

Pickering Official Plan Review

Natural Heritage, Hazards, and Sustainability Discussion Paper



January 2025

Table of Contents

Land Acknowledgement	4
Introduction	5
Purpose of this Discussion Paper	6
Share Your Input	7
1.0 What Is Valuable And Worth Preserving?	8
Direct Benefits of the Natural Environment	8
Indirect Benefits of the Natural Environment	9
2.0 Conforming with Provincial Policy	10
The Planning Act	10
Provincial Planning Statement	10
Greenbelt Plan	11
Oak Ridges Moraine Conservation Plan	13
Source Water Protection	13
Envision Durham	14
Conservation Authorities	15
The Reduced Role of Conservation Authorities	15
3.0 Natural Environment Protection in the Current Official Plan	16
Conservation in Existing versus New Neighbourhoods	19
Ecosystem Compensation	19
Tree Protection/Urban Forest	20



Passive Recreational Use	20
Opportunities for the New Official Plan	21
4.0 How Do We Protect People As We Plan The City's Growth?	22
Opportunities for the New Official Plan	23
5.0 How Can We Design Our City To Be More Sustainable And Resilient?	24
Integrated Sustainable Design Standards	25
Public Infrastructure	25
Opportunities for the New Official Plan	26
Conclusion	27
Next Step	28
Appendix	29
Appendix 1 – Engagement Topics	
Appendix 2 – Official Plan Review Timeline	



Land Acknowledgement

The City of Pickering resides on land within the Treaty and traditional territory of the Mississaugas of Scugog Island First Nation and Williams Treaties signatories of the Mississauga and Chippewa Nations. Pickering is also home to many Indigenous persons and communities who represent other diverse, distinct, and autonomous Indigenous nations. This acknowledgement reminds us of our responsibilities to our relationships with the First Peoples of Canada, and to the ancestral lands on which we learn, share, work, and live.



City of Pickering Indigenous Day 2022.



Introduction

Our city comprises many elements that come together to make Pickering a great place to live, work and grow. As we plan for how and where Pickering will grow, we must pay close attention to the parts of the City that must be protected and enhanced to support our long-term prosperity and wellbeing.

The natural environment is one of our city's greatest resources. It cleans our air and water while, at the same time, providing space for native plants as well as habitat for animals and pollinators. The decisions we make to protect and enhance our natural environment in Pickering contribute to our quality of life and benefit the interconnected natural systems throughout our part of Ontario.

With rapid growth in southern Ontario, natural environments are increasingly under pressure from new housing, commercial development, and infrastructure. Balancing the city's growth and the protection of natural environments is a significant challenge.



View of Altona Forest on the left and urban development on the right.



Part of the natural environment includes river valleys, slopes and floodplains which can be hazardous. These are dynamic areas that are shaped by natural features and weather. As we plan for where Pickering will grow, it is essential that we ensure human safety, and avoid foreseeable destruction to property from extreme weather events. Maintaining this priority is even more important in light of a changing climate.

In conjunction with protecting the natural environment and avoiding natural hazards, it is also critical that new development and infrastructure outside of these areas is sustainable and contributes to making our City more resilient and livable. To help achieve this, the policies within our Official Plan will need to provide direction on how the City can make positive steps towards climate adaptation.



The Waterfront Trail within the Rotary Frenchman's Bay West Park.

Purpose of this Discussion Paper

The discussion papers developed through the City's Official Plan Review ("Pickering Forward") are designed to make residents and stakeholders aware of the challenges faced by a growing city and to seek input and priorities on how to implement solutions. The discussion papers set the stage for subsequent policy direction. The themes within all six discussion papers are interconnected and are intended to build-on and support one another.

Response to the first discussion paper, "Community Vision and Priorities", revealed a number of public priorities, including enhancing environmental sustainability and protecting green spaces. The public expressed a strong desire to maintain Pickering's unique character, which includes the City's waterfront and abundant green spaces. There was also strong support for the continued economic growth, cultural vibrancy, and connectedness of Pickering.

The second discussion paper, "Growth Management and Urban Structure", described how much growth Pickering is expecting, and provided the Provincial framework that the City must follow to prepare for that growth.



