
Subject: The Town of Pelham’s Corporate Climate Change Adaptation Plan (CCCAP) Update

Recommendation:

BE IT RESOLVED THAT Council Receive Report #2019-0052-PW ; and

THAT Council endorses the development of a Corporate Climate Change Adaptation Plan (CCCAP) and;

THAT Council supports the creation of an internal Adaptation Steering Committee (ASC) and;

THAT Council supports the creation of an external Stakeholder Advisory Committee (SAC)

Background:

The Town has received funding from the Federation of Canadian Municipalities (FCM) in order to address climate change directly through the development of a Corporate Climate Change Adaptation Plan. The first phase of the grant is fulfilled by the development of a climate adaptation plan, followed by the second phase with the implementation of operational and institutional changes and the involvement of preparatory work leading to the implementation of climate adaptation initiatives in the third phase.

Amongst the six strategic priorities defined in the Town of Pelham’s 2019 Strategic Plan, one particularly focuses on “grow[ing] revenue by promoting cultural assets while protecting environmental assets”. To successfully accomplish this priority, actions listed in the plan indicate that the Town will “introduce best practices related to climate change and for the protection and preservation of environmental assets” as well as “educate and create community awareness in regards to [the] importance of environmental assets and climate change impacts”. Other supporting municipal documents, such as the Town’s Official Plan, also mention the need to understand the natural environment in order to manage climate risks. Components of the plan include the commitment to “maintain, enhance or restore

ecosystem health and integrity”, “protect natural resources”, and “ensure that all infrastructure including sanitary sewers, water distribution and storm water management facilities, public service facilities, and roads meet the needs of present and future residents and businesses”. These commitments, along with the aforementioned strategic priority stated in the Town’s 2019 Strategic Plan, address the concern to increase the Town’s capacity to adapt to climate change through the development and implementation a Corporate Climate Change Adaptation Plan (CCCAP).

Though the Town’s 2019 Strategic Plan aims to address climate awareness and encourage the implementation of adaptive initiatives, preceding priorities mentioned in the Town’s former strategic plans also support the development of a climate adaptation plan indirectly. Priorities such as “continu[ing] [to] develop sustainability programs for Town infrastructure” (2011), protecting natural systems while maintaining the rural landscape (2014; 2015), and “determin[ing] the implications of severe storm events” (2015; 2016; 2017) demonstrate that the Town has been concerned by climate change issues responsibility to anticipate the severity of environmental patterns and extreme weather, and to reduce the damages that cannot be avoided.

The sustainable principles within the Corporate Climate Change Adaptation Plan will increase the adaptive capacity and resiliency of the Town of Pelham’s assets and services to climate-related impacts through pragmatic and justifiable actions. In conjunction with the Town’s Asset Management Plan, these documents will provide a template and approach to “achieve the lowest lifecycle cost” for Town infrastructure.

Analysis:

Purpose: The purpose of the Corporate Climate Change Adaptation Plan is to increase the adaptive capacity and resiliency of the Town of Pelham’s assets and services to current and future climate impacts, and to integrate climate change adaptation practices into day-to-day operations.

Objective: the climate adaptation policy and plan will include the following objectives and will act as a reference for Town staff when required:

1. A clear vision, objectives and actions for the Town of Pelham’s Corporate Climate Change Adaptation Plan (CCCAP);
2. Council approval for the development and implementation of the plan;
3. Identification and assessment of the risks and vulnerabilities of a changing climate to Town assets, services and day-to-day operations;
4. Prioritization of the risks and vulnerabilities through adaptive options. These options aim to reduce the risk and vulnerability relative to climate change and extreme weather impacts and will involve extensive research on current best municipal practices.
5. An implementation schedule of adaptation measures that will include: a detailed timeline, estimated costs, required staff and their responsibilities, and a monitoring and



evaluation framework.

