (water evaporates from their surfaces and they transpire), they make pores and channels in the soil that increases infiltration of water, and they develop organic soils that are sponges for water. In addition, trees are canopies over the brook and in the forest which will cool the brook waters. In Section 2, I promoted the use of rain gardens and bioswales and berms. Rain gardens and bioswales are used in Portland, Oregon, a municipality faced with an expensive refitting of its storm sewer but avoided this by infiltrating water in school yards, shopping malls and street sides. Berms were used at Dartmouth Crossing by fish biologist, Dr. Bob Rutherford, who slowed down the runoff to maintain healthy Speckled Trout populations. They were also used by East Coast Aquatics to slow down water on Brier Island and to create floodplains for Wood Turtles on the Sackville River.

As we redevelop and restore natural wetlands and artificial wetlands, we are trying to do what Baille Ard Trail wetlands are doing at present (Photo 21). The wetland areas of the Baille Ard Forest have multiple ecological functions to reduce flooding and provide cool water to the brook for Speckled Trout. This area needs to have a Wetland Delineation and a Functional Assessment of the importance of these wetlands because no one wants to lose these wetlands or their ecological role in slowing water and supporting the Wash Brook fish populations.

Photos 21 and 22. At left, 21, is a Cinnamon Fern Sphagnum moss swamp. At right, 22, is the stream with mature Eastern Hemlocks.

The Eastern Hemlock woodlands are a mark of undisturbed forest conditions. Nature areas at Kentville, Rockingham, Kejimkujic National Park and Truro all champion their old growth hemlock woodlands.

The Baille Ard Forest adds to the living experience of Sydney and the Save the Baille Ard Forest facebook group posts photos of woodland scenes. I visited on a cold rainy day and met 18 people over an hour's visit. Baille Ard Trail woods contain a mix of Eastern Hemlock, Red Maple, Sugar Maple, Red Spruce, White Pine, Tamarack, Black Spruce, Yellow and Paper Birch and poplars in a mosaic of streamside and backwaters, uplands, and imperfectly drained and wetland woods. This mosaic reflects differences in site productivity and wetness and natural disturbance. The woodland is in good condition. The state of Baille Ard Forest demonstrates it has ecological integrity and this means it does its job. It is a habitat for cavity nesting birds—woodpeckers, nuthatches— and Northern flying squirrels. Its backwaters are nurseries for Speckled Trout. Its wetlands store water and slowly release it to groundwater or the brook. The low light regime on the forest floor means old-growth tree types predominate rather than fast-growing shade intolerant trees.

Figure 2 shows the Baille Ard Trail and how the arrangement of berms (2m high by 4m wide) will reduce the core interior forest community in the berm area to three small Remant cores. It is known that edges increase light availabity over 30m and that edges have impact on nesting successess and behaviour of forest interior birds (e.g. Least Flycatchers) at 45m distances (Perry, 2008). It has also been shown that drainage impacts from fill can affect water table and the forest structure of swamps at a distance of 100m from the edge and that these effects may take more than a decade to develop (Hill et al., 2018). Due to "edge effect" (wind, drying out, high light, invasive species, erosion—Foreman, 1995), the value of the Baille Ard Forest would be lost if berms were installed: "Most species in the edge are common in the landscape. Typically no rare species in the landscape live in edges" (pg. 96, Forman, 1995). If the berms are put in, they will be colonized with fast-dispersing, animal-dispersed,, shrubs. There are small patches of the exotic and invasive *Rosa multiflora* (Hill and Blaney, 2011) in human disturbances along the trail. If the berms are put in, this species and Glossy Buckthorn (*Frangula alni*) would dominate and further change the appearance and the ecology of what is now an unusual and ecologically valuable, old forest. There needs to be a biodiversity assessment of this intact, high integrity forest.

The CBCL goal of slowing down and storing flood water is good and is the same as the community's and the CBRM's, but this is the right solution in the wrong place. Mature, high integrity forests are becoming rare and they are very rare next to an urban centre. The values of Baille Ard Forest are multiple. It slows down, evapotranspires, stores, cools and filters water. It provides a home for Northern Flying Squirrels and other cavity using wildlife because of the old trees.

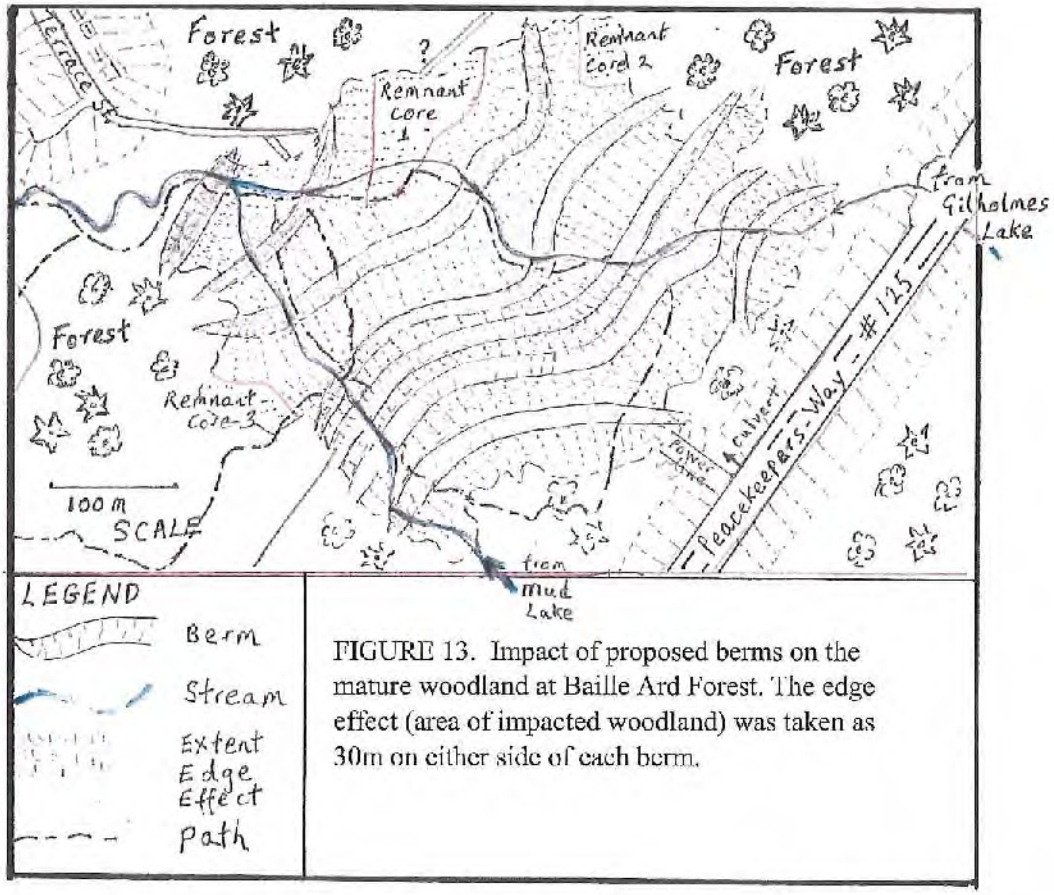

FIGURE 13. Impact of proposed berms on the mature woodland at Baille Ard Forest. The edge effect (area of impacted woodland) was taken as 30m on either side of each berm.

SECTION 7: ECOLOGICAL HEALTH OF WASH BROOK AND SPECKLED TROUT, BIOINDICATOR OF THE WATERSHED

The goalposts for flood reduction for Wash Brook are the same as those for keeping healthy trout

Photo 23 and 24. Measuring a juvenile trout (courtesy East Coast Aquatics) and photo from Saltscapes by Bob Bancroft

Cool, non-polluted, well-oxygenated were the waters of the original Wash Brook— good habitat for Speckled Trout. The streams coming out of the two lakes, Gilholmes and Mud, are rapid as they tumble down to the flatter slopes which now are the centre of Sydney—Centennial Arena and baseball fields. In this zone and on past Brookland School, water from long hillside street runs down pavement or through rubble, once wetland, into Wash Brook. This surface water is warmer than it was when it percolated through soil or wetland. Many of the bankside trees that used to shade the stream and evaporate its waters are now gone and pools heat up in summer. Despite this, the Speckled Trout has managed to hang on, aided by digger logs put across the stream that create pools and riffles; the pools provide habitat for spawning trout and the riffles encourage oxygenation of warming waters.

Restoring conditions for the brook trout will restore the brook ecosystem.

Tree shade will cool the pools so its waters hold more oxygen in summer. Tree roots will hold the bank together and prevent erosion of fine sediment that adversely affects trout eggs. Breaking up pavement in areas for rain gardens and bioswales will let water infiltrate to the soil and slow it down, filter it and keep it cool for fish and for reducing flood risk. Restoring wetlands will fill the wetland sponge, hold water, slow and filter it for fish and for reducing flood risk.

Keeping the Baille Ard Trail woods and stream backwaters will keep trees that transpire and cool water and provide energy for fish food. These woods and wetlands are another sponge, an area that infiltrates, cools water, feeds fish as tree leaves breakdown and has nursery pools out of the main current.

ACKNOWLEDGEMENTS

Thanks go to Mike Parker of East Coast Aquatics for discussions over bermed wetlands and potential for a bermed storage south of Highway 125; the idea was Mike's but the actual placement will need field surveying. Thanks also to Ian Manning, NSCC geomatics instructor at Lawrencetown, for help orthorectifying the 1947 map to Google Earth. Many thanks to the Baille Ard Trail community group for supporting and making this report possible. Dr. Jamie Gibson and colleague (DFO) helped shape my ideas on the Speckled Trout.

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3) PORTLAND https://www.portlandoregon.gov/bes/64040

CBRM

Clerk's Office

M·E·M·O

320 Esplanade Sydney, Nova Scotia, B1P 7B9 902-563-5010

To: Mayor Amanda M. McDougall and Members of Council

From: Deborah Campbell Ryan, Municipal Clerk

Date: August 1, 2021

Subject: Public Report: Citizen Appointments to various Committees

At the July 6, 2021 Council meeting, motions were passed approving the recommendations of the Nominating Committee for the appointment of citizens to the vacant positions on the Port of Sydney Development Corporation Board, and recommendations for the Cape Breton Island Housing Authority. Further, Council also approved the appointment of a citizen as a Community Member at Large on the Diversity Committee. This position had recently become vacant and the Nominating Committee instructed staff to reach out to another applicant from a recent call to ask if they were interested in re-offering. I reported to Council that said individual wanted to put their name forward once again. Copies of the motions are attached.