The Natural Heritage, Hazards, and Sustainability Discussion Paper is the third discussion paper of the City's Official Plan Review. This discussion paper has four intended outcomes:

- Outline the policy framework for environmental conservation in Pickering;
- Describe opportunities for conservation of the natural environment;
- Investigate methods to avoid harms from natural hazards; and
- Identify environmentally sustainable practices to grow the City and its infrastructure.

Share Your Input

The Official Plan is required to meet Provincial requirements and conform with Envision Durham. This includes ensuring appropriate policies are in place to direct growth away from, and ensure there are no negative impacts from development on, natural areas/systems that are significant, sensitive and/or unsafe.

This discussion paper identifies and reviews the key policies from the Province, and Envision Durham, that need to be considered through the Pickering Forward project. It also explores how the City protects and enhances the natural environment, directs growth away from natural hazards, and adapts to climate change.

Discussion questions have been included throughout this paper. They are designed to help the reader develop suggestions and comments that can then be shared with the project team.

The ideas presented in this report will be further discussed at a public information centre (PIC) to be held on February 6, 2025 (in-person), and a virtual presentation on February 11, 2025. More details on the upcoming PIC, and the upcoming engagement activities, can be found on the project web page: www.pickering.ca/PickeringForward.

How to get involved

- 1. Participate in one of the public information centres on **February 6, 2025 (in-person)** or **February 11, 2025 (virtual)**
- 2. View the background information on our web page Pickering.ca/PickeringForward
- 3. Complete the online survey <u>Pickering.ca/PickeringForward</u>
- 4. Send your questions/comments to us PickeringForward@Pickering.ca



1.0 What Is Valuable And Worth Preserving?

Whether we are aware of it or not, the natural environment contributes to the City's overall economy and vitality. Our natural areas comprise key natural heritage features, hydrological features, and natural hazards that include wetlands, woodlands, valleylands, and creeks. A natural heritage system is a collection of interconnected natural features that work together to conserve biological diversity and maintain ecological functions (i.e. wildlife corridors, endangered species habitat). A healthy natural heritage system has many direct and indirect benefits to the City.

Direct Benefits of the Natural Environment

The natural environment offers an abundance of direct benefits that we all enjoy. The benefits include:

- Preventing flooding
- · Cleaning the air we breathe;
- Filtering the water we drink;
- Creating habitat for wild animals;
- · Providing nutrients to the soil that grows our food; and
- Offering recreational opportunities.

Forests and other ecosystems also help to regulate climate, absorb carbon dioxide and release oxygen, as well as providing natural resources such as timber and other materials.

Aside from the direct benefit to the environment, preventing development in and around natural hazards has the added result of not locating people and property in areas that may be at risk from flooding and erosion.



Wetlands provide habitat to many species of wildlife (Source: Rouge National Urban Park).



Indirect Benefits of the Natural Environment

A healthy natural environment supports agriculture. Woodlots and hedgerows along the border of farm fields help reduce crop damage by acting as wind breaks. These natural features also provide habitat for pollinators such as bees, butterflies and moths.

The natural environment helps reduce damage to property and infrastructure. The majority of rain and snow that falls in natural areas is absorbed into the ground. Floodplains contain and direct flood waters along predetermined paths to avoid damage to homes, buildings, and roads. However, certain events or conditions like major storms and quick thaws can result in more water than the ground is capable of absorbing. Wetlands are natural retention areas that hold and clean stormwater while also supporting ecosystems.

The natural stormwater controls provided by the environment reduce (but do not eliminate) the need for costly infrastructure to handle flooding. Most stormwater naturally drains over the land to creeks that channel it to Lake Ontario. Along the way, the creek beds and wetlands that it passes through help to clean the water. It is only as development occurs that infrastructure is needed to redirect and concentrate existing stormwater away from new homes and businesses.

- 1. What natural environmental features are most at risk of being impacted by development in Pickering?
- 2. Where have you seen good examples, from Pickering or other places, where development has successfully integrated with nature?



Hedgerows and woodlots along farm fields acting as wind breaks.



