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Policy & Strategy Committee Meeting AGENDA

Tuesday, February 21, 2023 – 9:00 a.m.

Council Chambers, 10 Allée Champlain Drive Cookville NS

- 1. Call to Order**
- 1.1 Mi'kma'ki Territorial Acknowledgement
- 2. Announcements, Acknowledgements, Recognition**
- 3. Approval of Agenda**
- 4. Approval of Minutes of January 17, 2023 (as circulated)**
- 5. Business Arising from Minutes - Nil**
- 6. Presentations**
- 6.1 Accessibility Act Update 10:15 a.m. 1-9
- 7. Consideration of Correspondence**
- 7.1 Diocesan Environmental Network (DEN) – EV Charging Stations10
- 8. Referral from Council Staff Reports - Nil**
- 9. Staff Reports**
- 9.1 Planning Department**
- 9.1.1 Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project & Carbon 11-53
Offset Credit System
- 9.2 Administration Department**
- 9.2.1 Canadian Lyme Disease Research Network Request 54-55
- 9.2.2 Municipal Response to Dry Wells 56-62
- 9.3 Finance Department**
- 9.3.1 Hydrant Charge Proposed Policy 63-74
- 9. Mayor's/Deputy Mayor's/Councillors' Matters**
- 10. Added Items**
- 11. In Camera - Nil**
- 12. Adjournment**

Accessibility Act Update to the Municipality of the District of Lunenburg

Accessibility Directorate
Dawn Stegen, Executive Director
Terri Lynn Almeda, Manager
February 21, 2023

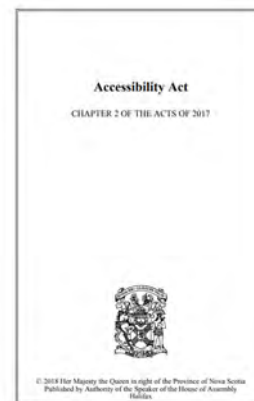


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Nova Scotia Accessibility Act

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- Passed on September 18, 2017
- 3rd province in Canada to have accessibility legislation
- Set a goal of an accessible province by 2030
- Prevent and remove barriers in:
 - Built Environment
 - Education
 - Employment
 - Goods and Services
 - Information and Communication Technology
 - Public Transportation and Transportation Infrastructure



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Since 2017...

- Access by Design 2030 released
- Standards Development underway
- Accessibility Awareness Campaign began
- Prescribed public sector bodies
- Several resources developed
- Collaborative grants provided
- Compliance and enforcement framework developed
- Several research and data products created
- Accessibility Act Review began
- Government of Nova Scotia Accessibility Plan – 2 three-year plans released



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NOVA SCOTIA

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Access By Design 2030

The framework for how the province will achieve our goal of an accessible Nova Scotia by 2030 and identifies priorities for this work.

- Standards Development (6)
- Awareness and Capacity Building
- Collaboration and Support
- Compliance and Enforcement
- Monitoring and Evaluation
- Government Leading by Example

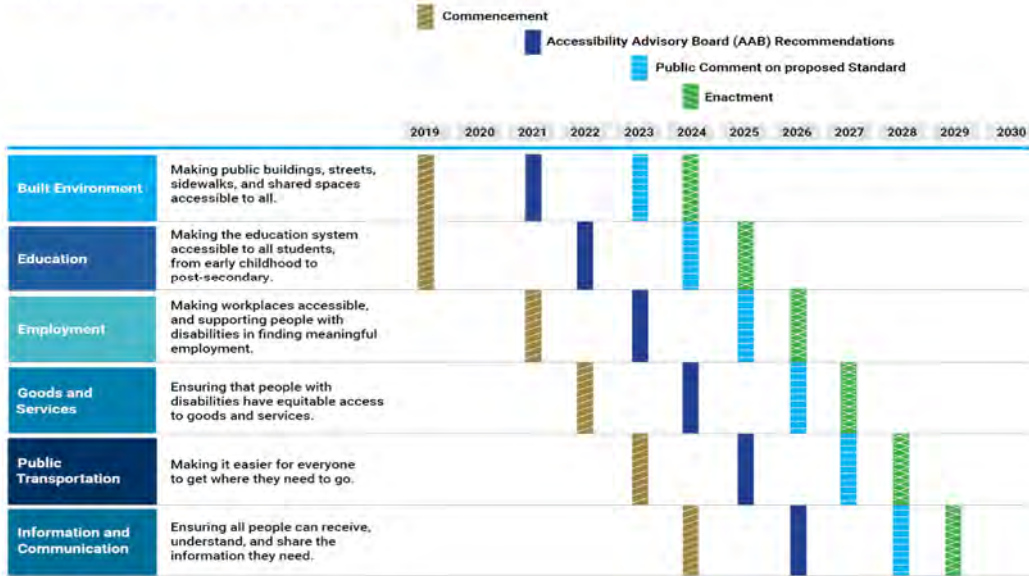


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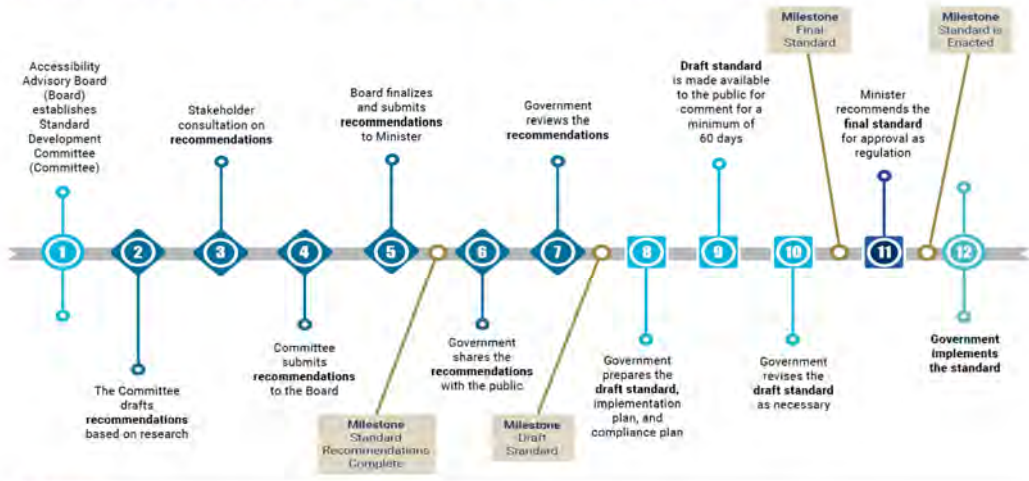
NOVA SCOTIA

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Standards Development



Standards Development & Implementation Process



Definitions

Standard - A set of rules that government, businesses and other organizations must follow

Accessibility Advisory Board - A group of community members who have been appointed to the Board provide advice and recommendations to the Minister of Justice about ways to make Nova Scotia accessible. Most of the members are people with disabilities.

Standard Development Committee - A group of experts from the community and government who have experience in areas like architecture, urban planning, engineering, and accessibility. Most of the members are people with disabilities.



Standard Development – Built Environment 7

- 2019 - 2021: Standard Development Committee prepared recommendations in two phases
- 2020 & 2021: Recommendations were submitted to the Minister of Justice for development into an accessibility standard.
- ➔ ➤ 2021 - 2023: Interdepartmental Working Group drafting standard, implementation plan, and compliance plan
- Late Spring 2023: Post publicly for comment (min. 60 days)
- 2024 onward: Standard is enacted and implemented.



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Standard Development 8

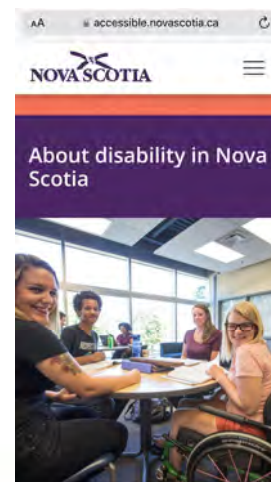
- Education Standard Development Committee preparing recommendations in two phases
 - First phase submitted to Minister in 2020, second phase submitted January 2023
- Employment Standard Development committee established and working on recommendations
- Goods and Services Standard Development Committee recruitment closing February 10, membership will be announced in spring
- Two remaining standards to start over next two years
 - Public Transportation and Transportation Infrastructure
 - Information and Communication Technology



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Awareness and Capacity Building

- Stigma and attitudinal barriers
- **Access includes everyone** public awareness campaign
- Increase awareness of accessibility, barriers and human rights
- Media
 - Television
 - Social media
 - Digital media
- Website: accessible.novascotia.ca



Awareness and Capacity Building

- Photography campaign across the province – in Bridgewater, Chester and Liverpool in January
- Working together to promote:
 - Access Awareness Week (May/June)
 - Disability Employment Awareness Month (October)
 - International Day of Persons with Disabilities (December 3)
- Evaluation and planning for next steps in the campaign



Collaboration and Support

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- Virtual Gatherings and Resources:
 - Introduction to Disability
 - Disability in the Workplace
 - Engaging with Persons with Disabilities
 - *Introduction to Accessibility Barriers*
 - *Accessibility Foundations Training*
- Grants to support capacity building
 - Partnership with AMANS
 - MSVU and NSCC
- Supporting other initiatives
 - CarShare Atlantic/ Communauto
 - Nova Ramp Up



Disability in the workplace

Candace Thomas, Deputy Minister of Justice, hosted a panel conversation on **Disability in the Workplace** for provincial Access Awareness Week 2022 and Nova Scotia Public Service Week. This conversation features the experiences of employees with disabilities and what workplaces can do to be more inclusive.



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Collaboration and Support

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Funding Opportunities

- Accessibility-specific funding opportunities
 - Community ACCESS-ability Grant Program (Provincial)
 - Business ACCESS-ability Grant Program (Provincial)
 - Accessible Transportation Assistance Program (Provincial)
 - Enabling Accessibility Fund (Federal)
- Other Funding opportunities
 - Sustainable Communities Challenge Fund (Provincial)
 - Incorporating accessibility into other funding opportunities

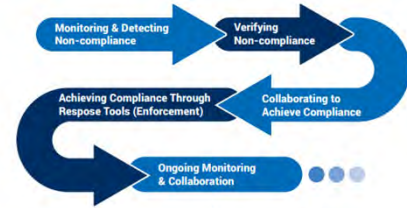


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Compliance and Enforcement

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- Accessibility Act includes requirements to monitor and enforce compliance
- Compliance Framework **developed collaboratively**
- Emphasis on **education and awareness**
 - Supporting organizations to comply
- Enforcement measures may be used :
 - If collaborative efforts do not result in compliance
 - Orders, Administrative Penalties, Summary Conviction



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Accessibility Plans - Cohort 1

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- Cohort 1 (90 prescribed public sector bodies)
 - 70 Municipalities
 - 11 Post-Secondary
 - 9 Libraries
- Plan status (as of January 2023)
 - 76 (84%) have developed accessibility plans
 - 14 (16%) have not completed plans
 - 12 of the 14 have indicated their plans will be completed by May 2023
- Municipalities and Villages
 - 55 of 70 (79%) have completed plans
 - 34 of 55 (62%) of municipalities and villages created joint plans

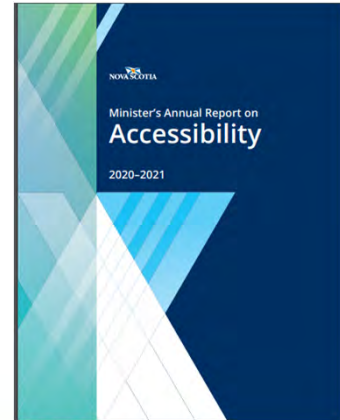


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Evaluation and Monitoring

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- Minister's Annual Reports
- Accessibility Act Review Report in March
- PPSB Evaluation Tools – MERL Working Group
- Annual Public Opinion Survey
- Quality of Life Index – Engage Nova Scotia and NSLEO

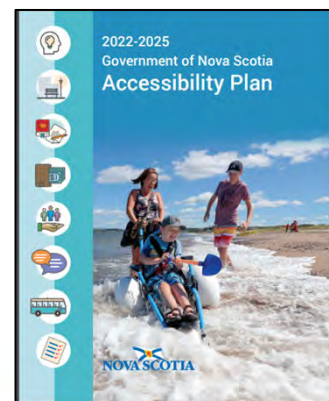


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Government of Nova Scotia – Leading by Example

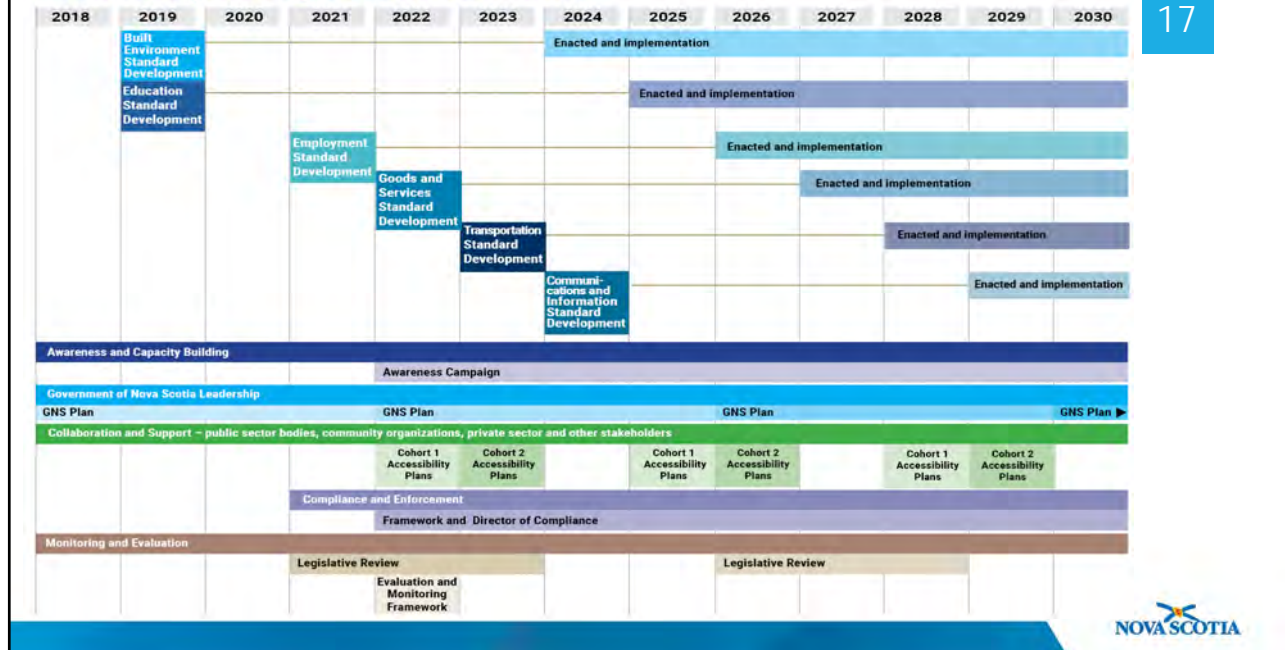
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- Government of Nova Scotia Accessibility Plan 2022-2025 – released in December
 - 8 priority areas
 - 6 government wide commitments
 - 47 individual and joint commitments
- GNS Accessibility Plan 2018-2021
 - Training for government staff and managers
 - Accessibility Audit Handbook and pilot audits
 - Electronic booking for in-person Access NS
 - Provincial Parks website / Accessible beaches
 - Bluenose II ramp
- Accessibility Interdepartmental Committee



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Access by Design 2030 Timeline



Questions and Discussion

Contact us:

novascotia.ca/accessibility

Email: accessibility@novascotia.ca
 Phone: 902-424-8280
 Toll free within NS: 1-800-565-8280
 TTY: 902-424-2667
 Toll free within NS: 1-877-996-9954

terrylynn.almeda@novascotia.ca
dawn.stegen@novascotia.ca



Diocesan Environmental Committee
Anglican Diocese of NS and PEI

January 6, 2023

Dear Honorable Mayor/Councillors:

As part of its commitment to the environment, the Diocesan Environmental Network (DEN), Anglican Diocese of Halifax and PEI, is interested in offering church parking lots in suitable locations to municipalities for the establishment of EV charging stations. Some other Christian denominations have also shown interest in doing the same, under the umbrella of DEN. While DEN is administered by the Anglican Church it welcomes and has members from other faith groups.

