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# The Regional Municipality of Durham Information Report

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From: Commissioner of Planning and Economic Development  
Report: #2020-INFO-18  
Date: March 13, 2020

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**Subject:**

Carruthers Creek Watershed Plan Update, Draft for Public Review and Comment, File: D07-17-01

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**Recommendation:**

Receive for information

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**Report:**

**1. Purpose**

1.1 The purpose of this report is to advise of the release the draft Carruthers Creek Watershed Plan Update for public review and comment.

**2. Background**

2.1 Watershed planning is required by Provincial Plans, including the Oak Ridges Moraine Conservation Plan, the Greenbelt Plan and the Growth Plan, to identify and protect natural resources and areas, and to help inform future land use planning decisions. The Regional Official Plan (ROP) also recognizes the preparation and implementation of Watershed Plans as an effective planning tool in the protection of natural heritage resources.

2.2 Watershed plan documents have traditionally been prepared by conservation authorities. In southern Ontario, particularly in the Greater Golden Horseshoe area, conservation authorities have experience and expertise in watershed management and watershed planning.

- 2.3 Watershed planning provides a framework for establishing goals, objectives, and direction for the protection of water resources, the management of human activities, land, water, aquatic life, and resources within a watershed<sup>1</sup>. It also provides an opportunity for the assessment of cumulative, cross-jurisdictional and cross-watershed impacts. As defined in the Growth Plan, 2019 and outlined in the Provincial Draft Watershed Planning Guidance (February 2018), watershed planning typically includes:
- a. Watershed characterization;
  - b. A water budget and conservation plan;
  - c. Nutrient loading assessments;
  - d. Consideration of climate change impacts and severe weather events;
  - e. Land and water use management objectives and strategies;
  - f. Scenario modelling to evaluate the impacts of forecasted growth, servicing options, and mitigation measures;
  - g. An environmental monitoring plan;
  - h. Requirements for the use of best management practices, programs, and performance measures;
  - i. Criteria for evaluating the protection of the quality and quantity of water;
  - j. The identification and protection of hydrologic features, areas, and functions and the inter-relationship between or among them; and
  - k. targets for the protection and restoration of riparian areas.
- 2.4 Watershed plans are not land use plans, nor do they constitute a land use planning decision. However, as required by Provincial Plans, the data, scientific analysis, modelling, scenario evaluation and management recommendations generated through a watershed planning process is used by municipalities to inform land use planning decisions.
- 2.5 The Carruthers Creek watershed is located within the City of Pickering and Town of Ajax and is on the eastern edge of the Toronto and Region Conservation Authority's (TRCA) jurisdiction. The watershed is relatively small, at approximately 3,840 hectares in size, ranging from 2 to 3 kilometres in width, and a total length of 18 kilometers. The headwaters of the Carruthers Creek form to the south of the Oak Ridges Moraine, in the City of Pickering, and the creek enters Lake Ontario in the Town of Ajax. The Carruthers Creek watershed consists of four subwatersheds<sup>2</sup>.

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<sup>1</sup> A watershed is defined as an area that is drained by a river and its tributaries.

<sup>2</sup> A subwatershed is defined as an area drained by a tributary, or portion of the stream, and is a more geographically specific scale than a watershed.

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- 2.6 The watershed is mainly rural north of Highway 7 and urbanized south of Taunton Road to the lakeshore. From Highway 7 south to Taunton Road, most lands are in the protected countryside designation of the provincial Greenbelt Plan. There are approximately 41,000 residents within the boundaries of the watershed.
- 2.7 Policy 7.3.11 p) of the ROP applies to lands located in Northeast Pickering and within the headwaters area of Carruthers Creek Watershed<sup>3</sup>. The policy states: “where a *comprehensive review* of this Plan includes consideration of lands for Urban Area expansion within the City of Pickering east of the Pickering Airport lands, outside of the Greenbelt, the following additional matters will be assessed and evaluated at that time:..... (ii) the preparation and completion of a *watershed plan* update for the East Duffins and Carruthers Creek watersheds.” The completion of this watershed plan is a precondition to the consideration of future development in northeast Pickering, but does not signal that the lands will be developed since that determination will be made through the Municipal Comprehensive Review process (further discussed in Section 5 of this Report).
- 2.8 The Work Plan to update the Carruthers Creek Watershed Plan was developed by Regional planning staff in consultation with TRCA staff and was designed to meet or exceed all Provincial requirements, while satisfying Policy 7.3.11 p) of the ROP. On April 1, 2015, Regional Council authorized staff to engage the TRCA in a consulting capacity to update the Carruthers Creek Watershed Plan on the Region’s behalf. In June of 2015, the TRCA Board granted approval to enter into a service agreement with the Region and to initiate the project.
- 2.9 The draft Watershed Plan Update has taken place over two phases. Phase 1 was initiated in June of 2015 and culminated in the preparation of seven peer reviewed technical reports that characterize the watershed’s existing conditions. Phase 2 was initiated in December of 2017 and included public consultation, further technical reports, watershed scenario analyses, and the development of management recommendations. The draft Watershed Plan Update (Attachment #1) was prepared by TRCA staff in late 2019 and is now available for public review and comment for a 90 day consultation period, along with the supporting Phase 2 technical reports (Attachment #2 through Attachment #9 are accessible via hyperlinks).

