



THE REGIONAL MUNICIPALITY OF NIAGARA
PLANNING & ECONOMIC DEVELOPMENT COMMITTEE
FINAL AGENDA

PEDC 4-2019

Wednesday, April 17, 2019

1:00 p.m.

Council Chamber

Niagara Region Headquarters, Campbell West

1815 Sir Isaac Brock Way, Thorold, ON

	Pages
1. <u>CALL TO ORDER</u>	
2. <u>DISCLOSURES OF PECUNIARY INTEREST</u>	
3. <u>PRESENTATIONS</u>	
3.1 <u>Niagara Housing Statement: Affordable Housing Data (Agenda Item 6.2)</u> Alexandria Tikky, Planner, Planning and Development Services	3 - 8
4. <u>DELEGATIONS</u>	
5. <u>ITEMS FOR CONSIDERATION</u>	
5.1 <u>PDS 14-2019</u> Combined Sewer Overflow (CSO) Control and Wet Weather Management (WWM) Program - 2019 Funding Recommendations <i>A presentation will precede the consideration of this item.</i>	9 - 21
5.2 <u>PDS 8-2019</u> Comments on the Province of Ontario's Draft Environment Plan	22 - 68
6. <u>CONSENT ITEMS FOR INFORMATION</u>	
6.1 <u>ED 4-2019</u> Q1 Economic Development Quarterly Update Report	69 - 77

6.2 PDS 17-2019
Niagara Housing Statement: Affordable Housing Data (and **BE CIRCULATED** to the Local Area Municipalities)

6.3 PDS 18-2019
Niagara Investment in Culture 2019 Funding Recipients

**This item has been removed and was included on the Council Weekly Correspondence Distribution on Friday, April 12, 2019.*

7. OTHER BUSINESS

8. CLOSED SESSION

There are no closed session items.

9. NEXT MEETING

The next meeting will be held on Wednesday, May 8, 2019, at 1:00 p.m. in the Council Chambers, Regional Headquarters.

10. ADJOURNMENT

If you require any accommodations for a disability in order to attend or participate in meetings or events, please contact the Accessibility Advisory Coordinator at 905-980-6000 (office), 289-929-8376 (cellphone) or accessibility@niagararegion.ca (email).



Database of Regional Demographics, Housing and Core Need

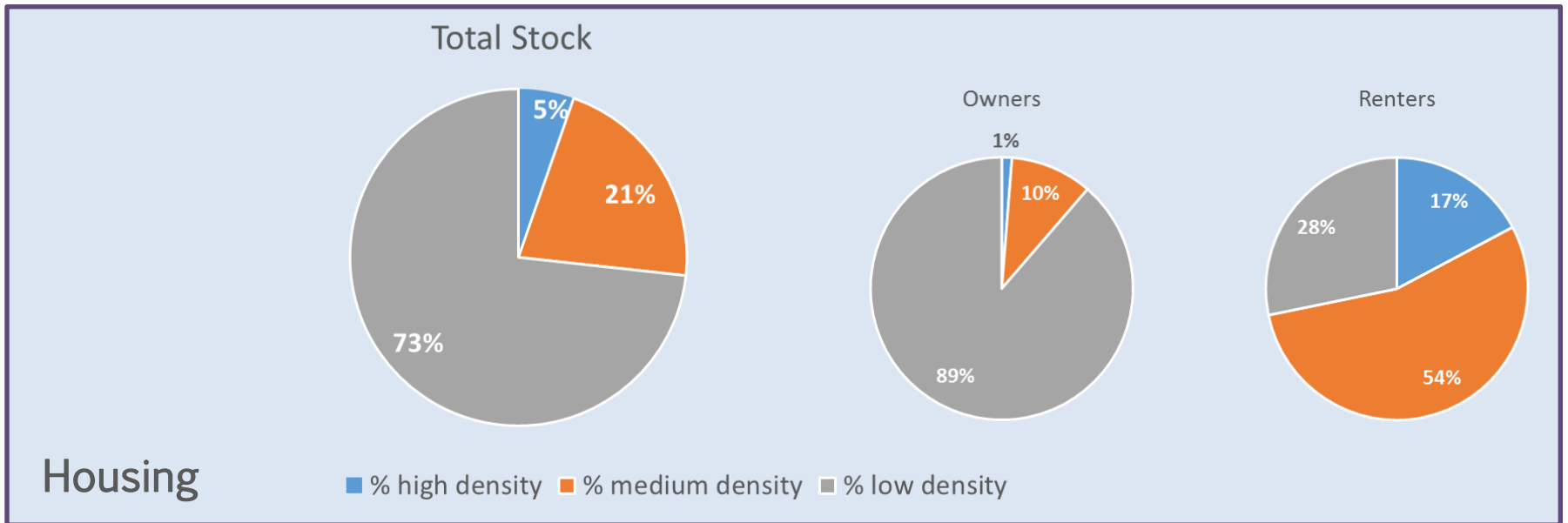
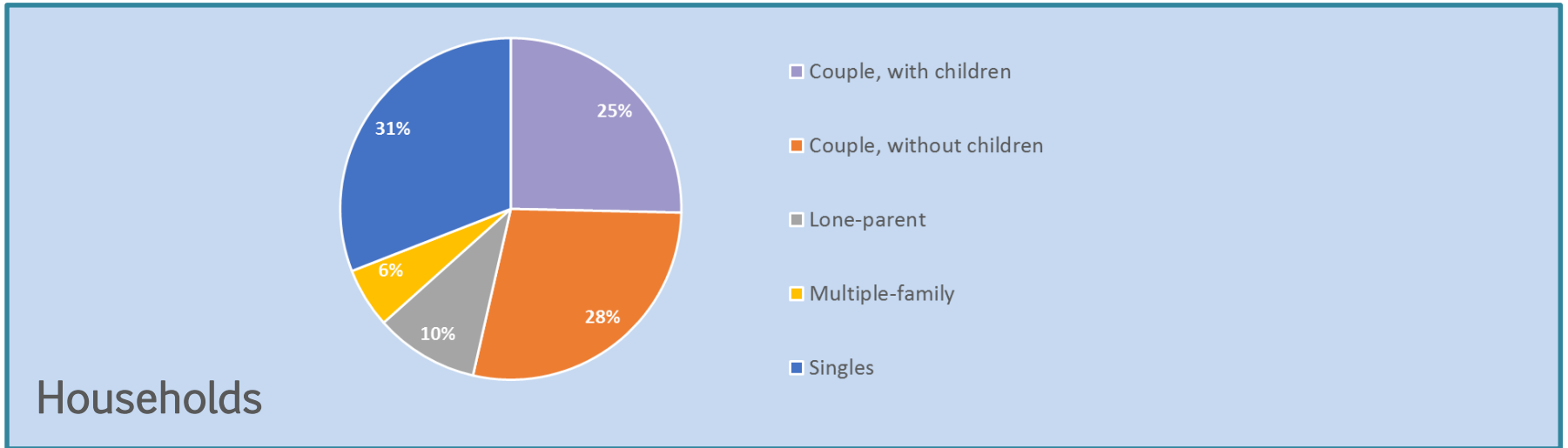
April 17th 2019

**CANADIAN CENTRE FOR
ECONOMIC ANALYSIS**

Introduction – Objectives

- Objective: Provision of a well-curated, historical and forward-looking database for all Niagara municipalities:
 - Detailed geographical mapping of demographic, housing, income trends
 - Key housing need metrics at the municipal level by cuts such as tenure, age of household maintainer, income decile and household type
 - Analyses of key sub-groups, including older adult, low-income, aboriginal identity, immigrant, and homeless populations
- Forward looking data is in alignment with targets generated by the Growth Plan and through the Region's municipal comprehensive review.
- Results:
 - Reviewed with local area municipalities, confirming important housing challenges
 - All local municipalities have the same database, made available through Excel spreadsheets
 - Database now creates the basis for analyzing policy and planning scenarios

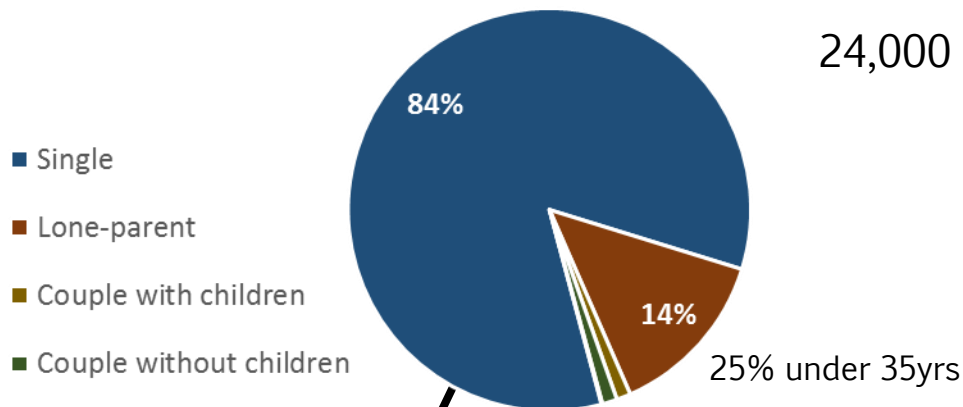
Niagara Region – Households and Housing (2016)



Niagara Region – Core Housing Need (2016)

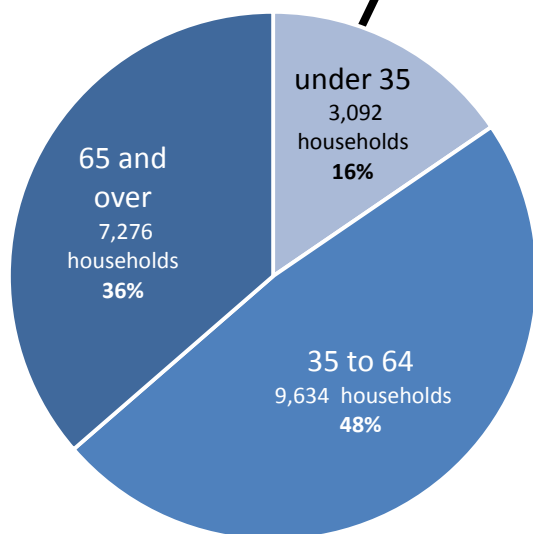
Households in Core Housing Need

24,000 households



Core Housing Need Household Counts	
Type	Households
Single	20,002
Lone-parent	3,254
Couple with children	271
Couple without children	286
Multiple-family	17

Single-Person Households



Core housing need defined by CMHC as:

- At least one condition of unaffordable, unsuitable or inadequate is met and
- No alternative market housing is available given the household's income

Niagara Region – Core housing need and affordability (2016)

Core Housing Need				
Age Range	All Households		Renters	
	Count	Percentage	Count	Percentage
15 to 34	4,031	16%	2,909	24%
35 to 64	12,201	12%	6,591	27%
65+	7,598	13%	4,101	36%

Spending over 30%				
Age Range	All households		Renters	
	Count	Percentage	Count	Percentage
15 to 34	8,685	35%	6,098	50%
35 to 64	23,767	23%	10,300	43%
65+	13,020	22%	6,225	54%

- Almost half of all renter households in Niagara are spending over 30% of income on shelter, compared to 16% of owner households.
- Household types most prone to core housing need are single-person households and lone-parent households, whether they rent or own.
 - **20,000 single-person households** are in core housing need
 - **3,250 lone-parent households** are in core housing need

Key Takeaways – Niagara Region

- The Region's housing stock is primarily low-density.
 - Single detached homes are most common, followed by low-rise apartments and row houses.
 - 26% of the stock is medium- or high-density; 71% of the renter population lives in these types of units.
- 24,000 households in Niagara Region are in core housing need.
 - Renters are twice as likely as owner households to spend over 30% of income on shelter, be in core housing need, live in an unsuitable dwelling and live in an unaffordable dwelling.
 - Affordability is the main challenge in the Region, as rates of unsuitability and inadequacy are low overall.
- Similar rates of core housing need exist across most ages of household maintainers
 - Rates are slightly higher for households with a maintainer younger than 35 or older than 84.
- Core housing need predominantly affects non-census and lone-parent households.
 - Non-census households comprise the vast majority of households in core housing need, followed by lone-parent households.
 - Lone-parent households have the highest likelihood of being low income (LIM-AT) relative to other household types.

Presentation for PDS 14-2019

CSO Control and Wet Weather
Management Program – 2019 Funding
Recommendations

April 17, 2019

Wet Weather Management/CSO Program

- Transferred from Public Works to Planning & Development in 2018
- Targeted Removal of Inflow & Infiltration from sanitary sewer system throughout the Region
 - Protection of basement flooding
 - Reducing overflows to the environment
 - Capacity to support growth
 - Postpone upgrades/expansion of sanitary sewer system



Defining the Problem

Inflow & Infiltration



Niagara  Region

The CSO Control & WWM Policy

- Shared funding
- Mitigate the impacts of wet weather
- Joint responsibility between LAMs and the Region
- “Optimal Solution” independent of ownership
- Eliminate, reduce, contain and report

Niagara  Region		CORPORATE POLICY <small>Policy number is applied by WWS following policy approval</small>
SECTION:	Public Works – Water and Wastewater	
NAME OF POLICY:	Combined Sewer Overflow Control & Wet Weather Management Policy	
Page 1 of 4		
DEVELOPED BY:	Public Works Department	
APPROVED BY:	Regional Council	
APPROVAL DATE:	June 1, 2007	
EFFECTIVE DATE:	June 1, 2007	
REVISION DATE:	September 2, 2014	
HISTORY OF THIS POLICY		
Implemented in June 2007, revised Oct 2008		

Niagara  Region

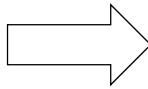
Wet Weather Management Program



293 Approved Applications from 2007-2018



\$ 56 M in total Regional funding approved



\$ 18 M remaining for active project to be completed

Types of Projects

- Sewer Separation
- Studies
- Private Side Source Control
- Conveyance and Flow Control
- Repair, Rehabilitation & Replacement



Wet Weather Management Committee



2019 Recommended Projects

Municipality	Project Title	Region % Share	Funding Requested	Funding Approved
Fort Erie	Bertie Place Watermain Replacement (BRPL19) ¹	30%	\$ 73,500	\$ 73,500
	Highland Ave Sanitary Sewer Replacement & Road Reconstruction	30%	\$ 123,300	\$ 123,300
	Nigh Road Sewershed Trenchless Rehabilitation (NSST19)	30%	\$ 120,000	\$ 120,000
	Thunder Bay Trenchless Sewer Rehabilitation (TBTR19)	30%	\$ 48,000	\$ 48,000
	Lakeside Road Watermain Replacement and Road Reconstruction ¹	30%	\$ 320,700	\$ 320,700
	Sanitary Sewer Flow Monitoring (FLOMON)	60%	\$ 45,000	\$ 45,000
Lincoln	Jordan Station/Campden Sump Pump Disconnect - Phase 1	60%	\$ 360,000	\$ 360,000
	Jordan and Campden Downspout Disconnect Phase 2	60%	\$ 8,100	\$ 8,100
	Twenty-First Street Maintenance Hole Replacement	30%	\$ 29,400	\$ 29,400
Niagara Falls	Fifth & Sixth Avenue Sewer Separation	40%	\$ 153,320	\$ 153,320
	Fourth Avenue Sewer Separation	40%	\$ 179,640	\$ 179,640
	Ross Street Sewer Separation	40%	\$ 9,840	\$ 9,840
	St. James Avenue Sewer Separation	40%	\$ 155,400	\$ 155,400
	Third Avenue Sewer Separation	40%	\$ 65,040	\$ 65,040
	South Niagara Falls Infiltration and Inflow Study - Phase 2	50%	\$ 100,000	\$ 100,000
Niagara-on-the-Lake	CSO Flow Monitoring (Post Repair)-(Phase 1-King-Charlotte Area)	60%	\$ 30,000	\$ 30,000
	CSO Reduction Project - Old Town (Phase 2 - Front & Ricardo Streets)	50%	\$ 75,000	\$ 75,000
	Old Town CSO I/I Study (Phase 3 - Dorchester St. South Area)	30%	\$ 45,000	\$ 45,000
Pelham	Design - Church Street Upgrade	30%	\$ 15,000	\$ 15,000
St. Catharines	Hampstead Place Sewer Separation	50%	\$ 104,000	\$ 104,000
	Yale Crescent	40%	\$ 99,200	\$ 99,200
	Else Street Sewer Separation	50%	\$ 1,040,000	\$ 1,040,000
Thorold	Sanitary Sewer Spot Repair Project	30%	\$ 10,590	\$ 10,590
Welland	Edgar Elgin (SCF) Sewer Separation	40%	\$ 100,000	\$ 100,000
	West Main Area Inf. Improv. WW	40%	\$ 180,000	\$ 180,000
	West Main Area Inf. Improv. Storm Water	40%	\$ 120,000	\$ 120,000
	Catchbasin Separation Work	40%	\$ 74,200	\$ 74,200
	Lincoln & Coventry Flow Monitoring	60%	\$ 45,000	\$ 45,000
	CSO & Sewer System Flow Level Monitoring	60%	\$ 60,000	\$ 60,000
	Extraneous Sewer Flow Study	50%	\$ 50,000	\$ 50,000
	Evelyn Ditch Flow Monitoring	60%	\$ 90,000	\$ 90,000
	Municipal I/I Collective Research Project for the Reduction of I/I	100%	\$ 15,000	\$ 15,000
Total			\$ 3,944,230	\$ 3,944,230

Wet Weather Management Program

Questions ?