DEN is dedicated to promoting ethical and practical responses to the climate emergency and we see this as both a practical response and an opportunity to further serve the communities in which we are already ministering. We would be offering parking lots at no cost and want to work as much as possible with your municipality to develop the infrastructure.

If you see this being of potential benefit to your municipality (we already have the interest of Halifax Regional Municipality), feel free to contact us. DEN would then engage in conversation with the identified congregations about their willingness to locate an EV charging station(s) in their parking lot.

The location of Anglican Churches throughout Nova Scotia can be found using this link:

<https://www.nspeidiocese.ca/find-a-church>

For further information or any queries, please contact The Rev. Marian Lucas-Jefferies, present chair of DEN.

Email "The Rev. Marian Lucas-Jefferies" marian.lucas.jefferies@gmail.com

Telephone: 902-483-6866

Good wishes for a Happy New Year.

Anne Marie Dalton

Anne Marie Dalton
(for Diocesan Environmental Network)

Policy & Strategy Committee

Date: February 21, 2023

Item: 9.1.1



Municipality of the District of Lunenburg Request for Decision

Report to: Policy & Strategy Committee

Submitted by: Abhi Jain, Sustainability Planner
Trudy Payne, Director of Recreation, Parks & Tourism

Date: February 21, 2023

Re: Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project and Carbon Offset Credit System

Recommendation

That Policy & Strategy Committee recommends the Municipal Council to:

“approve the funding of \$60,000 to the Kingsburg Coastal Conservancy’s Shaubac wetlands carbon project budgeting \$30,000 in fiscal 2023-2024 and \$30,000 in fiscal 2024-2025 and, furthermore release of this funding is conditioned upon the Kingsburg Coastal Conservancy’s application being approved by the Sustainable Communities Challenge Fund administered by the Nova Scotia Federation of Municipalities.”

Executive summary

The Kingsburg Coastal Conservancy (KCC) recently proposed to the Municipal Council at its Finance Committee meeting held on December 6, 2022, to partner on a project to assess and enhance the carbon sequestration capacity of wetlands within Shaubac lands, and to further develop a tangible toolkit that will enable the Municipality to assess and enhance the carbon sequestration capacity of other wetlands in its jurisdiction. KCC is a local, volunteer-run, non-profit land trust which is committed to “preserving headlands, beaches, and wetlands of the Kingsburg Peninsula and neighbouring areas, and to safeguarding traditional access to our shorelines”. Staff presented a report to the Municipal Council at its regular Council meeting held on January 24, 2023, to endorse its support to the KCC’s Shaubac wetlands carbon project while outlining the benefits of the project.

Following the discussions on the proposed project, the Council could not reach a final decision based on the information in hand on carbon tax credits system, and thereby passed the motion to “refer Item 11.1.5 Kingsburg Coastal Conservancy, Shaubac Wetlands Carbon Project to the February 21, 2023 Policy & Strategy Committee meeting for further discussion on carbon tax credits” and directed staff to provide additional information regarding the same.

Through this report and a presentation attached to it, staff intend to provide additional information on the project, carbon tax and carbon offset credit system, that is needed for the decision-making.

Discussion

The Municipality of the District of Lunenburg (MODL) declared a Climate Emergency in 2019, and developed a 10-year, Local Climate Change Action Plan 2030 (LCCAP2030) to guide the Municipality to achieve net-zero greenhouse gas (GHG) emissions by 2050 and support a climate-resilient, healthier, and sustainable future. The LCCAP2030, has set a target to reduce "Community emissions by 30% below 2019 baseline emissions level by 2030, 65% below 2019 levels by 2040, and achieve net-zero community emissions by 2050." Further, the LCCAP2030 has outlined 27 climate actions with specific targets that will set forth a pathway for the Municipality to reduce its community GHG emissions. The targets include, “purchase and/or accept land donations, as well as assess other mechanisms such as conservation easements, to protect and/or conserve up to 20% of the identified land and water mass in the Municipality by 2030” and “support research and technological innovations to address climate change.

Besides providing several ecosystem services such as improving water quality, controlling floods, recharging groundwater, protecting coastal infrastructure, providing critical habitat for rare and endangered species, Wetlands are also one of the highest stores of soil carbon on earth. However, there is little understanding of the actual quantity and distribution of carbon stored in them. The proposed project by KCC will contribute significantly in assessing the wetlands’ carbon storage capacity, determining ways to further enhance their performance as carbon sinks, and evaluating the ecological services provided by these wetlands. In particular, the project will contribute significantly towards MODL’s emission reduction and land conservation targets and make a stronger business case for MODL to protect/preserve these carbon sinks from getting destroyed, drained or encroached upon by development. Besides safeguarding our important carbon sinks and natural assets, the project will also protect and enhance biodiversity in these areas while improving the community’s climate resilience.

Project deliverables

- A proactive working collaboration between KCC, Acadia Band, MODL, and post-secondary institution resources;
- A comprehensive research report on wetlands and biological carbon sequestration;
- A drone technology map of area wetlands;
- A field assessment report to quantify and characterize the wetlands.
- A preliminary Report on Findings
- Specific recommendations for protection and potential enhancement/restoration of existing wetlands and quantification of the potential for biological carbon sequestration and reducing GHG emissions at the municipal level.
- Ongoing wetland monitoring plan and Toolkit
- Public Engagement Campaign and Final Report

Project benefits

- Opportunity for the Municipality to take leadership role in advancing research into protection and conservation of natural carbon sinks which play an integral role in the fight against climate change
- Opportunity for the Municipality to support its local community champions acting on climate change
- Allows the Municipality to reduce its carbon emissions and move towards meeting its set community emissions reduction targets
- Opportunity to partner with Acadia First Nations Community and build healthy working relationships
- Project management being led by KCC will put less burden on Municipal staff resources thereby improving efficiency
- Foster the wetlands ecosystems to enhance its functional values and services including improving water quality, controlling floods, soil stabilization, recharging groundwater, and providing critical habitat for rare and endangered species
- Generate shareable knowledge and assessment toolkit to support replication of the project in other communities and jurisdictions in Nova Scotia and Canada-wide.
- Assessment toolkit will provide a cost-effective way to assess and prioritize wetlands in the Municipality for protection and conservation, and further enable the Municipality to move towards achieving its target to protect and/or conserve up to 20% of the identified land and water mass in the Municipality by 2030

Although it is not a direct outcome of the project, however in addition to the many benefits that the project offers, staff foresees that the project will also create an opportunity for the Municipality and its residents in future to access the national GHG offset credit system launched by the federal government in the summer of 2022. This will allow proponents to register their relevant projects and generate carbon credits equivalent to the tonnes of carbon sequestered by their projects. Offset credits can then be sold to the interested buyers, thereby creating a revenue stream for the project owners. More information regarding the carbon tax and the GHG offset credit system is provided in the presentation attached to this report.

Project Timeline

The project will be delivered over 2 years in 5 phases. The activities of the 5-phases are outlined below:

Phase 1: Form meaningful partnerships with academic institutions, local stakeholders, other NGO's, government and indigenous groups. Create a plan to identify and map wetlands within the Shaubac lands with the intent to assess their functions and capacity to store carbon.

Phase 2: Research and document the wetland carbon absorption process, quantify the storage they currently provide and research measures to potentially increase carbon absorption capacity.

Phase 3: Develop a carbon storage capacity plan, including gathering Indigenous Ecological Knowledge from the Acadia First Nations Community, for use in phase 4; contract professional services to provide the aerial and field mapping of the Shaubac and perform field wetland assessments and inventory.

Phase 4: Develop a research plan based on Phase 3 results. This will include measuring and evaluating results and providing recommendations for the Municipality of the District of Lunenburg's (MODL) Local Climate Change Plan 20230, KCC Land Stewardship Program, and ecosystem values with Indigenous Traditional Ecological Knowledge. The project will develop a field research and monitoring plan for the wetlands and create a framework for investigating other wetlands within Lunenburg County for carbon sinks. The outcome of the project will be to provide guidance and a tangible toolkit for other municipalities to assess wetlands within their jurisdictions, if they so choose.

Phase 5: Conduct a meaningful public engagement campaign to raise awareness, gather and present community responses and encourage local communities to support and implement the proposed measures.”

Project management team

The project management team and the roles involved in implementing the project are as follows:

PRINCIPAL COLLABORATORS:

- Municipality of the District of Lunenburg
- Acadia First Nations: Scott Jermeay, First Nations Ecology Manager
- Dalhousie Assist. Prof: Andrew Medeiros, School for Resource and Environmental Studies

OVERALL PROJECT GUIDANCE:

KCC Board of Directors, in close collaboration with the Project Coordinator, designated MODL staff and First Nations Acadia Band Ecology Manager, Scott Jermeay

DAY-TO-DAY PROJECT MANAGEMENT:

Project Coordinator: Sarah Crnec; KCC Board Chair: Janet Peace; Science and Research Lead/Budget: Allison Tremain

PROJECT HUMAN RESOURCES:

- First Nations Acadia Band Cultural Advisor, Scott Jermeay: Project Guidance, Wetlands Research and Educational Tools
- Dalhousie summer student: Ground-truthing
- Dalhousie Assist. Prof: Andrew Medeiros: Wetlands Research
- Shaubac Committee Members/Lead Marilyn Congdon: land Acquisitions, Ground-truthing, Community Outreach
- Allison Tremain: Science & Stewardship

SPECIAL PROJECT ADVISORS:

- Vince Brewerton: Community Outreach, Community Consensus building
- Cliff Borden: Finance & Fundraising
- Maria Dyck: Fundraising
- Shawn Feener: KCC-First Nations Collaboration
- Marc Langlois: Sustainable Community Development
- Catherine Pross: Science and Stewardship

CONTRACTED RESOURCES:

- Strum Consulting: Lidar Wetlands mapping, carbon capture measurement, ground-truthing & community outreach

Budget implications

The estimated cost of this two-year project is \$382,000. The KCC has requested \$267,400 from the Sustainable Communities Challenge Fund; \$60,000 from MODL, \$20,000 from Nova Scotia Liquor Commission (NSLC) Community Leadership Fund; \$15,000 from MITACS which is a student granting agency and the remaining to come from the KCC as a result of an awareness raising fund campaign.

The \$20,000 from the NSLC, if successful in receiving, will be allocated specifically to facilitate First Nation Project Guidance and ground-truthing resources. The MITACS funding is to cover half of the cost of student involvement in the project with Dalhousie University. A Dalhousie professor will be volunteering to provide his research expertise.

It is recommended that \$30,000 is budgeted in 2023-24 fiscal year for the project and the remaining \$30,000 be included in the climate change budget for 2024-2025 fiscal year. The project lead is the KCC with the MODL's Sustainability Planner and Director of Recreation, Parks and Tourism acting support resources. The First Nations Acadia Band Ecology Manager will also be providing overall project guidance. The day-to-day project management will be by KCC.

The project budget is summarized in the table below:

Funding Sources	Status	Contribution Type	Contribution (\$)	Contribution (%)
Sustainable Communities Challenge Funds	Decision pending	Cash	\$267,000	70%
Municipality of the District of Lunenburg	Decision pending	Cash	\$60,000	16%
Kingsburg Coastal Conservancy	Confirmed	In Kind	\$20,000	5%
NSLC Community Grant	Decision pending	Cash	\$20,000	5%
Dalhousie University MITACS Grant	Decision pending	Matching Funds	\$15,000	4%
Total Project Costs (\$)			\$382,000	100%

Conclusion

To protect and restore wetlands is critical to both reducing greenhouse gas emissions and adapting to a changing climate. These valuable ecosystems provide multiple other benefits in terms of filtering pollution, recharging groundwater, providing species habitat, and recreational and commercial opportunities. The project will enable the Municipality to cost effectively assess and prioritize its wetlands that need to be protected and conserved. Furthermore, in order to prepare wetlands in the Municipality to potentially become eligible for federal GHG offset credit system in the future, the first requirement is to measure their carbon offset capacity, and the proposed project by KCC to quantify carbon sequestration capacity of wetlands on Shaubac Lands, is the right step towards that direction. Therefore, staff recommend that the Policy and Strategy Committee recommend the Council to approve the funding of \$60,000 to the Kingsburg Coastal Conservancy's Shaubac wetlands carbon project budgeting \$30,000 in fiscal 2023-2024 and \$30,000 in fiscal 2024-2025 and, furthermore release of this funding is conditioned upon the Kingsburg Coastal Conservancy's application being approved by the Sustainable Communities Challenge Fund administered by the Nova Scotia Federation of Municipalities.

Attachments:

1. Report to Municipal Council dated January 24, 2023, Re: "Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project"
2. Presentation on the Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project, Carbon Tax and Carbon Offset Credit System
3. Kingsburg Coastal Conservancy Advisor Bios and CVs

Report Preparation	
Department	Planning & Development Services
Report Prepared by	Abhi Jain, Sustainability Planner Trudy Payne, Director of Recreation, Parks & Tourism
Report Approved by	Jeff Merrill, Director of Planning and Development Services
Date Reviewed by C.A.O.	



Municipality of the District of Lunenburg Report to Council

Report To: Municipal Council
Submitted By: Abhi Jain, Sustainability Planner
Trudy Payne, Director of Recreation, Parks & Tourism
Date: January 24, 2023
Re: Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project

Through this memorandum, the staff would like to endorse its support to Kingsburg Coastal Conservancy's (KCC) project presented to the Council at its Finance Committee meeting held on December 6, 2022, and recommend that Council:

“approve the funding of \$60,000 to the Kingsburg Coastal Conservancy's Shaubac wetlands carbon project budgeting \$30,000 in fiscal 2023-2024 and \$30,000 in fiscal 2024-2025 and, furthermore release of this funding is dependent on the KCC's application being approved by the Sustainable Communities Challenge Fund administered by the Nova Scotia Federation of Municipalities.”