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<sup>3</sup> Policy 7.3.11 p) was incorporated into the Durham Regional Official Plan (ROPA128) by the Ontario Municipal Board through Decision PL101409 on January 9, 2013.

### 3. A Consultation Focused Approach

3.1 Since project initiation, the draft Carruthers Creek Watershed Plan Update has been a highly consultative and collaborative process. Following the completion of Phase 1 (technical analysis), a comprehensive consultation approach has been implemented to raise awareness of the project and to seek input and feedback. Below is a summary of consultation activities that have taken place over the course of the project thus far:

- a. Project Website: **Over 2,400 visits**
- b. Project information postcards: **Over 2,000 distributed**
- c. Online survey: **Over 70 participants**
- d. Project specific email: **Continuously maintained and monitored since October 2017.**
- e. Popup displays at public events: **7 events**
- f. Stakeholder Workshops (environmental non-government organizations, golf courses, etc.): **Hosted 3 workshops**
- g. Update Presentations to Municipal Committees of Council: **Durham 2, Ajax 2, Pickering 2, TRCA Board of Directors 4**
- h. Public Information Centres: **2 (October 8 and October 10, 2019)**
- i. TRCA, Ajax, Pickering and TRCA staff to staff meetings: **7**
- j. Presentations to advisory committees (Durham Agricultural Advisory Committee, Durham Environmental Advisory Committee, Ajax Environmental Advisory Committee, etc.): **6**
- k. Commissioner's Reports providing project updates to Durham Planning and Economic Development Committee / Committee of the Whole and Council with circulation to Ajax and Pickering: **9**

3.2 The draft Watershed Plan Update has entered the final stage of consultation. Commencing with the publication of this Commissioner's Report, the draft Watershed Plan Update and supporting technical studies have been released via the TRCA's project website for public review and comment for a period of 90 Days. **The final date to provide written comments to the TRCA on the draft Watershed Plan Update is June 16, 2020.** During this period, an additional Public Information Centre will be held on Thursday April 30, 6:00pm to 9:00pm at the Audley Recreation Centre (1955 Audley Road, Ajax, Hall 3C) to provide members of the public with the opportunity to ask questions and review the plan with TRCA staff.

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## 4. Watershed Plan Update Overview

4.1 The draft Watershed Plan Update (Attachment #1) is divided into nine sections. A brief summary of each section is provided below:

- a. **Introduction and Background:** provides an overview of the rationale and policy basis for watershed planning, the local context and considerations, and key partners and stakeholders.
- b. **Water Resources and Natural Heritage Systems:** describes the key components of the Water Resource System and Natural Heritage System, including a description of how each system was delineated.
- c. **Existing Watershed Conditions:** describes the current watershed conditions based on a series of technical evaluations undertaken in Phase 1 of the study. Four key issue areas, being the Water Resource System, the Natural Heritage System, Water Quality and Natural Hazards (including flooding) are described and rated against benchmark indicators.
- d. **Future Watershed Conditions:** describes the three future land use scenarios that were modelled to predict the response in the watershed, the results of the modelling analysis, and the implications of these scenarios.
- e. **Management Framework:** outlines what needs to be done to protect, enhance and restore the watershed's health. The management framework includes 34 recommendations divided into three goal areas of: Land Use, Water Resource System, and Natural Heritage System. A separate sub-section (5.4) details the management recommendations, should a settlement area boundary expansion occur within Northeast Pickering.
- f. **Monitoring and Evaluation:** details the indicators, frequency, and methods in which monitoring will occur. The performance of the Watershed Plan implementation will be evaluated on an ongoing basis.
- g. **Maps, Glossary and References:** contains supporting resources in the form of maps, a glossary of terms, and references.