Ilija Stetic, W&WW Development Project Manager

Subject: Combined Sewer Overflow (CSO) Control and Wet Weather Management (WWM) Program – 2019 Funding Recommendations

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 17, 2019

Recommendations

1. That the 2019 Local Area Municipal projects under the Combined Sewer Overflow (CSO) Control / Wet Weather Management (WWM) Cost Sharing Program, as identified in Appendix 1 of Report PDS 14-2019, **BE APPROVED** in the amount of \$3,944,230;
2. That Regional staff **PREPARE AND EXECUTE** the respective partnership funding agreements with the Local Area Municipalities for qualifying projects to reflect the terms and conditions set out in Appendix 2 and Appendix 3 of Report PDS 14-2019; and
3. That information respecting Regional funding support, as outlined in Appendix 1 of PDS 14-2019, **BE PROVIDED** to the Local Area Municipalities for information.

Key Facts

- The purpose of this report is to provide background information to support the approval of the 2019 Local Area Municipal projects under the CSO Control / WWM Cost Sharing Program.
- The Combined Sewer Overflow (CSO) Control/Wet Weather Management (WWM) Program has been in place since 2007 and is intended to facilitate shared funding with the Local Area Municipalities (LAMs) to help mitigate the impacts of wet weather events on the Region-wide sanitary system and the environment. As a result, the Region benefits from this program by gaining capacity, which in return, could be used for growth without oversizing Regional infrastructure. The CSO Control/WWM Program supports Council's Strategic Priorities with a goal to increase capacity in the wastewater systems by mitigating impacts of and reducing inflow and infiltration (I/I).
- Representatives of the CSO/WWM Work Group developed administrative procedures to support this Program and to rank project submissions by the LAMs in accordance with the guiding principles. In 2018, the group added a weighted approach of a growth component into the existing evaluation matrix.

- The Region supports this approach and has included funding annually in its budget. For 2019, an amount of \$4,000,000 was budgeted in the Region's Wastewater Operating Budget.
- The total of eligible projects submitted by the Area Municipalities for 2019 adds up to \$3,944,230.

Financial Considerations

A gross budget of \$4,000,000 has been approved as part of the 2019 Wastewater Operating Budget for the CSO Control/WWM cost share program. Funding for this program is partially provided through the Development Charges – Sewer deferred revenue account (50%).

The recommended eligible projects submitted by the LAMs for 2019 totaled \$3,944,230; therefore, sufficient funds are available to accommodate this request. The total amount included a \$15,000 support contribution to Municipal I/I Collective Research Project for the reduction of I/I. This project is directly aligned with the CSO Control/WWM Program benefiting all LAMs. In support of it, each municipality signed a written consent agreeing that the contribution be taken from the 2019 CSO Control/WWM Funding Program.

The remaining \$55,770 budget will still be available for the rest of 2019 in order to accommodate any unforeseen or not yet approved projects requested by the LAMs. If still unused by year-end, this amount could be returned to the Regional reserves from which the funding originated. The list of recommended eligible projects is presented in Appendix 1.

Based on the preliminary consultations with the LAMs, 25 finished projects are being reviewed for potential closure this year, which could create a net total of \$1,581,961 to be returned to Regional reserves. During the consultations, LAMs suggested the Region review the CSO Control/WWM Policy to explore if possible to provide assistance with municipal offered programs region-wide for disconnection of private side I/I sources. It is an industry known estimation that 50% of all extraneous flows originate from the private sources. Regional staff will review the policy to prepare recommendations after receiving LAM program information and data, and report to Committee and Council at a later date.

In addition to the \$4,000,000 approved in the 2019 Wastewater Operating Budget, there are currently \$23,633,914 of previously approved and active CSO projects at December 31, 2018. Of that amount, \$5,709,612 had been paid to Local Area Municipalities at December 31, 2018.

Analysis

Forty six (46) applications were received from eight (8) municipalities. Fifteen (15) applications either did not align with the CSO Control/WWM Program or were retracted by the applicants and therefore, were not included for the final analysis.

Thirty one (31) applications from eight (8) municipalities were considered for the funding in the amount of \$3,929,230. In addition to, a \$15,000 support contribution to Municipal I/I Collective research project for the reduction of I/I was endorsed by all municipalities. This total requested funding of \$3,944,230 shows a surplus of \$55,770 that will be available for the rest of 2019.

Alternatives Reviewed

No alternatives were considered at this time.

Relationship to Council Strategic Priorities

This report was brought forward by Regional Staff, supported by the CSO/WWM Work Group, and supported by the Public Works Officials as the first priority in establishing a more holistic and strategic approach to the operational challenges in dealing with high flows in the collection system, basement flooding, and overflows to the receiving water bodies.

Other Pertinent Reports

- PWA 116-2008, October 29, 2008 – Combined Sewer Overflow (CSO) Control Policy-Proposed Policy Amendments
- PW 96-2014, September 23, 2014 – Combined Sewer Overflow (CSO) Control Policy Amendments

Prepared by:

Ilija Stetic
Project Manager
Planning and Economic Development

Recommended by:

Rino Mostacci, MCIP, RPP
Commissioner
Planning and Economic Development

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Phill Lambert, P. Eng., Director, Infrastructure Planning & Engineering and Joe Tonellato, P. Eng., Director of Water & Wastewater Services, and reviewed by Dan Ane, Manager, Program Financial Support.

Appendices

Appendix 1	2019 CSO Control/WWM Applications Summary	Page 5
Appendix 2	Terms and Conditions of Funding Agreements	Page 6
Appendix 3	Funding Options	Page 7

Appendix 1: Recommended 2019 CSO Control/WWM Funding Requests

Municipality	Project Title	Region % Share	Funding Requested	Funding Approved
Fort Erie	Bertie Place Watermain Replacement (BRPL19) ¹	30%	\$ 73,500	\$ 73,500
	Highland Ave Sanitary Sewer Replacement & Road Reconstruction	30%	\$ 123,300	\$ 123,300
	Nigh Road Sewershed Trenchless Rehabilitation (NSST19)	30%	\$ 120,000	\$ 120,000
	Thunder Bay Trenchless Sewer Rehabilitation (TBTR19)	30%	\$ 48,000	\$ 48,000
	Lakeside Road Watermain Replacement and Road Reconstruction ¹	30%	\$ 320,700	\$ 320,700
	Sanitary Sewer Flow Monitoring (FLOMON)	60%	\$ 45,000	\$ 45,000
Lincoln	Jordan Station/Campden Sump Pump Disconnect - Phase 1	60%	\$ 360,000	\$ 360,000
	Jordan and Campden Downspout Disconnect Phase 2	60%	\$ 8,100	\$ 8,100
	Twenty-First Street Maintenance Hole Replacement	30%	\$ 29,400	\$ 29,400
Niagara Falls	Fifth & Sixth Avenue Sewer Separation	40%	\$ 153,320	\$ 153,320
	Fourth Avenue Sewer Separation	40%	\$ 179,640	\$ 179,640
	Ross Street Sewer Separation	40%	\$ 9,840	\$ 9,840
	St. James Avenue Sewer Separation	40%	\$ 155,400	\$ 155,400
	Third Avenue Sewer Separation	40%	\$ 65,040	\$ 65,040
	South Niagara Falls Infiltration and Inflow Study - Phase 2	50%	\$ 100,000	\$ 100,000
Niagara-on-the-Lake	CSO Flow Monitoring (Post Repair)-(Phase 1-King-Charlotte Area)	60%	\$ 30,000	\$ 30,000
	CSO Reduction Project - Old Town (Phase 2 - Front & Ricardo Streets)	50%	\$ 75,000	\$ 75,000
	Old Town CSO I/I Study (Phase 3 - Dorchester St. South Area)	30%	\$ 45,000	\$ 45,000
Pelham	Design - Church Street Upgrade	30%	\$ 15,000	\$ 15,000
St. Catharines	Hampstead Place Sewer Separation	50%	\$ 104,000	\$ 104,000
	Yale Crescent	40%	\$ 99,200	\$ 99,200
	Else Street Sewer Separation	50%	\$ 1,040,000	\$ 1,040,000
Thorold	Sanitary Sewer Spot Repair Project	30%	\$ 10,590	\$ 10,590
Welland	Edgar Elgin (SCF) Sewer Separation	40%	\$ 100,000	\$ 100,000
	West Main Area Inf. Improv. WW	40%	\$ 180,000	\$ 180,000
	West Main Area Inf. Improv. Storm Water	40%	\$ 120,000	\$ 120,000
	Catchbasin Separation Work	40%	\$ 74,200	\$ 74,200
	Lincoln & Coventry Flow Monitoring	60%	\$ 45,000	\$ 45,000
	CSO & Sewer System Flow Level Monitoring	60%	\$ 60,000	\$ 60,000
	Extraneous Sewer Flow Study	50%	\$ 50,000	\$ 50,000
	Evelyn Ditch Flow Monitoring	60%	\$ 90,000	\$ 90,000
	Municipal I/I Collective Research Project for the Reduction of I/I	100%	\$15,000	\$15,000
Total			\$ 3,944,230	\$ 3,944,230

Note 1: These projects incorporate works on the sanitary sewer side applicable under the CSO/WWM program.

Appendix 2: CSO Control / WWM Policy Funding Conditions

The terms and conditions under which funding will be offered to the successful applications include the following:	
1.	<i>Amount of Funding, Studies</i> - The Region shall contribute 50% of total study costs for the PPCP and I&I studies, and 60% for the Pre and Post Flow monitoring projects provided the Region participates on a committee overseeing the study and the study covers the entire area tributary to the Wastewater Treatment Plant(s) and includes both local and Regional infrastructure.
2.	<i>Amount of Funding, Design & Construction projects</i> – The Region shall contribute defined percentage of the cost based on the Funding Options matrix, provided that; the facility or measure is supported by a recommendation from a current CSO study, life cycle cost comparisons of alternative solutions were undertaken and the Region agrees with the cost comparisons, the Region agrees with the ‘best overall solution’, and the Region participates on a committee overseeing the design. For multi-year projects, annual project applications are required for each new planning, design, construction or program phase, related to that funding request.
3.	<i>Third Party Funding</i> – The Region’s funding shall be net of any third party funding approved for the project. If third party funding is obtained after Regional funding approval, the amount of Regional funding will be adjusted to be net of any third party funding. Payment of the funding to the Area Municipality shall be based on actual expenditures incurred up to the maximum amount approved by Regional Council based on the budget submitted with the application.
4.	<i>Project Lead Studies</i> – Lead by either the Area Municipality or the Region based on a mutual agreement prior to initiation of study.
5.	<i>Project Lead Design & Construction</i> – A project located in the Area Municipal wastewater system shall be managed by the Area Municipality while a project in the Regional wastewater system shall be managed by the Region. On a case-by-case basis the Region may consider managing a project in the local system, if requested by the Area Municipality.
6.	<i>Ownership and Operation of Assets</i> – The ownership and operation of all new and existing assets shall remain the responsibility of the current owner. The Area Municipality, on a case by case basis, may request the Region to operate and maintain an existing or new CSO control facility on behalf of the Area Municipality on a direct charge back basis.
7.	<i>Follow up Flow Monitoring</i> – On a case-by-case basis, the Region may include a condition or approval of funding that requires follow up flow monitoring to assess project’s effectiveness.
8.	<i>Expiry of Funding</i> – Funding of a project by the Region may expire if the project is not initiated within one year of approval. Projects must be completed within three years of approval by Regional Council. Where a project is not completed within the three years, written notice must be provided to the Region, in advance of the deadline, and extensions for continued funding may be granted on a case-by-case basis.
9.	<i>Indemnity</i> – The Region, or its directors, officers, employees, agents or consultants will not be held liable as a result of providing funding for any project.
10.	<i>Regional Recognition</i> – The Area Municipality is to ensure that the Region is to be acknowledged in all advertising and publicity related to the project for which funding was provided.
11.	<i>Project Deliverables</i> – The Region shall receive copies of all project deliverables, including, but not limited to, reports, flow monitoring data, hydraulic modelling files, GIS layers/data, and technical memorandums.
12.	<i>Funding Agreement</i> - A letter formalizing the funding in accordance with the Region’s CSO Funding Policy will be issued to the Area Municipality for signature and used as the agreement to the terms and conditions of the funding.

Appendix 3: Funding Options

Project Category No.	Project Types include design and/or construction. All projects must be recommended from a Study. All projects exclude internal costs incurred on projects.	100% Funding Amount Priority	Region %	LAM %
1.	Sewer Separation	40%		
Work Examples	Disconnection of road drainage		40	60
	Disconnection of road and private		60	40
	Disconnection of road, previous disconnection of private or opposite		50	50
2.	Studies	15%		
Work Examples	PPCP as per the PPCP Guide		50	50
	I&I and extraneous flow investigation including CCTV/smoke testing ¹		50	50
	Mandatory Flow Monitoring - Pre and Post		60	40
	Investigative work on Municipal/Private side		50	50
	Public Education/Water conservation and efficiency measures		50	50
	Sewer Use By-Law development/update and Municipal Policies		50	50
3.	Source Control - Private Side	20%		
Disconnection of roof leaders - prerequisite for other works on the private side.				
Work Examples	Disconnection of roof leaders		60	40
	Disconnection of weeping tiles from sanitary including applicable works		60	40
	Private property disconnection of sump pumps		60	40
	Backflow preventor installation on sanitary		40	60
4.	Conveyance and Flow control/storage	15%		
Work Examples	Real time control for detention		60	40
	In-line flow controllers design & construction (e.g. weirs)		60	40
	Off-line conveyance and pumping design and construction		60	40
	In-line / Off-line Storage		40	60
5.	Repair/ Rehabilitation/ Replacement of Sewers (estimated >50% flow reduction during WW events)	10%		
Work Examples	Repair of sanitary/ manholes - gel sealing, spot repairs		30	70
	Spot repair lining		30	70
	Full length liner		30	70

Note 1: CCTV inspection - only site/project specific. Regular **city wide** inspections should be part of municipal Asset Management or O&M programs.

Subject: Comments on the Province of Ontario's Draft Environment Plan

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 17, 2019

Recommendations

1. That staff comments on the Province of Ontario's proposed Environment Plan, *Preserving and Protecting our Environment for Future Generations*, as outlined in Appendix A to Report PDS 8-2019, **BE ENDORSED**; and
2. That a copy of Report PDS 8-2019 **BE CIRCULATED** to the Local Area Municipalities.