I would note that the successful applicants for the Port of Sydney Development Corporation Board and the Diversity Committee have accepted the positions and any required background checks are complete and in order.

With respect to the Cape Breton Island Housing Authority Board, the names were forwarded to the Nova Scotia Minister of Community Services with a request for approval of these appointments, however we have not yet received a response from the Minister. Once hear from that office, I will report same at a future Council meeting.

Therefore I am now providing Council with a public report on the successful candidates for the Port Board and Diversity Committee, as follows:

- **Port of Sydney Development Corporation Board of Directors (3-year term):**
  - *Expertise in Marketing*:
    > Lindsay MacIntosh (Candidate #6)

  - *Expertise in Business and Commerce*:
    > Gerard Shaw (Candidate #8)

Continued...

- **Diversity Committee (2-ycar term):**
  - *Community Member at Large*
    - Joe Costello

This is for information purposes only.

Original signed by:

Deborah Campbell Ryan, Municipal Clerk

Encl.

Report on Call for Expressions of Interest: Citizen Representatives on Committees

Port of Sydney Development Corporation:

Motion:
Moved by Councillor Eldon MacDonald, seconded by Councillor Gillespie, to appoint the following citizens to the Port of Sydney Development Corporation Board for a three-year term:

Expertise in Marketing

- Candidate #6

Expertise in Business and Commerce

- Candidate #8

Motion Carried.

Cape Breton Island Housing Authority:

Motion:
Moved by Councillor Gillespie, seconded by Councillor Eldon MacDonald, to approve the recommendation of the following citizens to the Nova Scotia Minister of Community Services for appointment to the Cape Breton Island Housing Authority Board for a three-year term:

- Candidate #1
- Candidate #3
- Candidate #4

Motion Carried.

Diversity Committee – Community Member at Large (vacancy):

Motion:
Moved by Councillor Gillespie, seconded by Councillor Green, to appoint the applicant as outlined in the staff Memo of June 28, 2021, to the Diversity Committee as a Community Member at Large for a two-year term.

Motion Carried.

Report on Call for Expressions of Interest – Citizen Representatives on Committees

Motion:

Moved by Councillor Paruch, seconded by Councillor Eldon MacDonald, that a recommendation be made to Council to appoint to:

- **Diversity Committee - Cape Breton University representative**
  - Candidate #1
- **Diversity Committee - Cape Breton-Victoria Regional Centre for Education representative**
  - Candidate #3
- **Port of Sydney Development Corporation Board – Professional Engineering Designation**
  - Candidate #4

Motion Carried.

CBRM

Clerk's Office

M·E·M·O

320 Esplanade Sydney, Nova Scotia, B1P 7B9 902-563-5010

To: Mayor Amanda M. McDougall & the Nominating Committee

From: Deborah Campbell Ryan, Municipal Clerk

Date: August 10, 2021

Subject: Report on Call for Expressions of Interest – Citizen Representatives on Commirtees

This report is in follow-up to the motions of the Nominating Committee on June 23, 2021 (copy attached) regarding the vacancies on the Diversity Committee and the Port of Sydney Development Corporation.

a) **Diversity Committee:**

Currently there are two vacancies on this Committee: one representative from Cape Breton University (CBU), and one representative from the Cape Breton-Victoria Regional Centre for Education (CBVRCE).

Shortly after the June 23rd meeting and before any call for citizens was issued, the CBVRCE submitted the name of an employee to serve as their representative on this Committee. They also recommended that CBRM may want to reconsider the process used for recruiting the representative from the CBVRCE on the Diversity Committee (i.e. should be appointed by the employer).

We also received expressions of interest from CBU before any notice was issued. There were three (3) applications received, however one later withdrew due to other commitments.

b) **Port of Sydney Development Corporation (PSDC) Board:**

There is one vacancy on the PSDC Board for an individual with a professional engineering designation for a two-year term.

As directed by the Committee, a second call was advertised on social media, and the Engineers Nova Scotia Association was contacted directly by this office. Engineers Nova Scotia notified their members of the CBRM volunteer vacancy and advised that they can put their name forward to serve on the PSDC Board if interested. The deadline for submissions was August 6, 2021.

Continued...

PSDC Board (Cont'd):

Further, the individual that contacted the CEO of the Port after the last posting deadline was contacted by myself and asked to submit a formal application if they are still interested in serving on that Board. The individual later indicated that they did not want to proceed with their application.

There were two (2) applications received for the individual with a professional engineering designation. However one applicant indicated they attended two years at our local University in the civil engineering technology program, but did not specify if they held a professional engineering designation. Therefore they were contacted by this office, asking for clarification on same. The individual contacted my office and indicated that they did not have the professional engineering designation required, therefore that applicant is not included in this report.

The matrix outlining the particulars of each applicant is attached separately.

Next Steps:

The Nominating Committee shall review the submissions in terms of suitability based on the responsibilities for each Committee and then forward their recommendations to Council for appointments to each Committee.

The applicants should be referenced by their number on the matrix only during discussions and in the motion to Council. Once they have accepted the appointments, their names will be publicly released at a future meeting of Council.

I would also recommend that the Committee instruct staff to draft possible amendments to the Diversity Committee Governance Policy that would enable representatives from CBVRCE (and CBU) to be appointed to the Committee by the employer rather than included in the general call for citizens from the other stakeholder groups. Further, CBRM should first re-confirm with those institutions that they, indeed, want to be part of this Committee.

Thank you.

Yours truly,

Original signed by:

Deborah Campbell Ryan, Municipal Clerk

Attachment

Report on Call for Expressions of Interest – Citizen Representatives on Committees

Diversity Committee (vacancies) – Cape Breton University and Cape Breton-Victoria Regional Centre for Education

Motion:
Moved by Councillor Eldon MacDonald, seconded by Councillor Parsons, that staff be directed to issue a fourth call for citizen volunteers to fill the vacant positions on the Diversity Committee [i.e. one representative from Cape Breton University (CBU), and one from the Cape Breton-Victoria Regional Centre for Education (CBVRCE)], which is to be advertised on social media only (i.e. no newspaper ad), and that both the CBU and CBVRCE be contacted directly requesting volunteer representatives for a two-year term.

Discussion:
During discussion, a question was raised by Councillor Paruch regarding amending the Governance Policy for the Diversity Committee to address quorum issues.

Motion Carried.

Port of Sydney Development Corporation – Professional Engineer Designation (vacancy)

Motion:
Moved by Councillor Gillespie, seconded by Councillor Paruch, that staff be directed to issue a second call for citizen volunteers to fill the vacancy for a professional engineering position on the PSDC Board, which is to be advertised on social media only (i.e. no newspaper ad), and that the Engineers Nova Scotia Association be contacted directly to ask that they notify their members who are residents of CBRM of the vacancy and advise that they can put their name forward to serve on the PSDC Board for a two-year term, if interested. Further, the individual that contacted the CEO of the Port regarding this vacancy should also be contacted to suggest submitting a formal application if they are interested in serving on that Board.

Motion Carried.

CAPE BRETON REGIONAL MUNICIPALITY

NOTICE

By-Law for Second (Final) Reading by Council

TAKE NOTICE that the following By-Law will be brought to Council for second (final) reading on **Tuesday, August 24th, 2021** at 6:00 p.m.

Due to the ongoing pandemic, the meeting will be closed to in-person public attendance. The meeting can be viewed live on the CBRM YouTube channel: https://www.youtube.com/c/CBRMGov/live

By-Law	Intent
T-300 - Provision of Tax Information By-law	• To prescribe charges for the provision of tax information to persons who use or benefit from the service

A copy of the proposed By-law can be obtained by contacting the Municipal Clerk's Department at 902-563-5010 or emailing: clerksoffice@cbrm.ns.ca

Anyone wishing to comment on the proposed By-Law amendments is welcome to submit a statement to the CBRM Finance Department no later than 4:00 p.m. on Friday, August 20, 2021, either by email: finance@cbrm.ns.ca; voicemail 902-563-5009; by Canada Post Mail or hand delivered to City Hall, 320 Esplanade, Sydney, NS B1P 7B9, and all comments must include the name and address of the submitter.

Signed: Deborah Campbell Ryan
Municipal Clerk
August 6, 2021

T-300 - Provision of Tax Information By-Law

PREAMBLE:

- WHEREAS Section 79 of the Municipal Government Act provides that subject to the approval of the Board for those services that are subject to the Public Utilities Act, the council may, by By-Law, prescribe charges for the services for persons who use or benefit from the service, on a basis to be set out in the By-Law; and

- **WHEREAS** the Cape Breton Regional Municipality (CBRM) receives a large number of requests for information regarding the status of property taxes from parties whom, after consideration, do not feel that they require the certainty of a tax certificate.

- **BE IT THEREFORE ENACTED** by the Council of the CBRM as follows.

1. SHORT TITLE

1.1. This bylaw shall be cited as the "Tax Information Bylaw".

2. DEFINITIONS

(a) "financial institution" means a an institution that provides financial services for its clients or members; includes banks, credit unions, trust companies, mortgage loan companies, insurance companies, pension fund companies, brokerage firms.
(b) "mortgage interest" means to be the holder of a loan that is secured against the property.
(c) "tax account statement" is a listing of all invoices and payments applied to the account during a defined period of time.
(d) "tax bill reprint" is a copy of the actual bill that was issued.
(e) "tax certificate" is an instrument issued by the Municipality that includes the property descriptors, the current taxes on the property, the total taxes due by the owner to the municipality and the liens have been levied on the property (i.e. local improvement loans, unsightly charges, etc.).

3. TAX INFORMATION

3.1–CBRM Staff will provide reasonable account information to taxpayers as requested over the telephone or in person at no charge. **No tax account information shall be given to any person other than the assessed owner, its officers or directors except upon payment of fees in accordance with the proposed structure ~~above~~ below).**

3.2 A nominal cost recovery fee will be charged for the provision of tax account information asked for by any party (in writing) in the following amounts:

a) A fee of $15.00 per tax account, per tax billing for the provision of tax information to financial institutions in relation to the payment of tax accounts in which they have a mortgage interest;
b) A fee of $10.00 for the provision of a tax bill reprint; this fee may be waived at the discretion of the Manager of Finance.
c) A fee of $10.00 for the provision of a tax account statement; this fee may be waived at the discretion of the Manager of Finance.
d) A fee of $30.00 for the provision of tax information under any other circumstance.