2.0 Conforming with Provincial Policy

Aside from the previously identified benefits that the city receives from the natural environment, the Official Plan is required to conform with the natural heritage and hydrological requirements of the Planning Act, the Provincial Planning Statement, 2024, and all applicable Provincial Plans (Greenbelt Plan and Oak Ridges Moraine Conservation Plan).

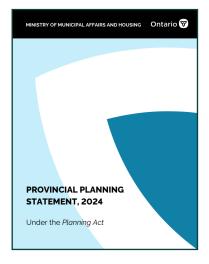
The Planning Act

As the foundation for land-use planning in Ontario, the Planning Act includes provisions for protecting the natural environment. Under this act, municipalities are required to integrate natural heritage protection into local planning documents, such as their official plan.

One of the stated purposes of the Planning Act is "to promote sustainable economic development in a healthy natural environment". In the process of carrying out their responsibilities under the Planning Act, municipalities shall have regard for matters of Provincial interest. Some of those matters include:

- the protection of ecological systems, including natural areas, features and functions;
- the conservation and management of natural resources and the mineral resource base;
- the supply, efficient use and conservation of energy and water;
- the minimization of waste;
- the promotion of development that is designed to be sustainable, to support public transit and to be oriented to pedestrians; and
- the mitigation of greenhouse gas emissions and adaptation to a changing climate.

Provincial Planning Statement



The Provincial Planning Statement, 2024 (PPS) provides guidance for municipalities on land-use planning. These policies require municipalities to identify and protect significant natural heritage features. These areas include:

- significant wetlands;
- coastal wetlands;
- significant woodlands;
- significant valleylands;
- significant wildlife habitat; and
- areas of natural and scientific interest.



No development or site alteration is permitted within significant wetlands and coastal wetlands.

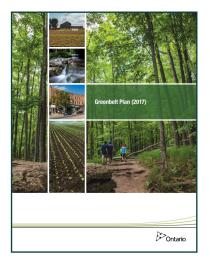
Development and site alteration is only permitted in other natural areas where it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

Endangered animal habitats and fish habitats are also excluded from development and site alteration (except where permitted by provincial and federal requirements).

It is important to note that ensuring that site alteration has "no negative impact" is not the same as full protection. The PPS sets the minimum level of conservation that municipalities must achieve. However, municipalities are permitted to offer greater protection.

It is also worth noting that the PPS only protects Provincially significant wetlands and significant woodlands. There are many more wetlands in Pickering than those that qualify as being Provincially significant. The City's review and mapping will attempt to account for all wetlands and woodlots that have local significance and value in Pickering.

Greenbelt Plan



The Greenbelt Plan, 2017, (Greenbelt) provides permanent protection to lands identified as "Protected Countryside" across the Greater Golden Horseshoe Area. It was originally created in 2005 to protect agricultural land, forests, wetlands, and other natural areas around the Greater Toronto Area (GTA) from urban sprawl. The Greenbelt Plan includes and builds on the Niagara Escarpment Plan and the Oak Ridges Moraine Conservation Plan. Municipalities are required to implement the policy direction of the Greenbelt Plan through their Official Plan. Outside of the lands that have been identified for development in Pickering (i.e. Seaton, Northeast Pickering), and the future airport lands, the majority of rural lands in Pickering are within the Provincial Greenbelt. The Greenbelt also includes urban valley lands that run through existing neighbourhoods in south Pickering.

Development or site alteration is generally not permitted in key natural heritage features and key hydrologic features within the Greenbelt's Natural Heritage System, including any associated vegetation protection zone. The vegetation protection zone is a buffer surrounding a natural heritage or hydrological feature

Many natural areas are found in Pickering's rural areas which are also the location of many farms. While environmental features must be protected in their natural state, having an environmental feature on or near a farm property does not limit agricultural uses from continuing on a farm.



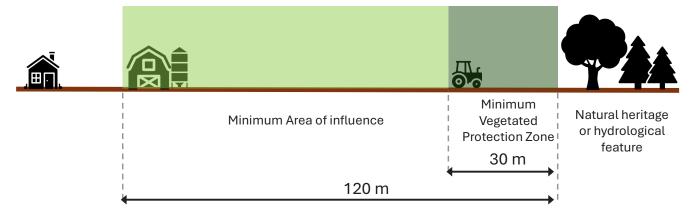


Figure 1: Illustration of minimum vegetated protection zone and minimum area of influence for natural heritage and hydrological features.