Key Facts

- The purpose of this report is to seek endorsement of staff comments on the Province's proposed Environment Plan, *Preserving and Protecting our Environment for Future Generations*.
- On November 29, 2018, the Ministry of the Environment, Conservation and Parks posted the draft Environment Plan on the Environmental Registry for a 60-day consultation period (closing January 28, 2019).
- On December 21, 2018, a Memorandum was circulated to Regional Council to advise of plans to coordinate staff-level comments on behalf of the Region.
- A submission was made to the Province that included staff comments from Planning and Development Services, Public Works, and Public Health and Emergency Services. Several Local Area Municipalities also provided input, which was incorporated into the submission.

Financial Considerations

There are no direct financial considerations associated with commenting on the draft Environment Plan.

Analysis

Overview

Preserving and Protecting our Environment for Future Generations is a broad environmental plan that contains proposed actions in the following areas:

- Protecting our Air, Lakes and Rivers
- Addressing Climate Change
- Reducing Litter and Waste in Our Communities & Keeping Our Land and Soil Clean
- Conserving Land and Greenspace

The Environment Plan sets a target to reduce Ontario's emissions by 30% below 2005 levels by 2030, in line with Canada's 2030 target under the Paris Agreement. Examples of proposed actions to meet this target include creating emission performance standards for large emitters, and creating a four-year \$400 million Ontario Carbon Trust fund to leverage private investment in clean technologies. This is intended to fulfill the Province's obligation under the *Cap and Trade Cancellation Act, 2018* to establish greenhouse gas reduction targets for Ontario and to prepare a climate change plan.

General Comments

Staff generally support many of the Plan's proposals in principle. However, various facts within the Environment Plan related to Ontario's contribution to climate change may be misinterpreted by the public and undermine efforts to take action on climate change due to insufficient context. Recommendations are included within the submission to address these concerns.

In addition, the proposed actions in the Environment Plan lack sufficient detail for fulsome consultation. Staff have requested to be included in any subsequent consultations addressing implementation details and timelines that affect municipal operations.

Detailed comments are included in **Appendix A** and examples are highlighted below.

Protecting our Air, Lakes and Rivers

Staff support proposals in this chapter, such as continuing work to restore and protect our Great Lakes; building on the Ministry's monitoring and drinking water source protection activities to ensure that environmental impacts from road salt are minimized; and reviewing the Province's water taking policies, programs and science tools. Staff also support proposals to improve municipal wastewater and stormwater management and reporting. Staff recommend addressing low impact development techniques in the Environment Plan, finalizing ongoing provincial reviews of stormwater management

guidance documents, updating the F-series procedures, and committing funding to projects such as sewer separation.

Addressing Climate Change

In addition to regulating large emitters and establishing the Ontario Carbon Trust, the Environment Plan includes proposals to increase climate resilience for households and communities. Examples include undertaking a provincial climate impact assessment and vulnerability assessment for key sectors; developing information tools to help homeowners protect their homes from flooding; modernizing the Building Code to improve resilience; reviewing the Municipal Disaster Recovery Assistance Program to incorporate climate resilience; and reviewing land use policies for climate resilience.

Staff generally support the proposals for climate resilience for household and communities, but recommend that the Province's impact assessment include health implications and impacts on vulnerable populations. In addition, the Province should support municipalities to undertake risk-based impact assessments at the local level given the diversity of Ontario's communities. Any updated land use planning direction on climate change adaptation should provide sufficient flexibility to address varying climate change impacts across municipalities. Staff also recommend addressing renewable energy and exploring incentives for new development, such as community district energy. The Environment Plan also confirms the Province's commitment to implement all-day GO Rail service to Niagara, which staff acknowledge and appreciate.

Reducing Litter and Waste in Our Communities & Keeping Our Land and Soil Clean

Staff support proposals in this chapter, such as expanding green bin collection systems in large cities and to relevant businesses; developing a proposal to ban food waste from landfill; developing a plastics strategy; reducing illegal dumping; moving to a producer responsibility model; and exploring options to recover resources from waste. Staff provided information regarding Niagara Region's waste management programs and initiatives, and identified a number of considerations and recommendations with respect to the Province's proposals. Examples of staff recommendations include establishing targets with respect to expanded green bin collection, and considering public spaces and community events as a sector to target for organics collection.

Conserving Land and Greenspace

Staff support proposals such as improving the resilience of natural ecosystems; improving coordination of land use planning and environmental approval processes; and protecting the environment from invasive species. Staff note that further scientific research is required to support increased resilience of natural ecosystems, and increased funding should be provided to stewardship conservation programs.

Alternatives Reviewed

The alternative would be for Council not to endorse staff comments on the proposed Environment Plan. This is not recommended, as it is important for Niagara Region's position to be considered in the development of the final plan.

Other Pertinent Reports

- PDS 22-2018 Climate Change Framework

Prepared by:

Lindsey Savage, MCIP, RPP
Senior Planner
Planning and Development Services

Recommended by:

Rino Mostacci, MCIP, RPP
Commissioner
Planning and Development Services

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Erik Acs, MCIP, RPP, Manager, Community Planning, and reviewed by Doug Giles, Director, Community and Long Range Planning.

Appendices

Appendix A

Staff Comments on Draft Environment Plan

Page 5

APPENDIX A: STAFF COMMENTS ON DRAFT ENVIRONMENT PLAN

PLANNING AND DEVELOPMENT SERVICES

Reference in Proposed Environmental Plan	Staff Comments
<p>We can do more to protect ourselves from the extreme weather events that have flooded houses, buildings and roads, overwhelmed aging stormwater and wastewater systems, damaged crops, and brought heavy ice and wind storms that knocked out power for hundreds of thousands of people, including those who are most vulnerable. (p 6)</p>	<p>An educational component is very important in all of this.</p> <p>Suggestion:</p> <ol style="list-style-type: none"> 1. Encourage educational campaigns on a municipal level, identify importance of it for general public and include this component into the financing structure; 2. Encourage flow monitoring assignments throughout the sanitary system to enhance system knowledge during wet weather events (quantification and qualification of extraneous flows entering the system); 3. Provide support (i.e., appropriate resources) to Conservation Authorities for the development of updated floodplain mapping.
<p>Continue work to restore and protect our Great Lakes (p 12)</p>	<p>Microplastics in our water (including the Great Lakes) needs to be addressed further.</p>
<p>Build on previous successes and continue efforts to protect water quality and ecosystems of the Great Lakes. (p 12)</p>	<p>Niagara Region supports the proposal to continue the existing partnerships with the federal government pursuant to the 'Canada-Ontario Great Lakes Agreement' and the 'Canada-Ontario Lake Erie Action Plan'.</p>
<p>Build on the ministry's monitoring and drinking water source protection activities to ensure that environmental impacts from road salt use are minimized. Work with municipalities, conservation authorities, the private sector and other partners to promote best management practices, certification and road salt alternatives. (p 13)</p>	<p>There are two actions that refer to reducing/ addressing salt as a pollutant – one through the review of the Ontario Great Lakes Strategy (p 12) and one by building onto the Source Water Protection program (p 13). Niagara Region supports progress with respect to addressing salt as a pollutant to both aquatic life, and to our drinking water but it is not clear what actions will be taken. In addition, the Province should contemplate setting standards for salt that are more in line with the acute and chronic toxicity levels in aquatic life. If we protect biodiversity from salt impacts, our drinking water will also be protected.</p>

Reference in Proposed Environmental Plan	Staff Comments
Thoroughly review the province's water taking policies, programs and science tools to ensure that vital water resources are adequately protected and sustainably used. (p 14)	Niagara Region supports the proposal to review the Province's water taking programs, policies, and science tools. In addition, Niagara Region encourages the Province to review the staffing and resources necessary to support, implement, monitor, and enforce these programs, policies, and tools and expand as required.
Ensure the knowledge gained through the drinking water source protection program helps inform our water management programs. (p 14)	Niagara Region encourages the Province to commit to funding the maintenance and updating of the existing Source Water Protection program.
Improve municipal wastewater and stormwater management and reporting (p 15)	While there are several recommendations to improve municipal stormwater management and reporting, there is no mention in the document to Low Impact Development techniques as a management practice. The Provincial Stormwater Management Guidelines (2003) have been subject to a review for a number of years, yet have not been updated. It would be beneficial to update the stormwater management guidance to consider the effects stormwater management may have on ecological and hydrologic functions, by managing stormwater at the source. The Draft Low Impact Development Stormwater Management Guidance Document (2017) has been available for some time and should be finalized.
Update policies related to municipal wastewater and stormwater to make them easier to understand. We will consider how wastewater and stormwater financing could be updated to improve investment and support new and innovative technologies and practices. (p 15)	Niagara Region developed a Combined Sewer Overflow Control & Wet Weather Management Policy recognizing the inter-dependent nature of wastewater collection and treatment system in Niagara. The policy directly supports F-5-5 MECP directives and facilitates the shared funding of strategic and prioritized solutions that mitigate the impacts of wet weather events on municipal sanitary systems, the environment, and individual household basements. Knowing that more than 50% of all extraneous flows enter the system from the private side, the policy addresses municipal projects for private side source control as well. Suggestions:

Reference in Proposed Environmental Plan	Staff Comments
	<ol style="list-style-type: none"> 1. Through the Municipalities for Climate Innovation Program (MCIP), re-develop a process so, the municipalities can easier apply for sewer separation projects since such projects bear the biggest cost and eliminate/reduce most of the wet weather effects to the sanitary system and the environment through the overflows. At the same time, such projects greatly reduce risks of basement flooding; 2. Encourage projects of eliminating and reducing impacts of wet weather through identification of funding category for municipalities working on the private side to disconnect sources of extraneous flows; 3. Identify projects for controlling extraneous flows through a variety of engineering solutions such as full/partial containment, inline upsizing, etc; 4. Develop and clarify the funding structure for infrastructure projects based on the following order: 1. Elimination, 2. Reduction, 3. Control, of wet weather flows;
<p>Encourage targeted investment and innovation in managing wastewater that overflows into our lakes and rivers. (p 15)</p>	<p>Further detail/consultation is needed on how investment in managing wastewater overflow into lakes and rivers will be encouraged.</p>
<p>The following graph shows the rising costs of insured property damage in Ontario between 1983 and 2017, providing an indication of the costs of climate change. The financial costs associated with extreme weather events in Ontario have increased over this period. Chief among factors affecting the increasing costs to Ontarians is the phenomenon of flooding, and more specifically,</p>	<p>This report indicates that: “Chief among factors affecting the increasing costs to Ontarians is the phenomenon of flooding [...]” However many watercourses in Ontario have either inadequate floodplain mapping or no floodplain mapping at all. As such, Niagara Region strongly encourages the Province to make available sufficient funding to provide for the generation and updates of floodplain maps in order to better delineate areas that are prone to riverine flooding.</p>

Reference in Proposed Environmental Plan	Staff Comments
residential basement flooding. (p 18)	
Undertake a provincial impact assessment to identify where and how climate change is likely to impact Ontario's communities, critical infrastructure, economies and natural environment. The assessment would provide risk-based evidence to government, municipalities, businesses, Indigenous communities and Ontarians and guide future decision making. (p 19)	The proposed provincial impact assessment may be too high-level to be a useful tool for municipalities. There should also be support for municipalities to undertake risk-based impact assessment at the local level.
Support communities by demonstrating how climate science can be applied in decision making to improve resilience. (p 19)	Support should also be provided to encourage municipalities to integrate climate change adaptation into plans, strategies, and risk management processes.
Review the Municipal Disaster Recovery Assistance program to encourage municipalities to	Enhancements to the Municipal Disaster Recovery Assistance program should be assessed in order to encourage infrastructure investments as adaptation to extreme weather.

Reference in Proposed Environmental Plan	Staff Comments
<p>incorporate climate resilience improvements when repairing or replacing damaged infrastructure after a natural disaster. Since the Municipal Disaster Recovery Assistance program was launched in 2016, over \$2.6 million has been provided to 11 municipalities. (p 20)</p>	
<p>10 Ways to Prevent Home Basements Flood (p 20)</p>	<p>There are still numerous houses with downspouts running through the ground to a sanitary lateral together with weeping tiles.</p> <p>Suggestion: Include pictures for:</p> <ol style="list-style-type: none"> 1. Downspout disconnection, 2. Weeping tile disconnection and re-direction, 3. Sump pit/sump pump installation; <p>There are evident issues associated with a backwater valve installed that could lead to a basement floor cracking if the soil surrounding the house is saturated enough to create and extra pressure from the outside to the foundation. Also, general perception is that with a backwater valve in place, the house is protected from flooding. What the general public does not understand is that a homeowner can flood his own house by using washing machine, taking showers, etc. during a wet weather event when the backwater valve is closed.</p> <p>Suggestion: Make a cautionary statement when presenting this way of protection from flooding.</p>
<p>Review land use planning policies and laws to update policy direction on climate resilience. This will help make the way our communities are planned and designed more</p>	<p>Niagara Region supports a review of the planning framework as it relates to climate resilience. Further policy direction and guidance from the Province on climate change adaptation is welcome.</p> <p>The Province should release further details with respect to the land use planning review. In addition, any</p>

Reference in Proposed Environmental Plan	Staff Comments
responsive and adaptive to changing weather conditions, such as improving the way that stormwater is managed. (p 21)	updated policy direction should be developed in consultation with municipalities, and provide sufficient flexibility to address varying climate change impacts. Each municipality experiences the impacts of climate change differently, and must customize their adaptation efforts to the risks and vulnerabilities present in their communities.
The Ontario Carbon Trust is an emission reduction fund that will use public funds to leverage private investment in clean technologies that are commercially viable. For this action we estimate a fund of \$350 million will be used to leverage private capital at a 4:1 ratio. Estimates will depend on the final design and mandate of the trust. The estimates also include the potential emission reductions associated with a \$50 million Ontario Reverse Auction designed to attract lowest-cost greenhouse gas emission reduction projects. (p 24)	There is not enough information to properly consider the Ontario Carbon Trust proposed in the document. Given it is premised on investing public money into private sector, more information should be made available.
Use Energy and Resources Wisely (p 31)	There is no emphasis at all on renewable energy investment, thereby reducing dependency on non-renewable resources. Green energy seems to have disappeared.
Work with the Ontario Energy Board and natural gas utilities to increase the cost-effective conservation of natural gas to simultaneously reduce emissions and lower energy bills. (p 32)	Work with OEB and natural gas utilities for conservation efforts should also consider incentives for new development (community district energy, heat pumps etc.), not only homeowner energy retrofits.