3.3 Information received through this process is not warranted (expressed or implied) nor certified by the CBRM.

3.4 Information pertaining specifically to the value of outstanding taxes and penalties on an account will only be provided, in these formats, to individual property owners and/or their financial/legal representatives who are in a position to participate in the management of the account. Other parties requiring this information, must apply for and be issued a Tax Certificate.

3.5 It is the sole responsibility of the party seeking the information to determine whether a Tax Certificate is necessary to suit their purposes.

PASSED AND ADOPTED by a majority of the whole of Council at a duly called meeting of the Cape Breton Regional Municipal Council held on _____

THIS IS TO CERTIFY that the attached is a true and correct copy of the Tax Information By-Law of the Cape Breton Regional Municipality as adopted by Council on _____.

_____
Deborah Campbell-Ryan, Clerk

Publication Date: _____

Fees for the Provision of Tax Information

Motion:
Moved by Councillor Green, seconded by Councillor Eldon MacDonald, to approve the proposed increases in tax information fees and approve first reading of "T-300 Provision of Tax Information By-Law."

Discussion:
During discussion Councillors shared their concerns regarding the fess being passed on to CBRM taxpayers.
Motion Carried.

CBRM A Community of Communities

Cape Breton Regional Municipality

ISSUE PAPER

Date: June 25, 2021

To: Mayor and Council
From: Jennifer Campbell, CPA, CA Chief Financial Officer

Re: Fees for the Provision of Tax Information

The Municipality receives a large number of requests for information regarding the status of property taxes. These include requests for tax certificates, bill reprints, account statements, and balance inquiries. CBRM's "Provision of Tax Information Policy" outlines approved fees for providing this information, however the fees have not been updated since the policy was initially adopted in 2003.

CBRM's current policy notes a nominal cost recovery fee for the provision of written tax account information. The costs associated with providing this information increase annually with respect to staff costs, postage, equipment costs and licensing fees for software, however the cost recovery fees have remained static. In order to arrive at a revised fee structure for council consideration, staff reached out to other municipal units to compare fees charged for like-information.

Financial Institutions:

Municipalities charge a fee per tax billing for the provision of tax information to financial institutions in relation to the payment of tax accounts in which they have a mortgage interest. In reviewing fee policies of Municipal units across the province, rates charged range from $7 to $20 per account per billing. CBRM's fee is $6. **Staff are proposing a fee increase to $15 per account per billing for the provision of tax information to financial institutions in order to align with fees charged by other municipalities.**

CBRM has on average 11,443 accounts whose tax payments are managed by mortgage companies. The fee increase would result in $103,000 in additional cost recovery for CBRM in 2021/22 (effective September billing). Subsequent year's billings would result in additional cost recoveries of approximately $206,000 annually thereafter.

Reprints/Account Statements:

Some municipalities' tax information policies specify fees for account statements and bill reprints. The intent of the fee is to prescribe a charge for services to persons who use or benefit from the service.

Such fees range from $5 - $30 per account. It is unclear whether the remaining municipal units simply do not charge a fee or simply require a tax certificate for this information.

CBRM is seeing an increase in the number of bill reprints, statements of account and professional firms requesting the same on behalf of their clients due to misplacement or poor record keeping. Currently there is no fee charged for these reproductions. While the majority are single account holders and not particularly time intensive, some requests can tie up staff resources for a significant amount of time and detract from their daily work.

CBRM issues tax bills twice per year and arrears notices after the due date of the final tax bill. The cost of tax bill distribution and arrears notices is in excess of $137,000 annually. A reprint fee would ensure those requesting reproduction and redistribution bear the cost of that service, while encouraging retention of the original documents.

Staff are requesting Council approve a statement and bill reprint fee of $10 per reprint for distribution via mail, email, fax or pickup. One-time fee exceptions may apply for property owners who did not receive their original bill, whether it be due to a change in address, changes in ownership, or returned/undeliverable mail. For every other instance, the $10 fee would apply. The $10 fee is limited to individual property owners or their representatives who are in a position to participate in the management of the account. Other parties requesting this information, must apply for and be issued a tax certificate or are subject to the alternative tax information fee described below.

It is difficult to estimate the incremental cost recovery associated with the reprint charge as it is dependent on volume, however an estimated 400 reprints annually would generate $4,000 – a nominal recovery given the demand on staff time associated with 400 reproductions. As mentioned, however, the desired outcome is for the fee to deter careless misplacement rather than a revenue/recovery source.

Other:

CBRM's Provision of Tax Information Policy stipulates a fee of $25 for "the provision of tax information under any other circumstance". Typically, this is for instances where information is sought from parties other than the property owner, such as legal representatives who, after consideration, do not feel that they require the certainty of a tax certificate. The fee was implemented when the policy was initially adopted in 2003, and has not been increased since its inception. **It is recommended that this fee be increased to $30, bringing CBRM's fee in line with other regional municipalities.**

Tax Certificates:

"Tax certificate" is an instrument issued by municipalities that includes the property descriptors, assessment information, the current taxes on the property, total taxes due by the owner to the municipality including arrears, and any liens that have been levied on the property. The fees for tax certificates vary considerably across municipalities ranging from $10-$75. CBRM's fee for tax certificates is $65 and was last increased by Council in 2008.

Given the length of time that has passed since the fee was reviewed, **staff propose increasing the fee for tax certificates to $75 to bring CBRM's fees in line with those charged by other regional municipalities.**

CBRM processes an average of 400 tax certificates annually. The proposed fee increase would result in additional revenues of $4,000 per year.

Section 79 of the Municipal Government states "subject to the approval of the Board for those services that are subject to the Public Utilities Act, the council may, by By-Law, prescribe charges for the services for persons who use or benefit from the service, on a basis to be set out in the By-Law". Therefore the policy details contained in the Provision of Tax Information Policy must be transitioned to a Provision of Tax Information Bylaw, which is included as part of the issue paper for review. Subsequent to bylaw approval, the Provision of Tax Information Policy will need to be repealed.

Summary of Recommendations:

1. Increase the fee to $15 per account per billing for the provision of tax information to financial institutions in order to align with fees charged by other municipalities;
2. Approval of a statement and bill reproduction fee of $10 per reprint;
3. Increase the fee for the provision of tax information other than those described above to $30, bringing CBRM's fee in line with other regional municipalities.
4. Increase the fee for tax certificates to $75 per account to bring CBRM's fees in line with those charged by other regional municipalities;

In order for the above changes to take effect, the following steps are required:

1) Approve the proposed By-law in accordance with the Municipal Government Act;

2) Repeal the current "Provision of Tax Information Policy" upon approval of the proposed ByLaw;

3) Pass resolution approving the revised Tax Certificate fee of $75.

Requested motion:

That Council approve the proposed increases in tax information fees and pass first reading of "T-300 Provision of Tax Information By-Law."

Council approve by resolution the revised fee for the issuance of Tax Certificates of $75.00.

Respectfully submitted,

Jennifer Campbell, CPA, CA
Chief Financial Officer

CAPE BRETON
REGIONAL MUNICIPALITY

ISSUE PAPER

TO: CBRM Council **DATE:** August 11, 2021

FROM: Director, Planning and Development

RE: **CBRM WILDLIFE FEEDING BYLAW REQUEST**

BACKGROUND

On June 30th, the Port Morien Wildlife Association submitted a request for a new bylaw to be introduced with the intent to regulate the feeding of wildlife in public parks and CBRM grounds (Appendix A). The association indicates that there is an ongoing issue with feeding waterfowl at John Bernard Croak Memorial Park in Glace Bay, impacting resident's use of the facility.

The *Municipal Government Act* (MGA) authorizes Council to adopt bylaws for municipal purposes, respecting wild and domestic animals and activities related to them. This would be required to prohibit the feeding of wildlife on CBRM properties.

DISCUSSION

Enforcement & Administration

To regulate wildlife feeding in CBRM a new bylaw would be needed, and a contractor or staff to administer and enforce it through regular patrols and/or complaint follow-up in CBRM parks and open spaces.

Non-regulatory options should be explored as a primary option to achieve any policy objective. If new regulation is deemed necessary, they should also be used to supplement new bylaws including public education and information sharing.

Financial Implications

CBRM does not currently have internal capacity to effectively enforce additional regulations. If Council is of the opinion that new regulation is necessary to prohibit wildlife feeding, staff and fleet additions would likely be needed to adequately enforce these regulations. A detailed budget could be provided prior to adoption of the bylaw.

Recommendation:

Given CBRM's current fiscal constraints, staff do not believe this is a priority service to be added at this time.

However, if Council is in support of fleet and staff additions to the 2022/2023 Budget:

1. CBRM staff initiate the By-Law Development Process (outlined in CBRM's By-Law Development Policy) to create regulations for wildlife feeding. This includes:

    1. Identify and consult with internal/external stakeholder groups;
    2. Draft preliminary strategy for review with internal & external clients;
    3. Establish applicable fines/fees;
    4. Identify associated internal costs for the strategy; and
    5. Administration and Council review final strategy.

Respectfully submitted by:

ORIGINAL SIGNED BY

Michael Ruus
Director, Planning and Development

PORT MORIEN WILDLIFE ASSOCIATION

P.O. BOX 6
568 SANDLAKE ROAD,
TOWER ROAD, NS
B1B 1J6

June 30, 2021

CAPE BRETON REGIONAL MUNICIPALITY
320 ESPLANADE
SYDNEY, NS B1P 7B9

Mayor and Council,

Request for Bylaw to be introduced.

Port Morien Wildlife Association passed a resolution on June 21,2021 to request CBRM to implement a bylaw regarding the feeding of wildlife in public parks and grounds within CBRM. This request is specific to CBRM public parks and grounds. So it doesn't encompass feeding birds at home bird feeders and hunting activities.

Currently, in many CBRM parks the general public believe they are doing a great thing by feeding wildlife and waterfowl. This Causes many issues that are well documented and can be read here on the Nova Scotia government website. https://novascotia.ca/natr/wildlife/living-with-wildlife/feeding-wildlife-full.asp

The Province of Nova Scotia doesn't have a law on feeding wildlife but many municipalities have introduced bylaws to prohibit this activity. Truro, Luneburg, New Glasgow and Yarmouth have these feeding bylaws in place. Some other areas with bylaws for not feeding Wildlife is the province of Saskatchewan that just enacted a no feeding law. BC has one related to feeding dangerous wildlife which was introduced in 2010.