Background

In 2019, MODL declared a Climate Emergency, and developed a 10-year, Local Climate Change Action Plan 2030 (LCCAP2030) to guide the Municipality to achieve net-zero greenhouse gas (GHG) emissions by 2050 and support a climate-resilient, healthier, and sustainable future. The LCCAP2030, has set a target to reduce "Community emissions by 30% below 2019 baseline emissions level by 2030, 65% below 2019 levels by 2040, and achieve net-zero community emissions by 2050." Further, the LCCAP2030 has set a target "to protect and/or conserve up to 20% of the identified land and water mass in the Municipality by 2030."

Discussion

Wetlands are one of the highest stores of soil carbon on earth, however, there is little understanding of the actual quantity and distribution of carbon stored in them. The proposed project by KCC will contribute significantly in assessing the wetlands' carbon storage capacity, determining ways to further enhance their performance as carbon sinks, and evaluating the ecological services provided by these wetlands. In particular, the project will contribute significantly towards MODL's emission reduction and land conservation targets and make a stronger business case for MODL to protect/preserve these carbon sinks from getting destroyed, drained or encroached upon by development. Besides safeguarding our important

carbon sinks and natural assets, the project will also protect and enhance biodiversity in these areas while improving the community's climate resilience.

Carbon Offset Credit System

With this project, staff would also like to draw Council's attention towards Canada's 'Greenhouse Gas Offset Credit System' launched in 2022.¹ The federal government has established a national GHG offset credit system that allows proponents to generate credits if they register and implement projects that reduce GHGs using a published federal GHG offset protocol. Offset credits can be sold and used for compliance by facilities covered in the federal Output Based Pricing System. The Environment and Climate Change Canada is currently developing the following federal offset protocols:

- Reducing Greenhouse Gas Emissions from Refrigeration Systems
- Improved Forest Management on Private Lands
- Enhanced Soil Organic Carbon
- Livestock Feed Management
- Direct Air Carbon Dioxide Capture and Sequestration

Wetlands fall under 'Enhanced Soil Organic Carbon'. Regarding pricing under Canada's Greenhouse Gas Offset Credit System, one credit will be created for every tonne of emissions reduced by approved projects. The earned credits can be sold to big emitters across Canada by the federal carbon price (currently \$50/tonne and will go up to \$170/tonne by 2030²). It means if wetlands on Shaubac Lands sequester 10 tonnes of carbon emissions per year, it can generate revenue of \$1,700 per year by 2030 for the property owner.

On October 18, 2022, Nova Scotia government announced that it will move away from its current provincial cap and trade program to federal Output-Based Pricing System³ and the new output-based pricing system will begin on January 1, 2023.

¹ Canada's Greenhouse Gas Offset Credit System. Retrieved from: <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system/federal-greenhouse-gas-offset-system.html>

² 2030 emissions reduction plan: Canada's next steps to clean air and a strong economy. Pg. 27. Retrieved from: <https://publications.gc.ca/site/eng/9.909338/publication.html>

³ Nova Scotia News Release. October 18, 2022. Legislation to Reduce Industrial Carbon Pollution. Retrieved from: <https://novascotia.ca/news/release/?id=20221018002>

Benefits of Carbon Offset Credit System to MODL

As carbon offset credits from wetlands become eligible to trade in greenhouse gas national market, the property owners who have wetlands on their sites can determine their wetlands' ability to sequester carbon, and once verified, property owners can sell the certified credits to interested buyers nationwide. Property owners will be incentivized to protect these natural assets as it will then become a revenue stream for them, which will also reduce the burden on MODL to acquire these assets to protect them. However, in situations where the Municipality must acquire these wetlands or other carbon offsetting natural assets, these assets will become a revenue stream for the Municipality in the future.

KCC's 5-Phase Project

The KCC has summarized the proposed project into 5 phases which are:

“Phase 1: Form meaningful partnerships with academic institutions, local stakeholders, other NGO's, government and indigenous groups. Create a plan to identify and map wetlands within the Shaubac lands with the intent to assess their functions and capacity to store carbon.

Phase 2: Research and document the wetland carbon absorption process, quantify the storage they currently provide and research measures to potentially increase carbon absorption capacity.

Phase 3: Develop a carbon storage capacity plan, including gathering Indigenous Ecological Knowledge from the Acadia First Nations Community, for use in phase 4; contract professional services to provide the aerial and field mapping of the Shaubac and perform field wetland assessments and inventory.

Phase 4: Develop a research plan based on Phase 3 results. This will include measuring and evaluating results and providing recommendations for the Municipality of the District of Lunenburg's (MODL) Local Climate Change Plan 20230, KCC Land Stewardship Program, and ecosystem values with indigenous Traditional Ecological Knowledge. The project will develop a field research and monitoring plan for the wetlands and create a framework for investigating other wetlands within Lunenburg County for carbon sinks. The outcome of the project will be to provide guidance and a tangible toolkit for other municipalities to assess wetlands within their jurisdictions, if they so choose.

Phase 5: Conduct a meaningful public engagement campaign to raise awareness, gather and present community responses and encourage local communities to support and implement the proposed measures.”

Budget Implications

The estimated cost of this two-year project is \$382,000. The KCC has requested \$267,400 from the Sustainable Communities Challenge Fund; \$60,000 from MODL, \$20,000 from Nova Scotia Liquor Commission (NSLC) Community Leadership Fund; \$15,000 from MITACS which is a student granting agency and the remaining to come from the KCC as a result of an awareness-raising fund campaign.

The \$20,000 from the NSLC, if successful in receiving, will be allocated specifically to facilitate First Nation Project Guidance and ground-truthing resources. The MITACS funding is to cover half of the cost of student involvement in the project with Dalhousie University. A Dalhousie professor will be volunteering his research expertise.

Funds have been allocated this year for climate change actions. All of the funding allocated this year will not be spent; therefore, it is being recommended that \$30,000 come from this year's budget and the remaining \$30,000 be included in the climate change budget for 2023-2024 fiscal. The project lead is the KCC with the MODL's Sustainability Planner and Director of Recreation, Parks and Tourism acting support resources. The First Nations Acadia Band Ecology Manager will also be providing overall project guidance. The day-to-day project management will be the KCC.

Conclusion

To protect and restore wetlands is critical to both reducing greenhouse gas emissions and adapting to a changing climate. These valuable ecosystems provide multiple other benefits in terms of filtering pollution, recharging groundwater, providing species habitat, and recreational and commercial opportunities. Furthermore, in order to prepare our assets to become eligible for carbon offset credit system, the first requirement is to measure the carbon reduction from them, and the proposed project by KCC to quantify carbon sequestration capacity of wetlands on Shaubac Lands, is the right step towards that direction. Therefore, staff recommends that Council approve the funding to the organization.

Report Preparation	
Department	Planning & Development
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Report Approved by	Jeff Merrill, Director of Planning & Development
Date Reviewed by C.A.O.	

Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project AND Carbon Tax and GHG Offset Credit System

Policy and Strategy Committee

Presenter: Abhi Jain, Sustainability Planner

Date: February 21, 2023



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Background



Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project



Carbon Tax and GHG Offset Credit System



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Background

Climate Emergency and LCCAP2030

- The Municipality of the District of Lunenburg (MODL) declared a Climate Emergency in 2019, and developed a 10-year, Local Climate Change Action Plan 2030 (LCCAP2030) to guide the Municipality to achieve net-zero greenhouse gas (GHG) emissions by 2050 and support a climate-resilient, healthier, and sustainable future.
- The LCCAP2030, has set a target to reduce "Community emissions by 30% below 2019 baseline emissions level by 2030, 65% below 2019 levels by 2040, and achieve net-zero community emissions by 2050."
- Further, the LCCAP2030 has outlined 27 climate actions with specific targets that will set forth a pathway for the Municipality to reduce its community GHG emissions. The targets include, "purchase and/or accept land donations, as well as assess other mechanisms such as conservation easements, to protect and/or conserve up to 20% of the identified land and water mass in the Municipality by 2030" and "support research and technological innovations to address climate change."



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Background

Natural Assets Inventory and Wetlands Assessment

- In 2020, MODL hired Municipal Natural Assets Initiative (MNAI) to develop a natural asset inventory in the Municipality
- The report was published in 2021 and the table-2 below, from the final report, summarizes the natural assets in the Municipality by type

TABLE 2: SUMMARY OF NATURAL ASSETS BY TYPE

NATURAL ASSET TYPE	NUMBER OF ASSETS	TOTAL AREA (HA)	AVERAGE ASSET AREA (HA)
Agriculture	1,403	7,048	5.02
Beach	85	160	1.89
Cliffs, Dunes, Coastal	628	492	0.78
Forest	34,044	148,192	4.35
Grassland	284	508	1.79
Inland Water	1,340	11,565	8.63
Ocean Wetland	8	0.31	0.04
Open Space and Successional	245	118	0.48
Shrubland	482	610	1.27
Wetland	4,059	10,060	2.48
Total	42,578	178,753	4.20



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Background

Natural Assets Inventory and Wetlands Assessment

- Wetlands are vital natural assets that provide several ecosystem services such as improving water quality, controlling floods, recharging groundwater, protecting coastal infrastructure, and providing critical habitat for rare and endangered species.
- In 2022, MODL collaborated with Ducks Unlimited Canada to conduct five Wetland Ecosystem Services Protocol (WESP) assessments to quantify and compare the ecosystem services provided by important wetlands in the region.



Figure 2. New Germany Lake wetland on the Lunenburg river.



Figure 4. Rose Bay wetland off Lunenburg road.

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Kingsburg Coastal Conservancy's Shaubac Wetlands Carbon Project

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KCC's Shaubac Wetlands Carbon Project

Project Overview

- The Kingsburg Coastal Conservancy (KCC) proposed to the Municipal Council at its Finance Committee meeting held on December 6, 2022, to partner on a project to assess and enhance the carbon sequestration capacity of wetlands within Shaubac lands, and to further develop a tangible toolkit that will enable the Municipality to assess and enhance the carbon sequestration capacity of other wetlands in its jurisdiction.
- Besides providing several important ecosystem services, Wetlands play an integral role in taking up atmospheric carbon and restricting subsequent carbon loss to facilitate long-term storage. They can be deliberately managed to provide a natural solution to mitigate climate change, as well as to help offset direct losses of wetlands from various land-use changes and natural drivers.
- Wetlands are often drained to improve human utility but leads to loss of natural asset and release of carbon stored in them.
- Wetlands management, protection, and conservation is one of the necessary solutions to mitigate and adapt to the changing climate.
- The proposed project by KCC will contribute significantly towards assessing the wetlands' carbon storage capacity, determining ways to further enhance their performance as carbon sinks, and enable their value-based prioritization for protection and conservation.



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KCC's Shaubac Wetlands Carbon Project

Project Map



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KCC's Shaubac Wetlands Carbon Project

Project Map



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KCC's Shaubac Wetlands Carbon Project

Project Deliverables

- A proactive working collaboration between KCC, Acadia Band, MODL, and post-secondary institution resources;
- A comprehensive research report on wetlands and biological carbon sequestration;
- A drone technology map of area wetlands;
- A field assessment report to quantify and characterize the wetlands.
- A preliminary Report on Findings
- Specific recommendations for protection and potential enhancement/restoration of existing wetlands and quantification of the potential for biological carbon sequestration and reducing GHG emissions at the municipal level.
- Ongoing wetland monitoring plan and Toolkit
- Public Engagement Campaign and Final Report

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KCC's Shaubac Wetlands Carbon Project

Project Benefits

- Opportunity to advance research into protection and conservation of natural carbon sinks which play an integral role in the fight against climate change
- Opportunity to support local community champions acting on climate change
- Reduce community carbon emissions and move towards meeting our emissions reduction targets
- Opportunity to partner with Acadia First Nations Community and build healthy working relationships
- Subsidized project cost and less burden on Municipal staff resources thereby improving efficiency
- Foster the wetlands ecosystems to enhance its functional values and services including improving water quality, controlling floods, soil stabilization, recharging groundwater, and providing critical habitat for rare and endangered species
- Generate shareable knowledge and assessment toolkit to support replication of the project in other communities and jurisdictions in Nova Scotia and Canada-wide.
- Municipally-owned assessment toolkit will provide a cost-effective way to assess and prioritize wetlands in the Municipality for protection and conservation, and further enable the Municipality to move towards achieving its target to protect and/or conserve up to 20% of the identified land and water mass in the Municipality by 2030



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KCC's Shaubac Wetlands Carbon Project

Project Timeline

The project will be delivered over 2 years in five-phases. The activities of the five-phases are outlined below:

- Phase 1: Identify and map wetlands within the Shaubac lands to assess their functions and capacity to store carbon.
- Phase 2: Research and document the wetland carbon absorption process, quantify its carbon storage capacity and research measures to potentially increase carbon absorption capacity.
- Phase 3: Develop a carbon storage capacity plan, including gathering Indigenous Ecological Knowledge from the Acadia First Nations Community; contract professional services to provide the aerial and field mapping of the Shaubac and perform field wetland assessments and inventory.
- Phase 4: Measure and evaluate results and provide recommendations to for the Municipality of the District of Lunenburg's (MODL) Local Climate Change Plan 20230, KCC Land Stewardship Program, and ecosystem values with Indigenous Traditional Ecological Knowledge. The outcome of the project will be to develop an assessment toolkit to assess other wetlands in the Municipality.
- Phase 5: Conduct a meaningful public engagement campaign to raise awareness, gather and present community responses and encourage local communities to support and implement the proposed measures.