Reference in Proposed Environmental Plan	Staff Comments
<p>This government is expanding GO service and making it easier for commuters and members of the community to move around the GTHA. More riders in seats relieves congestion on the roads. We're providing more reliable, predictable journeys across the region – greatly improving the daily transit experience. These improvements bring us a step closer to our vision to deliver twoway, all-day GO service. (p 38)</p>	<p>Niagara Region thanks the Province for its accelerated January 2019 implementation of daily GO Rail service to St. Catharines and Niagara Falls. The Region will continue to work closely with the Province to establish GO Rail service delivery to Grimsby, as well as towards achieving its commitment to implement daily all-day GO Rail service to each of Niagara's stations by 2023.</p>
<p>Move Ontario's existing waste diversion programs to the producer responsibility model. This will provide relief for taxpayers and make producers of packaging and products more efficient by better connecting them with the markets that recycle what they produce. (p 43)</p>	<p>Producers should be responsible for their products for the full life cycle. This should be expanded to all retailers that provide products in single use packaging (restaurants, etc.)</p>
<p>Revise the brownfields regulation and the record of site condition guide to reduce barriers to redevelop and revitalize historically contaminated lands, putting vacant prime land back to good use. (p 45)</p>	<p>Cutting red tape in the brownfield regulations and reusing soil should not compromise human or environmental health.</p>

Reference in Proposed Environmental Plan	Staff Comments
Work with municipalities, conservation authorities, other law enforcement agencies and stakeholders to increase enforcement on illegal dumping of excess soil. (p 45)	This review is supported. There may be opportunities to consider regulations relating to enforcement on private properties and fines. A tracking system for reusing excess soil may assist in municipal enforcement efforts for illegal dumping.
Collaborate with partners to conserve and restore natural ecosystems such as wetlands, and ensure that climate change impacts are considered when developing plans for their protection. (p 47)	Further scientific research and guidance is required to assist with increasing the resiliency of natural ecosystems in the context of climate change. Funding and support for such science will be required in order to fulfill the goal.
Protect vulnerable or sensitive natural areas such as wetlands and other important habitats through good policy, strong science, stewardship and partnerships. (p 48)	There are a number of stewardship conservation programs that are not adequately funded and if they were, could provide more on-the-ground results (i.e., Species-at-Risk Stewardship Fund, Land Stewardship & Habitat Restoration Program, etc.).
Improve coordination of land use planning and environmental approval processes by updating ministry guidelines to help municipalities avoid the impacts of conflicting land uses. (p 48)	It is understood that to support conservation and environmental planning, the Environmental Plan proposes to review and update legislation to ensure approval processes are well coordinated. There are a number of guidance documents that have been released by the Province but not finalized, which would assist in improving coordination (Watershed Planning Guidance in Ontario, Low Impact Development Stormwater Management Guidance Manual, etc.). Further detail/consultation is needed regarding this proposal.
Sustainable Forest Management (p 50)	Municipalities may benefit from a province/regional specific guide on best practices for managing forests, sustainable forest management plans.

Reference in Proposed Environmental Plan	Staff Comments
Protect our natural environment from invasive species by working with partners and other governments and using tools to prevent, detect and respond to invasions. (p 51)	Enhancing and maintaining biodiversity is one of the best ways to protect against invasive species and this is not mentioned.
An advisory panel on climate change will be established to provide advice to the Minister on implementation and further development of actions and activities in our plan specific to climate change. (p 53)	The advisory panel on climate change should include municipal representation to gain a local perspective on implementation.
Begin implementing priority initiatives. (p 53)	There are many references to the Province supporting partnerships with municipalities to address certain elements (i.e., stormwater, land use planning) however it is not clear what actions will be taken to further support. Consideration should be given to resource allocation, particularly programming and funding opportunities, to enhance the ability for municipalities to address some of the identified actions (ex. Explore opportunities to enhance coordination and guidance for municipalities to help them consider climate change in their decision-making; work with municipalities to develop climate and energy plans....).

PUBLIC WORKS

Reference in Proposed Environmental Plan	Staff Comments
<p>Increase transparency through real-time monitoring of sewage overflows from municipal wastewater systems into Ontario’s lakes and rivers. Work with municipalities to ensure that proper monitoring occurs, and that the public is aware of overflow incidents. (p 15)</p>	<p>Niagara Region currently monitors and reports its combined sewer overflows and publicly report the information on dates, times and volumes to the public via our website. The site gets very few “hits” and the information is rarely requested. As the overflows occur during wet weather, when the public is unlikely to be using the water body recreationally, we are unsure as to the benefit of real-time reporting. As the information is already reported in real-time to the MOE/MECP as a requirement of the Environmental Compliance Approval system, it would seem to be more efficient for the MOE/MECP to develop a real-time reporting system to avoid duplication of efforts amongst all the municipalities currently regulated. This would avoid unnecessary costs to develop reporting systems that are not budgeted for or requested by the rate payers.</p>
<p>Update policies related to municipal wastewater and stormwater to make them easier to understand. We will consider how wastewater and stormwater financing could be updated to improve investment and support new and innovative technologies and practices. (p 15)</p>	<p>Niagara Region supports the updating of the current F-5-5 policy. We would prefer these documents be turned into standards as opposed to the current “guideline” approach. The use of the word “guideline” and “procedures” has always been problematic for the regulated community and others as to the interpretation or legal basis of not designing to these old documents. Using the “standard” approach, it would remove ambiguity and be understood that a design either complies with the standard (or does not). One typically designs a facility to meet a standard (whether it’s a CSA, ASTM, NSF or other standard). A guideline is more of a “best practice” approach that doesn’t have any legal consequence. The Region supports an update of all the F-series “procedures” and would like to be part of any working group set up to do this.</p>
<p>We will work with partners on ways to make it easier for residents and businesses to waste less food or reuse it for beneficial purposes such as compost. (p 31)</p>	<p>Niagara Region supports the Ontario Food Recovery hierarchy consisting of the following steps in order of importance: (I) Reduce; (ii) Feed People; (iii) Recover Resources. When considering recovery rates it is important to consider the parameters used to in the calculation. Comments on other action items in this plan specifically reflect Niagara Region’s position that</p>

Reference in Proposed Environmental Plan	Staff Comments
	individual sectors in the province should have their own measurable targets and metrics.
<p>Quick Fact: About 60% of Ontario’s food and organic waste is sent to landfills which emits methane – a potent greenhouse gas – when it decomposes. Efficient diversion of household waste from landfills is an important tool in the fight against climate change. To read more about our plan to fight litter and waste, see page 40. (p 32)</p>	<p>Niagara Region’s position to date, reflected in the Province’s Food and Organic Waste Framework, is that actions focusing on prevention of food and organic waste are critical. We also support the Province’s expanded vision to take a systems approach to food and organic waste generation, management and recovery, recognizing that all stages of supply and production have a role to play in moving towards a circular economy.</p>
<p>Expand green bin or similar collection systems in large cities and to relevant businesses. (p 41)</p>	<p>Niagara Region supports this action and currently offers unlimited organics collection for small to medium sized Industrial, Commercial and Institutional (ICI) properties. Carts are priced for cost recovery only, encouraging participation.</p> <p>Provincial plans should specifically reflect expansion and targets for ICI and high and low-rise multi-residential (multi-res) sectors as participation rates for these sectors are typically lower than for Low Density Residential (LDR). Multi-res high-rise buildings may face unique challenges with respect to collection of organics materials, depending on age and design. Collection of organics must be as convenient as garbage collection is to encourage participation and improve program participation rates in these sectors.</p> <p>The Province should also consider public spaces and community events as a sector to target (e.g. festivals generate food waste). Some municipalities, including Niagara Region, already offer organics collection at special events.</p> <p>As noted in previous EBR comments on the Province’s Food and Organic Waste Framework, parameters to be used for measuring success, and the detailed calculation to establish a baseline and future</p>

Reference in Proposed Environmental Plan	Staff Comments
	measurement for the percentage of waste reduction and resource recovery, need to be defined, separately, for each sector. The Province should work with all stakeholders to establish timelines, as municipalities must budget and plan for processing capacity and end markets must be identified. Additionally, beneficial activities such as on-site management of organics through grasscycling and backyard composters should not be reduced through implementation or expansion of organics collection programs.

Reference in Proposed Environmental Plan	Staff Comments
<p>Develop a proposal to ban food waste from landfill and consult with key partners such as municipalities, businesses, and the waste industry. (p 41)</p>	<p>Niagara Region is supportive of a disposal ban, as noted in previous EBR comments on the Province’s Food and Organic Waste Framework.</p> <p>Materials to be included in the ban must be clearly defined and the program should be further expanded to include branded (non-food) organics, including compostable packaging and other materials, some of which may already be acceptable in local programs (e.g. leaf and yard waste and pet waste).</p> <p>A disposal surcharge could potentially be used in conjunction with a ban to provide some allowance for incidental amounts of designated materials.</p> <p>Disincentives in the form of levies/penalties are needed to discourage private sector facilities from accepting banned materials.</p> <p>In order for bans to be effective, targets must be established and implementation time is needed between diversion program start, target dates and enforcement of a ban. For example, Niagara Region currently collects from LDR, ICI and multi-res locations in the same routes, and phased-in targets might be different for each sector. Participation and contamination rates currently vary by sector and this may make thresholds for compliance and enforcement more challenging. Implementation time between the various sectors should be done within reasonable time limits in order to ensure consistency in messaging to the public.</p> <p>Compensation to municipalities should be provided for any additional costs related to disposal bans, as food and organics are costly waste streams for municipalities to collect and process. The Province must provide the necessary oversight and enforcement resources to ensure compliance of disposal bans.</p> <p>Timelines are critical for planning by municipalities as many, including Niagara Region, have a tonnage threshold at which the processing costs increase, and many municipalities have little or no excess capacity.</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>Educate the public and business about reducing and diverting food and organic waste. (p 41)</p>	<p>Niagara Region’s position, as noted in previous EBR submissions for Ontario’s Food and Organic Waste Framework, is that actions focusing on prevention of waste, including education, are critical in attaining goals minimizing the amount of food and organic waste to be disposed of. Niagara Region will continue to develop Promotional and Educational material (P&E) and programs aimed at preventing food waste, for example by participating in and leveraging work completed through the Ontario Food Collaborative (OFC) and other initiatives. Province-wide P&E messaging to prevent food waste is supported.</p> <p>To date, Province-wide P&E messaging on organics diversion collection programs has been difficult to deliver and may contribute to resident confusion due to the differences between municipal processing systems and the various materials that can be accepted in each system. Also P&E needs to be customized to reflect needs of different sectors, such as lower participation and higher contamination rates experienced by the multi-res sector.</p> <p>Niagara Region’s residential food/organics diversion program rate is less than 50% based on a 2015/2016 waste composition study. Participation rates in organics programs for the ICI sector tend to be even lower (in Niagara between 6% and 14% of ICI properties in downtown business areas use organics, according to audits completed between 2014 and 2018). Although education programs do work, further actions are required. Niagara Region had suggested in previous comments for the Food and Organic Waste Strategy that food waste reduction in the ICI sector could be better achieved through provincial policy/legislative changes such as policies similar to those in France/Europe that allow for and reduce risk to retailers when donating food as well as incentives to reduce food waste at the producer/retail level.</p>
<p>Work with other provinces, territories and the federal government to develop a plastics strategy to reduce plastic waste and limit</p>	<p>Similar to our position regarding food and organic waste, Niagara Region believes that actions focusing on reduction and reuse are critical. Municipal waste management systems must currently handle plastics at the end of the lifespan, whether through recycling</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>micro-plastics that can end up in our lakes and rivers. (p 42)</p>	<p>programs or as litter, and as such, municipalities are an important stakeholder. Niagara Region looks forward to a coordinated effort with all levels of government. Any plastics strategy should also include the development and retention of recycling markets in Ontario.</p>
<p>Seek federal commitment to implement national standards that address recyclability and labelling for plastic products and packaging to reduce the cost of recycling in Ontario. (p 42)</p>	<p>Niagara Region is supportive of actions to reduce the cost of recycling, such as through implementation of national standards.</p>
<p>Ontario will establish an official day focused on cleanup of litter in Ontario, coordinated with schools, municipalities and businesses, to raise awareness about the impacts of waste in our neighbourhoods, in our waterways and in our green spaces. (p 42)</p>	<p>Niagara Region is supportive of this action and is undertaking an educational anti-litter campaign in 2019. The objectives of this campaign are to: (i) decrease the amount of litter in communities, specifically neighbourhoods, parks and other outdoor public spaces and; (ii) increase understanding and use of proper disposal methods for commonly littered items. Strategies include an education piece (targeted public space advertising, ads in newspaper and social media), provision of support to coordinated activities, and for Niagara Region to act as a hub for community clean ups so residents can participate.</p> <p>It would be beneficial for the Province to advertise and promote not only the official clean-up day, but also other local cleanup events, and to fund all or a portion of these clean-up events.</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>Work with municipal partners to take strong action against those who illegally dump waste or litter in our neighbourhoods, parks and coastal areas. (p 42)</p>	<p>Niagara Region is supportive of initiatives to reduce illegal dumping and is proactive in taking action against offenders. A reporting tool, accessible on-line or by phone, is available. A monetary reward (a shared cost between Niagara Region and the appropriate LAM) is provided to persons reporting illegal dumping when the report results in an act of compliance (i.e. the offender returns to the site and removes the dumped material) or in a conviction. In 2017 Niagara Region’s Illegal Dumping Working Group (IDWG), reestablished in 2012 and comprised of Regional staff and LAM representatives, formalized a partnership with Crime Stoppers of Niagara (CSN) to aid in public awareness of initiatives and allow all parties to better utilize resources. Residents can use CSN’s anonymous tipster system as an alternative option for reporting incidents of illegal dumping, and are still eligible for rewards related to compliance and conviction as outlined above. CSN also aids in the promotion of illegal dumping campaigns on their social media platforms. In 2018 the IDWG continued to focus on installation of illegal dumping signage at hot spots, continued to promote Niagara Region’s illegal dumping campaign and reporting tool via multiple avenues including newspaper ads, banners, transit ads, brochures and social media, and provided public litter bin stickers tailored to each LAM, along with other actions.</p> <p>Niagara Region also works with local residents associations to help with concerns of illegal dumping and contamination. In 2018 Niagara Region completed a litter bin “blitz” in LAMs to reduce illegal dumping in litter receptacles, an ongoing issue in Niagara Region.</p> <p>In 2018 a total of 755 illegal dumping reports were received at Niagara Region, an increase of 11% compared to 2017, and two offence notices were issued, along with 142 warning letters. Challenges for by-law officers include the need for evidence of the offender (e.g. material with the name and address of the offender) and the availability of a witness who is willing to testify in court. While bylaw officers have jurisdiction on public property, illegal dumping often occurs on private property.</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>Develop future conservation leaders through supporting programs that will actively clean up litter in Ontario's green spaces, including provincial parks, conservation areas and municipalities. (p 43)</p>	<p>Niagara Region supports this action. One example is our Public Spaces Recycling (PSR) Program. To encourage installation of PSR containers in indoor and outdoor public spaces with higher public traffic, funding for the cost of containers is provided on a 50/50 cost-sharing basis between Niagara Region and LAMs.</p> <p>Niagara Region offers Special Events Recycling and Organics (SER&O) programs throughout the year to all public events within Niagara Region. A unique aspect of the program is the partnership with Eco-Defenders, a local non-profit community group that provides trained waste sorting volunteers to public events. Material diverted by Eco-Defenders is free of contamination and minimizes garbage produced by events, improving the diversion rates for Niagara Region's SER&O programming.</p> <p>As demonstrated by these examples, Niagara Region sees high value in the continued support of local programs promoting clean-up of litter and diversion of waste.</p> <p>All community events should be mandated to have diversion programs (twinned with garbage) and the Province should providing funding for volunteers to help sort waste properly at events. Public events should be</p>

Reference in Proposed Environmental Plan	Staff Comments
	waste-free and generate only acceptable recyclable and compostable material.
Connect students with recognized organizations that encourage environmental stewardship so they could earn volunteer hours by cleaning up parks, planting trees, and participating in other conservation initiatives. (p 43)	Niagara Region has traditionally supported waste diversion programs in educational facilities and we continue to expand our programming.
Work with municipalities and producers to provide more consistency across the province regarding what can and cannot be accepted in the Blue Box program. (p 43)	Niagara Region supports a consistent Provincial approach to standardization of materials accepted in the Blue Box program that should be done as part of the change to full producer responsibility. To achieve this, materials should not be removed from the program and if they are, alternative approaches for disposal must be considered, with producers paying for management of the material in the waste management system. Consumer convenience should be maintained or improved, and access to existing services should not be negatively impacted by any changes to Blue Box program.
Explore additional opportunities to reduce and recycle waste in our businesses and institutions. (p 43)	<p>Niagara Region is supportive of initiatives that target waste reduction and diversion in the ICI sector. As noted earlier, Niagara Region currently offers unlimited curbside recycling and organic pick-up service to small and medium sized businesses. We have created an environmental program specific to businesses: Rethink Your Waste at Your Workplace. This recognition program includes an educational component and rewards businesses that make efforts to maximize their waste diversion efforts.</p> <p>Similar voluntary programs have been in existence for a number of years, however, to make tangible progress towards reducing and recycling waste in the ICI sector, it would be beneficial to establish mandatory Provincial targets with firm timelines for the sector.</p>