Figure 2: Aerial visulization of the minimum vegetated protection zone and minimum area of influence to an existing woodlot.



Aside from agricultural uses, new development or site alteration in the Greenbelt's Natural Heritage System shall demonstrate that:

- there will be no negative impacts on key natural heritage features or key hydrologic features or their functions;
- connectivity along the system and between key natural heritage features and key hydrologic features located within 240 metres of each other will be maintained or, where possible, enhanced; and
- key natural heritage features and key hydrologic features should be incorporated into the planning and design of the proposed use wherever possible.

Agricultural uses are still required to follow best management practices to protect and/or restore key natural heritage features and key hydrologic features and their functions.

Oak Ridges Moraine Conservation Plan

The Oak Ridges Moraine Conservation Plan, 2017, (ORM Plan) provides planning direction on land use and resource management with the goal of protecting the Moraine's ecological and hydrological features and functions.

Generally, all development and site alteration within a key natural heritage feature or the related minimum vegetation protection zone is prohibited.

Source Water Protection

Under the Clean Water Act, municipalities are required to have their Official Plans conform with Source Protection Plans (SPPs) that regulate municipal drinking water systems. The City of Pickering does not have any municipal drinking water wells. However, there are portions of the City that are within Wellhead Protection Areas (WHPA) for two municipal drinking water wells located in the Town of Whitchurch-Stouffville. WHPA are vulnerable land areas around a municipal drinking water well where development may have an impact on water quality or water quantity.

Pickering's urban drinking water comes from Lake Ontario. Intake pipes draw the water from Lake Ontario and deliver it to a treatment plant. Each pipe is surrounded by an intake protection zone (IPZ). The protection zones include areas of land beside streams

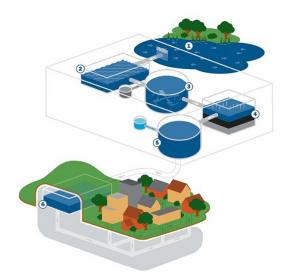


Figure 3: Surface water treatment and distribution (Source: Region of Durham).

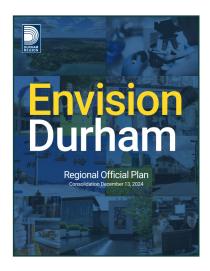


and storm sewers where runoff water can quickly reach the intake. These zones are vulnerable to contamination and therefore must be protected and the land uses in proximity to these zones must be controlled. There are several intake protection zones (IPZ) in Pickering located along major creeks and also near the Lake Ontario waterfront.

Envision Durham

The Durham Regional Official Plan (Envision Durham) was approved, in part, by the Minister of Municipal Affairs and Housing in September 2024. In December 2024, all remaining parts of Envision Durham received approval. Envision Durham provides direction on how growth is expected and should occur to 2051. To help direct that growth, Envision Durham includes policies that:

- Identify a protected "Greenlands System"¹ that conserves, protects and enhances water and land resources for present and future generations.
- Protect, restore and enhance an interconnected natural heritage system and water resources system across the region.



- Support the linkages between the region's waterfronts and the Oak Ridges Moraine through the connecting valley systems.
- Promote resilient and sustainable communities that support climate change adaptation.
- Encourage green infrastructure, including low impact development and stormwater management systems.
- Direct that design and construction of infrastructure projects be more resilient to the effects of climate change.
- Encourage community design that promotes intensification, walkable communities and compact built form, and prioritizes active transportation.
- Promote increased tree canopy coverage.
- Encourage access to local food through urban agriculture.

Envision Durham requires that area municipalities identify individual key natural heritage features, key hydrologic features, and associated minimum vegetation protection zones within their official plans. Generally, all development and site alteration are prohibited within key natural heritage features and/or the related minimum vegetation protection zone.

1 The Regional "Greenlands System" is identified in the Pickering Official Plan as "Natural Heritage System".



On January 1, 2025, planning functions were removed from the Region of Durham and Envision Durham became a responsibility of all lower tier municipalities in Durham Region, including Pickering. As a result, Envision Durham now exists alongside Pickering's Official Plan.