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KCC's Shaubac Wetlands Carbon Project

Project Management Team

The project management team and the roles involved in implementing the project are as follows:

Principal Collaborators:

- Municipality of the District of Lunenburg
- Acadia First Nations: Scott Jerney, First Nations Ecology Manager
- Dalhousie Assist. Prof: Andrew Medeiros, School for Resource and Environmental Studies

Overall Project Guidance:

- KCC Board of Directors, in close collaboration with the Project Coordinator, designated MODL staff and First Nations Acadia Band Ecology Manager, Scott Jerney

Day-to-day Project Management:

- Project Coordinator: Sarah Crnec; KCC Board Chair: Janet Peace; Science and Research Lead/Budget: Allison Tremain



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KCC's Shaubac Wetlands Carbon Project

Project Management Team

Project Human Resources:

- First Nations Acadia Band Cultural Advisor, Scott Jerney: Project Guidance, Wetlands Research and Educational Tools
- Dalhousie summer student: Ground-truthing
- Dalhousie Assist. Prof: Andrew Medeiros: Wetlands Research
- Shaubac Committee Members/Lead Marilyn Congdon: land Acquisitions, Ground-truthing, Community Outreach
- Allison Tremain: Science & Stewardship

Special Project Advisors:

- Vince Brewerton: Community Outreach, Community Consensus building
- Cliff Borden: Finance & Fundraising
- Maria Dyck: Fundraising
- Shawn Feener: KCC-First Nations Collaboration
- Marc Langlois: Sustainable Community Development
- Catherine Pross: Science and Stewardship

Contracted Resources:

- Strum Consulting: Lidar Wetlands mapping, carbon capture measurement, ground-truthing & community outreach

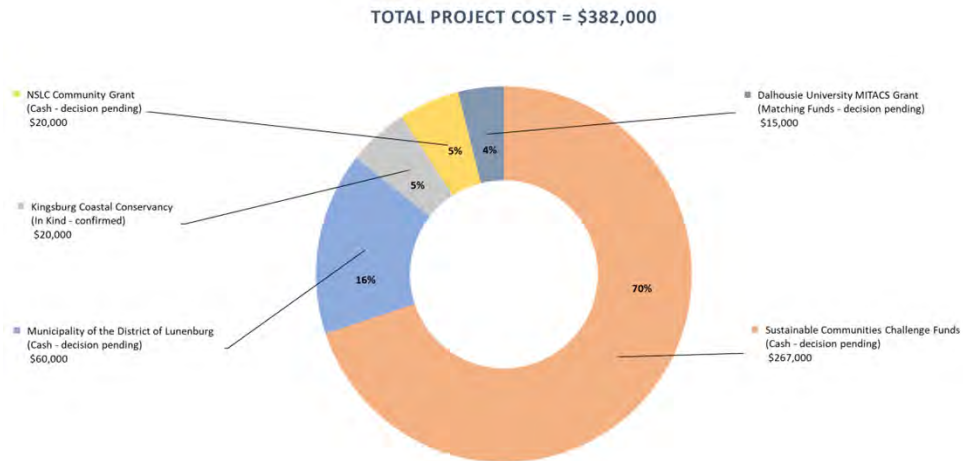


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KCC's Shaubac Wetlands Carbon Project

Project Budget and Funding Sources



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Carbon Tax and GHG Offset Credit System



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Carbon Tax and GHG Offset Credit System

Carbon Tax and Cap-and-trade

- In 2016, the federal government announced a pan-Canadian framework to enact towards climate change that required all the provinces and territories of Canada to adopt a carbon system by 2019, that could include either:
 - A cap-and-trade system; or
 - Carbon tax; or combination of both
- **A carbon tax** directly institutes a price on GHG emissions, so the emitters are charged a certain price for every tonne of emissions they produce.
- **A cap-and-trade system** caps the total amount of GHG emissions allowed.
- The Federal standards for the cap-and-trade system, requires provinces and territories to cap emissions to at least 30% below 2005 emissions levels, by the year 2030. For a price-based system or carbon tax, the Federal standards require the provinces and territories to levy a carbon tax of at least \$10 per metric tonne CO₂e starting in 2018, and the tax will be further raised to \$50 metric tonne CO₂e, by 2022.



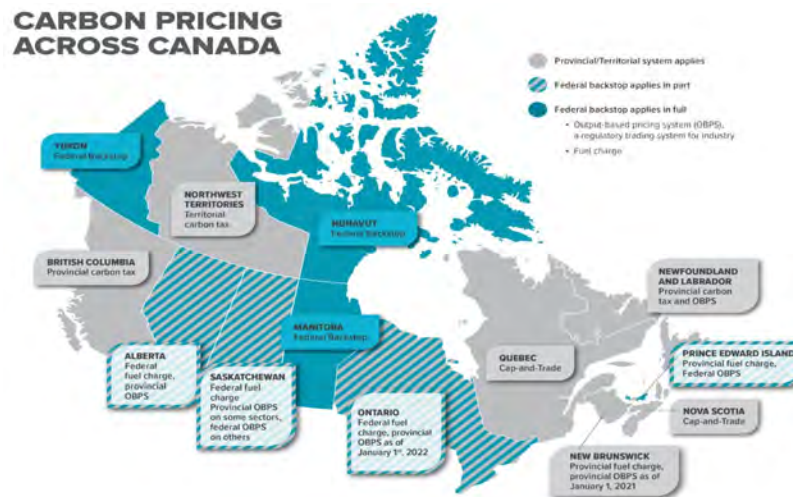
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Carbon Tax and GHG Offset Credit System

Carbon systems across Canada

CARBON PRICING ACROSS CANADA



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Carbon Tax and GHG Offset Credit System

Nova Scotia's Cap-and-Trade

Nova Scotia launched its Cap-and-Trade program on January 1, 2019.



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Carbon Tax and GHG Offset Credit System

Nova Scotia's Cap-and-Trade

Program grants (2021-22)

Initiatives	Fiscal 2021-22
Affordable Housing Retrofits	\$ 2,000,000
Clean Energy Training	\$ 2,000,000
Electric Vehicle Chargers for Multi-Unit Residential Buildings	\$ 1,000,000
Flood Line Mapping Program	\$ 998,500
Home Energy Assessment	\$ 8,000,000
Industrial Energy Managers	\$ 1,500,000
Next Ride – EV Engagement Campaign	\$ 1,500,000
Off Oil Pilot	\$ 1,500,000
Solar for Non-Profit Organizations	\$ 1,500,000
SolarHomes	\$ 8,000,000
Sustainable Communities Challenge Fund	\$ 15,000,000
Other small grants	\$ 449,700
Total Allocation	\$ 43,448,200



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Carbon Tax and GHG Offset Credit System

Impacts of federal Carbon Tax

- Carbon Tax will be imposed in Nova Scotia beginning in July 2023.
- Beginning at \$65 per tonne of carbon in 2023, increasing by \$15 per year, until reaching \$170 per tonne in 2030.
- In 2023, the tax will add a projected 14.4 cents per litre to the price of gas, and 15 cents per litre to the price of home heating oil.

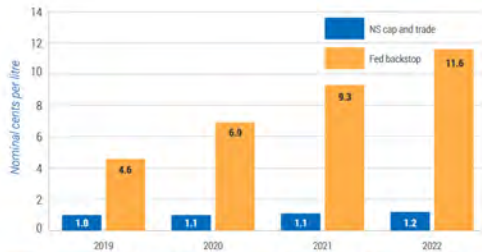


Figure 5. Estimated increases in gasoline prices: Nova Scotia cap and trade program vs. federal carbon pricing policy (2019–2022). change in gasoline prices (nominal cents per litre)

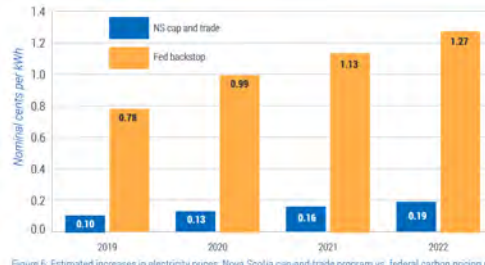


Figure 6. Estimated increases in electricity prices: Nova Scotia cap and trade program vs. federal carbon pricing policy (2019–2022). change in electricity price (nominal cents per kWh)

Source: <https://climatechange.novascotia.ca/sites/default/files/Nova-Scotia-Cap-and-Trade-Regulatory-Framework.pdf>



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Carbon Tax and GHG Offset Credit System

Impacts of federal Carbon Tax

- Federal Carbon Tax is a revenue neutral system. All carbon revenues generated within a province subject to the federal backstop are recycled back to that province
- Majority of the proceeds, 90%, will be sent to households as annual quarterly payments to offset carbon costs
- Climate Action Incentive Payment (CAIP) will be paid quarterly to all Nova Scotians starting July 2023.
 - In Nova Scotia, the annual credit amounts in 2023 are \$496 for an individual, \$248 for a spouse or common law partner, \$124 per child 18 and under, and \$992 for a family of 4.
 - The rural supplement is 10% of the base amounts. Under its terms, anywhere outside HRM is considered rural.
- Presently, the provinces that receive the CAIP are Alberta, Ontario, Manitoba and Saskatchewan. Starting July 2023, the credit will also be given to residents of Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.



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Carbon Tax and GHG Offset Credit System

GHG Offset Credit System

- The Canadian Greenhouse Gas Offset Credit System Regulations (GHG Offset Regulations) established under Part 2 of the Greenhouse Gas Pollution Pricing Act (GGPPA), were published in the Canada Gazette, Part II (PDF) on June 8th, 2022. The GHG Offset Regulations apply across Canada.
- Canada's Greenhouse Gas (GHG) Offset Credit System enables project proponents to generate federal offset credits if they register and implement projects that reduce GHGs using a published federal GHG offset protocol.
- Offset credits can be sold and used for compliance by facilities covered in the federal Output Based Pricing System or sold and used by others who are looking to meet voluntary climate targets or commitments.
- It is expected that private-sector individuals and organizations, such as brokerage services and carbon exchanges may facilitate the trading of Offset Credits. Relevant links may be available on the Federal GHG Offset System website as they are developed. The financial value of offset credits will be determined by supply and demand in the market.



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Carbon Tax and GHG Offset Credit System

GHG Offset Credit System – Federal Protocols

- Federal offset protocols set out requirements for project implementation and methods for quantifying the GHGs emitted or removed from the atmosphere. Only eligible project activities included in a published federal offset protocol will be able to generate credits in Canada's GHG Offset Credit System.
- Published Federal Offset Protocols
 - Landfill Methane Recovery and Destruction (Version 1.0)
- ECC is currently developing the following federal offset protocols:
 - Reducing Greenhouse Gas Emissions from Refrigeration Systems
 - Improved Forest Management on Private Lands
 - Enhanced Soil Organic Carbon
 - Livestock Feed Management
 - Direct Air Carbon Dioxide Capture and Sequestration
- As protocols are completed, work on new protocols will begin. Subsequent project types under consideration for federal offset protocol development include Bioenergy Carbon Dioxide Capture and Sequestration, Improved Forestry Management on Public Lands, Livestock Manure Management and Anaerobic Digestion.



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Carbon Tax and GHG Offset Credit System

GHG Offset Credit System – How it works?

Credit and Tracking System (CATS)

Environment and Climate Change Canada's Credit and Tracking System (CATS) tracks:

- compliance obligations, surplus credit issuance, transfer, retirement, suspension, revocation and cancellation, and remittance of compliance units and payments under the federal Output-Based Pricing System (OBPS);
- registration, reporting, offset credit issuance, transfer, retirement, suspension, revocation and cancellation, as well as compliance obligations, remittance of compliance units and any payments under Canada's GHG Offset Credit System; and
- registration, applications, reporting and issuance and use of compliance credits under the Clean Fuel Regulations.

If you already have an account in CATS for participation in the Output-Based Pricing System, Canada's GHG Offset Credit System, or Clean Fuel Regulations, sign in using the "Login" button below. By logging into the system, you agree to the applicable CATS Conditions of Use

I already have a CATS account

Login

Carbon Markets

The federal Output Based Pricing System (OBPS) and Canada's GHG Offset Credit System are market-based approaches designed to incent GHG reductions and spur innovation while maintaining competitiveness and protecting against carbon leakage.

Persons responsible for covered facilities under the OBPS are required to open an OBPS account in CATS. If you are a Person Responsible, or their Authorized Official, select the "Open a Carbon Market Account in CATS" button below to apply to open an OBPS account.

Clean Fuel Regulations (CFR)

Clean fuels are a key part of Canada's 2030 Emissions Reduction Plan. The *Clean Fuel Regulations* require producers and importers of gasoline and diesel, called primary suppliers, to reduce the lifecycle carbon intensity of the gasoline and diesel they produce or import in Canada for use in Canada. The Regulations use a performance-based approach and establish a credit market that will incent the use of a broad range of low-carbon-intensity fuels (e.g. ethanol, renewable diesel), energy sources (e.g. hydrogen and electricity) and technologies (e.g. carbon capture and storage).



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Summary

- Project proposed by KCC to develop an assessment toolkit for MODL to assess and enhance the carbon sequestration capacity of the wetlands, will contribute significantly towards MODL's set emission reduction targets and goals of LCCAP2030.
- Further, it will provide MODL a cost-effective way for value-based prioritization of its wetlands for protection and conservation.
- In future, project may also provide opportunities to access Federal GHG offset credit system
- Should Council choose to support the project, the recommended motion is as follows:

That Policy & Strategy Committee recommends the Municipal Council to:

“approve the funding of \$60,000 to the Kingsburg Coastal Conservancy’s Shaubac wetlands carbon project budgeting \$30,000 in fiscal 2023-2024 and \$30,000 in fiscal 2024-2025 and, furthermore release of this funding is conditioned upon the Kingsburg Coastal Conservancy’s application being approved by the Sustainable Communities Challenge Fund administered by the Nova Scotia Federation of Municipalities.”



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Thank you



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KINGSBURG COASTAL CONSERVANCY ADVISOR BIOS AND CVS

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Vince Brewerton

Potential Project Canada Inc.

vince.brewerton@potentialproject.com

www.potentialproject.com

Vince Brewerton works with leaders and teams to enhance performance and wellbeing at clients such as Accenture, RBC, Walmart, Novo Nordisk, Blakes Cassels Graydon, and LEGO. He is an experienced speaker, facilitator, and trusted advisor to corporate, not-for-profit, and public sector organizations.

Vince has 30 years of mindfulness experience and is the Canadian Country Director for Potential Project – a global leadership research and consulting firm that is working to create a more human world of work by harnessing the full potential of the mind.

Vince has more than 25 years' experience as a management consultant. Prior to joining Potential Project, he advised CEOs and boards of directors at many North American not-for-profit organizations on strategic and successful ways to increase revenue sources, assess readiness and implement mergers and acquisitions, build community engagement, and facilitate partnerships/collaborations.

Clients included Toronto Region Board of Trade, Atlantic Canada Opportunities Agency, Big Brothers Big Sisters of Canada, Adopt-a-Minefield Campaign, and many others. He was the Executive Director of the Centre for Spirituality and the Workplace at Saint Mary's University where he engaged leaders in explorations about creating employee-centred organizational cultures.

He is a recipient of the Rotman Award of Teaching Excellence based on his teaching in the MBA program at the Rotman School of Management, University of Toronto. Vince has served as a director on boards at Juvenile Diabetes Research Foundation (Board Chair), Renascent (Chair, Governance & Nominations), and member of the Board of Advisors at The Public Good Initiative, and at the Impact Consulting Group (University of Toronto). He also Chaired the Environmental Action Committee, reporting to the Town Council in Whitchurch-Stouffville, Ontario. Vince lives in Toronto with his wife Jacqueline and two sons Zach and Ethan and spends as much time as possible in Kingsburg.