Reference in Proposed Environmental Plan	Staff Comments
	<p>Municipalities need to be compensated for ICI materials that are municipally collected as part of the integrated collection system.</p>
<p>Move Ontario’s existing waste diversion programs to the producer responsibility model. This will provide relief for taxpayers and make producers of packaging and products more efficient by better connecting them with the markets that recycle what they produce. (p 43)</p>	<p>Niagara Region is fully supportive of making producers responsible for properly managing the waste they produce, and believes the internalization of the cost of end-of-life product packaging with all-in pricing to remove costs from municipalities/taxpayers is the best option for Ontario. This provides the opportunity for design for the environment and less disposal.</p> <p>Niagara Region agrees with the Association of Municipalities of Ontario (AMO), who note that, “ it is to the benefit of all stakeholders and citizens to have the Blue Box transition process start with the Minister of Environment, Conservation and Parks issuing a wind-up letter early in 2019, allowing for adequate time for robust planning and consultation on the development of a Paper Product and Packaging Regulation under Resource Recovery and Circular Economy Act, 2016 (RRCEA)”.</p> <p>Furthermore, the list of designated materials should be reviewed and items such as construction and demolition waste included under producer responsibility.</p>
<p>Investigate options to recover resources from waste, such as chemical recycling or thermal treatment, which have an important role – along with reduction, reuse and recycling – in ensuring that the valuable resources in waste do not end up in landfills. (p 43)</p>	<p>Incentives to promote waste reduction (avoid waste generation) followed by reuse, recycling/composting are needed. These are higher value activities and although recovery is secondary, there should be recognition of energy production from biological treatment as diversion (e.g. anaerobic digestion to produce biogas or biological drying of organics into biofuel).</p> <p>Niagara Region is supportive of this and currently completes a formal yearly (at minimum) review of alternative waste management technologies. Niagara Region continues to engage other neighbouring municipalities in discussions related to available capacity at their current/future alternative waste management technology facilities and/or future needs that could be addressed by partnering with Niagara Region on alternative technologies.</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>Encourage increased recycling and new projects or technologies that recover the value of waste (such as hard to recycle materials). (p 43)</p>	<p>There is a desire for access to increased options for recycling unacceptable Blue Box items by residents. While Niagara Region supports the goal of increased recycling and development of new technologies, the approach to encourage improved environmental outcomes should also include mechanisms to discourage the use of difficult to recycle materials. With access to additional funding and Provincial support, innovative programs to increase municipal diversion rates could be more widely implemented.</p>
<p>Ensure new compostable packaging materials in Ontario are accepted by existing and emerging green bin programs across the province, by working with municipalities and private composting facilities to build a consensus around requirements for emerging compostable materials. (p 43)</p>	<p>Niagara Region is supportive of this action as municipalities currently face challenges with respect to compostable packaging, namely that the material does not all break down in the various organic processing systems, at the same rate. Consensus around requirements would ensure the effectiveness of producer P&E material and also reduce resident confusion. Requirements would also help ensure that producers do not move to compostable packaging simply to avoid producer responsibility for designated paper and packaging, thereby shifting the problem.</p> <p>At the same time, the requirement to accommodate standard compostable material may mean that some municipalities must invest in new technology. Cost and capacity is a concern as increased tonnages will result in increased processing contract costs. Municipalities must be supported in these efforts.</p>
<p>Consider making producers responsible for the end of life management of their products and packaging. (p 43)</p>	<p>This aligns with previous positions put forward by Niagara Region. Niagara Region requests the Province take a firm stance, for example, designating all packaging, whether it is recycling or compostable. Producers should pay for management of designated materials regardless of the stream in which they end up. Niagara Region also supports designation and full producer responsibility of new materials such as additional electronics (appliances, electrical tools), florescent bulbs and tubes, mattresses, carpets, clothing and textiles, furniture and the bulky items. Transition plans particularly for the Blue Box program must address municipal contracts and assets and how</p>

Reference in Proposed Environmental Plan	Staff Comments
	to avoid stranded assets. Transition to a producer responsibility regime could lead to Niagara Region's Recycling Centre becoming a stranded asset depending on the strategies put forth to achieve producer responsibility.
Cut regulatory red tape and modernize environmental approvals to support sustainable end markets for waste and new waste processing infrastructure. (p 44)	<p>Access to stable and sustainable end markets for processed materials are critical to the successful implementation of the Province's plan. This includes the development and implementation of local / domestic end markets.</p> <p>As previously noted, increased organics tonnages due to an organics ban and increased P&E, requires that municipalities have the capacity to process and manage the material. The process could be eased with modernized environmental approval processes. With respect to Blue Box materials, market prices have fluctuated in recent years and access to the world-wide market requires production of a consistent and un-contaminated product. Funding and improved access to new waste processing infrastructure might allow for better sorting and processing of material, resulting in an improved and more desirable product for end-markets along with increased diversion.</p> <p>Niagara Region is supportive of streamlining approvals for waste processing infrastructure.</p>
Provide municipalities and the communities they represent with a say in landfill siting approvals....The province will look for opportunities to enhance municipal say while continuing to ensure that proposals for new and expanded landfills are subject to rigorous assessment processes and strict requirements for design, operation, closure,	Niagara Region is supportive of streamlining landfill site approvals.

Reference in Proposed Environmental Plan	Staff Comments
post-closure care and financial assurance. (p 44)	
Set clear rules to allow industry to reduce constructions costs, limit soil being sent to landfill and lower greenhouse gas emissions from trucking by supporting beneficial reuses of safe soils. (p 45)	<p>Niagara Region agrees that excess soil from construction projects should be beneficially re-used wherever possible. Landfill sites should not be the first option for soils disposal, as landfill capacity is required for solid waste disposal. Niagara Region agrees that beneficial soil re-use sites should be identified locally to reduce trucking distances, whereby reducing cost and reducing greenhouse gas emissions.</p> <p>Previous modification to the MECP Excess Soil Disposal Framework included practical options for municipalities to apply with respect to soil reuse. For example, municipalities can reuse salt contaminated soils at other locations that have similar salt impact using local background soil quality as a benchmark, rather than immediately resorting to landfilling if the soil exceeds the MECP Ontario background concentrations. The valuable input and ideas provided in previous EBR consultations should be incorporated in future plans.</p>
Work with municipalities, conservation authorities, other law enforcement agencies and stakeholders to increase enforcement on illegal dumping of excess soil. (p 45)	<p>As previously noted, Niagara Region by-law officers do not have jurisdiction over illegal dumping on private lands, and illegal soil dumping on public land in Niagara Region is not a common practice. (Some of the Local Area Municipalities in Niagara have site-alteration by-laws to regulate illegal dumping of fill.)</p> <p>Clarification regarding who is responsible for monitoring of excess soil movement should be provided. Contamination is based on soil chemistry and as such, visual inspection is not sufficient. Currently our by-law officers focus on the illegal dumping of waste material and monitoring/enforcement of illegal soil dumping is difficult due to the nature of the material as it is typically lacking supporting documentation required for conviction.</p> <p>A provincial framework for development of Excess Soil Management Plans (ESMP) developed in consultation with stakeholders, would help ensure consistency across Ontario municipalities.</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>Consider approaches for the management and spreading of hauled sewage to better protect human health and the environment (including land and waterways) from the impacts of nutrients and pathogens. (p 45)</p>	<p>In Niagara, all sewage is hauled to municipally owned wastewater treatment plant for disposal and treatment. No spreading of raw sewage occurs on agricultural land here. Niagara Region has implemented a successful sewage biosolids management program that works well and is welcomed and supported by the local agricultural industry. The nutrient rich biosolids, from anaerobically digested sewage are land applied to give the soils the required nutrients needed to make local crops thrive. This program has worked effectively for several decades and Niagara would want to have input if any changes are being contemplated that may impact our contractual obligations or the agricultural community in general.</p>
<p>Continue to consult with the public and engage with Indigenous communities. (p 52)</p>	<p>Niagara Region is supportive of continued public engagement. Programs are most effective when all stakeholders are engaged in defining and developing opportunities, leading to better uptake and support. Waste Management Services (WMS) actively engages with all levels of stakeholders, including citizens, with respect to waste management policies and programs.</p> <p>As part of the Niagara Region’s Humberstone Landfill Site Expansion EA process, dedicated meetings with Indigenous communities including Six Nations and Niagara Region Metis Council occurred. An EA Advisory Group comprised of local residents and businesses was also established. These efforts helped develop trust with the neighbouring community and Aboriginal Groups resulting in successful EA.</p>
<p>Begin implementing priority initiatives. (p 53)</p>	<p>Stakeholders need information about short and long-term timelines and access to detailed implementation plans in order to best support the Province with implementation of priority initiatives.</p>
<p>Measure and report on progress. (p 53)</p>	<p>Creation of data collection mechanisms to measure progress in waste reduction and resource recovery is vital. The province should have separate targets and metrics for reporting progress in reducing waste in the disparate sectors (LDR, ICI and multi-res sectors) and these targets should be enforced. Targets and metrics</p>

Reference in Proposed Environmental Plan	Staff Comments
	should be developed in partnership with all stakeholders, including municipalities.

PUBLIC HEALTH AND EMERGENCY SERVICES

Reference in Proposed Environmental Plan	Staff Comments
<p>At the same time, climate change threatens these resources and our homes, communities and businesses, infrastructure, and our locally grown food and crops. (p 6)</p>	<p>Could be strengthened by elaborating on the increasing evidence behind the impacts of climate change on food systems and how it is causing food system emergencies and disturbances. (Seed & Rocha, 2018). For example, the price of vegetables – a prime under-consumed food category based on prevalent nutrition recommendations – is predicted to increase due to changing weather patterns caused by climate change.</p> <p>It is also important to recognize that “blanket” policies based on locally-sourced foods are not best practice, given the diversity of challenges to food access.</p>
<p>It (climate change) also threatens food security and road access for remote First Nations, as well as the health of ecosystems across our great province. (p 6)</p>	<p>Food security should be clarified to include the ability to secure safe, healthy, personally/culturally acceptable foods, and how this has a significant impact of human and planetary health.</p>
<p>In 2001, the government of the day announced the closure of the Lakeview Generating Station, setting the stage for the phase out of coal-fired electricity generation which remains the largest single greenhouse gas reduction in Canadian history. (p 7)</p>	<p>Although the phase-out of coal-powered plants was and is a key contributor in climate change action, it is important to note that the electricity sector tends to be among the smallest contributor of GHG emissions – which is consistent across all sectors and all provinces. Identifying the full emissions produced from other sectors, such as transportation, will better inform a more accurate representation of Ontario’s current carbon foot print and the role the province plays in GHG emissions for the country.</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>Measured against the same base year of Canada's target under the Paris Agreement (2005), the province's total greenhouse gas emissions have dropped by 22% – even while the rest of Canada saw emissions increase by 3% during that same time. (p 7)</p> <p>Doing Canada's heavy lifting on greenhouse gas emission reductions came at a cost that was too high for Ontario families and businesses. (p 7)</p>	<p>It is important to recognize and acknowledge in the Plan that Ontario is the second largest contributor to GHG emissions in all of Canada (23%), preceded only by the highly driven oil and gas province of Alberta (37%) (Environment and Climate Change Canada, 2016). Ontario and Alberta together represent 60% of Canada's overall emissions produced. Without considering emissions for Ontario and Alberta, the rest of the country actually saw a decrease in emissions by 5.4%. Given the physical attributes of the province and its current emission practices, Ontario is a huge driver of the national average. As such, the province has a key role in reducing GHG emissions, which is not sufficiently addressed in the current draft of the plan.</p> <p>Hence, it is very appropriate (and needed) for Ontario to continue to contribute to emission reduction in Canada, Furthermore, it is notable that Ontario only had the 3rd largest percentage decrease across the country – further proving that emission reduction is a collective effort, and not just solely at the expense of Ontario as the statement suggests.</p>
<p>Quick Fact: As of 2013, Canada is responsible for 1.6% of global emissions, with Ontario responsible for less than 0.4% of global emissions. (p 16)</p>	<p>Although this is an accurate statement, without a sufficient background in climate knowledge, it is very easy to misinterpret this statement and downplay the significance of both 1.6% and 0.4% (respectively). The 1.6% of emissions represents the fact that Canada is the 9th largest GHG emitter (out of 195 countries) which is a significant number, and even more so when considering population density (making Canada the 3rd highest polluter per capita in the world). Without considering this background information, the fact presented in the Plan insufficiently represents Ontario's role in climate change and should consider rephrasing.</p>
<p>Undertake a provincial impact assessment to identify where and how climate change is likely to impact Ontario's communities, critical infrastructure, economies and natural environment.</p>	<p>It is important to include the health implication in this assessment to bring awareness to communities on the current and projected implications of climate change on health. Further improvement would include:</p> <ul style="list-style-type: none"> • Applying the health equity lens for impacts on vulnerable populations <p>(See page 39 for further information).</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>The assessment would provide risk-based evidence to government, municipalities, businesses, Indigenous communities and Ontarians and guide future decision making. (p 19)</p>	<ul style="list-style-type: none"> • Considering how different sectors may be affected by climate change, as well as how such sectors may contribute to climate change. • Engaging communities to avoid potential rejection of sustainability principles/measures on the basis of ethnicity, culture, religion, etc. <p>It is recommended to consider the <i>local</i> lens when completing such assessments as impacts heavily vary between communities and – since the province of Ontario is so large and diverse – it is important to not conclude with a “one-size-fits-all solution” but consider how to use local risk-reduction information to benefit individual communities.</p>
<p>Ontario will reduce its emissions by 30% below 2005 levels by 2030.</p> <p>This target aligns Ontario with Canada’s 2030 target under the Paris Agreement.</p> <p>This is Ontario’s proposed target for the reduction of greenhouse gas emissions, which fulfills our commitment under the Cap and Trade Cancellation Act, 2018. (p 21)</p>	<p>The Environment Plan proposes a new target goal: <i>a 30% reduction in the targets of GHG emissions based on 2005 baseline levels, by 2030</i>. This new target represents a 26.9% increase in GHG emissions from the goals outlined in the Climate Change Action Plan by the previous government leadership. To put this increase into perspective, the proposed change will produce 30 additional megatonnes (Mt) of pollution, which is equivalent to the reductions achieved by the phase out of coal-fired electricity generation - quoted by the plan as the “largest single greenhouse gas reduction in Canadian history” (p. 7). With each additional tonne of GHG emitted, the issue of climate change becomes much more unmanageable and costly (ECO, 2018). Thus, efforts must be focused on decreasing GHG emissions in Ontario, not increasing as the current plan proposes.</p> <p><i>Initial</i> Climate Change GHG Target Goal: Reduce emissions by 37% below 1990 levels (179.2 Mt) by 2030 = 112.9 Mt</p> <p><i>Proposed</i> Environment Plan GHG Target Goal: Reduce emissions by 30% below 2005 levels (204.7 Mt) by 2030 = 143.3 Mt</p> <p>This represents a difference of 30.4 Mt more GHG emission (26.9% increase in pollution).</p>