Conservation Authorities

While municipal official plans are required to include natural heritage protection policies, conservation of the natural environment has traditionally been shared with local conservation authorities (i.e. Toronto Region Conservation Authority). However, in 2022, the Province made changes to legislation that reduced the mandate of conservation authorities in relation to the development review process.

The Reduced Role of Conservation Authorities

Conservation authorities continue to own and manage conservation on their own properties, including those located within Pickering. However, in relation to long range land use planning and development review, conservation authorities are now required to focus exclusively on the review and management of natural hazards (i.e. slopes and flood plains), wetlands, and source water protection. Conservation authorities can no longer comment on environmental impacts that fall outside the scope of their reduced mandate. For example, they cannot comment on

impacts of development on forests and animal habitat unless their comments relate to their core mandate (i.e. the role that trees play in reducing erosion and stabilizing a slope).

The City continues to work with conservation authorities in reviewing development applications and planning for Pickering's future. However, the reduced mandate for conservation authorities places a greater responsibility on municipalities to possess the Official Plan policies, and acquire the expertise necessary, to effectively protect the natural environment.



Illustration of a slope failure beside a home that is located in a natural hazard (Source: TRCA).



3.0 Natural Environment Protection in the Current Official Plan

Pickering's current Official Plan includes mapping and policy that directs where growth can and cannot occur. The Official Plan identifies the community as comprising of three distinct, yet interrelated systems: an ecological system, an urban system and a rural system. The ecological system is a complex mosaic of forests, fields, wetlands, farms, hedgerows, streams, rivers, valleys, and shorelines. The Official Plan contains policies designed to:

- · conserve and enhance natural resources;
- protect the health and integrity of Pickering's ecological processes, functions, cycles and systems; and
- promote ecosystem diversity, stability, equilibrium and exchanges.

Within the ecological system, the majority of Pickering's natural environment is designated as Open Space System. It includes a variety of designations including Natural Areas, Marina Areas, and Active Recreational Areas.

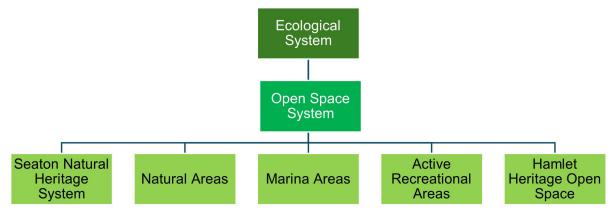


Figure 4: Open Space System designations in the Official Plan.

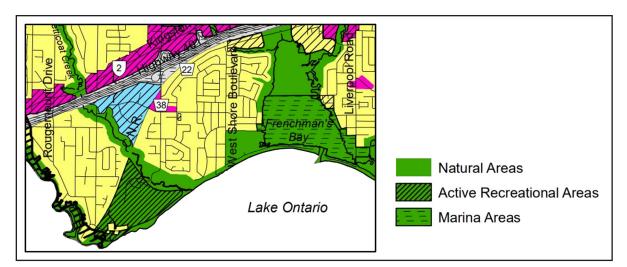
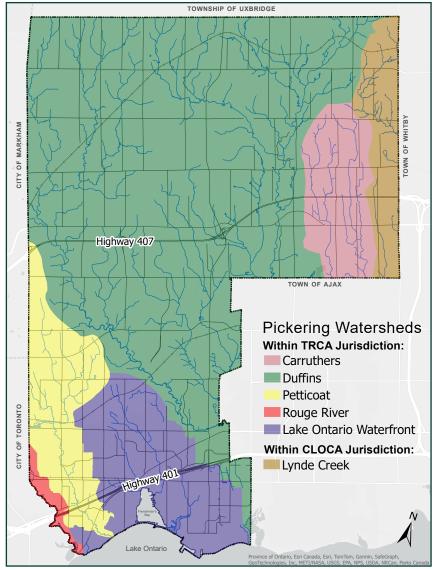


Figure 5: Illustration of the Open Space System designations along Pickering's waterfront (Source: Pickering Official Plan, Schedule I).