Sarah Crnec
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Performance Profile _____

An enthusiastic Environmental Professional with over 10 years proven experience in conservation and environmental work. Accustomed to working in the field performing strenuous work in challenging conditions, data collection, report preparation, as well as possessing a wide variety of transferable skills. A clear communicator who has worked with multiple stakeholders and is comfortable in a leadership role. It is my objective to secure a rewarding position in the environmental conservation and/or restoration field where I can utilize my skills to help enhance and protect our natural environment for generations to come.

Education _____

Cape Breton University, Sydney NS
Bachelor's Degree Engineering Technology (BET): Environmental Studies
Nova Scotia Community College, Bridgewater NS
Diploma Natural Resources Environmental Technology Diploma
British Columbia Institute of Technology
Parks Law and its Administration
Navigating Canadian Environmental Law
Eco Canada Certification

Relevant Work Experience _____

The Province of Nova Scotia: Nova Scotia Environment

Environment Inspector III

Bedford NS 2020-2021

- Worked to protect and promote the sustainable use of air, land and water resources in Nova Scotia.
- Researched applicable legislation, regulations, guidelines and standards and applied them to various complaints, application requests and questions regarding onsite sewage disposal systems, pits and quarries, registered drinking water supplies, well construction, contaminated sites, wastewater treatment, water quality, air emissions, industrial activities, solid waste, watercourse and wetlands, compliance, inspection and enforcement.
- Conducted inspections and audits of facilities to enforce regulations and compliance with approvals.
- Conducted investigations of complaints and gathered detailed information for reports.
- Responded to environmental emergencies during and after normal working hours.
- Promoted compliance by educating the public on legislation and regulations.
- Wrote letters, reports and terms and conditions for approvals.

Capital Regional District (CRD) Environmental Protection Division

Environmental Technologist

Victoria BC 2019-2020

- Carried out sampling and characterization of wastewater associated with treatment plants.
- Liaised with business owners and conducted routine sampling of business' discharges for compliance standards for the Regional Source Control Program.

- Carried out sampling for Sewer Odour and Corrosion Control Programs.
- Conducted wastewater, surface water, ground water, water column, biological and sediment sampling to maintain compliance with provincial water quality guidelines, evaluate potential impacts on human health and report on the status of the current ecosystem.
- Conducted investigations to determine sources of contamination and collected GPS data and ensured methods were consistent with applicable standards.
- Operated, maintained and calibrated sampling equipment including automated wastewater samplers, pH/temp and flow meters, as well as other various composite and grab samplers.
- Scheduled sampling activities, prepared sample plans, COC's, recorded data into field logbooks and downloaded received lab data into database.
- Operated and maintained EQIS database used by all CRD environmental programs.
- Submitted samples to labs and ensured sampling and analysis were carried out as per QA procedures.
- Prepared and updated sampling methodology and procedures as needed.
- Performed all work on land and water in accordance to WorkSafe BC standards.

Capital Regional District (CRD) Parks Department

Park Worker III

Victoria BC 2016-2019

- Performed a variety of routine park facility maintenance including hazard tree identification, trail building and inspections, maintaining Parks infrastructure (trestles, buildings, culverts, bridges etc), data collection and public relation duties, requiring independent judgement and the ability to effectively respond to non-routine situations and emergencies as they occurred.
- Assisted with a variety of projects including the reclamation of the Thetis Lake Park Pistol Range contaminated site and Thetis Lake dam improvements.
- Routinely monitored the lake water levels and adjusted the dam outflow at the spillway as per the CRD Biologist's recommendations and recording all data.
- Routinely monitored Elk and Beaver Lakes for the presence of toxic green algae and reported findings.
- Responded while on 24-hour call to fires as a member of the fire crew to contain and put fires out and ensure the safety of park users.
- Worked cooperatively with volunteers and partners with park special events as required.
- Ensured all work was performed in accordance with WorkSafeBC regulations and CRD regional parks policies and procedures and that all required data collection forms and reports were completed and submitted.
- Operated a variety of CRD regional parks vehicles (including off-road), small engine boats, standard power tools, chainsaws and specialized equipment.

Summerhill Group

In-field Ambassador representing Efficiency NS

Halifax Regional Municipality (HRM) NS 2014

- Engaged with people directly in their own communities
- Introduce programs to consumers, guide them on their journey of understanding about energy use, and create the one-on-one experience so essential to changing people's attitudes about energy efficiency.

- Traveled to scheduled appointment to provide direct installations of energy efficient products in homes and businesses in communities across HRM.
- Responsible for scheduling appointments and keeping track of inventory using inventory tracking software and keeping track of mileage.
- Provided updates on program to management.

Parks Canada: Kejimikujik National Park & Historic Site

Project Coordinator for Piping Plover Project

Queens County NS 2013

- Conducted bird survey field work (hiked & canoed to remote survey sites, surveyed sites for birds, sought out and recorded GPS nest coordinates, collected and submitted data to the lab, recorded wind speed using indicator and air temperature, as well as signs of predators).
- Assisted with Kejimikujik's other Species at Risk Recovery projects including: blandings turtles, ribbon snakes, monarch butterflies and performed water quality monitoring using secchi disk, YSI and acquired water samples as per protocol in Kejimikujik remote back country.
- Maintained and calibrated specialized field equipment and data entry into Excel, as well as scientific report preparation.
Trained co-op students and volunteers for field work and was responsible for their safety, as well as volunteer's in the field.
- Worked in collaboration with various stakeholders (Bird Studies Canada, Mersey Tobiatic Research Institute).
- Presented educational/outreach information to the public and Coordinated and participated in ecosystem restoration activities within the park.

Bluenose Coastal Action Foundation

Project Coordinator for Elver Abundance Study & American Eel Population Projects

Lunenburg County NS 2012

- Performed field work (constructed and monitored live traps for elvers and American eel, sampled elver DNA and monitored water quality with data loggers and a YSI, used PIT tags to track eels and operated a small boat within lakes within a protected watershed).
- Trained project interns and volunteers to perform field work.
- Calibrated and maintained specialized field equipment and tools.
- Followed strict protocols for sampling, data collection and safety procedures
- Collaborated with stakeholders (DFO, commercial fishers, other not for profit organizations).
- Assisted in the development of a protocol for commercial elver fishers to follow to determine fish weight when reporting their landings.
- Participated in meetings with board of directors, government departments and commercial fishers.
- Ensured all permits were always up to date.
- Developed and presented outreach information to the public, at scientific forums and to the board of directors (Was asked to fly to Ottawa and present study findings to the American Eel Working Group).
- Data management and report preparation, including contributing to DFO's scientific

report on the Elver population dating back to 1996.

**Friends of Keji: Kejimkujik National Park & Historic Site
Project Coordinator for American Eel Research Project
Queens County NS 2011**

- Developed and implemented Kejimkujik's first American Eel Research Project.
- Researched applicable polices, regulations and compliance requirements.
- Conducted field work to collect base line data (hiked and canoed to monitor live traps for American eel, monitor water quality with data loggers and a YSI, used PIT tags to track eels at various lakes within the park and recorded data all the while following strict protocol and keeping detailed field notes).
Maintained and calibrated specialized field equipment and tools.
- Developed and presented educational information to the public.
- Coordinated volunteers and responsible for their safety in the field.

MARIA L. DYCK, MBA

Phone: (647) 963-4954

marialdyck@gmail.com

A hands-on leader with 25+ years of experience in fundraising, marketing, communications, government relations, special events, public affairs and strategic planning. An innovative and effective problem solver and team leader with a solid record of successful initiatives and developing systems that work.

Professional experience:

St. Joseph's Health Centre Foundation (2010 – present)

President and CEO

- Rebuilt the Foundation at St. Joseph's. Restructured the operation and rebuilt the fundraising capacity and Board. Foundation is now one of the highest performing organizations of its kind in Canada and has more than quadrupled its fundraising.
- Recently completed a \$100 million campaign that exceeded goal by 40% and was completed in just over four years.
- Oversaw development of two strategic plans.
- Led initiative to rebrand St. Joseph's and built a strong brand called Promise.
- Built innovative, integrated fundraising operation supporting both measureable short and long term goals and created new community engagement plan.
- Member of the executive committee of the newly integrated Unity Health Toronto (comprised of Providence, St. Joseph's and St. Michael's) with an operating budget of \$1 billion.

St. Michael's Hospital Foundation (2004 – 2010)

Vice President, Development

- Conceived of project that resulted in \$25 million gift from international donor, Li Ka-shing, to St. Michael's Hospital. Developed proposal and supporting documents and worked with small group of senior hospital staff to secure gift.
- Part of major gifts team that completed St. Michael's Hospital Foundation's \$120 million campaign in summer of 2009 (campaign 2006 – 2009).
- Worked with Board volunteers to develop five-year strategic plan for Hospital Foundation.
- Member of Foundation's Campaign Cabinet – managing the Foundation's \$120 million campaign.
- Overhauled the Foundation's communications operation – worked with outside agencies to brand the campaign and develop advertising, e-commerce and web 2.0 initiatives for St. Michael's Hospital.
- Member of St. Michael's senior leadership team.
- Co staff lead on St. Michael's rebranding.

University of Toronto at Scarborough (2001 – 2004)

Executive Director of Advancement, Associate Principal

- Rebuilt advancement office of University of Toronto at Scarborough (UofTS) which had suffered from neglect for many years. Developed and executed strategic plan for communications, marketing, alumni programs, public affairs, special events, public relations and fundraising. Oversaw campus rebranding, increased campus visibility with a variety of key audiences, improved connection with alumni and increased net revenue. Oversaw \$30 million capital campaign at the campus as part of \$1 billion overall campaign.
- Conceived of and created a community development campaign called “Stand UP Scarborough.” Recruited leading local organizations to join campaign coalition that included: Scarborough Hospital, Rouge Valley Health Centre, Centennial College, Metroland Group of Papers, the City of Toronto, the Scarborough Chamber of Commerce, Scarborough Town Centre, Rohm and Haas, University of Toronto at Scarborough, community organizations and other business partners.

The FLA Group (now Goodworks) (2000-2001)

Partner

- Fundraising consulting for a variety of firms. Canadian Cystic Fibrosis Foundation (1996 – 2000)

Director of Development

- Overhauled fundraising department. Launched new events, updated existing ones, added major and planned giving programs and built and strengthened corporate partnerships. Organized CCFF’s first Celine Dion benefit concert in Toronto. Successful event was organized in three months and grossed more than \$1 million dollars. Improvements led to most successful years ever while at CCFF.

Ontario Government Caucus Services (1991-1996)

Director of Communications

- Developed comprehensive communications strategies for government caucus.
- Managed a full service group of 40+ experts including direct mail, television, radio, print media, and public events.
- Member of government leadership group.

Government of Ontario – Ministry of Energy (1990 – 1991)

Special Assistant to the Minister

Previous: Fundraising consultant in Canada, the United States and Australia

Education:

- Master of Business Administration: Schulich School, York University
- Bachelor of Arts, Honours degree: University of Western Ontario, , Dean’s Honour List, Huron College Full Scholarship

Volunteer Leadership:

- Chair, AHP Convene 2020: AHP's national Canadian conference
- Co-Founder and Curator - Debate. Debunk. Delight. Conference (2010 – 2018): D3 was a bi-annual event held five times that brought together 200 non-profit senior executives and board members from across Canada for a one day discussion of big ideas that impact the charitable sector. Speakers have included: The Governor General of Canada, Dominic Barton, Zita Cobb, Annette Verschuren, Dr. Danielle Martin, Victor Dodig, Sam Duboc, Tomi Poutane, Moses Znaimer, Michael McCain and many others.
- Advisory Committee Member: Seneca College Non-Profit Leadership and Management Program
- Advisory Board: Humber College Fundraising Management Postgraduate Certificate
- Judge, CMA Awards – Canadian Medical Association 2013-15
- Congress Chair (2011) and Head of Marketing & Education Portfolios 2004-2011: Association of Fundraising Professionals (AFP), Greater Toronto Chapter, and Board Member: AFP GTA 2006 – 2008

Professional Affiliations

- Member Association of Fundraising Professionals, Toronto Chapter (AFP)
- Member, Association for Healthcare Philanthropy (AHP)
- CFRE, Certified Fundraising Executive

References available on request

Shawn Feener

Shawn Feener is a conservationist and an active member of the Mi'kmaw community. He has worked in the conservation field for many years as a fish biologist and has recently entered the education field. Shawn has lived close Pijinuiskaq or the Lahave River his whole life and has had the pleasure of working with some of the beings that call Pijinuiskaq home. He completed a diploma in Wildlife Conservation at Holland College in Prince Edward Island, a Bachelor of Science in Environmental Management at the University of New Brunswick and is currently working on a Bachelor of Education at St. FX in Nova Scotia.

Scott Jermey

Manager, Acadia First Nation Ecology Program and coordinator for Kespukwitk AFN Earth Keepers. Scott was born and grew up in/around the Wildcat Community of the Wabanaki forest and on the many waterways that make up the Kespukwitk district of Mi'ma'ki.

He currently works closely with many ecology & environmental organizations including:

- Parks Canada
- Mersey Tobeatic Research Institute (MTRI)
- Confederacy of mainland Mi'kmaq (CMM)
- Clean Annapolis River Project (CARP)
- John F Kearny's Listening Together Project
- Southwest Nova Biosphere
- National Tree Seed Centre
- Environment and Climate Change Canada (ECCC)

Current/ongoing projects include Eastern Ribbon Snakes monitoring, Blanding's Turtle nesting/hatching, Bat monitoring, Wisqoq (black ash) research, seed collections, Hemlock Woody Adelgid (HWA), Emerald Ash Borer (EAB), First nation community outreach/education and consultation.

He currently is a member of the following:

- Kespukwitk Conservation Collaborative (KCC)
- North Queens Community School's Land Based Learning Project, Elaptoq
- Mersey Corridor Indigenous Protected and Conserved Area (IPCA)
- Indigenous Habitat Participation Program
- Indigenous Seed Collection Program

Marc Langlois

Marc Langlois is a leading thinker, and practitioner in community development, developmental evaluation, action research, and systems change. He is widely regarded for his innovative community project designs for sustainable impact, youth and adult partnerships, experiential education, and useful evaluations.

He has been a social innovator and entrepreneur, facilitator, and educator for 40 years. Following his years as co-founder and Executive Director of HeartWood, Centre for Community Youth Development, he went on to work, study and research across Canada in comprehensive community development and whole systems change. He holds a Masters of Management from McGill University and a PhD from Concordia University where he studied open systems theory, social innovation and whole system design. His extensive research focused on project design for comprehensive urban and rural community and youth development.

He now lives in semi-retirement in Rose Bay, NS.