Reference in Proposed Environmental Plan	Staff Comments
	<p>Ontario has already experienced an increase of 1.5°C since 1948, with an additional projected increase of 2.5°C by the year 2050 - which can lead to irreversible and catastrophic results for our province, if strong mitigation efforts are not taken (ECO, 2018). Substantial reduction of GHG emissions are essential preventative measures to ensure that global temperature averages do not exceed 2°C above pre-industrial levels (Haines, 2009). In the most recent Special Report released by the International Panel on Climate Change (IPCC), evidence calls for <i>greater</i> mitigation efforts in order to achieve this goal and avoid potentially catastrophic impacts (2018). For instance, the Insurance Bureau of Canada (IBC) estimates that up to 10% of Canadian properties may soon be too high to be insured, which will make it much more difficult for families to protect themselves, and thus be more vulnerable to the impacts of climate change (2015).</p> <p>In addition to the low GHG targets, the projected GHG emissions presented in the Environment Plan appear to be unclear. More transparency is needed around what measures were used to predict GHG emission levels under the “business as usual” scenario which appears to project no change (i.e. staying consistently within the range of 161-162 Mt), rather than displaying an increasing trend as projected by the evidence in the leading modelling practices. Furthermore, the Environment Plan does not include any mention of targets or actions beyond the year 2030. Not only are these long-term goal considerations (i.e. 2050, 2080) essential to a strong climate plan, overlooking such projections makes it much more difficult to achieve the regarded standard of a low carbon economy.</p> <p>Furthermore, it is not reasonable to justify these target changes as a way to align with the Canadian federal targets, which have largely been recognized as “highly insufficient” by leading climate progress tracking (Action Climate Tracker, 2017). Scientific evidence suggests that commitments to deeper emission cuts are needed in order to achieve long-term goals of keeping the increase of global temperatures well below 2°C (Haines, 2017). Given that Ontario is the second-largest driver of</p>

Reference in Proposed Environmental Plan	Staff Comments
	<p>emissions in Canada, this presents an obvious responsibility, and a tremendous opportunity, for Ontario to set leading target goals that not only help support Canada’s commitment in the Paris Agreements, but also facilitate international leadership in a transformative, low carbon economy for the province.</p> <p>In addition to the proposed actions, the Environment Plan should consider implementing and/or expending on the following efforts that have been shown to be most effective in lowering GHG for Ontario (ECO, 2018):</p> <ul style="list-style-type: none"> ▪ <i>Focus on Improvements by Industry</i>, particularly the transportation sector that is responsible for majority of emissions (see page 36). ▪ <i>Strengthen and Improve Codes and Standards</i> (e.g. building codes, particularly within low-income communities). ▪ <i>Green Energy Act</i> (e.g. provincial and legislative guidance) ▪ <i>Better Rules on Land Use</i> (e.g. mandatory impact considerations on climate) ▪ <i>International Leadership</i> (e.g. committing to strong climate goals) ▪ <i>Climate Law</i> (e.g. Cap and Trade) – Ontario has and can further benefit from a “Polluter-Pay Carbon Pricing System” which is the most effective way of reducing GHG emissions (ECO, 2018). With the removal of the Ontario Cap and Trade Program, Ontario is again in need of a strong climate <i>law</i> that will positively contribute to the regulation and reduction of GHG emissions. <p>Given Ontario’s large GHG emission rates, and following the recent actions to repeal efforts that were aimed at reducing GHG emissions (i.e. Cap and Trade), the province should do better. Shifting to “net-zero” emissions and green energy renewable paradigms are great (and much needed) examples of how our province can be a driving force for more sustainable and healthier living.</p>
We will create and establish emission performance standards to	This is very vague and needs to be further clarified. For instance, how will the standards be constructed? How are “large emitters” defined? How will other polluters

Reference in Proposed Environmental Plan	Staff Comments
<p>achieve greenhouse gas emissions reductions from large emitters. Each large industrial emitter will be required to demonstrate compliance on a regular basis. The program may include compliance flexibility mechanisms such as offset credits and/or payment of an amount to achieve compliance. (p 26)</p>	<p>who may not classify as “large emitters” be accountable?</p>
<p>We also know that just over 60% of Ontario’s food and organic waste is sent to landfills. [...] When food and organic waste is sent to landfill, opportunities are lost to preserve valuable resources that could be used to heat our homes, support healthy soils and reduce greenhouse gas emissions. (p 31)</p>	<p>Should be improved by:</p> <ul style="list-style-type: none"> • Including other implications of food loss/waste, such as the resources required to produce, harvest, process, package, transport, store, advertise, retail, etc.; and consumers’ money, time, and nutrition needs. • Acknowledging the complexities inherent to food waste, as evident by fact that while vegetables and fruit are the highest category of avoidable food waste, these are also one of the most under-consumed relative to dietary recommendations.
<p>We will work with partners on ways to make it easier for residents and businesses to waste less food or reuse it for beneficial purposes such as compost. (p 31)</p>	<p>Should be improved by:</p> <ul style="list-style-type: none"> • Differentiating between <i>food losses</i> (by food industry, typically defined as up to the activity of distribution) from <i>food waste</i> (most of which is generated by households/consumers). • Changing the perspective of food as just another commodity. Raise awareness of the important lack of realization that the biggest differentiator between profitable and non-profitable business is food losses (Dr. Martin Gooch, U. of Guelph, Policies, Practices and Partnerships: Reducing Food Waste Symposium, May 30, 2017) • Pointedly putting much more emphasis proportionately on prevention (waste less food) over diversion/recovery (re-use)
<p>Quick Fact: About 60% of Ontario’s food and organic</p>	<p>While having merit as stated, this would be a better and more precise statement if it were revised to emphasize</p>

Reference in Proposed Environmental Plan	Staff Comments
<p>waste is sent to landfills which emits methane – a potent greenhouse gas – when it decomposes. Efficient diversion of household waste from landfills is an important tool in the fight against climate change. To read more about our plan to fight litter and waste, see page 40. (p 32)</p>	<p>prevention (waste less food) proportionately over diversion/recovery (re-use).</p>
<p>Increase the renewable content requirement (e.g. ethanol) in gasoline to 15% as early as 2025 through the Greener Gasoline regulation, and reduce emissions without increasing the price at the pump, based on current ethanol and gasoline prices. (p 33)</p>	<p>Clarification and considerations are needed as to whether this may have negative impacts on food production for humans, such as if production of other agricultural products are switched to growing corn for fuel purposes, thus impacting overall food systems.</p>
<p>Make climate change a cross-government priority (p 35)</p>	<p>The actions in this section could be enhanced by recognizing the importance of multi- and cross-sectoral, intra-governmental collaboration (encouraging broad stakeholder cooperation amongst governments, agriculture, environment, energy, water, health, education, civil society, and finance/economic sectors). Limitations on food industry lobbying is encouraged to avoid undue, biased influence on sustainability. Additionally, emphasised alignment is needed amongst health (nutritional, mental), social (affordability, acceptability, capabilities), economic (profitability) and ecosystem/environmental sustainability agendas (e.g. alignment with the national food policy/revised dietary guidance).</p>
<p>Encourage local leadership by forming stronger partnerships and sharing best practices with</p>	<p>The sharing of best practices could be strengthened by more research and evaluation.</p>

Reference in Proposed Environmental Plan	Staff Comments
community groups and business associations. (p 37)	
<p>Increase opportunities for Ontarians to participate in efforts to reduce waste (p 39)</p> <p>Educate the public and business about reducing and diverting food and organic waste. (p 41)</p>	<p>This action - as well as broader agendas - would be much strengthened by being incorporated into a larger consumer-oriented strategy of Leverage Food Literacy Framework to Integrate Sustainability (see page 32)</p>
Develop best practices for safe food donation. (p 41)	<p>Indisputably, precautions are important for safe food, including for donating. However, reducing food waste and discouraging the overproduction of food should be top priority. It is also important to recognize that food donations do not address the root of the problem, which is income inadequacy.</p>

PUBLIC HEALTH AND EMERGENCY SERVICES – OMISSIONS AND ADDITIONAL OPPORTUNITIES

Omissions/Opportunities	Staff Comments
<p>Need to consider the costs of negative externalities of the food system.</p>	<p>There has been an increasing realization of the externalized costs that are generated by the food industry (Seed & Rocha, 2018). Instead of being accounted for in food prices, these costs typically have to be absorbed by ecosystems and by public systems such as health care. Examples of these costs include:</p> <ul style="list-style-type: none"> • Burden of chronic diseases from over-consumption of calories and unhealthy diets; • High use and depletion of natural resources across the food chain • Accumulation of harmful substances (contaminants, packaging, microorganisms, etc.) in the ecosystem (land, water, air)
<p>Need to alter individual and population dietary choices and patterns, while still meeting food and nutrition needs.</p>	<p>Consumption patterns that are unhealthy and impactful to the environment, are determined by the following factors:</p> <ul style="list-style-type: none"> • Inadequate incomes - Poverty means inadequate household-level incomes to afford eating patterns consistent with a sustainable diet. Well-intended but erroneous food-based responses do not address the root cause of food insecurity. • Societal reprioritization and devaluation of food-related activities, • Attitude that we can afford to waste food because it is cheap (Dr. Martin Gooch, U. of Guelph, Polices, Practices and Partnerships: Reducing Food Waste Symposium, May 30, 2017). Points to the widespread need to re-develop food literacy. • Un/under-regulated marketing of foods, particularly of ultra-processed foods to children <p>Consumption patterns should be based on a “win-win” principle that healthy dietary patterns can be balanced for improvements in environmental sustainability, with socially-beneficial, economically-viable food system designs.</p> <ul style="list-style-type: none"> • Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and

Omissions/Opportunities	Staff Comments
	<p>affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources (FAO, 2010).</p> <ul style="list-style-type: none"> • Include as corollaries that there isn't a need to avoid any food category entirely (such as meats), and that the traditional advice about eating a wide variety of foods remains valid
<p>Consider the <i>Consumer Strategy: Leverage Food Literacy Framework to Integrate Sustainability</i></p>	<p>Promote, support, and resource opportunities to learn, practice, and teach Food Literacy:</p> <ul style="list-style-type: none"> • Fostering a culture of valuing and prioritizing food, and having a healthy relationship with it (food as a precious resource) • Understanding where food comes from and what it takes for food to be available to all people • Knowing how to plan, prefer, grow/produce, access, prepare, serve, save, re-purpose/prevent waste, and store safe and healthy foods • Appreciating the relationships of food to your health, food systems, and socio-cultural, economic, and physical environments
<p>Promote "Circular Economies".</p>	<p>An economic model that minimizes the use of raw materials, maximizes the useful life of materials through resource recovery, and minimizes waste generated at the end of product life - rather than a traditional linear economy. Such model could be effective is supporting the prevention and reduction of food waste. This further supports a shift from perceiving food as just another commodity, especially among industries.</p>
<p>Need for Research and Evaluation</p>	<p>Encourage and support research and evaluation to:</p> <ul style="list-style-type: none"> • <u>Investigate and develop a holistic approach</u> that integrates health, social, and economic agendas with environmental sustainability • <u>Conduct community food assessments</u> to identify opportunities, needs, gaps, and threats to the integration of food literacy and food systems, with environmental sustainability • <u>Understand food loss/waste</u> causes and amounts all across the food value chain. For example, audits can provide data for developing, implementing, and evaluating the effectiveness of loss/waste reduction intervention to determine best practice. Further exploration of consumer food attitudes and practices

Omissions/Opportunities	Staff Comments
	<p>are needed, especially to inform reduction of household-level food waste</p>
<p>NRPH requests additional and more explicit action to be taken to address the growing emissions produced through the transportation sector in the Environmental Plan.</p>	<p>In recognizing that the transportation sector is Ontario’s fastest growing and largest source of emission, more focus is needed for strategies to address this growing concern. As it currently stands, the Environmental Plan has very limited mention of actions to address the energy use and emissions produced from the transportation sector. Aside from the limited actions mentioned on <i>heavy-duty</i> vehicles (pp.10, 33), <i>electric vehicles</i> (EV) (p. 23), compressed <i>natural gas</i> (p. 23) and <i>public transportation</i> (p. 38), there is no direct mention of addressing the issue of on-road passenger emissions – which accounts for most of the emissions (ECO, 2018). Moreover, the few actions that are outlined, the plan does not provide any detail as to how these actions will be achieved. For instance, the plan commits to an uptake of EV, but it is unclear on how the province plans to tackle this. Clarity on this issue is particularly needed to be addressed, especially given the recent removal of EV vehicle and charging incentives by the cancellation of the Cap and Trade Program.</p> <p>Not only is the transportation sector our largest source of emissions (38%) and is steadily growing (34% increase since 1990), its impacts heavily outweigh our existing efforts to reduce emissions (ECO, 2018). For example, the plan reports on the province’s success in reducing the emissions in the electricity sector by the phasing out of coal-powered electricity generation in stating that “<i>Ontario’s low-emission combination of hydroelectric, nuclear, natural gas and non-hydro renewable generating capacity has enabled the province to avoid up to 30 megatonnes of annual greenhouse gas emissions, equivalent to taking up to 7 million vehicles off the road</i>” (p. 7). Given that there are roughly around 730 million cars annually on the road (just considering the major highways in the Greater Toronto and Hamilton Areas (GTHA)), the reduction mentioned in the plan accounts for less than 1% of the Ontario’s emissions challenge presented from the transportation section (AADT, 2016). As such, this highlights a huge opportunity for further reduction of</p>

Omissions/Opportunities	Staff Comments
	<p>GHG by focusing on the transportation sector. Although we agree that Ontario’s role in reducing electricity emissions has definitely been a great step in the right direction, we hope that this example will emphasize that more action is urgently needed to address the emissions produced in the transportation sector:</p> <p>Electricity Sector: Ontario’s low-emission combination of hydroelectric, nuclear, natural gas, and non-hydro renewable generating capacity = saving of 30 megatonnes of GHG/year = 7 million vehicles.</p> <p>Transportation Sector: <u>Approximately 730 million vehicles/year</u> (in GTHA) = 3, 128.6 megatonnes/year Electricity sector equates to approximately 0.9% of the emissions produced by the transportation sector.</p> <p>NRPH is glad that Ontario has expressed commitment for the protection of air quality and the recognition of the public health threat that air pollution has on population wellbeing. The World Health Organization (WHO) estimates that air pollution is responsible for approximately 7 million deaths per year worldwide (1 in 8 deaths) (WHO, 2016). A major contributor to poor air quality is the transportation sector. Not only does transportation affect the quality of the surface ozone, but it is also the direct cause of particulate matter (PM)_{2.5} – exposure to which pose serious concerns for the health of our vital organs such as lungs and heart (WHO, 2016). Additionally, our dependence on driving has been linked to obesity, stress, insufficient sleep and physical activity – all of which significantly increase risk of chronic disease (Ding et al., 2014). So if Ontario is really serious about protecting air quality and benefiting human health and the environment, it is imperative to have more direct action in the Environment Plan on addressing the increasing trend of personal vehicle dependency for transportation.</p> <p>One specific strategy that is overlooked in the Plan that could effectively address the transportation sector issue is the promotion and support of active transportation. This strategy would not only address Ontario’s transportation emission challenges but also tackle some of the more serious public health priorities. We know that</p>

Omissions/Opportunities	Staff Comments
	<p>the majority of reported emissions from the transportation sector are attributable to on-road passenger vehicles used for commuting, and continue to grow (ECO, 2018). As such, addressing the commuting issue through the promotion of active transportation has been a leading practice with notable results across the globe. Creating more opportunity for Ontarians to choose walking, biking and/or public transportation over driving presents a significant cost saving strategy across all sectors of health, infrastructure, transit and more.</p> <p>The Plan may choose to draw inspiration from the following successful examples from other cities and regions that have committed to and adopted active travel as the leading mode of travel - Our Commitment to Green and Healthy Communities: Fossil-Fuel-Free Streets Declaration.</p>
<p>The province of Ontario must commit to enhancing the public’s understanding of the significant health impacts of climate change, along with other implications in their community, in order to successfully build Ontario’s resilience to climate change.</p>	<p>NRPH is pleased with Ontario’s commitment to help Ontarians understand the impacts of climate change (p. 19), however, we urge that explicit action is taken to increase the public’s awareness of the climate change impacts on population health and wellbeing. Research suggests that although a majority of the public may be aware to some degree of the emerging serious issue of climate change, there is actually only a few who understand the significant implications that climate change has on their <i>health</i> (Maibach, 2011). This knowledge gap has been shown to be a great barrier to an individual’s connection with the climate change issue, as it reinforces perceptions of climate change as a distant, impersonal issue.</p> <p>In fact, climate change effects on personal health are very current, well documented, and projected to increase substantially. Climate change is highly regarded as the “Defining Public Health Issue for the 21st Century” (Dr. Margaret Chan, the former Director-General of the WHO). IPCC has additionally reported how climate change, in a very current and near term, will further exacerbate existing health problems (2018). As such, this will ultimately further contribute to loss of work, decrease in labor productivity and reduced economic prosperity. Therefore, public health can and</p>