Biologists have proposed changes to the department of Lands and Forestry since 2010 here in Nova Scotia but the government doesn't want the task of opening the current Wildlife Act. This change for feeding wildlife was asked to be covered in the current Biodiversity Act but the Provincial Government didn't move it forward. For this reason, many Municipalities are introducing a **No Feeding of Wildlife bylaw.**

Apart from the obvious diseases associated with wildlife and waterfowl that are more explained in the provincial wildlife link that we have attached, our request comes in response to issues that arose while building the Wheelchair Accessible Barrier Free Fishing Facility at John Bernard Croak Memorial Park in Glace Bay. This facility offers a space where people with barrier challenges can enjoy the sport of angling that many of us take for granted.

The closer we got to completing this project the more obvious it became that the domestication of wildlife in this area was a huge problem, with people feeding them daily. We contacted NS Department of Land & Forestry and were told there was nothing they could do and that our best course of action would be to request CBRM to enact a BYLAW to address the issue.

We asked for financial assistance from CBRM to purchase bird deterrents (Councillors, Parks & Recreation and Mayor McDougall) to no avail. We purchased two owl deterrents to aid in scaring off some of the nuisance birds that have crapped on our project. This doesn't address the goose problem that have killed the $2000.00 if newly place sods we laid, by feeding and defecating on them. (See attached photos). We have recently applied through the CBRM Sustainability Grant for funding to purchase deterrents to help us deal with this issue. As if this problem wasn't bad enough there is now a duck feeding station installed at this park. We are not aware who installed this but it is licensed by CBRM. The amount of goose droppings at this park is discouraging people from taking advantage of the Health & Wellness provided by being physically active participants of this beautiful park.

Jeff McNeill
President
Port Morien Wildlife Association

PORT MORIEN WILDLIFE ASSOCIATION

P.O. BOX 9
568 SANDLAKE ROAD,
TOWER ROAD, NS
B1B 1J6

June 22, 2021

CAPE BRETON REGIONAL MUNICIPALITY
320 ESPLANADE, 1ST FLOOR
SYDNEY, NS
B1P 7B9

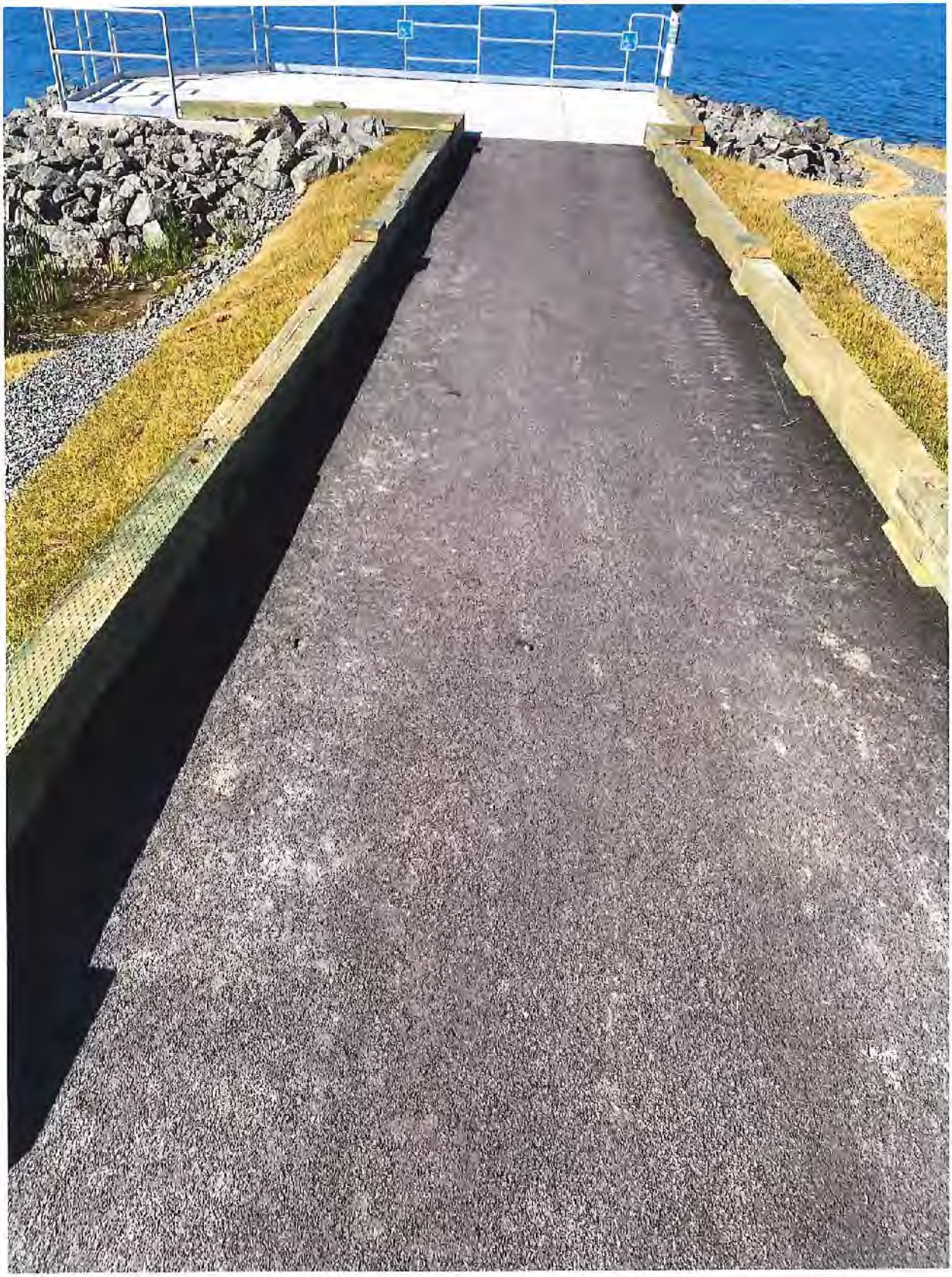
Wildlife Feeding Bylaw

CBRM Mayor & Councillors:

Please accept this resolution from our organization to request a Wildlife Feeding Bylaw for CBRM owned parks and recreation areas. Covid restrictions has hampered our ability to meet in person and as a result we have been conducting business like most of the rest of the province via Zoom Meetings.

During a Zoom meeting on June 21, 2021 with members of our organization, it was duly moved and seconded, that Port Morien Wildlife Association make a request for a Wildlife Feeding Restriction Bylaw. We would be very interested in working with the CBRM to develop a bylaw that can address this issue.

John Kennedy
Secretary PMWA




Help Keep our Duck Population
Healthy and Happy
To help address the conservation needs of waterfowl this machine dispenses the perfect healthy feed portion for only a Toonie.


$2

APPENDIX A – Port Morien Wildlife Association Submission


$2
LICENSED AUTOMATIC VENDING MACHINE
Cape Breton Regional Municipality
License Year 2021
LICENSE No. 0001

Revenue	Year To Date Assigned	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
Total Taxes	28,992,512	28,743,847	$ 248,665	$ 114,975,389	$ 85,982,877
Total Federal Government	825,336	825,336	-	3,301,346	2,476,010
Total Federal Government Agencies	190,684	190,684	-	762,734	572,050
Total Provincial Government	536,046	536,046	-	2,144,184	1,608,138
Total Provincial Government Agencies	845,117	847,631	(2,514)	3,390,524	2,545,407
Total Services to Other Local Government	239,171	239,171	(0)	956,685	717,514
Total Transit	92,298	146,250	(53,952)	1,255,000	1,162,702
Total Environmental Development Services	49,130	61,550	(12,420)	246,200	197,070
Total Licenses & Permits	29,927	37,750	(7,823)	151,000	121,073
Total Fines & Fees	134,617	213,767	(79,151)	855,070	451,667
Total Rentals	146,544	146,544	0	586,177	439,633
Total Concessions & Franchises	10,297	-	10,297	1,017,000	268,787
Total Interest on Taxes	354,586	378,750	(24,164)	1,515,000	1,160,414
Total Finance Revenue	8,905	5,625	3,280	22,500	13,595
Total Solid Waste Revenue	559,985	518,750	41,235	2,450,000	1,890,015
Total Recreation & Cultural Service Programs	77,843	131,761	(53,917)	1,071,000	1,999,860
Total Water Utility Charges	1,237,877	1,237,877	-	4,951,510	3,713,633
Total Unconditional Transfers	3,960,014	3,958,960	1,055	15,835,838	11,875,824
Total Conditional Transfers	16,238	16,238	-	125,000	108,762
Total Extraordinary Revenue	-	-	-	1,750,000	1,750,000
Year To Date Assigned	**$ 38,307,128**	**$ 38,236,538**	**$ 70,589**	**$ 157,362,157**	**$ 119,055,029**

Departmental

Reviewed

Summary

Statement of Expenditures

June 30, 2021

Expenditures	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
Legislative	$ 292,749	$ 372,986	$ 80,236	$ 1,505,992	$ 1,213,243
Administration	99,080	113,911	14,830	459,094	360,014
Finance	532,769	611,126	81,162	2,654,307	2,121,538
Legal	1,635,227	1,676,053	40,826	2,206,286	571,059
Human Resources	267,068	338,276	71,207	1,353,103	1,086,035
Technology & Communications	793,216	878,737	85,521	3,710,255	2,917,039
Municipal Clerk	104,689	116,990	12,301	523,783	419,094
Fiscal Services	5,917,498	5,991,886	74,388	32,662,089	26,744,591
Police Services	6,220,614	6,620,450	399,837	26,836,654	20,616,040
Fire Services (Incl EMO)	4,739,736	4,995,198	255,461	18,260,025	13,520,289
Engineering & Public Works	11,035,473	11,552,277	516,804	50,899,990	39,864,517
Planning	710,152	807,100	96,948	3,392,070	2,681,918
Facilities C200 & Arenas	671,962	840,194	168,232	3,724,475	3,052,513
Parks & Grounds	692,574	821,043	128,469	2,976,699	2,284,125
Buildings	741,713	860,418	121,663	3,441,674	2,699,961
Recreation	396,758	591,138	194,381	2,755,661	2,257,397
Total expended to date	$ 34,851,278	$ 37,187,782	$ 2,342,266	$ 157,362,157	$ 122,409,373