Education

PhD, Individualized Program, Concordia University, December 2013

Masters of Management in the Voluntary Sector, McGill University, 2002

National Certificate in Voluntary & Non Profit Sector Management, Henson College, 1998

Diploma, Leisure Services (Recreation Therapy), Mount Royal College, Calgary, Alberta 1980

Diploma, Outdoor Recreation (Technician), Seneca College, Toronto, Ontario, 1978

ANDREW S. MEDEIROS

**Assistant Professor
School for Resource and
Environmental Studies,
Faculty of Management**

6100 University Ave, Suite 5030
Dalhousie University, Halifax, Nova Scotia
andrewmedeiros@dal.ca
902-494-6355

Research Agenda

My interests focus on understanding the anthropogenic drivers of environmental stress on the sustainability of freshwater ecosystems, past, present, and future. I am particularly motivated in applying new methodologies to field-based research that supports environmental decision making and conservation.

Higher Education

11/2011 D.Phil. Biology, York University, Toronto, Ontario

08/2005 M.E.S. Environmental Science, York University, Toronto, Ontario

08/2003 B.Sc. Biological Sciences – Specialization in Earth Science, Brock University, St. Catharines, Ontario.

Employment

2018-present Assistant Professor, School for Resource and Environmental Studies, Cross- appointment with the College of Sustainability, tenure-track, Dalhousie University, Halifax, Nova Scotia

2017- 2018 Assistant Professor, limited-appointment; non-tenure track, Trent University, Peterborough, Ontario

2016- 2018 Postdoctoral Research fellow, joint collaboration with Northwestern University / Robarts Centre for Canadian Studies, York University Advisor: Yarrow Axford

2015 – 2016 Associate member of the Faculty of Graduate Studies, York University

2014 – 2016 Assistant Professor, limited-appointment; non-tenure track, York University, Toronto, Ontario

2013– 2014 Postdoctoral Fellow, University of Waterloo, Waterloo, Ontario Advisor: Thomas W.D. Edwards

2011 – 2013 Postdoctoral Fellow, Wilfrid Laurier University, Waterloo, Ontario Advisor: Brent B. Wolfe

Current Projects

- Sable Island’s Vulnerable Ecosystems in a Changing Climate

o Funding: Marine Environmental Observation Prediction and Response Network, Parks Canada

o Role: Principal investigator

- Coastal Adaptation & Vulnerability Assessment (CAVA): The Case of Lunenburg, Nova Scotia

o Funding: Social Sciences and Humanities Research Council

o Role: Co-investigator (Principal applicant)

- Water Security for Northern Communities; identifying the influence of environmental change on source-waters and supply

o Funding: Crown-Indigenous Relations and Northern Affairs Canada

o Role: Co-investigator (Principal applicant)

- South Greenland's Holocene Climate History Reconstructed Using Three Paleolimnological Approaches

o Funding: National Science Foundation (NSF) CAREER: #1454734.

o Role: Named Collaborator

Catherine Pross

I was asked to become an advisor to KCC because of my experience as Chair of the Indian Path Common Committee for MODL, responsible for the stewardship of the Common for over fifteen years. As advisor I carried out an extensive biodiversity exploration and documentation of the Shaubac lands throughout 2022, together with Frances Anderson, Anne Mills (see Report on the Survey of Shaubac Biodiversity carried out by Frances Anderson, Anne Mills & Catherine Pross).

Allison Tremain
94-2 Hopson Street, Lunenburg, NS
BOJ 2C0 (250)726-3934 allison.tremain@gmail.com

EDUCATION

2004 – B.Sc. Earth and Ocean Sciences, University of British Columbia, Vancouver, BC.

PROFESSIONAL ASSOCIATION

Geoscientist in Training, Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).

PROFESSIONAL EXPERIENCE

ENVIRONMENTAL SCIENCE & FORESTRY

- Supervised several construction sites for forestry, highways, land development, and hydroelectric projects. Supervision included preliminary site assessments, construction monitoring, sediment and erosion control measures, culvert installation, water quality, and stream channel alteration or diversion.
- Conducted several ecosystem restoration projects on eastern Vancouver Island. Designed site specific restoration plans for government and community organizations for riparian areas and wetlands. Constructed new riparian corridors with native plants, utilized bioengineering techniques for sediment and erosion control, and constructed new stream banks and channels with woody debris and bedrock materials.
- Provided baseline data for environmental impact assessments for several proposed land development projects in the BC central and southern interior. Assessments included a field inventory of flora and fauna, soils, geology, surface and groundwater features, and sensitive habitats.
- Completed several forest data inventories in the BC central and northern interior. Inventories included growth and yield, density measurements, cut block layout, sensitive soils, water resources, potential fish habitat, and mountain pine beetle mortality.

HYDROGEOLOGY & SOILS

- Completed numerous preliminary site investigations for potential contamination in surface water, groundwater, and soils. Projects included field and office investigations of land use (commercial, institutional, industrial), soil and groundwater sampling programs, monitoring, government compliance, and remediation.
- Provided technical field data of soils, geology, groundwater travel time, entry points to water bodies, and physical behavior in situ of potential contaminants. Projects included prevention, real time events, and post incident monitoring.
- Conducted several site assessments in groundwater for drinking water supply and wastewater treatment plants. Assessments included supervision of borehole drilling programs, excavation test pits, pumping tests, monitoring well installation, and rapid infiltration basin tests. Field investigations included groundwater depths, direction of flow, travel time, groundwater sampling, and soil permeability tests.
- Conducted several investigations in soils, geomorphology, and bedrock geology for preliminary environmental impact assessments. Assessments included identifying and mapping soil stratigraphy, surficial material, and bedrock geology through aerial photograph interpretation, field reconnaissance, and ArcGIS.

HYDROLOGY

- Developed, installed, and monitored water quality and quantity programs for existing and proposed mine development, forestry, and run of river (hydroelectric) projects. Programs included hydrometric and climate gauging station installation, discharge measurements, water quality sampling for lab analyses, invertebrate sampling, streambed sediment sampling.
- Assisted clients with provincial and federal regulations for water license applications. Applications included projects for land development and construction, water use and extraction, potential surface water supply and storage, and fisheries compliance.
- Conducted technical reviews of municipal water supply and demand studies, reservoir and dam safety and maintenance procedures, and land use assessments in community watersheds.
- Completed several stream, channel, and riparian assessments on Vancouver Island and the BC southern and central interior. Assessments included total station surveys, vegetation and woody debris function, channel classification, gravel counts, and natural or anthropogenic disturbances.
- Conducted several watershed assessments (IWAPs) in the BC southern and central interior. Field investigations included aerial photograph analysis, helicopter reconnaissance, existing and proposed forest development, sediment sources, inspection of roads, riparian function, Mountain Pine beetle mortality, equivalent clear cut area calculations (ECAs) and risk assessment to aquatic habitat and water quality.
- Assisted with university field research conducting snow surveys (BC southern interior) and glacier mass balance measurements (BC Coast Mountains). Research included traversing remote areas measuring snow depths and drilling glacier stakes. Field research required a high level of safety, GPS and map proficiency, and travel by snow machine, snowshoe, and ice traverse.

COMMUNICATION

- Provided numerous technical reports for clients in forestry, environment, government, land development, and university research. Reporting included assessment summaries, data reduction and analysis, recommendations, project proposals, and oral presentations.
- Trained and educated several groups in environment management and practice through local field projects. These groups included volunteer organizations, BC First Nations, municipalities, junior environmental consultants, and field subcontractors.
- Conducted oral presentations of project findings to clients, community interest groups, First Nations communities, and both Federal and Provincial ministries.
- Instructed other scientists, engineers, & trades in my area of science through staff meetings and company publications.
- Developed a new teaching assistant manual for university level Intro to Geology including course outline, lab instruction, quizzes, and lab exams.

FIELD SKILLS

- Trained in WHMIS and field safety protocols including operating two-way radio, ATV and snow machines.
- Several years experience operating off road vehicles & field equipment in remote wilderness areas.
- Proficient in using handheld GPS, map & compass, and traversing terrain on foot.
- Expertise in collecting field data with manual tools, sensors, and scientific measuring equipment.
- Special skills in developing real time in-field problem based solutions and adapting scientific procedures to collect accurate and precise data.

EMPLOYMENT HISTORY

Self-Employed

Visual Artist Allison Designs Ucluelet, BC
2013 to Present

Visitor Services Attendant/Trails Maintenance

Parks Canada, Pacific Rim National
Park Reserve, Ucluelet, BC
July 2010 to October 2012

Teacher Assistant/Geology University of British Columbia

Kelowna, BC
January 2009 to December 2009

Environmental Geoscientist EBA Engineering Consultants Ltd.

Kelowna, BC October 2006 to December 2008

Geoscientist Summit Environmental Consultants

Vernon, BC August 2005 to September 2006

Silviculture Foreperson Mountain Reforestation Ltd.

Lillooet and Vernon, BC Spring/Summer 2005

Soils Technician

Forestry Research
University of Northern BC Prince George, BC Autumn 2004

Hydrology Technician

Geography Research University of British Columbia Vancouver, BC Summer/Autumn 2003

Soils Technician BC Ministry of Forests and Range

Fort St. John, BC Summer 2002

Assistant Manager

Habitat Restoration Streamside Native Plants
Courtenay, BC February 1999 to September 2000

REFERENCES Employment references available upon request.



Municipality of the District of Lunenburg

Report to Council

Report To: Council

Submitted By: Sarah Kucharski, Manager, Corporate Services & Communications

Date: February 21, 2023

Re: Canadian Lyme Disease Research Network Request

Background

In 2017, Council received presentations from Nova Scotia Public Health, the Public Health Agency of Canada (PHAC) and a staff working group on the issue of Lyme Disease. Three motions were passed indicating MODL's commitment to improving Lyme Disease prevention and treatment in Nova Scotia. We continue to execute on the commitments made at that time.

On January 10, 2023, Council received a presentation from Camille Guillot, Research Assistant, Université de Montréal and Dr Jean-Philippe Rocheleau, DMV PhD. They represent the Canadian Lyme Disease Research Network, a group working to identify science-based interventions to reduce the risk of Lyme disease and share science and experience among local partners and researchers, and the University of Montreal.

They are asking potential municipal partners to commit to the following:

- Support in the creation of a toolbox that contains the various interventions Lyme prevention,
- Identifying relevant stakeholder groups with the input of the research team,
- Sending staff to attend workshops (virtual or in person),
- Represent views of municipality in discussions.

Ms. Guillot estimates that municipal staff time needed would be between 20 and 30 hours, between February and July 2023. They do not require any additional funding; however, they would appreciate the use of our Municipal Services Building Council Chambers as a meeting space for a workshop, should the dates/times work with their needs.

Recommendation/Motion

That Municipal Council approve MODL join the Canadian Lyme Disease Research Network as a partner municipality, and that the Manager of Corporate Services and Communications be the Municipality’s staff representative.

Report Preparation	
Department	Administration
Report Prepared by	Sarah Kucharski, Manager, Corporate Services & Communications
Report Approved by	
Date Reviewed by C.A.O.	



Municipality of the District of Lunenburg

Request for Decision

Report to: Policy & Strategy Committee
Submitted by: Alex Dumaresq, Deputy CAO
Date: February 21, 2023
Re: Municipal Response to Dry Wells

Recommended Motions

Move that the Policy and Strategy Committee direct staff to develop a draft private water supply improvement and financing program for the committee to review, and further that the Committee direct staff to explore possible sites and costs for a non-potable community supply source.

Background

Leading up to the 2010's, droughts and periods of drought-like weather have been infrequent in Southwestern Nova Scotia. Unfortunately, projections suggest that our region will increasingly see dryer conditions. By 2050, the Federal Government projects that precipitation deficits, that is periods of abnormally low rainfall compared to the historical record, will be 36% more frequent.

Compounding the issue, MODL is a rural area with the majority of households getting water from private wells, and there is a greater rate of shallow, dug wells than the rest of the province resulting in a higher susceptibility to dry wells during precipitation deficits.

Council has been aware and responding to the issue of dryer summers since 2016. That year, the province experienced extreme periods of drought-like conditions resulting in more than 1,000 homes experiencing water shortages in southwest Nova Scotia. In response, Council

initiated a program to provide jugs of potable water to residents who were struggling with dry wells and worked with partners such as the LCLC to provide shower facilities.

Precipitation deficits cause other issues for our communities as well. The Department of Natural Resources (DNR) reports that the water shortage in 2016 also created issues in agriculture, resulting in smaller yields, and issues for farmers tending to livestock. In addition, there was a greater risk of wildfires, and the lack of precipitation affected local waters ways. As a result, there was also a loss of habitat for species such as the Atlantic salmon.

DNR also identifies a set of factors which impact the susceptibility of a community to experiencing impacts from a lack of rain. These include:

- The severity of existing precipitation deficit;
- Amount of precipitation in forecast;
- The density of unserved homes in an area; and
- The amount of shallow wells serving households in the area.

In July of 2021 Council approved the following issue statement:

The Municipality will investigate and implement measures that:

- 1) reduce the impact of drought-like conditions and**
- 2) increase community resiliency to precipitation deficits**
for private potable water supplies and small-scale livestock
and agricultural needs.

Criteria identified to evaluate options include:

- The effectiveness of a tactic at reducing impact of precipitation deficit;
- The effectiveness at increasing a household's self-sufficiency in the face of precipitation deficits;
- The cost, both to the Municipality and to the household;
- Ease of access for residents (including possible economic issues, logistical and accessibility concerns and possible systemic barriers for racialized groups).

OPTIONS

Temporary Relief

Municipalities across North America have engaged in a range of programs to provide residents with support when private wells have gone dry. MOD currently works with retailers to provide coupons for potable water and provides showers via the LCLC.

Approximately 50 households participate in the program. It supports potable water needs but not domestic supply (e.g., toilets and washing). The program also does not assist with gardens small agricultural uses or increase individual resilience.

There are no capital costs and under \$10,000 is needed for operating costs. There are some administrative adjustments to be incorporated in the next offering of the program including: removing the 7-days' notice of program launch, diarizing monthly precipitation forecast from Environment Canada and Climate Change (ECCC), confirming retailer participation in early summer before potential dry weather, easing the distribution of coupons and re-exploring additional shower facilities.

Ultimately the program provides short-term relief for some household for parts of their water needs and is low cost and easy to administer. However, because it does not increase resiliency or address domestic supply or small agricultural needs, it is insufficient as a stand-alone option.

Bulk Supply

One approach to providing bulk water to residents is a filling station connected to a municipal utility, capable of providing potable water to commercial and residential users. In some instances, these facilities have automated software-based meter systems allowing for residents to fill larger containers and pay via credit card. Construction estimates range between \$200,000 to \$500,000 depending on site conditions, post-pandemic inflation impacts, and software complexity. While private haulers reported filling concerns in 2016 at the Bridgewater bulk supply facility, the Town is currently constructing a new bulk supply facility which will be operational in the summer of 2023. Therefore, it is not recommended that the municipality proceed with a municipal utility-based bulk supply at this time, to avoid duplication of infrastructure and competition with private haulers. This decision could be revisited at a later date, if the new facility in Bridgewater does not address the commercial hauler concerns.