The Open Space System is important for its role in maintaining ecological health, and where possible, improving the ecological and hydrological integrity of the natural environment. It is also important for promoting physical, spiritual and mental health for the City's residents. This includes protecting natural features such as significant valleylands and stream corridors, shorelines, wetlands, significant woodlands, and promoting active spaces such as trails and public parks. Lands within the Open Space System are intended to be used primarily for conservation, restoration, environmental education, recreation, and ancillary purposes. These areas are protected from development and can complement growth by providing recreation and open spaces for residents to enjoy.



One of the primary roles of the Official Plan is to direct growth in a manner that conforms with completed sub-watershed plans. Watersheds are the lands within the drainage area of a creek and its tributaries. All development that occurs within one watershed must ensure that it contains all of the stormwater within that same watershed and does not transfer or impact the stormwater capacity in another watershed. The watersheds in Pickering include:

- Lynde Creek;
- Carruthers Creek;
- Duffins Creek;
- Petticoat Creek;
- Rouge River; and
- Lake Ontario Waterfront.

Figure 6: Watersheds within Pickering.



One area with significant protections for both the natural environment and agricultural use is the Duffins Rouge Agricultural Preserve. This area is also part of the Provincial Greenbelt. As an example of ongoing conservation efforts in this area, in November of 2024, 119 hectares of land north and west of the Altona Forest in Pickering was transferred from the Toronto Region Conservation Authority to the Rouge National Urban Park. Both groups are working together to restore the habitat of the two watersheds in this area (Rouge River and Petticoat Creek).

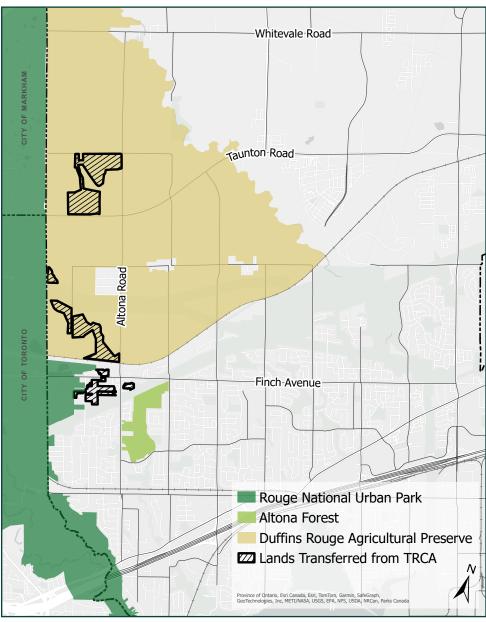


Figure 7: Map of lands recently dedicated from TRCA to the Rouge National Urban Park.

Beyond the general Open Space System policies, the Official Plan specifically requires the protection and enhancement of the following areas as having unique natural significance:

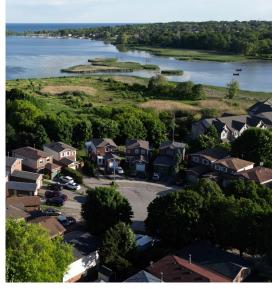
- Rouge National Urban Park;
- Rouge-Duffins Wildlife Corridor;
- Altona Forest; and
- Lake Ontario Waterfront and Frenchman's Bay.



Conservation in Existing versus New Neighbourhoods

Conservation can occur at all scales, and in both existing and new neighbourhoods. Most natural features within the existing urban area are already protected from future development. However, as infill and redevelopment occurs there is an opportunity to ensure that development continues to avoid impacting, and where possible enhances, the natural environment. Within these existing urban areas, redevelopment also provides the opportunity to create increased resiliency by upgrading the infrastructure needed to respond to a changing climate.

New development areas (such as Northeast Pickering) can provide more protection for existing natural features when planning from a "blank slate". It is important to balance the natural environment protections in these areas with a cohesive and connected community design.



Natural features adjacent to existing neighbourhoods.

3. In addition to ongoing protection, how can we enhance the natural environment in Pickering as the city continues to grow?

Ecosystem Compensation

There may be times where planning for the overall health and vitality of larger natural systems may be of greater benefit to our overall conservation goals than the preservation of small and disconnected features.