Omissions/Opportunities	Staff Comments
	<p>should play a key role in supporting the efforts in addressing the issue of climate change, and consequently outcomes affecting health.</p> <p>NRPH is happy that the province is open to collaborating with public health units (as referenced on page 10) but further urges for this support to go beyond air pollution, and recognize the multiple health implications of climate change. Here is a <i>brief</i> outline of the existing and projected climate-related risks, and their impact on health:</p> <ul style="list-style-type: none"> • Ontario is expected to experience an increase in temperatures by 2.5°C by 2050, if significant efforts are not met. Hotter temperatures can lead to serious health implications such as heat exhaustion and heat stroke, worsening of cardiovascular, respiratory and chronic kidney disease, increased ozone air pollution, and changes in vector-borne disease distribution (such as Lyme Disease and West Nile), prolonged risk of droughts and quality of water supply, as well as all the negative mental health implications that are associated with any and all of those risks (WHO, 2018) • Changing climate also increases risk of more frequent extreme weather events to impact Ontario, similar to the already seen wind and snow storms, and even the potential of severe tornadoes (such as those that have devastated Ottawa just this past year). More frequent extreme weather and changes in precipitation significantly increase the risk of flooding (as well as the risk of injury and deaths associated with it), damage to infrastructure including homes and hospitals, as well as devastating impacts on the harvest and food production for the local agricultural communities (WHO, 2018). <p>At this time, the Environment Plan does not include any mention of how the current and projected changes in our climate are impacting the health of our communities, and how these impacts are expected to worsen. This can be rectified in the plan by recognizing the direct connection between health and climate change, and explicitly addressing it in the plan.</p>

Omissions/Opportunities	Staff Comments
	<p>It is also important for the province to consider and acknowledge the direct benefits to health that will arise from mitigation efforts taken on climate change. Policies and actions that reduce greenhouse gas emissions can also bring about important corollary benefits, or “co-benefits”, to population health (Haines, 2017). In other words, the investments we make to transition to a low-carbon economy today, as supported by a strong action plan, will not only have a positive impact on reducing GHG emission levels which will ultimately result in more positive health outcomes, but such investments can also have direct and timely benefits to health as a whole. For example, our commitment to the promotion of active transportation does not only reduce GHG emissions but increases opportunity for physical activity, social connectedness and improvements in air quality to support respiratory and cardiovascular health. Thus, we don’t need to wait on GHG emissions reductions to take place before we are able to experience health benefits, while we work on long-term solutions towards larger climate issues.</p> <p>A good starting point to addressing climate change is by better understanding the current and future impacts on communities. That is why NRPH is pleased with Ontario’s intentions to “undertake a provincial impact assessment to identify where and how climate change is likely to impact Ontario’s communities, critical infrastructure, economies and natural environment” (p. 19). While a provincial assessment is an important tool, it is essential that the information collected and disseminated be made at a local municipal and regional levels. Although the impacts from the changing climate are experienced across the province, what those impacts translate to will vary largely due to the geographical regions. As such, the provincial government should draw support and collaborate with local municipalities who have already begun to do great work in assessing climate change impact. Additionally, based on the rationale above, it is important for the plan should commit to specifically completing a Climate Change and Health Vulnerability Assessment to better understand the impacts of climate variability on health and identify strategies to reduce those risks. The</p>

Omissions/Opportunities	Staff Comments
	<p>province should lean on the guidance from the Environmental Health Climate Change Framework for Action when considering actions. Given that the health of our populations is at the core of our productive and sustainable society, further understanding of climate change impacts on health is key.</p> <p>The most recent Lancet report has concluded that the climate change impacts on health are unequivocal and potentially irreversible. As such, urgent action is needed in order to do something about this and it should start with explicit recognition of the health implication of climate change for the public.</p>
<p>NRPH urges for further effort to be shifted towards more explicit actions that supports Ontario's most vulnerable populations.</p>	<p>Actions to consider and support Ontario's most vulnerable populations is another significant gap in the Environment Plan as it currently stands. The Environment Plan needs to explicitly recognize that not everyone will be impacted equally by the changing climate and develop appropriate action that focus on building resilience of the most vulnerable communities. Those populations who experience poverty and homelessness, who are living with low income and lack access to homes that can shelter against flooding or extreme heat, and populations who are elderly, young and living with pre-existing health conditions are at a much greater risk of negative health outcomes that are expected as a result of climate change. These communities are much more vulnerable to the impacts expected from climate change, however very little has been referenced in the plan to explain how such concerns may be addressed.</p> <p>Not only does climate change pose a significant threat to the vulnerable population, but is expected to also exacerbate the inequities that are already experienced within these communities, such as less access to healthy foods, green spaces and job security (BARHII, 2015). For example, a large portion of individuals who experience homelessness tend to reside in inner-city neighbourhoods that are more prone to extreme heat exposure through the Urban Heat Island effect with limited means for support – as such, these individuals experience a much greater risk of harm and potential loss of life.</p>

Omissions/Opportunities	Staff Comments
	<p>The degree of population’s vulnerability is largely affected by policies associated with socioeconomic factors such as city design, infrastructure services and health care systems. The Environment Plan has an important role to play in ensuring that there are actions put in place to reduce risk to health and equity impacts resulting from climate change. The Environment Plan may consider specific actions such as investments in the building and housing quality, increased trees and green spaces and better street designs within lower-income neighbourhoods.</p> <p>“The true measure of any society can be found in how it treats its most vulnerable members” – Mahatma Gandhi</p> <p>Evidence informed practices and initiatives, such as the Urban Climate Change Research Network, urge that in order to have an effective climate change action, the focus must be to the most vulnerable populations (2015). In order for Ontario to have a strong and effective climate action plan, the Environment Plan has to better align resilience building within communities that experience highest vulnerability to the current and future challenges faced in our changing climate.</p>

References:

- Bay Area Regional Health Inequities Initiative (BARHII). (2015). *Quick guide 03: climate change and health equity*. Retrieved from <http://barhii.org/issues/climate-change/>.
- Climate Action Tracker. (2017). *Canada rating*. Retrieved from https://climateactiontracker.org/media/documents/2018/4/CAT_2017-11-07_CountryAssessment_Canada.pdf.
- Ding D., Gebel, K., Phongsavan P., Bauman, A.E. & Meron, D. (2014). Driving: a road to unhealthy lifestyles and poor health outcomes. *PLoS: ONE*, 9(6): e94602, doi: 10.1371/journal.pone.00094602.
- Environment and Climate Change Canada. (2018). *National Inventory Report 1990-2016 - greenhouse gas sources and sinks in Canada: executive summary*. Retrieved from: <https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/emissions-inventories-reporting/nir-executive-summary/National%20Inventory%20Report%20Executive%20Summary%202018.pdf>
- Environment Commissioner of Ontario. (2018). *Climate action in Ontario: what's next? 2018 Greenhouse Gas Progress Report*. Retrieved from: <https://docs.assets.eco.on.ca/reports/climate-change/2018/Climate-Action-in-Ontario.pdf>.
- Haines A., et al. (2009). Public health benefits of strategies to reduce greenhouse-gas emissions: overview and implications for policy makers. *Lancet series: Health and Climate Change* 6, 374, 2104-14. Retrieved from [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(09\)61759-1.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(09)61759-1.pdf).
- Haines, A. (2017). Health co-benefits of climate action. *The Lancet: Planetary Health – Comment*, 1 (1), PE4-E5. Retrieved from [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(17\)30003-7/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(17)30003-7/fulltext).
- Insurance Bureau of Canada. (2015). *The economic impacts of the weather effect of climate change on communities – final report*. Retrieved from: <http://assets.ibc.ca/Documents/Studies/IBC-The-Economic-Impacts.pdf>
- International Panel on Climate Change (IPCC). (2018). *Special report: global warming of 1.5°C*. Retrieved from <https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/>
- Maibach, E., Nisbet, M., & Weathers, M. (2011). Conveying the human implications of

climate change: a climate change communication primer for public health professionals. *Centre for Climate Change Communication: George Mason University*. Retrieved on January 5, 2019 from

Ministry of Transportation. (2016). *Ontario provincial highways traffic volumes on demand*. Retrieved from:
<http://www.raqsa.mto.gov.on.ca/techpubs/TrafficVolumes.nsf/tvweb/>.

The World Bank. (2014). *CO2 emissions (metric tons per capita)*. Retrieved from:
<https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>.

Seed, B. & Rocha, C. (2018). Can we eat our way to a healthy and ecologically sustainable food system? *Canadian Food Studies*, 5(3), 182-207. Retrieved from:
<http://canadianfoodstudies.uwaterloo.ca/index.php/cfs/article/view/258/298>

Urban Climate Change Research Network. (2015). *Climate change and cities: 2nd assessment report*. Retrieved from <http://uccrn.org/arc3-2/>.

Watt, N. et al. (2018). The 2018 report of the Lancet Countdown on health and climate change: shaping the health of nations for centuries to come. *Lancet*, 392, 2479-2514. Retrieved from: [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(18\)32594-7.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)32594-7.pdf).

World Health Organization (WHO). (2016). *Ambient air pollution: a global assessment of exposure and burden of disease*. Retrieved from
<http://apps.who.int/iris/bitstream/handle/10665/250141/9789241511353-eng.pdf?sequence=1>

World Health Organization (WHO). (2018). *COP24 Special Report – health and climate change*.

Subject: Q1 Economic Development Quarterly Update Report

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 17, 2019

Recommendations

That Report ED 4-2019 **BE RECEIVED** for information.

Key Facts

- Economic Development provides quarterly updates to the PEDC. The purpose of this report is to provide the PEDC with an update on the department's activities for the first quarter (Q1) 2019.
- Economic Development activities take place within four main function areas: Trade and Investment; Expedited Services for Business; Strategic Economic Initiatives and Strategic Marketing Initiatives.
- Implementation of the five-year Economic Development Strategy 2019-2024 is underway and initial reporting will be included in the Q2 report.

Financial Considerations

The activities described in this report have been accommodated within the approved 2019 Economic Development Department budget.

Analysis

This is the economic development quarterly update for the Planning and Economic Development Committee and covers work carried out during the first quarter (Q1) 2019.

1. Trade and Investment

The Manager, Trade & Investment is responsible for delivering an Annual Work Plan, within a prescribed budget, that supports the Niagara Economic Development (NED) team's efforts to secure Foreign Direct Investment (*FDI*) for the Niagara Region; promote business attraction opportunities in designated key, highest *FDI*-probability markets, the United States, United Kingdom and Europe; respond to queries from other global markets; champion key economic sectors in the Region, participate in trade shows on behalf of the Niagara Region, and independently, involve Niagara economic growth stakeholders (e.g., Niagara Development Corridor Partnership Inc. (NDCPi), Niagara Industrial Association (NIA), TEAM Niagara, the Chambers of Commerce and others) where possible.

Note: Q1 is traditionally a preparation period for organizing the groundwork for outgoing Q2 FDI missions in the Trade & Investment portfolio, typically involving the awarding of Qualified Lead Generation Contracts in the target markets. Thus, the emphasis in this period of the calendar is to contract the Qualified Lead Generation firms; and, produce a comprehensive plan for TEAM Niagara to undertake the first of two annual Canadian Consular visits in Niagara's neighbouring target states for FDI and Trade.

- a. Inward Missions Q1:
 - Australian-based IT Company considering Niagara for a North American operating base location.
- b. Outward Missions Q1:
 - Hamilton-Niagara Partnership Mission to Mexico City and Guadalajara: 12 business meetings; 2 with consortia (*IJALTI* with 137 IT members; and, *AMITI* with 315 ICT members).
 - Economic Developers Council of Ontario, Annual Meeting, Toronto.
 - Automotive News-APMA Canada Congress, Toronto.
 - Meetings with the Senior Trade Commissioners in the Colombian and Costa Rican Consulates, Toronto.
 - Eight U.S. Qualified Lead Meetings in Pennsylvania, Minnesota, Ohio and Western New York.
 - Food Manufacturer, Richmond Hill.
- c. Leads Generated, Q1: 22 companies/organizations
- d. Leads to Date, 2019: 22 companies
- e. Active Prospects, 2018 ongoing: 48 companies

2. Niagara Foreign Trade Zone (NFTZ)

The Niagara Foreign Trade Zone point is now established and servicing more than 65 clients. Contact was made with 160 firms and 13 institutions within an active database of 400 firms, 11 NFTZ seminars were conducted and the Manager participated in 20 networking events. NFTZ clients/prospects represent the agribusiness, manufacturing, and logistics sectors.

To date the Canada Border Services Agency has processed approximately \$102,600.00 in Duties Relief (K90) claims and \$178,366.00 in Duty Drawback (K32) claims, for Niagara based claimants. These amounts do not include the new surtax relief.

NFTZ clients have received export-related support, through customized services and education on the Federal FTZ programs and services. This information helps them successfully enter into new markets by identifying specific incentives, export-related financing and risk mitigation as well as providing assistance to resolve the impact of the new surcharge and its remission procedure.

a. Business Strategy Plan

- The implementation of the NFTZ Business Strategy started in Q1. The Strategy is based on the draft report developed by consultants E&Y in the Fall 2018.
- The Strategic Plan focuses on target prospects through an outreach strategy.
- Activity has been focused on Business Retention and Expansion by providing our exporting firms in Niagara with information and relevant contacts through a 'single contact point.'
- Support has been provided to NED's FDI attraction research, lead development, trade missions and strategy development.

b. Business Outreach Program

- The 65 clients of the NFTZ were surveyed to identify their exporting needs and assess NFTZ services.
- The prospect database of 400+ companies was revisited.
- The scheduling of a series of NFTZ seminars for 2019 is in progress. An agenda including a working session with Task Force members, country insights and issue-based sessions are highlights of the next series.
- Work with 15 clients has been completed.

c. Networking and Relationship Building

- Attended six networking events including: the Prospectors and Developers Association of Canada (PDAC) 2019 where meetings were held with Canadian Trade Commissioners; Post-Brexit trade; UN Procurement for international suppliers; Netherland Investment Authority; NIA and the Southern Mayors' luncheon.
- Provided updates to our clients on 'Regional Economic Growth through Innovation – Steel and Aluminum' Federal Initiative. Two clients have expressed their interest in this program.

d. Supporting the NFTZ Taskforce

- Moderated a session at an event organized by Transport Canada, 'Increasing and Diversifying Exports through E-commerce' focused on the Hamilton Niagara area. Identified and invited clients to participate in the session.

- e. Administrative Update
 - Provided updates to Niagara Development Corridor Partnership Inc. (NDCPi) meetings held in February and March 2019. (NED has subcontracted the day to day operations of the NFTZ to the NDCPi).
- f. Marketing Tools
 - Working with NED to develop a CRM tool to include NFTZ clients.
 - Proposed NFTZ news within the Region's e-newsletter.

3. Expedited Services for Business

The Manager, Business Development and Expedited Services acts as a formal liaison between investment/development stakeholders, existing businesses, local municipal staff and stakeholders, and Regional staff in site selection, investment due diligence and planning policy support and interpretation. Beyond this core function, this role manages a number of project-based initiatives.