A second approach to providing bulk water is to provide access to a community well source of bulk water. Residents bring their own containers to these water sources and in other municipalities the sources may be tested but are not staffed or metered. Generally, this water is not considered potable because even when testing of the source is completed regularly, the municipality cannot guarantee the containers used will be sanitized. The location could be on municipal property with adequate supply, or in a non-municipal location such as a community hall.

It is estimated that approximately 50 households would make use of this type of source. While not addressing potable or domestic supply, it may assist with garden and small agricultural uses. Capital costs would be less than the \$500,000 range for a utility-connected source, and there would be minimal operating costs and administrative burden.

In summary, a bulk supply facility connected to potable water is not advised at this time. Should Council wish to pursue a community well type facility, staff could further investigate options for consideration. The use would primarily be for small agricultural uses (i.e., not potable water).

Water Conservation Programs

A common approach that local governments have taken during dry periods include campaigns to promote efficient use of water. These programs can be delivered in house or through a 3rd party. Water conservation programs take a holistic view of water and can include: advice on lawns and garden designs to be water efficient; water conservation tips and equipment; stormwater management guidance; youth and public education; and home visits to tailor solutions.

This program would have a larger reach than the previous options considered and may yield small increases in the resilience of existing potable/domestic supplies, water for gardens/small agriculture, individual resilience.

If a 3rd party with experience in environmental and/or public education programs were engaged, the annual costs could be in the range of \$60,000 to \$100,000. There is low administrative burden once the contract is established, and without special attention, it is unlikely that the program will have any impact on equity seeking groups.

In summary, while this option would provide the widest reach, it is anticipated to be the least effective at directly increasing access to water. At best, a conservation program would complement other municipal water and sustainability initiatives.

Private Supply Improvements

Municipalities have also developed programs to assist residents installing improved water supply systems such as drilled wells and cisterns. MODL would develop a Bylaw enabling the municipality to loan funds to homeowners for the purpose of improving water supply. Similar to the clean energy program, MODL would assist in the evaluation of options and implementation of solutions and would provide financing for capital upgrades to the home.

The impact of the program would be limited to a small number of homes (e.g., 10 participants/year), however the option provides a complete solution to domestic, potable, and small agricultural supply issues. It would require an approximate amount of \$100,000 per year, though the funding is recycled through homeowner repayment. There is a high administrative burden for the municipality to operate this type of program. The application-based programs also more likely benefit higher income/higher education households as financing options reduce but don't eliminate financial issues for low/fixed income households.

In summary, the financing program makes use of municipal reserves to facilitate a major improvement in the water supply for individual households. It is highly effective at addressing the core issue but is a small scale solution not accessible to all residents facing the issue, and therefore should not be used as the only solution to the problem.

DISCUSSION

Based on the criteria selected, no single option provides a solution to the issue as identified.

- The financing of improvements to private supply provides the most effective solution, but the number of participants is limited;
- There is a need for bulk supply, but contamination of potable water is a concern, and this type of facility is most suited to address non-potable uses.
- Temporary relief will continue to be necessary for those who face financial barriers to major investment in their property;
- While a conservation program would have the broadest reach, it is the least effective option at addressing the issue statement.

As a result, staff are recommending that Council develop a program to assist residents identify, install, and finance improvements to their private supply, that the municipality explore potential sites for a non-potable water source, and that the Municipality continue the

temporary relief program (with annual operating adjustments based on council and resident input).

BUDGET IMPLICATIONS

- Water improvement financing may have annual administration costs (e.g., \$20,000) and an annual recyclable investment amount (e.g., \$100,000).
- Capital costs for a non-potable supply could vary significantly depending on the site, but would not be expected to exceed \$500,000, and operating cost of under \$20,000 per year.
- The temporary relief program budget is less than \$10,000 per year.

WORKPLAN/TIMELINE

- Staff time is required to investigate the design of an appropriate private supply improvement program. A draft program could be ready for consideration in 6 months' time.
- The site selection process would dictate whether to proceed with a bulk-non-potable water source. If a suitable location is identified, design may occur in winter of 2024, and possible construction in 2024/25.
- The temporary relief program along with Councils' suggestions for improvement will remain in place for the summer of 2023, should weather conditions require.

CONCLUSION

Climate change continues to exert influence on our lives, and communities will be required to adapt to changing conditions, including the increase in frequency and severity of precipitation deficits. Improving private supply is the most effective approach and will increase community resiliency, but its reach will be limited to a small number of homes. As a result, MODL should continue to provide temporary relief and explore a non-potable community supply.

Report Preparation	
Department	Administration
Report Prepared by	Alex Dumaresq, Deputy CAO
Report Approved by	
Date Reviewed by C.A.O.	

Policy & Strategy Committee

Date: February 21, 2023

Item: Item: 9.3.1



Municipality of the District of Lunenburg

Request for Decision

Report to: Policy & Strategy Committee
Submitted by: Elana Wentzell, Director of Finance
Date: 2023-02-21
Re: Hydrant Charge Proposed Policy

Recommendation

It is recommended that the Policy & Strategy Committee direct Staff to develop a policy for hydrant charges to start April 1, 2024 based on Option 1 (a).

Executive summary

The Finance Committee recommended the 2023/24 hydrant charges based on past practice. There was some discussion regarding how the charges are applied. Staff were directed to bring more information back to Council on this subject.

Discussion

Currently, hydrant charges are levied to all properties within 1,000 feet of a hydrant. Please see the enclosed map labelled Appendix 1.

This billing began after the hydrants were installed with the following Motion of Council at their April 12, 2005 Council Meeting:

“Moved by Councillor Statton, seconded by Councillor Young, that we accept the recommendation of the Committee of the Whole that the charges for the fire hydrants in the MacCulloch Road and Pine Grove areas be recovered under option (d) as presented by staff in their report dated January 31, 2005.... “A combination of General Tax Rate and a Charge levied on Properties within 1,000-foot radius of a Hydrant”; and further, that the phasing-in of cost sharing be as follows:

- Year 1 – 75 % from the general tax rate and 25% from the hydrant rate;
- Year 2 - 50 % from the general tax rate and 50% from the hydrant rate;

- *Year 3 - 25 % from the general tax rate and 75% from the hydrant rate; and*
- *Year 4 and thereafter - 100% from the hydrant rate;*

Please see the attached copy of the motion and Staff report from the 2005 meetings labelled as Appendix 2.

On July 7 2010, the Northfield District Fire Department submitted a letter to the Mayor agreeing to help with the funding of the fire hydrant maintenance fees. The Department agreed and paid a total of \$15,000: \$2,000 per year in 2010 & 2011; \$3,000 per year in 2012 & 2013; and \$5,000 in 2014. Please see Appendix 3.

On June 10, 2015 an email was received by the local Councillor from the Northfield Fire Department. It indicates that the Department will no longer support the hydrant system financially based on the limited availability and training requirements. Please see Appendix 4.

Because there was never a policy developed for the ongoing maintenance fees, MODL staff continue to bill based on the April 12, 2005 Council Motion. There is an existing related By-law 13 Capital Cost Recovery Charges for Water Systems. This By-law deals specifically with new requests for water connections at MacCulloch Road and does not deal with ongoing hydrant charges for maintenance.

Staff believe that there is a need for a policy to specifically address the ongoing maintenance charges for hydrants so there is clarity on what properties receive the charge. Relying on an 18 year old Council motion is not the best way to ensure billing consistency at the staff level and makes it easier to communicate the billing charges to the public.

Budget implications

The budget should be minimally impacted based on any decision made by Council. If the fees are recovered 100% by either the existing area rate or through the Fire rate, there would be no impact to the general tax rate. However, if Northfield Fire Department was billed directly for the fire hydrants, all residents in the fire district would be affected. The \$68,153 hydrant costs in 2023/24 would equal approximately 2.7 cents on the existing Northfield fire rate which is currently set at 14 cents per \$100 of assessment.

Alternatives

Staff believe there are some options for Council to consider:

1. Develop a policy for hydrant rates
 - a. Continue to bill only those properties within 1,000 feet of a hydrant OR
 - b. Bill the Northfield Fire Department for the hydrants
2. Continue to bill the hydrant rates as per the April 12, 2005 Council motion
3. Discontinue billing the hydrant rates and recover through the general tax rate.

Alternative Discussion

The Public Service Commission must bill the Municipality for the hydrants located in the Municipal District.

The current area rate charge was developed based on information from a staff report in 2005 and approved by Council at that time. The existing area rate is applied only to the properties in a concentrated area that gain the most benefit from the hydrants. Staff believe this is still the best option. A policy would be better (alternative 1 a.) than the way the charge is applied now (alternative 2.)

The Municipality could pass these costs on directly to the Northfield Fire Department (alternative 1 b.). The Department would most likely have to adjust its own Fire Tax rates which would apply to properties in the Fire District that do not derive any benefit from the hydrants.

The Municipality could also discontinue recovering the hydrant charges from an area rate and recover them from the general tax rate (alternative 3). This would call into question why any area rates are set as there is a specific benefit to the community where the hydrants are located. This would be no different than setting rates for other community specific benefits like sewer and street lights.





Conclusion

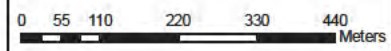
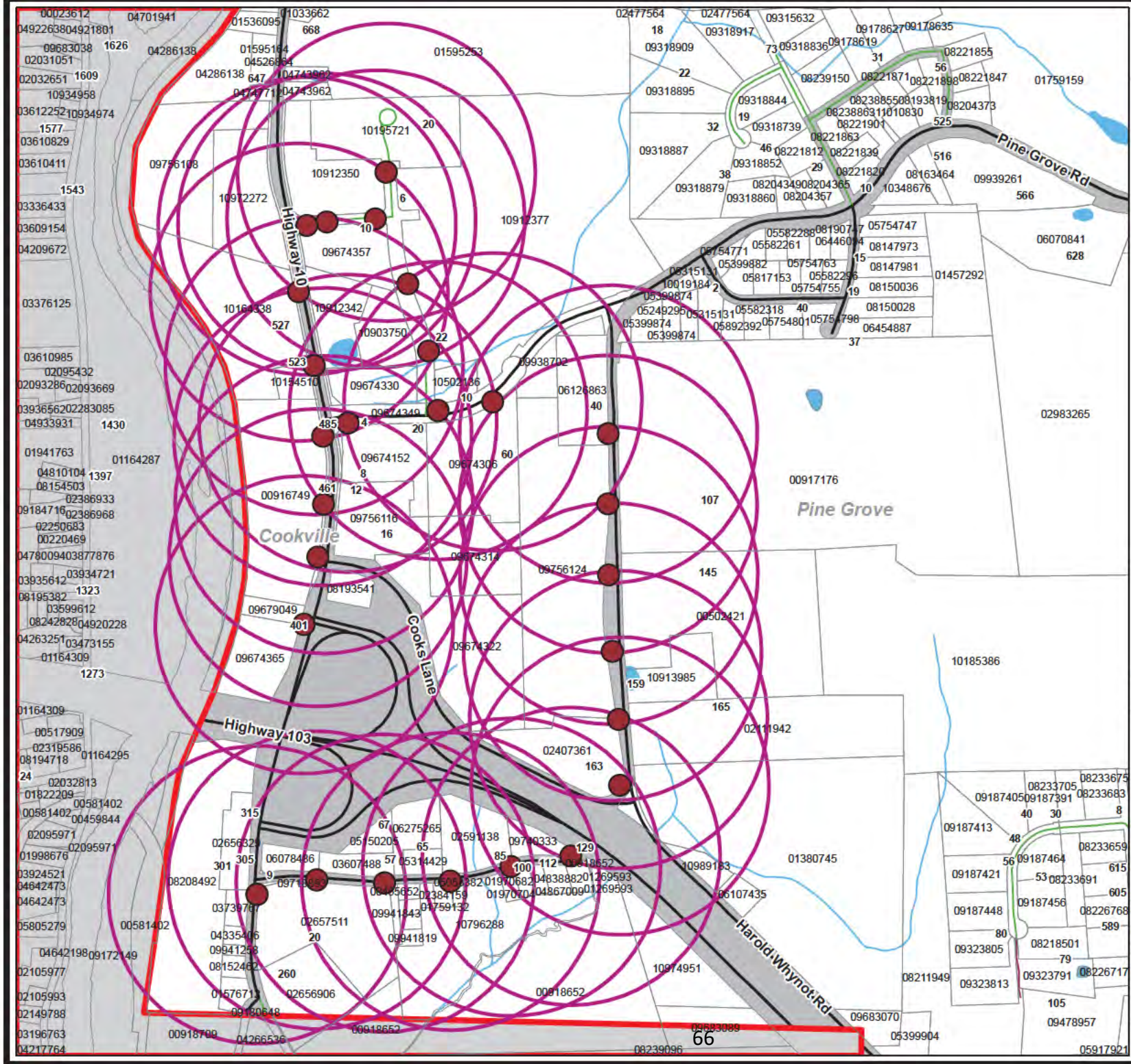
Because the existing hydrant charges are based on an 18-year old Council Motion, it is recommended that a policy be developed for the fire hydrant area rate and further for it to start in April, 2024 as the hydrant rate for April 2023 has already been approved.

Report Preparation	
Department	
Report Prepared by	
Report Approved by	
Date Reviewed by C.A.O.	

Hydrants

Appendix 1

-  Municipal Hydrants
-  Civic Points
-  properties_jan2023
-  Hydrant 1000ft radius



Project Description:

MUNICIPALITY OF THE DISTRICT OF LUNENBURG

Sources: Digital Base Map Data from the Nova Scotia Geomatics Centre, Amherst, NS

Disclaimer: Information compiled from numerous sources and may not be complete or accurate. Graphical representation only.

Date:

File:

Prepared By Planning & Development Services
Municipality of the District of Lunenburg

to attend the Spring Workshop. (Counc. Nauss, who had earlier left the meeting, was subsequently contacted and he also plans to attend.)

AWARDING OF TENDER

At 10:40 a.m. Pierre Breau, Director of Engineering and Public Works, was in attendance for Council's consideration of the tender award for the supply and delivery of Baler Wire for the Lunenburg Regional Recycling and Composting Facility (LRRCF) for the fiscal year 2005-06.

TEN. #2005-01-003
BALER WIRE FOR
LRRCF

Mr. Breau informed Council that the purchase of this Baler Wire is a regular expense that is done every year. The expenditure for 2004-05 was approximately \$19,000.00. However, the price of steel has had a big increase. The LRRCF budget will be adjusted accordingly.

Moved by Counc. Young, seconded by Deputy Warden Garber that we accept staff's recommendation and award the tender for the supply and delivery of Baler Wire for the LRRCF to Samuel Strapping Systems for the price of \$30,731.22 (including HST). Carried.

Mr. Breau was thanked and he left the meeting.

COMMITTEE OF THE WHOLE - RECOMMENDATIONS

Mr. Gordon Pettipas, Director of Financial Services and Municipal Treasurer, was in attendance at this time.