In those instances when natural features are removed (whether intentionally or by accident), the Official Plan contains policies to offset that loss by requiring compensation. The funds raised by compensation are to support the creation and/or conservation of natural features and their ecosystems elsewhere within the same watershed.

4. Do you support removing small, isolated natural features if it is compensated by planting more and creating stronger natural systems nearby?



Tree Protection/Urban Forest

Pickering's current Official Plan recognizes the importance of an urban forest in maintaining a healthy ecosystem, managing stormwater, providing wildlife habitat, reducing the urban heat island effect, and improving air quality. To that end, the Official Plan identifies that an Urban Forest Management Plan shall be prepared and implemented. Additionally, the City's Tree Protection By-law regulates the destruction of healthy trees in specified tree protection areas. The Official Plan already includes the stated priority of increasing the City's tree canopy through tree planting programs.

5. How can the City increase the number of trees planted throughout Pickering (i.e., along rural roads, at commercial sites, on residential properties)?

Passive Recreational Use

Whether walking along a forest trail, enjoying the view from the top of a hill, or fishing in a creek, the natural environment has a lot for people to enjoy. However, not all natural areas possess the conditions necessary to support passive recreational use. Whether due to steep slopes, sensitive habitats, or flood risks, many natural areas should not be open to the public.

Where appropriate, the Official Plan already requires the conveyance of watercourses, significant valleylands and associated vegetation, and buffers to the City (or other public agency) as a condition of development approval. These lands are over-and-above the parkland



Recreational hiking trails (Source: Rouge National Urban Park).

requirements that developers must also convey to the City. Some municipalities have begun to combine the two and now accept natural areas (i.e. forests, creeks, wetlands, etc.) as part of developers' parkland dedication requirements. Developers have begun asking Pickering to consider making the same accommodations.

Lands that the City receives from parkland dedication need to be able to be developed and programmed for both active and passive recreational uses. This requires that the lands be relatively flat, accessible from a public street, and free of anything that would prevent the space from being used for various recreational activities. Natural areas provide a valuable ecological function and are not suitable places for active parkland that contain playgrounds, community gardens, and/or sports fields. Similarly, the hydrological function of floodplains renders them unsuitable as parkland due to their seasonality and the potential risks they represent.



Opportunities for the New Official Plan

The Official Plan already contains many policies that prioritize the conservation of the natural environment. The Official Plan will be reviewed and updated to ensure continued conformity with all relevant Provincial policy and mapping. Beyond just conforming with Provincial policy, our Official Plan is permitted to include policies that offer greater protection than those provided by Provincial plans and the PPS.

Some areas that the Official Plan Review may explore include:

- · Considering cumulative impacts of development on the natural environment;
- Seeking and incorporating traditional ecological knowledge into resource management;
- Define natural features in need of conservation (i.e. the minimum size of a significant woodlot);
- Update the size of buffers surrounding natural features;
- Update the criteria for study and evaluation of natural features that may be impacted by future development;
- Update the conditions when study and evaluation of natural features are required;
- Define the requirements and criteria for watershed planning for new urban boundary expansions;
- Prioritize natural systems, not just features, to ensure the comprehensive protection and vitality of the ecological system; and
- Promote the creation of wildlife corridors to ensure unobstructed movement of all species among different natural spaces.



Aerial view of Altona Forest, a key natural feature preserved within Pickering's urban area (Source: TRCA).



4.0 How Do We Protect People As We Plan The City's Growth?

Natural hazards include unstable areas such as steep slopes, flood plains, as well as lands prone to erosion or landslide that pose a risk to life and property or damage to the environment. Most natural hazards are located within, or beside, natural features (i.e. a flood plain beside a creek). The PPS requires that development be directed away from natural hazards where there is an unacceptable risk to public health and safety or risk of property damage. Development also cannot create new hazards or aggravate existing ones.

The Official Plan already contains policies that directly and indirectly give guidance on how the City can grow in a safe and sustainable manner. These include:

- · Conserving and rehabilitating natural systems, landscapes and features; and
- Protecting people from pollution and other hazards.

Outside of natural hazards, there is also the need to actively manage stormwater risks as we experience more frequent and more intense storm events. Not only will the infrastructure for new neighbourhoods need to be designed to be resilient to a changing climate, but also our existing infrastructure will need to be re-evaluated to ensure it has the capacity to respond to changing needs.