Departmental

Reviewed

Legislative	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 212,777	$ 258,545	$ 45,768	$ 1,049,929	$ 837,152
6010 BENEFITS	33,787	46,086	12,299	184,344	150,557
6030 TRAVEL/CONFERENCES	11,546	19,742	8,196	78,969	67,423
6040 PROF MEM/DUES & FEES	21,224	20,325	(899)	80,000	58,776
6050 OFFICE SUPPLIES	335	3,100	2,765	12,400	12,065
6060 OFFICE EQUIPMENT	2,443	1,750	(693)	5,000	2,557
6080 ADVERTISING	797	3,625	2,828	14,500	13,703
6100 COURIER	-	62	62	250	250
6110 TELEPHONE/FAX	2,975	6,225	3,250	24,900	21,925
6120 PUBL./SUBSCRIPTIONS	314	525	211	2,100	1,786
6130 COMPUTER HARDWARE	-	1,250	1,250	6,600	6,600
6150 MEETING EXPENSES	4,673	6,250	1,577	25,000	20,327
6170 PROMOTION	1,879	5,500	3,621	22,000	20,121
Total expended to date	**$ 292,749**	**$ 372,986**	**$ 80,236**	**$ 1,505,992**	**$ 1,213,243**

Departmental

Finance

Administration (CAO) Statement of Expenditures June 30, 2021

CAO	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 65,236	$ 68,854	$ 3,618	$ 279,612	$ 214,376
6010 BENEFITS	9,915	12,151	2,236	48,607	38,692
6020 TRAINING/EDUCATION	-	825	825	3,300	3,300
6030 TRAVEL/CONFERENCES	2,000	1,250	(750)	5,000	3,000
6040 PROF MEM/DUES & FEES	636	636	(0)	1,800	1,164
6050 OFFICE SUPPLIES	-	700	700	2,800	2,800
6080 ADVERTISING	-	-	-	-	-
6110 TELEPHONE/FAX	402	750	348	3,000	2,598
6120 PUBL./SUBSCRIPTIONS	-	119	119	475	475
6130 COMPUTER HARDWARE	-	-	-	-	-
6150 MEETING EXPENSES	421	1,125	704	4,500	4,079
6170 PROMOTION	47	1,250	1,203	5,000	4,953
8010 OPERATIONAL MAT/SUPP		-	-	-	-
8100 PROFESSIONAL SERVICE	20,422	26,250	5,828	105,000	84,578
Total expended to date	**$ 99,080**	**$ 113,911**	**$ 14,830**	**$ 459,094**	**$ 360,014**

Departmental

Finance

Finance	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 435,855	$ 488,245	$ 52,390	$ 1,955,897	$ 1,520,042
6010 BENEFITS	93,655	95,196	1,542	380,785	287,130
6020 TRAINING/EDUCATION	64	3,875	3,811	15,500	15,436
6030 TRAVEL/CONFERENCES	583	1,750	1,167	7,000	6,417
6040 PROF MEM/DUES & FEES	2,805	1,331	1,331	5,325	2,520
6050 OFFICE SUPPLIES	801	3,625	2,824	14,500	13,699
6060 OFFICE EQUIPMENT	63	2,625	2,562	10,500	10,437
6080 ADVERTISING	4,061	10,662	6,601	42,650	38,589
6090 POSTAGE	66,033	65,750	(283)	181,000	114,967
6100 COURIER	7,495	8,338	843	33,350	25,855
6110 TELEPHONE/FAX	5,530	4,025	(1,505)	16,100	10,570
6130 COMPUTER HARDWARE	-	-	-	13,050	13,050
6140 COMPUTER SOFTWARE	-	-	-	50,000	50,000
6180 COST RECOVERY	(113,429)	(106,250)	7,179	(325,000)	(211,571)
8010 OPERATIONAL MAT/SUPP	906	1,125	219	4,500	3,594
8100 PROFESSIONAL SERVICE	11,041	13,000	1,959	52,000	40,959
8110 CONTRACTS/AGREEMENTS	14,591	14,591	0	44,200	29,609
8120 LEASES	2,715	3,238	523	12,950	10,235
8180 TAX EXEMPT/WRITE OFF	-	-	-	140,000	140,000
Total expended to date	**$ 532,769**	**$ 611,126**	**$ 81,162**	**$ 2,654,307**	**$ 2,121,538**

Departmental

Finance

Legal

Statement of Expenditures

June 30, 2021

Legal	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 97,300	$ 104,258	$ 6,958	$ 417,034	$ 319,734
6010 BENEFITS	22,924	21,529	(1,395)	86,117	63,193
6020 TRAINING/EDUCATION	-	1,625	1,625	6,500	6,500
6030 TRAVEL/CONFERENCES	288	1,125	838	4,500	4,213
6040 PROF MEM/DUES & FEES	9,655	9,655	0	13,500	3,845
6050 OFFICE SUPPLIES	631	875	244	3,500	2,869
6060 OFFICE EQUIPMENT	719	1,050	331	4,200	3,481
6070 PHOTOCOPIER LEASE	372	875	503	3,500	3,128
6080 ADVERTISING	-	750	750	3,000	3,000
6100 COURIER	51	200	149	800	749
6110 TELEPHONE/FAX	833	850	17	3,400	2,567
6120 PUBL./STATUTES	4,893	4,900	7	13,000	8,107
6130 COMPUTER HARDWARE	-	875	875	3,500	3,500
6140 COMPUTER SOFTWARE	-	-	-	-	-
6150 MEETING EXPENSE	-	125	125	500	500
6160 LIABILITY INSURANCE	1,489,790	1,488,735	(1,055)	1,488,735	(1,055)
8100 PROFESSIONAL SERVICE	8,072	38,625	30,553	154,500	146,428
Total expended to date	**$ 1,635,227**	**$ 1,676,053**	**$ 40,826**	**$ 2,206,286**	**$ 571,059**

Departmental

Finance

Human Resources	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 199,413	$ 218,989	$ 19,576	$ 875,958	$ 676,545
6010 BENEFITS	48,694	47,449	(1,246)	189,795	141,101
6020 TRAINING/EDUCATION	509	2,462	1,954	9,850	9,341
6030 TRAVEL/CONFERENCES	515	4,375	3,860	17,500	16,985
6040 PROF MEM/DUES & FEES	292	500	208	2,000	1,708
6050 OFFICE SUPPLIES	1,817	3,750	1,933	15,000	13,183
6060 OFFICE EQUIPMENT	-	625	625	2,500	2,500
6080 ADVERTISING	-	750	750	3,000	3,000
6100 COURIER	-	-	-	-	-
6110 TELEPHONE/FAX	3,333	2,500	(833)	10,000	6,667
6120 PUBL./SUBSCRIPTIONS	-	750	750	3,000	3,000
6130 COMPUTER HARDWARE	-	1,500	1,500	6,000	6,000
6140 COMPUTER SOFTWARE	-	125	125	500	500
6150 MEETING EXPENSE	262	1,125	863	4,500	4,238
8010 OPERATIONAL MAT/SUPP		-	-	-	-
8100 PROFESSIONAL SERVICE	11,778	51,500	39,722	206,000	194,222
8110 CONTRACTS/AGREEMENTS	455	1,875	1,420	7,500	7,045
Total expended to date	**$ 267,068**	**$ 338,276**	**$ 71,207**	**$ 1,353,103**	**$ 1,086,035**

Departmental

Finance

Technology Including 911 Comm Centre

Statement of Expenditures

June 30, 2021

Technology/Communications	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 399,494	$ 546,677	$ 147,183	$ 2,186,707	$ 1,787,213
6010 BENEFITS	86,058	112,311	26,253	449,246	363,188
6020 TRAINING/EDUCATION	64	5,500	5,436	22,000	21,936
6030 TRAVEL/CONFERENCES	1,938	2,889	951	10,625	8,687
6040 PROF MEM/DUES & FEES	1,340	1,344	4	1,450	110
6050 OFFICE SUPPLIES	2,445	1,450	(995)	5,800	3,355
6060 OFFICE EQUIPMENT	-	3,250	3,250	13,000	13,000
6080 ADVERTISING	356	750	394	3,000	2,644
6100 COURIER	-	-	-	-	-
6110 TELEPHONE/FAX	28,394	36,800	8,406	147,200	118,806
6120 PUBL./SUBSCRIPTIONS	-	-	-	-	-
6130 COMPUTER HARDWARE	15,279	16,119	840	138,000	122,721
6140 COMPUTER SOFTWARE	111,513	111,634	121	375,177	263,664
6150 MEETING EXPENSE	-	250	250	1,000	1,000
7010 ELECTRICAL	560	2,413	1,853	9,650	9,090
7060 BLDG/FACILITY RENOV	4,797	-	(4,797)	-	(4,797)
7070 BLDG/FACILITY RENTAL	14,945	16,225	1,280	64,900	49,955
8010 OPERATIONAL MAT/SUPP	-	-	-	-	-
8040 COMM EQUIPMENT LINES	134	1,875	1,741	7,500	7,366
8100 PROFESSIONAL SERVICES	1,251	3,750	2,499	15,000	13,749
8110 CONTRACTS/AGREEMENTS	124,647	15,500	(109,147)	62,000	(62,647)
8120 LEASES SAP	0	-	(0)	95,000	95,000
8130 LICENSES/PERMITS	-	-	-	103,000	103,000
Total expended to date	**$ 793,216**	**$ 878,737**	**$ 85,521**	**$ 3,710,255**	**$ 2,917,039**

Departmental

Finance

Municipal Clerk		Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000	WAGES/SALARIES	$ 66,904	$ 71,327	$ 4,423	$ 285,307	$ 218,403
6010	BENEFITS	16,357	15,425	(932)	61,701	45,344
6020	TRAINING/EDUCATION	-	688	688	2,750	2,750
6030	TRAVEL/CONFERENCES	-	625	625	2,500	2,500
6040	PROF MEM/DUES & FEES	636	636	0	725	89
6050	OFFICE SUPPLIES	441	750	309	3,000	2,559
6060	OFFICE EQUIPMENT	-	1,000	1,000	4,000	4,000
6070	PHOTOCOPY SUPPLIES	3,542	6,000	2,458	24,000	20,458
6080	ADVERTISING	-	188	188	750	750
6100	COURIER	98	188	90	750	652
6110	TELEPHONE/FAX	613	750	137	3,000	2,387
6120	PUBL./SUBSCRIPTIONS	2,021	1,800	(221)	1,800	(221)
6130	COMPUTER HARDWARE	4,041	4,025	(16)	6,500	2,459
6140	COMPUTER SOFTWARE	9,964	9,964	0	12,500	2,536
6150	MEETING EXPENSES	73	3,625	3,552	14,500	14,427
8110	CONTRACTS/AGREEMENTS	-	-	-	100,000	100,000
Total expended to date		**$ 104,689**	**$ 116,990**	**$ 12,301**	**$ 523,783**	**$ 419,094**