- a. Site Selection Support
 - In the first quarter of 2019 we received five qualified requests for site selection support. This has resulted in one request for additional information.
 - In partnership with the City of St. Catharines successfully relocated one business to the Niagara region.
 - Facilitated a second site tour of a food processing company that has short-listed Niagara for a second location.
 - The Niagara Region and Local Area Municipalities are working with the St. Lawrence Seaway to investigate opportunities for the development of new employment lands.
- b. Industrial DC Grant Program
 - In the first quarter of 2019 Niagara Region received a total of four Industrial Grant Applications.
 - The industrial development charge grants will support approximately \$15.3 million in new construction.
 - The economic impact will result in the creation and/or retention of an estimated 88 jobs.
- c. Gateway Economic Zone & Centre CIP Incentives Program
 - In the first quarter of 2019 no new Gateway CIP applications have been received.
 - Three legal agreements for previously approved Gateway CIP applications were created and distributed.

4. Strategic Economic Initiatives

The key focus of this area involves taking a longer-term view of the work of the economic development department and how it can support growth within the regional economy. This involves strategy development, partnerships, securing external funding and awarding grants.

a. Industry Partnerships

- An agreement to provide funding to Innovate Niagara for 2019 is being developed, similar to previous years and including performance metrics. The final report for 2018 is included below.

INNOVATE NIAGARA 2018		
2081 Goals	2018 Results	
Work with 18 high performing companies	Innovate Niagara staff have worked with 24 new high performing companies	
Organize and partner on 35 events reaching 1,700 people	Innovate Niagara staff organized and partnered in 38 events reaching 1,596 people.	
Meet 120 new clients	Innovate Niagara staff met with 107 companies	
Create 30 new full-time jobs	Innovate Niagara has helped create 50 jobs, full-time and interns	
RENEW ALL EXISTING AND ADD NEW MOUs	EXPIRATION	PROGRESS
DSBN	Dec 31, 2019	Up-to-date
VRIC	Sept 14, 2020	Up-to-date
CIO Consortium	March 31, 2017	In Progress
Brock University	March 31, 2019	Up-to-date
Niagara College Research and Innovation	March 31, 2019	Up-to-date
43North	New Opportunity	Draft proposed

b. Funding Partnerships

- An Invest Canada Communities Initiative (ICCI) funding application has been approved for NED activities in 2019. The funding will provide 50% of the total project cost for two lead generation initiatives, as well as purchasing research data and conducting analysis. Funding to develop a promotional video for the Hamilton-Niagara Partnership, has also been approved.

- NED has entered into the second year of a two-year agreement with NDCPi to run the day-to-day operations of the NFTZ and based on successful 2018 results, the funding transfer was made in Q1. NED retains strategic oversight.
- c. Planning and Strategy
- Development of a five year Economic Development Strategy was completed during Q1 and it was presented to the Planning and Economic Development Committee on March 20th. The strategy addresses the immediate issues of stakeholders across the region, which were identified during extensive stakeholder consultations in 2018. The objective going forward is to re-visit the development of a longer-term plan in collaboration with partners, to achieve a vision of the region in a 20-year time-frame. Implementation of the five-year strategy has started and a report on progress will be included in the Q2 Economic Development Quarterly Update report, in July 2019.
 - An 'Expression of Interest' application has been developed and was submitted to the Federal Government's National Trade Corridor Fund in March 2019. The submission was led by the Public Works Department and supported by Economic Development.

5. Market Intelligence and Data Collection (Manager, Research and Analysis)

NOTE: The following information includes research, analysis and information provision to support investment, business development and site selection opportunities for Niagara Region among both internal (regional and local municipal) and external (business) clients of Niagara Economic Development.

Economic Research and Analysis

- Completed and disseminated Niagara Tourism Profile.
- Formalized research partnership with Niagara Community Observatory to produce economic policy briefs.
- Updated Niagara major investment database with final 2018 information.
- Completed trade research for National Trade Corridor Fund application.
- Provided economic development success information for State of the Region Address.
- Provided key economic indicators for Niagara Region's Budget Summary for 2018.

6. Strategic Marketing

The focus of strategic marketing is to support broader awareness of Niagara and improve overall business attraction and resident attraction.

a. Marketing Planning & General Activity

- Marketing Plan for 2019 developed, with a focus on developing marketing capabilities, engaging in consistent marketing activity, and building up local networks and community.
- RFP in development to engage with a Marketing Agency of Record to assist with establishing consistent marketing activity vs. individual project work.
- Social media accounts on Twitter and LinkedIn launched in January, with ongoing and consistent activity established.
- Stakeholder feedback received on Welcome Niagara Canada website through a survey, and focus groups with newcomers to Niagara. Feedback will be integrated into website updates that will continue to optimize usability and content.
- New marketing assets developed, including new business cards, USB keys and Passport promotional piece. New ad copy and templates are in development, as well as promotional banners.

b. CRM Development

- Decision made to proceed with Index RSM platform. Developed a comprehensive needs analysis document to identify and prioritize key needs for the team.
- Currently working with Innovate Niagara on technical updates to the system.

c. Media & Thought Leadership

- Tourism Profile was launched with a press release, blog post and social media promotion. Media coverage included a 10-minute interview on CKTB 610 on March 7, and a 2m 30s segment on CHCH Evening News on March 8.
- Radio Roundtable sponsorship confirmed with CKTB 610 for May 31st. This will be the first roundtable held at the Region.

d. Hamilton- Niagara Partnership

- New promotional video supporting the partnership is in development.

7. Economic Development Officer

The principle focus of the work of the Economic Development Officer is to provide support to the Local Area Municipalities that do not have economic development staff.

These municipalities are Grimsby, Niagara-on-the-Lake, Pelham, Thorold, Wainfleet and West Lincoln. In addition, the development of the Agribusiness and Tourism sectors are also a focus of the Economic Development Officer.

a. Stakeholders

18 outreach meetings with 14 different stakeholders.

b. Tourism

26 meetings with eight different stakeholders.

Examples include:

- Brock Sports Tourism Report meetings – project scoping and introductions to industry and stakeholders.
- Canada Summer Games meetings – RFP distribution, Municipal Forum attendance, etc.
- Metrolinx summer schedule adjustments – connecting with tourism industry to determine adjustments to summer 2019 schedules and proposed initiatives for summer/fall extended service.
- Municipal airports – development meetings and RFP for future business modelling.
- Circulating Tourism Profile to industry stakeholders and advising on its use in grant applications and business planning.
- Tourism research involvement – discussions with Brock researchers, potential future sport event bids.

c. Agri-business

14 meetings with seven different stakeholders.

Examples include:

- Irrigation strategy next steps – meetings with local area municipalities to explore new funding applications.
- Agriculture Funds meetings with Niagara North and Niagara South Federations of Agriculture.
- Ontario Federation of Agriculture/OMAFRA webinar attendance – use of agricultural data for support Economic Development, Agriculture Economic Development manual.
- Farmland Success Stories presentation at 2019 Farmland Trust Forum conference.
- Meeting with Ontario Federation of Agriculture to discuss advocacy in natural gas extension in rural areas.
- Promotion of OMAFRA and CFDC grocery retailer events – connecting Niagara agribusinesses to retail connections to expand their operations.
- Update on the agriculture asset map, information completed through the Golden Horseshoe Food and Farming Alliance.

d. LAM development:

36 meetings with seven municipalities.

- Five client/site visits and six site selection inquiries.
- Includes meetings with more than 14 private-sector businesses on expansion/investment and multiple meetings with LAM Economic Development committees.
- Work includes: Review and approval of LAM video; FDI information session and outreach meetings; Economic Development strategy review and comments; Development Charge/Incentive Program information sessions.
- Research and information requests: 148 requests.

Alternatives Reviewed

None applicable.

Relationship to Council Strategic Priorities

Economic development activities described in this report directly support three of Council Strategic Priorities:

- Fostering innovation, investment and entrepreneurship
- Building a labour-ready workforce
- Positioning Niagara globally

Other Pertinent Reports

ED 1-2019 Economic Development Overview
ED 2-2019 Economic Development Strategy

Prepared and Recommended by:

Valerie Kuhns
Acting Director
Economic Development

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with and reviewed by Valerie Kuhns, Acting Director Economic Development.

Subject: Niagara Housing Statement: Affordable Housing Data

Report to: Planning and Economic Development Committee

Report date: Wednesday, April 17, 2019

Recommendations

1. That Report PDS 17-2019 **BE RECEIVED** for information; and
2. That a copy of Report PDS 17-2019 **BE CIRCULATED** to the Local Area Municipalities.

Key Facts

- The purpose of this report is to inform Council of the development of a Niagara Housing Statement database to inform the concurrent studies being undertaken by the Planning and Development Services Department and the Community Services Department. Specifically, the comprehensive review of the Niagara Region's Housing and Homelessness Action Plan and the preparation of a regional housing strategy to inform the policies of the Regional Official Plan.
- An inter-departmental Steering Committee was formed in 2018 to align the concurrent efforts across the Corporation to address issues of housing supply and affordability. The Steering Committee determined that there is a need for a single source of housing-related data that clearly delineates housing need within Niagara Region.
- The Canadian Centre for Economic Analysis (CANCEA) was awarded the project and has prepared a comprehensive database that includes key housing metrics, and detailed demographic and housing trends for Niagara by region and municipality.
- A series of one-on-one consultation meetings was held in March 2019 between local municipal planning staff, Regional staff, and the CANCEA Project Team to discuss the database and emerging trends. Feedback received during these sessions was overwhelmingly supportive of the project deliverables, and indicated an urgent need for this data to be shared in order to inform municipal-level housing studies and related initiatives.
- Following this Committee meeting, Regional staff will distribute the database to local municipal staff, and organise a one-day working session to review the data, identify local and regional trends and identify scenarios that will inform the preparation and implementation of local and regional housing policy.

Financial Considerations

The Niagara Housing Statement project was funded through the 2018 Council Approved Operating Budget with contributions from the Planning and Development Services Department, and the Community Services Department. There are no direct financial implications arising from this report.

Analysis

Background

New Regional Official Plan and Housing and Homelessness Action Plan

Section 26 of the *Planning Act* requires municipalities to undertake regular reviews of their Official Plans in order to align and conform to Provincial planning policy and legislation, including the policies of the Provincial Policy Statement (2014), the Growth Plan for the Greater Golden Horseshoe (2017), the Greenbelt Plan (2017), and the Niagara Escarpment Plan (2017).

Through approval of Report PDS 40-2016, Regional Council endorsed the preparation of a new Regional Official Plan in accordance with the *Planning Act*. Subsequently, Report PDS 41-2017 outlined eight (8) background studies necessary for the development of the new Regional Official Plan. In conformity with Section 2.2.6 of the Provincial Growth Plan (2017), this list of studies includes the preparation of a regional housing strategy, that must, among other things: identify a diverse range and mix of housing options and densities to meet the needs of current and future residents; establish targets for affordable ownership and rental housing; identify land use planning and financial planning tools to support these measures; and align with the Niagara Region 10-Year Housing and Homelessness Action Plan (HHAP) as required under the *Housing Services Act*.

The Niagara Region 10-Year HHAP was developed in consultation with local community members, service providers, local area municipalities, and other stakeholders as per the requirements of the *Housing Services Act*. Action plans play a critical function in setting out how Service Managers, such as the Regional Municipality of Niagara, are to address housing and homelessness locally, including: housing affordability, the co-ordination of homelessness and related support services, and the prevention of homelessness and chronic homelessness. The Plan was approved by Niagara Regional Council in 2013, and came into effect on January 1, 2014.

The *Housing Services Act* stipulates that Service Managers must review their plans at least once every five (5) years to reflect changes in policy and/or shifts in local priorities, as well as to ensure consistency with the Policy Statement: Service Manager Housing

and Homelessness Plans (2016). The review process is an opportunity to consider if any substantial changes have taken place in the local context since its initial creation, particularly in relation to local demographic and economic changes.

This is formally reflected in the Policy Statement: Service Manager Housing and Homelessness Plans (2016), which requires Service Managers to complete an assessment of current and future housing needs. The assessment must be used to inform objectives, targets, and achievements within the updated HHAP, including goals related to the provision of a mix and range of housing by non-profit housing corporations, non-profit cooperatives, and the private sector in order to meet the needs of the local community. The action plan must also reflect a coordinated approach with Ontario's land use planning framework, including the Provincial Policy Statement (2014) and the Provincial Growth Plan for the Greater Golden Horseshoe (2017).

Preparation of the Niagara Housing Statement Database

In 2018, staff members from Niagara Regional Housing, Planning and Development Services, Community Services, and ERMS Departments formed an inter-departmental Steering Committee to coordinate concurrent housing studies, as well as to align efforts being undertaken across the Corporation to address housing supply and affordability within the Niagara Region.

The Steering Committee identified that there was no existing source of data either within or outside the organization that could provide an accurate assessment of the current and future demand for ownership, rental, and affordable housing within the Niagara Region. As such, in recognition of the mutual need for this information, the Planning and Development Services Department and the Community Services Departments prepared a joint Request for Proposal (RFP) for the development of a comprehensive database that would inform the policies of the Niagara Region Housing and Homelessness Action Plan and the Regional Official Plan.

In December 2018 the project was awarded to the Canadian Centre for Economic Analysis (CANCEA), an analytics and data organization with over 15 years experience in the provision of demographic, household, employment, land-use and economic analyses for various municipal and provincial government bodies. The database prepared by CANCEA includes detailed demographic and housing trends, both based on historical data, as well as data projections in conformity with those developed for Niagara 2041 Growth Strategy. The database also includes geographical mapping of income levels, demographic and housing characteristics at the sub-municipal levels, key housing need metrics at the municipal level, and analyses of key sub-groups, including older adults, low-income earners, immigrant and homeless populations, and aboriginal identity.

Local Municipal Consultation

Following a presentation by CANCEA to the inter-departmental Steering Committee on March 25, 2019, a series of one-on-one consultation meetings were held on March 26, 2019 and March 27, 2019 between local planning staff from all twelve (12) area municipalities, staff from Planning and Development Services, Community Services, and Niagara Regional Housing, and the CANCEA Project Team

As part of these consultation sessions, each municipality was provided with data specific to their community, as well as a high-level overview of the housing data collected. The contents and capabilities of the prepared database were presented by the Project Team, followed by a facilitated discussion regarding the results of the preliminary data analysis and its potential implications on municipal housing initiatives.

Feedback from local municipal staff was positive, with few corrections or gaps in the data identified. Several local municipalities indicated that they were in the process of undertaking similar types of housing analyses to address the specific needs of their communities, and that receipt of the prepared database would be critical to determining their scope and direction.

Process and Next Steps

Given the overall response to the database and the urgent nature of select municipal studies, Regional staff have determined that it is imperative that the results of the data analysis be presented to the Committee at this time, so that the Niagara Housing Statement database can be shared with local municipalities to work with.

Following the circulation of the dataset, Regional staff will be working with CANCEA's Project Team to arrange and host a training session for local municipal staff. Regional staff also intend to use this session as a means to facilitate further discussion regarding the specific housing needs of local area municipalities, and to develop specific scenarios for a risk and opportunities analysis that can inform the policies and regional targets within the Niagara Region HHAP and the new Regional Official Plan.

Alternatives Reviewed

The inter-departmental Steering Committee discussed various means of utilizing existing data sources to form the basis of the Region's housing policies and objectives. However, due to the incomplete and disjointed nature of the information available, it would compromise the effectiveness of any recommended tools or metrics. The comprehensive database prepared by CANCEA is necessary for staff to develop evidence-based policies that more accurately reflects the Region's housing needs, as well as to provide consistency between Regional and local municipal housing studies and strategies.

Relationship to Council Strategic Priorities

The new Regional Official Plan will assist in implementing Council's Strategic Priority of Labour-Ready Workforce.

Other Pertinent Reports

N/A

Prepared by:

Alexandria Tikky
Planner
Planning and Development Services

Recommended by:

Rino Mostacci
Commissioner
Planning and Development Services

Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was reviewed by Doug Giles, MCIP, RPP, Director, Community and Long-Range Planning.