Scope

The scope of this project is restricted to the Town of Pelham and will focus on the adaptive and resilient capabilities of a changing climate to Town-owned assets (such as buildings, vehicles, street lights and traffic signals, bridges and culverts, sanitary sewer and storm sewer networks, water distribution networks and roads), Town-run programs and day-to-day operations. It will also withdraw data from the activities and reports produced by Brock University's Niagara Adapts partnership to further enhance the plan.

Once complete, the Corporate Climate Change Adaptation Plan will drive and support future changes to the Town's Asset Management Plan. The phase-in schedule of the Asset Management Plan listed below delineates the expected dates for an Asset Management Plan to be set in place:

- July 1, 2019 – Date for municipalities to have a finalized strategic asset management policy that promotes best practices and links asset management planning with budgeting, operations, maintenance and other municipal planning activities
- July 1, 2021 – Date for municipalities to have an asset management plan for core assets (i.e. roads, bridges and culverts, water, wastewater and storm water management systems) that identifies current levels of service and the cost of maintaining those levels of service
- July 1, 2023 – Date for municipalities to have an approved asset management plan for all municipal infrastructure assets that identifies current levels of service and the cost of maintaining those levels of service
- July 1, 2024 – Date for municipalities to have an approved asset management plan for all municipal infrastructure assets that builds upon the requirements set out in 2023. This includes an identification of proposed levels of service, what activities will be required to meet proposed levels of service, and a strategy to fund these activities.

The goal of *Asset Management Planning for Municipal Infrastructure Regulation, O.Reg. 588/17*, is to help improve the way municipalities plan for their infrastructure. Since the Corporate Climate Change Adaptation Plan is set to be completed by February 2021, the Town will be able to align its actions with the Asset Management Plan. It is also an opportunity for municipalities to commit to the consideration of climate change adaptation and mitigation activities, as well as to engage with the public. In addition to meeting the aforementioned commitments, the Town of Pelham's Corporate Climate Change Adaptation Plan will also enhance the low impact development (LID) guidelines for the Town's Engineering Design Manual, with a particular emphasis on storm water management and mitigation



"IN" Scope	"OUT" of Scope
<ul style="list-style-type: none"> • Council approval of a climate adaptation policy and plan, along with continual updates of the process • Consultation with an internal Adaptation Steering Committee (ASC) and an external Stakeholder Advisory Committee (SAC) during the development and pre-implementation phases of the project. The ASC will involve Town staff and the SAC will contain individuals with unique perspectives and various expertise from the Pelham community. • Identification of Town-owned assets, Town-run programs and day-to-day operations that will be included in the plan • Activities and data practiced and withdrawn from Brock University's Niagara Adapts partnership 	<ul style="list-style-type: none"> • A community adaptation plan • A mitigation plan, involving a greenhouse gas (GHG) inventory and set reduction targets • Implementation phase – i.e. following through with the adaptation options

Project Schedule

According to the Municipalities for Climate Innovation Program (MCIP) framework, the final draft of the Corporate Climate Change Adaptation Plan is set to be completed by February 2021. The framework consists of three main phases and is listed below:

Phase 1: Develop a climate adaptation plan for the Town. The plan will identify climate change impacts, risks, and the best municipal climate adaptation practices;