Departmental

Finance

Fiscal Services	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
9010 INT SHRT TERM BORROW	$ 112,107	$ 145,732	$ 33,624	$ 582,927	$ 470,820
9020 INT ON DEBT	572,117	572,117	0	1,328,944	756,827
9051 PRINC ON DEBT	-	-	-	8,756,070	8,756,070
9052 DEBT/CAP BOND DISC	-	-	-	98,000	98,000
9090 BANK CHARGES	16,567	15,000	(1,567)	60,000	43,433
9200 ALLOWANCE FOR UNCOL. TAXES	-	-	-	800,000	800,000
9420 APPROP TO CAPITAL FUND	22,500	22,500	-	90,000	67,500
9430 APPROP TO B.I.D.C.	44,060	44,060	-	176,239	132,179
9600 PROV. CORRECTIONS	266,670	267,617	946.50	1,070,466	803,796
9610 CB REG. HOUSING	539,288	580,672	41,383.77	2,322,687	1,783,399
9620 REGIONAL LIBRARY	175,950	175,950	-	703,800	527,850
9630 CB/VIC. SCHOOL BOARD	3,820,522	3,820,522	-	15,282,089	11,461,567
9640 PROPERTY ASSESSMENT	347,717	347,717	-	1,390,867	1,043,150
Total expended to date	**$ 5,917,498**	**$ 5,991,886**	**$ 74,388**	**$ 32,662,089**	**$ 26,744,591**

Departmental

Finance

Police Services	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
GL 6000, 6010 , & 6011 WAGES & BENEFITS NET OF COST RECOVERY	$ 5,640,846	$ 5,898,707	$ 257,862	$ 23,594,829	$ 17,953,983
6020 TRAINING/EDUCATION	(2,738)	25,000	27,738	100,000	102,738
6030 TRAVEL/CONFERENCES	1,257	17,500	16,243	70,000	68,743
6040 PROF MEM/DUES & FEES	1,949	625	(1,324)	2,500	551
6050 OFFICE SUPPLIES	8,998	10,000	1,002	40,000	31,002
6060 OFFICE EQUIPMENT	11,930	11,250	(680)	45,000	33,070
6070 PHOTOCOPY SUPPLIES	2,985	4,500	1,515	18,000	15,015
6080 ADVERTISING	-	1,250	1,250	5,000	5,000
6090 POSTAGE & 6100 COURIER	2,511	3,750	1,239	15,000	12,489
6110 TELEPHONE/FAX	52,526	56,250	3,724	225,000	172,474
6120 PUBL./SUBSCRIPTIONS	27	1,500	1,473	6,000	5,973
6130 COMPUTER HARDWARE	32,709	38,750	6,041	155,000	122,291
6140 COMPUTER SOFTWARE	6,113	32,500	26,387	130,000	123,887
6150 MEETING EXPENSES	1,383	2,875	1,492	11,500	10,117
6170 PROMOTION	-	2,750	2,750	11,000	11,000
7000 HEAT	3,247	6,250	3,003	25,000	21,753
7010 ELECTRICAL	22,718	27,587	4,870	110,350	87,632
7020 WATER	1,646	2,500	854	10,000	8,354
7030 BLDG/FACILITY MAINT	17,568	20,750	3,182	83,000	65,432
7040 BLDG/FACILITY REPAIR	-	3,750	3,750	15,000	15,000
7060 BLDG/FACILITY RENOV	2,207	3,750	1,543	15,000	12,793
7070 BLDG/FACILITY RENTAL	8,895	6,250	(2,645)	25,000	16,105
7110 SECURITY	-	500	500	2,000	2,000
7500 VEH/EQUIP MAINT	430	12,005	11,575	48,020	47,590
7505 GASOLINE & DIESEL	95,368	101,250	5,882	405,000	309,632
7510 VEH/EQUIP REPAIRS	79,073	71,929	(7,143)	287,717	208,644
7530 VEH/EQUIP REPLACEMENT	16,261	16,500	239	580,000	563,739
7540 VEH/EQUIP RENTAL	-	500	500	2,000	2,000
7550 VEH/EQUIP TOWING	422	1,250	828	5,000	4,578
8000 OPERATIONAL EQUIP	26,754	33,750	6,996	135,000	108,246
8010 OPERATIONAL MAT/SUPP	42,341	33,750	(8,591)	135,000	92,659
8020 MAINTENANCE EQUIP	3,098	1,892	(1,205)	7,570	4,472
8090 UNIFORMS/CLOTHING	75,743	75,750	7	175,000	99,257
8100 PROFESSIONAL SERVICE	14,891	33,750	18,859	135,000	120,109
8110 CONTRACTS/AGREEMENTS	12,449	7,000	(5,449)	28,000	15,551
8125 MAJOR INVESTIGATIONS	16,720	32,292	15,572	129,168	112,448
8150 GRANTS/SUBS TO ORG	20,287	20,287	(0)	50,000	29,713
Total expended to date	**6,220,614**	**$ 6,620,450**	**$ 399,837**	**$ 26,836,654**	**$ 20,616,040**

Departmental

Finance

Police Services Statement of Revenue June 30, 2021

Police Services Revenue	Year to date Assigned	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
4751 RECORDS INQUIRIES	$ 27,431	$ 26,250	$ 1,181	$ 105,000	$ 77,569
5151 FINES	34,705	56,250	(21,545)	225,000	190,295
Total Revenue to date	**$ 62,136**	**$ 82,500**	**$ (20,364)**	**$ 330,000**	**$ 267,864**

Departmental

Finance

Fire Services Including EMO	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 1,450,718	$ 1,540,292	$ 89,574	$ 6,161,170	$ 4,710,452
6010 BENEFITS	335,876	316,238	(19,638)	1,264,950	929,074
6011 MISC. BENEFITS	1,996	6,723	4,728	26,892	24,897
6020 TRAINING/EDUCATION	3,574	41,279	37,705	165,115	161,541
6030 TRAVEL/CONFERENCES	1,216	10,650	9,434	42,600	41,384
6040 PROF MEM/DUES & FEES	7,025	6,521	(504)	12,082	5,057
6050 OFFICE SUPPLIES	1,791	3,025	1,234	12,100	10,309
6060 OFFICE EQUIPMENT	469	3,238	2,769	12,950	12,481
6080 ADVERTISING	331	1,337	1,007	5,350	5,019
6110 TELEPHONE/FAX	8,735	10,027	1,292	40,108	31,373
6120 PUBL./SUBSCRIPTIONS	-	675	675	2,700	2,700
6130 COMPUTER HARDWARE	-	2,877	2,877	11,507	11,507
6140 COMPUTER SOFTWARE	-	602	602	2,406	2,406
6150 MEETING EXPENSES	246	1,026	780	4,104	3,858
6170 PROMOTION	1,032	5,975	4,943	23,900	22,868
7000 HEAT	17,337	24,338	7,001	97,351	80,014
7010 ELECTRICAL	10,420	16,134	5,714	64,535	54,115
7020 WATER	8,000	7,431	(569)	29,727	21,727
7030 BLDG/FACILITY MAINT	15,298	13,433	(1,865)	53,729	38,431
7040 BLDG/FACILITY REPAIR	2,281	5,563	3,282	22,253	19,972
7060 BLDG/FACILITY RENOV	-	1,250	1,250	5,000	5,000
7500 VEH/EQUIP MAINT.	62,864	48,137	(14,727)	192,550	129,686
7505 GASOLINE/DIESEL	8,126	14,325	6,199	57,300	49,174
7510 VEH/EQUIP REPAIRS	-	1,000	1,000	4,000	4,000
7530 VEH/EQUIP REPLACEMENT	913	21,875	20,962	87,500	86,587
7550 VEH/EQUIP TOWING	482	-	(482)	-	(482)
7560 VEH/EQUIP GEN SUPPLY	6,142	4,000	(2,142)	16,000	9,858
8000 OPERATIONAL EQUIP	33,865	101,059	67,194	404,238	370,373
8010 OPERATIONAL MAT/SUPP	6,653	26,468	19,814	105,870	99,217
8020 MAINTENANCE EQUIP	-	12,829	12,829	51,316	51,316
8040 COMM EQUIPMENT LINES	1,095	1,095	-	4,380	3,285
8090 UNIFORMS/CLOTHING	16,782	19,944	3,162	79,777	62,995
8100 PROFESSIONAL SERVICE	1,336	2,135	799	8,538	7,202
8110 CONTRACTS/AGREEMENTS	17,665	22,659	4,994	90,638	72,973
8120 LEASES	32,326	27,705	(4,621)	110,821	78,495
8130 LICENSES/PERMITS	16,995	5,187	(11,808)	5,187	(11,808)
8150 GRANTS/SUBS TO ORG	899,050	899,050	0	1,904,997	1,005,947
8195 WATER SUPPLY & HYDR	1,769,098	1,769,096	(1.74)	7,076,384	5,307,286
Total expended to date	**$ 4,739,736**	**$ 4,995,198**	**$ 255,461**	**$ 18,260,025**	**$ 13,520,289**

Departmental

Finance

Engineering and Public Works Actuals to June 30, 2021

REVENUE	Actual & Committed Y-T-D June 30, 2021	Budget Y-T-D June 30, 2021	Variance Y-T-D June 30, 2021	Total Annual Budget	Annual Budget Remaining	% of Annual Budget
TRANSIT	$92,298	$138,750	$46,452	$1,255,000	-$1,162,702	7.35%
SOLIDWASTE TIP FEES	$559,985	$518,750	-$41,235	$2,075,000	-$1,515,015	26.99%
SOLIDWASTE COST RECOVERIES	$0	$0	$0	$375,000	-$375,000	0.00%
SEWER PERMIT FEES	$15,095	$25,000	$9,905	$100,000	-$84,905	15.09%
WATER UTILITY ADMIN FEE	$1,237,877	$1,237,877	$0	$4,951,510	-$3,713,633	25.00%
TOTAL PW REVENUES	$1,905,255	$1,920,377	$15,123	$8,756,510	-$6,851,255	21.76%
EXPENDITURES						
ADMINISTRATION	$902,603	$906,809	$4,207	$4,510,505	$3,607,902	20.01%
ENGINEERING	$189,872	$191,219	$1,347	$773,086	$583,214	24.56%
CENTRAL DIVISION	$1,541,852	$1,573,605	$31,753	$7,621,751	$6,079,899	20.23%
EAST DIVISION	$1,531,356	$1,617,837	$86,481	$6,981,988	$5,450,632	21.93%
NORTH DIVISION	$632,934	$694,400	$61,467	$3,294,402	$2,661,468	19.21%
SOLID WASTE	$3,446,766	$3,632,389	$185,623	$14,518,711	$11,071,945	23.74%
MECHANICAL FLEET	$850,892	$828,283	-$22,609	$3,648,634	$2,797,742	23.32%
TRANSIT	$1,372,922	$1,528,894	$155,972	$6,276,317	$4,903,395	21.87%
QUALITY CONTROL	$566,276	$578,839	$12,563	$3,274,596	$2,708,320	17.29%
TOTAL PW EXPENDITURES	$11,035,473	$11,552,277	$516,804	$50,899,990	$39,864,517	21.68%