FIRE HYDRANTS
CHARGES -
MacCULLOCH RD.
AND PINE GROVE
AREAS

Moved by Counc. Statton, seconded by Counc. Young that we accept the recommendation of the Committee of the Whole that the charges for the fire hydrants in the MacCulloch Road and Pine Grove areas be recovered under option (d), as presented by staff in their report dated January 31, 2005 (copy attached to original Minutes), "A combination of General Tax Rate and a Charge Levied on Properties within a 1,000 foot radius of a Hydrant"; and further, that the phasing-in of the cost-sharing be as follows:

- Year 1 - 75% from the general tax rate and 25% from the hydrant rate;
- Year 2 - 50% from the general tax rate and 50% from the hydrant rate;
- Year 3 - 25% from the general tax rate and 75% from the hydrant rate;
- and • Year 4 and thereafter - 100% from the hydrant rate.

Counc. Statton indicated that she wished to make an amendment to the motion.

Moved by Counc. Statton, seconded by Counc. Countway that the motion be amended so that the 25% from the hydrant rate not include residential and that it be only from the commercial property taxes.

Counc. Young questioned if the amendment changes the intent of the original motion.

Mr. Cooper said he doesn't believe that it does.

Mr. Quinn said there is nothing improper to exclude one type of land for a common charge or levy.

Mr. Cooper said you can't treat two houses differently but two types of land you can.

Counc. Zwicker said he can't support the amendment. If he had a house in that area, a fire hydrant would certainly be a benefit to him. He cannot support that residential properties be exempt. We could have a hundred homes within the radius that we're talking about. He could not agree to that.

Deputy Warden Garber commented that commercial would pay more of the taxes than the residential if we don't make this amendment.

Counc. Young said he can't support the amendment. Hydrants are a benefit to everyone involved. He thinks the commercial properties are going to be paying higher as it is. He thinks it's fair the way the motion was presented.

Counc. Statton said she had Mr. Pettipas do some calculations. The \$1,030 that would be collected would cause a hardship on those it will be collected from. That amount of money does not represent 1/8¢ on the tax rate. Commercial properties can raise the price of the goods they sell. The highest tax would be \$85. It doesn't make any sense for the hardship it will cause to some residents.

Counc. Bell said this present formula was done in such a way to ease the burden. We tried to make it as fair as possible. When a service is put in an area, those who receive direct benefit of it should pay.

Counc. Moore said she has to support the amendment. We want commercial development in that area, so they should pay.

Warden Wentzell pointed out that we have not determined the residential part of it yet.

Counc. Zwicker commented that we're taking a snapshot at MacCulloch Road. We're not looking down the road. There will be areas designated for residences. That being the case, they would not pay anything towards the cost of hydrants. He's sure in Bridgewater the residents pay towards maintaining a fire hydrant system. We can't take a snapshot at just one street. That's his reason for not supporting the amendment.

Counc. Dempsey asked for clarification. If we approve the amendment and it applies to commercial assessed property, condominiums and apartment buildings would be assessed commercial. Would they pay?

Mr. Quinn said apartment buildings with four units or more are assessed as commercial and would pay.

Counc. Dempsey said then saying it would not apply to residential is not quite correct. Commercially assessed properties have the ability to be sprinklered. This has major implications for insurance. They would benefit more so than residential. You have to take into consideration the residential that is there. They did not request these hydrants. She can support amending the motion to have it apply to commercially assessed property. We tax commercial properties differently. We have no problem doing that. They have the ability to recoup their costs.

Counc. Statton said she's targeting MacCulloch Road because that is where the residential properties are. We subsidize sewer rates in this Municipality. Those hydrants were put there because of the commercial development, so why should we penalize the people who can ill afford to pay.

Counc. Bell said, from the report we had privy to see, he can see hydrants extended. If that is done within the next five years, he thinks we are closing ourselves in a box. He doesn't want to tie Council's hands in the future.

Deputy Warden Garber said what we're talking about is urban service in a rural area. This is different from what we normally do. He questioned if,

traditionally, in a structured urban area, is it normal to distinguish between the two properties for a service?

Counc. Dempsey said it is rolled into a general service rate.

Mr. Pettipas said it was all inclusive.

Deputy Warden Garber reiterated that it's an urban service in a rural area. He pointed out that there are other services that could be provided ...street lights, sewer, water. We have to treat all those services in the same manner and equally. Do we not have to treat hydrant service equally the same? Commercial properties pay more taxes, so they will pay more. Will you not charge residential properties for those other services? We pay for street lights in Dayspring. Is not fire hydrants a logical extension of that?

The question was called on the amendment.

The amendment was defeated.

The vote was then taken on the original motion.

The motion accepting the recommendation of the Committee of the Whole regarding charges for the fire hydrants in the MacCulloch Road and Pine Grove areas was carried.

Mr. Pettipas was thanked and he left the meeting.

HERITAGE ADVISORY COMMITTEE (PAC) - RECOMMENDATION

HERITAGE PPTY.
REGISTRATION -
ST. PAUL'S UNITED
CHURCH, BLUE
ROCKS

At 11:10 a.m. Mr. Jeff Merrill, Junior Planner, was in attendance for Council's consideration of an application from St. Paul's United Church located at 135 Stonehurst Road, Blue Rocks, to be registered as a Municipal Heritage Property. Mr. Merrill reviewed the history of this Church, as outlined in his report to the Planning/Heritage Advisory Committee dated January 27, 2005, as well as the Evaluation Report (copy of memo and report attached to original Minutes).

Moved by Counc. Tanner, seconded by Counc. Palmer that we accept the recommendation of the Heritage Advisory Committee (PAC) and register St. Paul's United Church, located at 135 Stonehurst Road, Blue Rocks, as a Municipal Heritage Property.

Counc. Bell asked if the action to register this Church as a Heritage Property was started by the congregation or by others outside the Church.

Mr. Merrill said the applicant was the Trustees of the Church.

Counc. Bell said then we should certainly support it.

The motion to register St. Paul's United Church as a Municipal Heritage Property was carried.

ST. PAUL'S UNITED
CHURCH -
PROPOSED
ALTERATIONS

Mr. Merrill then informed Council that he received a letter informing him that the congregation of St. Paul's United Church is planning some alterations to their Church. Mr. Merrill reviewed the proposed alterations which he outlined in his memo to the Planning/Heritage Advisory Committee dated February 14, 2005 (copy attached to original Minutes). As the proposed alterations are considered to be substantial changes, they, therefore, require the approval of Council.

Moved by Counc. Dempsey, seconded by Counc. Tanner that we accept the recommendation of the Heritage Advisory Committee (PAC) and approve



MEMORANDUM

TO: Warden Wentzell and Members of the Committee of the Whole
FROM: Tammy Wilson, MURP, MCIP, Director of Planning and
Development Services
DATE: January 31, 2005
RE: **HYDRANT CHARGES**

The Committee of the Whole has directed staff to prepare a report outlining the options available to Council in recouping the hydrant charges that the Bridgewater Public Service Commission will be billing the Municipality for in the Cookville Area. This report will outline for Council the methods of recovery used in other rural Nova Scotia municipalities, and provide Council with an analysis of the options available to Council for recovery of the hydrant charges.

Legislative Authority

Section 80 of the Municipal Government Act enables Council to levy a rate on assessable property and business occupancy assessments in an area serviced by a water system in the Municipality to recover that portion of the cost of the water system that is attributable to fire protection. Section 80 further requires that this be defined by a Policy of Council.

Recovery Options used by Rural Municipalities

In reviewing practices in rural municipalities in Nova Scotia, it is apparent there is no one consistent practice or standard for the collection of certain fees for fire hydrants. The following are some of the recovery options used elsewhere:

1. Levy included in general tax rate
2. Levy charged against all properties serviced by the water line (whether connected or not connected)
3. Payment through area rate charged to all businesses and residences benefiting from the fire hydrant
 - In Kings County for example, they draw an arc 1000 feet from each fire hydrant and all properties within the arc are included in the assessment base for which the levy is struck

Recovery Options for Consideration

In the Cookville area, a total of 17¹ fire hydrants were installed along the main water transmission line and along the spur transmission line along MacCulloch Road. Based

¹ The 17 hydrants include the Hydrant in front of Bucks, along MacCulloch road, along Pine Grove Road to the New Pine Road, along the New Pine Grove Road to Highway 10, and along Highway 10 in front of

c) Charge Levied on Properties within a 1000 foot radius of a Hydrant.
 Municipal Staff have confirmed the possibility of a reduced premium on house insurance for a house within 1000 feet of a hydrant. As with the option in clause (b) - levying a charge on properties abutting the waterline- this method assumes that all those properties within 1000 feet of a hydrant will directly benefit from the hydrant. If this method were to be utilized, each hydrant charge would be paid by the properties within a 1000 foot radius of a hydrant. The difficulty with this approach is that in rural municipalities, lots are larger in area and frontage, resulting, in most cases, that only a few lots covering the cost of a hydrant. Furthermore, the hydrants in this area are approximately 393 feet to 492 feet apart, resulting in the inability to charge out individual hydrants to properties within 1000 feet of the hydrant, as many properties overlap with the 1000 foot radius of the neighboring hydrant. As a result, the overall boundary of the 1000 foot radius was used.

McCulloch Road to Hwy 103

Cost to recover	\$ 9,804
Assessment Value of properties within 1000 feet	\$4,545,500

.1 cent of tax on property = \$455

$\$9,804 / 455 = \underline{\$0.21 \text{ Fire Protection Rate per } \$100 \text{ of assessment}}$

Pine Grove Rd/Hwy 10

Cost to Recover	\$17,974
Assessment Value of properties within 1000ft	\$9,366,200

1 cent of tax on property = \$937

$\$17,974 / 937 = \underline{\$0.19 \text{ Fire Protection Rate per } \$100 \text{ of assessment}}$

Total Area (MacCulloch Rd and Pine Grove)

Cost to Recover	\$27,778
Assessment Value	\$13,911,700

1 cent of tax on property \$1391

$\$27,778 / \$1391 = \underline{\$0.20 \text{ Fire Protection Rate per } \$100 \text{ of assessment.}}$

d) A combination of General Tax Rate and either option in clause (b) or (c).
 As with past infrastructure projects, Council may choose to partially fund the cost of the fire hydrants out of the general tax rate and fund the remainder by a Fire Protection Rate that either applies to the lots that abut the water line or are within a 1000 foot radius of the hydrant.

In considering this option Council may wish to phase the cost sharing in an effort to give the area time to build out and increase its assessment base prior to absorbing 100 percent of the cost. For example, in year one the cost sharing could be 75 percent general tax rate and 25 percent abutting properties; year two would be 50 percent

Received July 11, 2010

Northfield District Fire Department
2233 Highway 10
West Northfield, Nova Scotia, B4V5C2



7 July, 2010

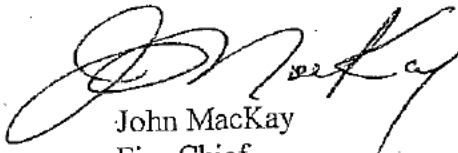
Mayor Downe:

I am writing with respect to the conversation representatives from our department had with you, Tammy Wilson and Sandra Statton regarding funding of fire hydrant maintenance fees. This topic was discussed as promised at our July meeting and I am pleased to inform you that our Fire Department has agreed to assist in the funding of the hydrant fee. Specifically we will pay two thousand dollars each year for 2010 and 2011. That will increase to three thousand dollars each year for 2012 and 2013 and to five thousand dollars for 2014. At the end of 2014 we will re-evaluate this support through discussion with your council. This support will be based on our ability to pay these amounts without the need to raise our fire taxes. During the time specified (2010 to 2014) should our expenses increase to the point where we feel we cannot afford these amounts, we will in discussion with your representatives alter or stop these payments.

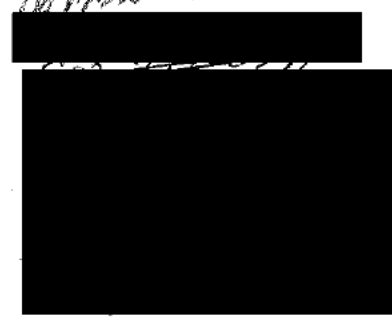
} proposal

I hope this meets with your approval, and I look forward to continue working with your council in a cooperative and mutually respectful manner.

Sincerely


John MacKay
Fire Chief

Nov Chief
Darran Mallock



Appendix 4

Gordon Pettipas

From: Claudette Garland
Sent: September 1, 2015 9:44 AM
To: Gordon Pettipas
Cc: Kevin Malloy
Subject: FW: Northfield departments support of pressurized hydrant system

Hi Gordon and Kevin,

This is correspondence that I had requested in June from Fran Bonfield with regards to the NFD minutes and their discussion regarding the hydrants.

Claudette

From [REDACTED]
Sent: Tuesday, September 1, 2015 9:41 AM
To: Claudette Garland
Subject: Fwd: Northfield departments support of pressurized hydrant system

----- Original Message -----

From: fran bonfield [REDACTED]
To: Claudette garland [REDACTED], darren mulock [REDACTED]
Date: June 10, 2015 at 2:16 PM
Subject: Northfield departments support of pressurized hydrant system

Hi Claudette,

I have been back through our meeting minutes and discovered the information pertaining to the discussion about our continued support financially of the pressurized hydrant system in bridgewater.

On November 3rd 2014 we held our regular monthly meeting, John MacKay chaired the meeting for us and during the meeting brought to our attention the following information:

In 2010 we as a department agreed to pay the municipality for the hydrants maintenance and costs. We agreed to the following figures
2010/2011 \$2000

2012/2013 \$3000

2014 \$5000 and then reevaluation at the end of 2014.

To this point we have had access to the hydrant system for ongoing training needs but it is limited and not always available to us without supervision, we now need to discuss as a department our continued support of this financially.

A motion was made by Norman Raimey and seconded by Donnie Fancey to hold discussion about this and ultimately to discontinue financial support, a vote was not held and the issue was held pending further discussion the chief wanted to hold with councilors and see if resolutions could be made.

To sum up the discussion it was strongly felt by our membership that we shouldn't be "on the hook" for infrastructure costs and that they should lie with the municipality, we also felt that if we did continue at all there would be a measurable increase in the value to us as a department.

In the December meeting we revisited this and John advised us he had held discussion with you and with the deputy mayor too, we had been offered at this point to train on the system in the spring but it was still agreed that as it stood we would not be continuing our support, all members were in agreement with this.

So the above sums up our meeting minutes, what you will still need is information i have no direct access to at this time, Darren has been copied and i will speak with him to provide you the limitations of the hydrant system, flow rate information, the impact on business insurances and coverage etc

Please feel free to come back to me if any of the above is unclear or i have missed anything, Darren can you copy me on any correspondence you send so that i can minute it and keep for future reference?

Thanks in advance

Eran Bonfield