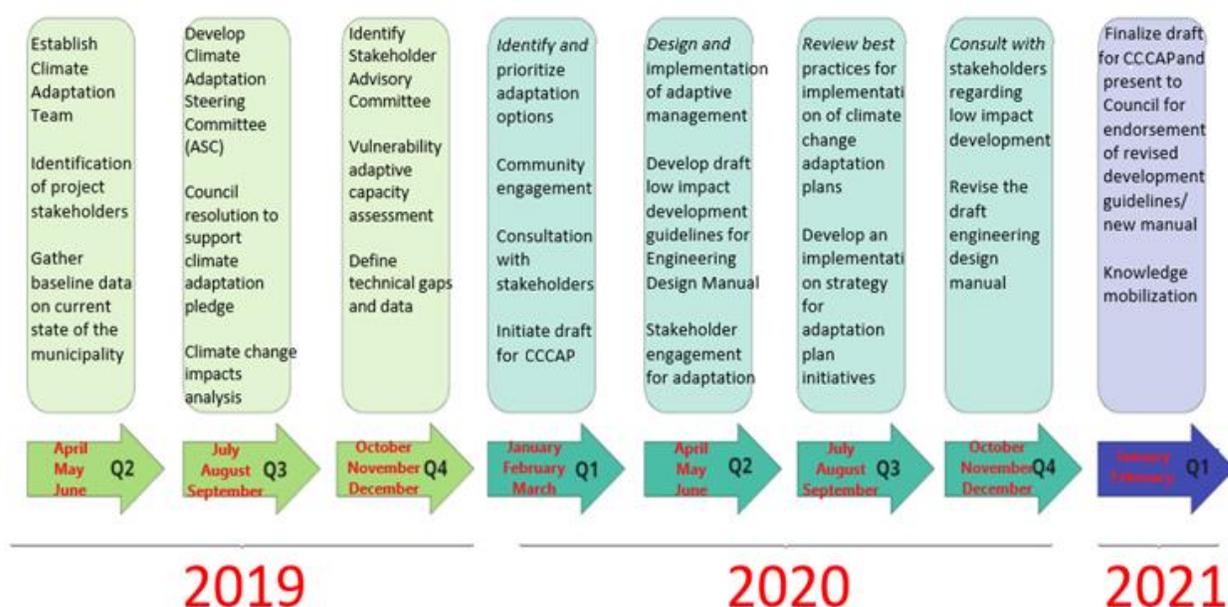
Phase 2: Implement operational and institutional changes to ensure long-term climate adaptation and;

Phase 3: Conduct preparatory work leading to the implementation of climate adaptation initiatives.

The high-level milestones are tentative, however, they align with the schedule for Brock University's Niagara Adapts partnership.



High-Level Milestones	Target Completion Dates
1. Establish a Climate Adaptation Team 2. Identification of project stakeholders 3. Gather baseline data on current state of the municipality	Q2 (April, May, June – 2019)
4. Develop Climate Adaptation Steering Committee (ASC) 5. Council resolution to support climate adaptation pledge 6. Climate change impacts analysis	Q3 (July, August, September – 2019)
7. Identify Stakeholder Advisory Committee (SAC) 8. Vulnerability adaptive capacity assessment 9. Define technical gaps and data	Q4 (October, November, December – 2019)
10. Identify and prioritize adaptation options 11. Community engagement 12. Consultation with stakeholders 13. Initiate draft for CCCAP	Q1 (January, February, March – 2020)
14. Design and implementation of adaptive management 15. Develop draft low impact development guidelines (LID) for Engineering Design Manual 16. Stakeholder engagement for adaptation	Q2 (April, May, June – 2020)
17. Review best practices for implementation of climate change adaptation plans 18. Develop an implementation strategy for adaptation plan initiatives	Q3 (July, August, September – 2020)
19. Consult with stakeholders regarding low impact development 20. Revise the draft engineering design manual	Q4 (October, November, December – 2020)
21. Finalize draft for CCCAP and present to Council for endorsement of revised development guidelines/new manual 22. Knowledge mobilization	Q1 (January, February – 2021)



From the Department of



Project Risks

Risks	Response / Mitigation Strategies
<ul style="list-style-type: none"> The Corporate Climate Change Adaptation Plan is not approved by Council in February 2021 	<ul style="list-style-type: none"> Plan will be presented to Council in Q3 2020 before the deadline in Q1 2021. This will provide opportunity for feedback from Council and time to modify any recommendations provided by Council

Assumptions & Constraints

Assumptions	Constraints
<ul style="list-style-type: none"> Niagara Adapts will provide support to further enhance the Corporate Climate Change Adaptation Plan The Adaptation Steering Committee and Stakeholder Advisory Committee meetings will be productive and provide enough input for the Plan SMT will continuously provide support for the development and implementation of the Plan 	<ul style="list-style-type: none"> FCM deadlines Niagara Adapts deadlines Adaptation Steering Committee (ASC) and Stakeholder Advisory Committee (SAC) are unable to attend meetings due to schedule conflicts and lack of knowledge on their department, thus the input is lower quality

Critical Success Factors

The final draft of a Corporate Climate Change Adaptation Plan in February 2021. Other success factors will be determined after the internal Adaptation Steering Committee (ASC) and external Stakeholder Advisory Committee (SAC) have provided input.