Signature:

Director of Engineering & Public Works

Chief Financial Officer

Planning Department	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 316,569	$ 370,066	$ 53,496	$ 1,480,264	$ 1,163,695
6010 BENEFITS	74,609	79,941	5,332	319,764	245,155
6020 TRAINING/EDUCATION	-	4,375	4,375	17,500	17,500
6030 TRAVEL/CONFERENCES	245	2,750	2,505	11,000	10,755
6040 PROF MEM/DUES & FEES	1,879	2,200	321	8,800	6,921
6050 OFFICE SUPPLIES	3,359	4,375	1,016	17,500	14,141
6060 OFFICE EQUIPMENT	1,998	3,625	1,627	14,500	12,502
6080 ADVERTISING	3,614	5,375	1,761	21,500	17,886
6110 TELEPHONE/FAX	3,073	4,875	1,802	19,500	16,427
6120 PUBL./SUBSCRIPTIONS	-	200	200	800	800
6130 COMPUTER HARDWARE	1,302	2,625	1,323	10,500	9,198
6140 COMPUTER SOFTWARE	-	500	500	14,500	14,500
6150 MEETING EXPENSE	-	488	488	1,950	1,950
6170 PROMOTION	20,518	23,018	2,500	40,000	19,482
7130 DEMOLITIONS	-	-	-	120,000	120,000
8000 OPERATIONAL EQUIPMENT	568	8,250	7,682	33,000	32,432
8010 OPERATIONAL MAT/SUPP	2,085	1,000	(1,085)	4,000	1,915
8090 UNIFORMS / CLOTHING	337	2,000	1,663	8,000	7,663
8100 PROFESSIONAL SERVICE	16,238	17,738	1,500	131,000	114,762
8110 CONTRACTS/AGREEMENTS	29,200	37,950	8,750	432,992	403,792
8130 LICENSES/PERMITS	78,431	79,000	569	79,000	569
8135 REGULATORY FEES	29,875	30,500	625	41,000	11,125
8150 GRANTS /SUBS TO ORG	126,250	126,250	(0)	565,000	438,750
Total expended to date	**$ 710,152**	**807,100**	**$ 96,948**	**$ 3,392,070**	**$ 2,681,918**

Departmental

Finance

Planning

Statement of Revenue

June 30, 2021

	Year to date Assigned	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
Bylaw Revenue					
5112 Vendor Licenses	$ 2,735	$ 3,625	$ (890)	$ 14,500	$ 11,765
5113 Animal Licenses	3,829	2,750	1,079	11,000	7,171
5114 Taxi Licenses	1,769	4,500	(2,732)	18,000	16,232
5115 Vending Machine Licenses	-	1,875	(1,875)	7,500	7,500
5301 Parking Meter Revenue	11,213	70,000	(58,787)	280,000	268,787
Total Bylaw Revenue	$ 19,545	$ 82,750	$ (63,205)	$ 331,000	$ 311,455
Development / Plannning Revenue					
5496 Mapping Sales	$ -	$ 525	$ (525)	$ 2,100	$ 2,100
5495 Other Sales	1,183	1,025	158	4,100	2,918
5101 Building Permits	34,169	50,000	(15,831)	200,000	165,831
5102 Subdivision Fees	11,170	10,000	1,170	40,000	28,830
5103 Development Permits	-	-	-	-	-
Total Develop / Planning Rev	$ 46,521	$ 61,550	$ (15,029)	$ 246,200	$ 199,679
Total Bylaw / Dev / Planning Revenue	$ 66,067	$ 144,300	$ (78,233)	$ 577,200	$ 511,133

Departmental

Finance

Facilities (C200 / Arenas)

Statement of Expenditures

June 30, 2021

	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 287,210	$ 390,233	$ 103,023	$ 1,560,930	$ 1,273,720
6010 BENEFITS	63,060	74,636	11,577	298,545	235,485
6020 TRAINING	69	875	806	3,500	3,431
6030 TRAVEL/CONFERENCES	162	1,500	1,338	6,000	5,838
6040 PROF MEM/DUES & FEES	1,050	750	(300)	3,000	1,950
6050 OFFICE SUPPLIES	657	1,500	843	6,000	5,343
6060 OFFICE EQUIPMENT	-	500	500	2,000	2,000
6080 ADVERTISING	-	1,500	1,500	6,000	6,000
6100 COURIER	-	250	250	1,000	1,000
6110 TELEPHONE/FAX	5,327	5,125	(202)	20,500	15,173
6130 COMPUTER HARDWARE	-	750	750	3,000	3,000
6140 COMPUTER SOFTWARE	208	625	417	2,500	2,292
6150 MEETING EXPENSES	416	250	(166)	1,000	584
7000 HEAT	13,487	16,500	3,013	66,000	52,513
7010 ELECTRICAL	129,794	137,500	7,706	550,000	420,206
7020 WATER	9,531	10,625	1,094	42,500	32,969
7030 BLDG/FACILITY MAINT	10,376	21,250	10,874	85,000	74,624
7040 BLDG/FACILITY REPAIR	22,822	13,750	(9,072)	55,000	32,178
7060 BLDG/FACILITY REOV					
7070 BLDG/FACILITY RENTAL					
7080 PLANT MAINTENANCE	25,728	25,750	22	81,000	55,272
7110 SECURITY	26,318	27,500	1,183	110,000	83,683
7510 VEH/EQUIP REPAIRS	122	2,625	2,503	10,500	10,378
7540 VEH/EQUIP RENTAL	-	-	-	-	-
8000 OPERATIONAL EQUIPMENT	239	625	386	2,500	2,261
8010 OPERATIONAL MAT/SUPP	20,255	53,750	33,495	215,000	194,745
8050 COST OF SALES	32,930	30,450	(2,480)	507,500	474,570
8090 UNIFORMS/CLOTHING	365	2,250	1,885	9,000	8,635
8100 PROFESSIONAL SERVICE	3,916	6,625	2,709	26,500	22,584
8110 CONTRACTS/AGREEMENTS	17,922	12,500	(5,422)	50,000	32,078
Total expended to date	**$ 671,962**	**$ 840,194**	**$ 168,232**	**$ 3,724,475**	**$ 3,052,513**

Departmental

Finance

	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
GL 5001 Ice Rentals	$ 43,136	$ 43,136	$ -	$ 630,000	$ 586,864
GL 5002 Public Skating	801	250	551	1,000	199
GL 5004 Arena Rental	5,000	5,000	-	30,000	25,000
GL 5005 Gym Rental	-	-	-	20,000	20,000
GL 5006 Canteen Sales	2,890	-	2,890	500,000	497,110
GL 5009 Major Events	-	-	-	60,000	60,000
GL 5010 Other Revenue	7,406	-	7,406	517,000	509,594
GL 5033 Program Equipment	-	-	-	25,000	25,000
GL 5034 Facility Rentals	4,907	59,375	(54,468)	237,500	232,593
Total Revenue To Date	**$ 64,140**	**$ 107,761**	**$ (43,621)**	**$ 2,020,500**	**$ 1,956,360**

Departmental

Finance

Parks and Grounds Operations

Statement of Expenditures

June 30, 2021

Parks & Grounds	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 339,491	$ 402,351	$ 62,860	$ 1,609,402	$ 1,269,911
6010 BENEFITS	79,867	89,024	9,158	356,097	276,230
6011 MISC BENEFITS	2,985	625	(2,360)	2,500	(485)
6020 TRAINING/EDUCATION	-	1,625	1,625	6,500	6,500
6030 TRAVEL/CONFERENCES	2,508	3,188	679	12,750	10,242
6040 PROF MEM/DUES & FEES	-	50	50	200	200
6050 OFFICE SUPPLIES	196	375	179	1,500	1,304
6060 OFFICE EQUIPMENT	-	250	250	1,000	1,000
6080 ADVERTISING	-	-	-	-	-
6110 TELEPHONE/FAX	2,166	2,125	(41)	8,500	6,334
6130 COMPUTER HARDWARE	-	62	62	250	250
7000 HEAT	1,078	1,350	272	5,400	4,322
7010 ELECTRICAL	11,467	19,375	7,908	77,500	66,033
7020 WATER	3,487	6,250	2,763	25,000	21,513
7030 BLDG/FACILITY MAINT	673	1,250	577	5,000	4,327
7040 BLDG/VACILITY REPAIR	-	-	-	-	-
7060 BLDG/FACILITY RENOV	-	-	-	-	-
7080 PLANT MAINTENANCE	-	-	-	8,500	8,500
7110 SECURITY	-	2,125	2,125	-	-
7510 VEH/EQUIP REPAIRS	15	275	260	1,100	1,085
7530 VEH/EQUIP REPLACEMENT	-	6,250	6,250	25,000	25,000
7540 VEH/EQUIP RENTAL	-	3,750	3,750	15,000	15,000
8000 OPERATIONAL EQUIP	43,079	28,000	(15,079)	28,000	(15,079)
8010 OPERATIONAL MAT/SUPP	133,368	133,368	(0)	350,000	216,632
8020 MAINTENANCE EQUIP	18,471	20,000	1,529	40,000	21,529
8040 COMM EQUIP LINES (GPS)	2,672	2,500	(172)	10,000	7,328
8080 STREET LIGHTS	144	1,375	1,231	5,500	5,356
8090 UNIFORMS/CLOTHING	1,335	3,000	1,665	12,000	10,665
8100 PROFESSIONAL SERV	-	1,250	1,250	5,000	5,000
8110 CONTRACTS & AGRMNT	49,571	91,250	41,679	365,000	315,429
Total expended to date	**692,574**	**$ 821,043**	**$ 128,469**	**$ 2,976,699**	**$ 2,284,125**