4.2 In addition to the draft Watershed Plan Update, a series of supporting technical reports have also been completed as part of Phase 2 of the study. The Phase 2 technical reports measure and model the watershed in response to different high level land use scenarios, which were used to inform the preparation of the draft Watershed Plan Update and its management recommendations. Similar to Phase 1, the Phase 2 technical reports were subject to an external peer review process to ensure the analysis was rigorous and completed at or above technical / industry standards.

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## 5. Key Outcomes

- 5.1 The draft Carruthers Creek Watershed Plan Update is being released for public review and comment. The technical analysis undertaken to characterize the watershed's existing conditions indicate that:
- a. The aquatic ecosystem is sensitive and is near the level of development that it can sustain long term without additional and improved mitigation;
  - b. There is not enough natural cover, or good quality habitat;
  - c. Water quality is impaired; and
  - d. The flow of water through the watershed is out of balance with natural conditions, resulting in flooding and erosion issues.
- 5.2 A management framework (Section 5) has been developed to protect, enhance and restore the watershed by addressing existing issues and mitigating the impacts from potential future land uses.
- 5.3 Scenario analysis is used to help inform the municipal planning process by identifying potential impacts and by providing management recommendations on potential future land uses. One of the land use scenarios assumes post-2031 urban development within the Carruthers Creek headwaters, within the white belt area of Northeast Pickering, for modelling purposes. The watershed plan update does not provide recommendations on the type or configuration of future land uses.
- 5.4 As part of "Envision Durham", the Region's Municipal Comprehensive Review (MCR) of the Regional Official Plan (ROP), a Land Needs Assessment (LNA) will be completed to comprehensively assess the Region's urban structure, its intensification potential, and future urban land needs to accommodate the provincially mandated population and employment forecasts. Upon the completion of the LNA, a determination will be made on whether additional urban land will be required through a settlement area boundary expansion to accommodate the provincially mandated growth forecasts. Should the LNA determine that additional urban land is required to accommodate the growth forecast, then candidate areas (i.e. areas outside of existing urban areas that are outside of the Greenbelt Plan area) would be evaluated and assessed for a settlement area boundary expansion.
- 5.5 The draft Watershed Plan Update has modelled likely implications associated with the potential for urban development within the headwaters. Should it be determined through the LNA that additional urban land is required in this general area, the implications and the related recommendations of the Watershed Plan Update would also be considered.

## 6. Next Steps and Conclusion

- 6.1 The draft Carruthers Creek Watershed Plan Update is now available for public review and comment. The Watershed Plan Update and the supporting Phase 2 technical reports are posted on the [TRCA project website](#). A Public Information Centre will be held on Thursday April 30, 6:00pm to 9:00pm at the Audley Recreation Centre (1955 Audley Road, Ajax, Hall 3C). An email notification will be sent by TRCA staff to all individuals who previously provided comments on the Watershed Plan Update and to those who requested to be notified of project progress. A notice outlining the date, place and time of the April Public Information Centre will be distributed via TRCA's social media platforms and posted on the project website. The final date to provide comments to the TRCA on the draft Watershed Plan Update is June 16, 2020.
- 6.2 TRCA staff will respond to any written comments that are received during the public review period and incorporate any necessary modifications into a final draft Watershed Plan. Following this process, the final draft Watershed Plan and the summary package of public comments / submissions will be presented to the Durham Region Planning and Economic Development Committee for its consideration, and ultimately for endorsement by Regional Council.
- 6.3 A copy of this report will be forwarded to the Toronto and Region Conversation Authority, the Town of Ajax and the City of Pickering.

## 7. Attachments

Attachment #1: Draft Carruthers Creek Watershed Plan Update, March 2020;

### Attachments via Hyperlinks Only

Attachment #2: [Aquatic Impact Assessment, September 2019](#);

Attachment #3: [Fluvial Geomorphic Assessment, October 2019](#);

Attachment #4: [Groundwater Modelling Report, March 2019](#);

Attachment #5: [Soil Water Assessment Tool \(SWAT\) Modelling Report, September 2019](#);

Attachment #6: [Stormwater Management Report, May 2019](#);

Attachment #7: [Terrestrial Impact Assessment, September 2019](#);

Attachment #8: [Urban Forest Assessment, May 2019](#);

Attachment #9: [Hydrological Assessment, November 2019](#);

Respectfully submitted,

Original signed by

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Brian Bridgeman, MCIP, RPP  
Commissioner of Planning and  
Economic Development