Project Team:

Team Member	Role on the Project	Required Involvement	
		Duration	Effort
Deanna Allen	Project Manager	23 months	High
Derek Young	Project Sponsor and Manager of Engineering	23 months	Medium-High
Dr. Jessica Blythe	Research Professor at Brock University and Niagara Adapts Lead	22 months	Low
Dr. Ryan Plummer	Research Professor at Brock University and Niagara Adapts Lead	22 months	Low

Project Governance:

The development and implementation of a Corporate Climate Change Adaptation Plan require three main teams: A Project Team, an internal Adaptation Steering Committee (ASC) and an external Stakeholder Advisory Committee (SAC).



The Project Team is responsible for the development of a Corporate Climate Change Adaptation Plan by providing research and consultation, synthesizing data from both the internal Adaptation Steering Committee (ASC) and the external Stakeholder Advisory Committee (SAC) into the final draft of the Plan.

The internal Adaptation Steering Committee (ASC) involves Town staff and provides strategic direction and input for the plan. Members will also complete key milestones, such as risk and vulnerability assessments as well as final endorsements of the Plan.

The external Stakeholder Advisory Committee (SAC) contains individuals with unique perspectives and various expertise from the Pelham community. Members will provide sector-specific knowledge, input and oversight from a community perspective during the developmental phase of the Plan.

Project Sponsor(s)	<ul style="list-style-type: none"> • Derek Young
Steering Committee	<ul style="list-style-type: none"> • Jason Longhurst - <i>Fire Prevention Officer</i> – Fire & By-Law Services • Shannon Larocque - <i>Senior Planner</i> - Community Planning & Development • Curtis Thompson – <i>Planner</i> – Community Planning & Development • Tolga Aydin - <i>Engineering Technologist</i> – Public Works • Mitch Holland – <i>Arborist</i> – Public Works • Teresa Quinlin – <i>Director</i> – Corporate Services • TBD – Recreation Culture and Wellness
Project Manager/Lead (s)	<ul style="list-style-type: none"> • Deanna Allen – <i>Climate Change Coordinator</i> – Public Works
Project Team	<ul style="list-style-type: none"> • Derek Young – <i>Manager of Engineering</i> – Public Works • Deanna Allen – <i>Climate Change Coordinator</i> - Public Works • Dr. Jessica Blythe – <i>Research Professor, Niagara Adapts Lead</i> – Brock University • Dr. Ryan Plummer – <i>Research Professor, Niagara Adapts Lead</i> – Brock University
Other Stakeholders	<ul style="list-style-type: none"> • Diana Huson – <i>Regional Councillor Town of Pelham</i> – Niagara Region • More recipients TBD





Financial Considerations:

Budget – Estimates: To be determined.

Funding:

The Town has received \$125,000 from the Federation of Canadian Municipalities (FCM), offered through the Municipalities for Climate Innovation Program (MCIP) to complete this project. The grant was used to hire a staff member to implement initiatives that will increase the municipality’s capacity to adapt to climate change.

There are no other sources of funding for this project at this time.

Alternatives Reviewed:

[Click here to enter text.](#)

Strategic Plan Relationship: Strong Organization

[Click here to enter text.](#)

Other Pertinent Reports/Attachments:

[Click here to enter text.](#)

Consultation:



Click here to enter text.

Legal Consultation, If Applicable:

Click here to enter text.

Prepared and Recommended by:

Deanna Allen, Climate Change Coordinator
Jason Marr, Director of Public Works

Approved and Submitted by:

David Cribbs, Chief Administrative Officer