Departmental

Finance

Building Operations

Statement of Expenditures

June 30, 2021

Buildings	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
6000 WAGES/SALARIES	$ 322,284	$ 350,949	$ 28,665	$ 1,403,798	$ 1,081,514
6010 BENEFITS	73,827	79,269	5,442	317,076	243,249
6020 TRAINING/EDUCATION	169	1,063	893	4,250	4,081
6030 TRAVEL/CONFERENCES	-	313	313	1,250	1,250
6040 PROF MEM/DUES & FEES	-	-	-	-	-
6050 OFFICE SUPPLIES	139	250	111	1,000	861
6060 OFFICE EQUIPMENT	812	625	(187)	2,500	1,688
6110 TELEPHONE/FAX	5,518	2,200	(3,318)	8,800	3,282
6130 COMPUTER HARDWARE	-	750	750	3,000	3,000
6140 COMPUTER SOFTWARE	-	1,625	1,625	6,500	6,500
7000 HEAT	20,654	25,000	4,346	100,000	79,346
7010 ELECTRICAL	111,596	126,875	18,236	507,500	395,904
7020 WATER	6,258	7,125	867	28,500	22,242
7030 BLDG/FACILITY MAINT	1,253	10,625	9,372	42,500	41,247
7040 BLDG/VACILITY REPAIR	-	-	-	-	-
7060 BLDG/FACILITY RENOV	14,871	25,000	10,129	100,000	85,129
7070 BLDG/FACILITY RENTAL	49,843	50,750	907	203,000	153,157
7080 PLANT MAINTENANCE	-	3,875	3,875	15,500	15,500
7100 MAINT. TOOLS/EQUIP	196	875	679	3,500	3,304
7110 SECURITY	28,854	31,000	2,146	124,000	95,146
7120 PROPERTY TAXES	13,613	9,125	(4,488)	36,500	22,887
7540 VEH/EQUIP RENTAL	-	625	625	2,500	2,500
8000 OPERATIONAL EQUIP	-	625	625	2,500	2,500
8010 OPERATIONAL MAT/SUPP	17,874	30,125	12,251	120,500	102,626
8020 MAINTENANCE EQUIP	95	750	655	3,000	2,905
8040 COMM EQUIP LINES (GPS)	939	1,000	61	4,000	3,061
8090 UNIFORMS/CLOTHING	1,081	1,625	544	6,500	5,419
8100 PROFESSIONAL SERVICE	11,784	20,000	8,216	80,000	68,216
8110 CONTRACTS/AGREEMENTS	45,051	62,500	17,449	250,000	204,949
8120 LEASES	-	625	625	2,500	2,500
8130 LICENSES/PERMITS	-	250	250	1,000	1,000
8150 GRANTS/SUBS TO ORG	15,000	15,000	-	60,000	45,000
Total expended to date	**$ 741,713**	**$ 860,418**	**$ 121,663**	**$ 3,441,674**	**$ 2,699,961**

Departmental

Finance

Recreation Cultural Services — Statement of Expenditures — June 30, 20201

Recreation/Cultural Services	Year to date Expended	3 Month Budget	3 Month Budget Variance	Annual Budget	Annual Budget Remaining
GL 6000, 6010, & 6011 Wages & Benefits Including Summer Students	$ 198,975	$ 301,641	$ 102,666	$ 1,206,566	$ 906,085
6020 TRAINING/EDUCATION	17	4,000	3,983	16,000	15,983
6030 TRAVEL/CONFERENCES	1,424	6,250	4,826	25,000	23,576
6040 PROF MEM/DUES & FEES	-	875	875	3,500	3,500
6050 OFFICE SUPPLIES	653	1,500	847	6,000	5,347
6060 OFFICE EQUIPMENT	825	2,000	1,175	8,000	7,175
6080 ADVERTISING	665	17,500	16,835	70,000	69,335
6110 TELEPHONE/FAX	2,216	2,750	534	11,000	8,784
6120 PUBL./SUBSCRIPTIONS	54	50	(4)	200	146
6130 COMPUTER HARD/SOFTWARE	0	1,750	1,750	7,000	7,000
7070 BLDG/FACILITY RENTAL	9,339	3,833	(5,506)	15,333	5,994
8000 OPERATIONAL MAT/SUPPLY	45,303	43,750	(1,553)	175,000	129,697
8025 COMMUNITY EVENTS	15,797	83,750	67,953	335,000	319,203
8150 SCHOLORSHIPS	20,000	20,000	-	20,000	-
8160 SPECIAL EVENTS & FESTIVALS	-	-	-	356,562	356,562
8170 OPERATING GRANTS POLICY	101,489	101,489	(0)	500,500	399,011
Total expended to date	**$ 396,758**	**$ 591,138**	**$ 194,381**	**$ 2,755,661**	**$ 2,257,397**

Departmental

Finance

Recreation / Cultural Services

Statement of Revenue

June 30, 2021

Recreation/Cultural Services			Variance		Remaining
5031 PROGRAM REVENUE	$ 24,000	$ 24,000	$ -	$ 30,000	$ 6,000
5034 FACILITY RENTALS	4,907	59,375	(54,468)	7,500	2,593
Total Revenue To Date	**$ 28,907**	**$ 83,375**	**$ (54,468)**	**$ 37,500**	**$ 8,593**

Departmental

Finance

Cape Breton Regional Municipality Water Utility
Statement of Operations - period ending June 30th, 2021

	Actual June 30th, 2021	Budget June 30th, 2021	Variance June 30th, 2021	Total Annual Budget 2021-2022
Revenue				
Operating:				
Metered Sales	4,830,311	4,804,655	25,657	19,218,618.97
Public Fire Protection	1,769,098	1,769,098	-	7,076,391.00
Interest on Overdue Accounts	145,011	87,500	57,511	350,000.00
Other Operating Revenue	2,150	16,500	(14,350)	66,000.00
Total Operating Revenue	6,746,571	6,677,752	68,818	26,711,010
Expenditures				
Operating Expenses				
Souce of Supply	86,643	133,035	46,392	532,140.18
Power and Pumping	436,398	490,661	54,263	1,962,642.17
Water Treatment	999,645	1,212,511	212,866	4,850,044.00
Transmission & Distribution	1,082,409	1,215,752	133,343	4,863,008.15
Administration & General	1,100,059	832,082	(267,977)	3,328,327.00
Depreciation	962,500	962,500	-	3,850,000.00
Taxes	497,049	505,075	8,026	2,020,300
Total Operating Expenses	5,164,703	5,351,615	186,913	21,406,462
Operating Profit/(Loss)	**1,581,868**	**1,326,137**	**255,731**	**5,304,548**

Cape Breton Regional Municipality Water Utility
Statement of Operations - period ending June 30th, 2021

	Actual June 30th, 2021	Budget June 30th, 2021	Variance June 30th, 2021	Total Annual Budget 2021-2022
Non Operating Revenue				
Debt Charge Income	-	-	-	-
Interest Income	-	-	-	-
Amorization of Deferred Capital contribution	70,293	70,293	0	281,171
Total Non Operating Revenue	70,293	70,293	0	281,171
Non Operating Expenses				
Short term interest charges	50,507	50,508	0	202,030.00
Debt Charges				
Principal	891,125	891,125	0	3,564,500.00
Interest	309,788	266,461	(43,327)	1,065,842.00
Amortization of Debt Discount	8,136	8,000	(136)	32,000.00
Capital Expenditures out of operations	312,500	312,500	(0)	1,250,000.00
Total Non Operating Expenses	1,572,057	1,528,593	(43,464)	6,114,372
Non- Operating Profit/(Loss)	**(1,501,764)**	**(1,458,300)**	**(43,464)**	**(5,833,201)**
TOTAL UTILITY REVENUES (OPERATING & NON-OPERATING)	6,816,863	6,748,045	68,818	26,992,181
TOTAL UTILITY EXPENSES (OPERATING & NON-OPERATING)	6,736,759	6,880,208	143,449	27,520,834
CBRM WATER UTILITY PROFIT/(LOSS)	**80,104**	**(132,163)**	**212,267**	**(528,653)**

Prepared by Amanda R. Carroll

Review by _____

Date _____

Port of Sydney Development Corporation

July 31, 2021 Income Statement

	This Year Actual	This Year Budget	Variance to Budget	Annual Budget
Wharfage and Berthage	136,451.09	105,095.00	31,356.09	360,941.00
Event Revenue	9,690.76	25,150.00	(15,459.24)	48,400.00
Miscellaneous Reveue	3,693.16	850.00	2,843.16	4,850.00
Storage and Rental	46,104.76	50,847.74	(4,742.98)	133,817.00
Passenger tax	0.00	0.00	0.00	0.00
Security/Traffic Control	20,469.33	18,617.25	1,852.08	57,465.00
Government Grants	40,655.00	10,000.00	30,655.00	20,000.00
Craft Market Revenue	0.00	0.00	0.00	0.00
	257,064.10	210,559.99	46,504.11	625,473.00
Wages	151,162.88	178,583.14	(27,420.26)	515,906.89
Benefits	47,655.94	34,922.46	12,733.48	100,887.11
Professional Fees	48,990.00	8,350.00	40,640.00	35,200.00
Advertising & Promotions	1,624.95	3,700.00	(2,075.05)	10,610.00
Cruise Activities	(1,705.88)	4,000.00	(5,705.88)	17,650.00
Dues & Membership Fees	3,273.37	13,237.00	(9,963.63)	39,226.00
Event Expense	89.76	0.00	89.76	2,600.00
Insurance	17,034.94	13,600.00	3,434.94	53,300.00
Interest & Bank Charges	889.02	1,000.00	(110.98)	3,270.00
Office & Admin	885.24	2,483.00	(1,597.76)	7,787.00
Office Rent	17,440.00	17,440.00	0.00	52,320.00
Miscellaneous	905.00	1,400.00	(495.00)	4,200.00
Repairs & Maintenance	28,728.52	47,603.00	(18,874.48)	124,331.00
Repairs -JHCP	5,245.80	10,000.00	(4,754.20)	10,000.00
Travel	0.00	1,000.00	(1,000.00)	4,000.00
Utilities	27,867.76	45,960.00	(18,092.24)	157,880.00
Bad Debts	1,610.00	500.00	1,110.00	1,000.00
Security Expense	13,321.71	16,903.00	(3,581.29)	43,326.00
Leasehold Improvements	0.00	10,000.00	(10,000.00)	10,000.00
	365,019.01	410,681.60	(45,662.59)	1,193,494.00
	(107,954.91)	(200,121.61)	92,166.70	(568,021.00)
Less Amortization	(133,333.32)	(133,333.32)	0.00	(400,000.00)
	(241,288.23)	(333,454.93)	92,166.70	(968,021.00)