Waterfront restoration.



Opportunities for the New Official Plan

The new Official Plan will continue to contain policies that direct new development away from areas that are unsafe or may become unsafe over time. These hazard areas include:

- Shorelines;
- Significant valleylands;
- Stream corridors; and
- Floodplains.

The maps and schedules within the Official Plan will be updated, in consultation with the respective conservation authorities, to ensure that they accurately identify floodplains, valleylands, wetlands, and any other natural hazard areas.

The City's Official Plan policies already provide guidance for the protection and maintenance of watercourses and their associated valleylands. Where possible, these policies will be enhanced, based on best practices, to further promote the remediation and restoration of natural hazard lands to improve water quality, stormwater management, and reduce soil erosion/improve slope stability.

In light of a changing climate and updated engineering practices, the existing stormwater management policies may be revised to identify innovative solutions and techniques in new developments. One consideration will be to identify full lifecycle costs of stormwater management and recommend long term funding options.

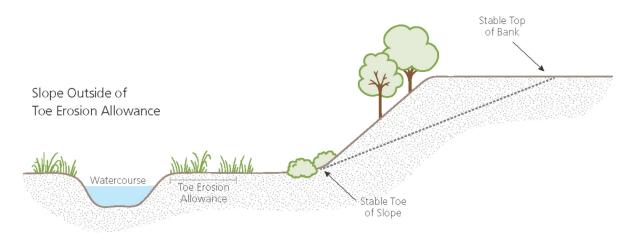


Figure 8: Illustration of how to measure a stable slope (Source: Conservation Halton).

6. What should Pickering do to reduce the potential risk of flooding?



5.0 How Can We Design Our City To Be More Sustainable And Resilient?

Pickering is on a journey to becoming a more sustainable city. As the first municipality in Ontario to establish an Office of Sustainability, Pickering's ongoing commitment and award-winning efforts are helping to create resilient, healthy and sustainable neighbourhoods. As Pickering grows, it will be important to ensure that sustainability continues to be embedded into future development and decision-making. The Official Plan Review will provide an opportunity to evaluate, strengthen, and expand the existing policies and framework related to sustainability and climate change.

As a document that directs growth, the policies of the Official Plan should establish what is to be protected, direct where and how development should occur, and contribute to the mitigation of problems, such as the impacts of our changing climate. This is needed to support sustainable and resilient communities that are well positioned for the changes that our City and Region will experience in the coming years. Often the policies that are most effective at conserving and protecting the natural environment are also the same policies that haveco-benefits for social wellbeing, climate adaption and mitigation.

Sustainable cities should be complete, compact, and provide for the needs of its residents within a reasonable distance. This includes providing places to work, shop, recreate, and go to school close to where people live.

7. Which of the following changes would support the creation of more sustainable neighbourhoods?



Sustainable practices implemented in the Seaton neighbourhood.



Integrated Sustainable Design Standards

In conjunction with the policies in the Official Plan, Pickering has also created the Integrated Sustainable Design Standards (ISDS) which require new development to achieve enhanced levels of sustainability within the design of their projects. These standards exceed the minimum requirements of the Ontario Building Code with the objective of creating developments, which reduce waste and resource use (water and electricity) and promote more sustainable practices (active transportation, bird-friendly design, use of native landscaping). Examples of ISDS requirements includes:

- Installing cool roofs / green roofs;
- Setting building energy performance standards;
- Reducing light pollution;
- Requiring electric vehicle infrastructure;
- · Planting native species; and
- · Diverting waste from landfill.

The existing Official Plan contains sustainable building and design policies for the Seaton neighbourhood that are complementary to the requirements contained in the ISDS.

Public infrastructure

A healthy city focuses growth around existing resources and services as much as possible to maximize infrastructure capacity. Providing services and amenities near where people live, promotes active transportation, and increases access for all members of our community. Compact development also enables transit efficiency which is the key driver of transit usage by the public.

While the City takes steps to provide planning and infrastructure to support a healthy city, there are also opportunities for private development to contribute to a healthy city.





EV charging stations in new neighbourhoods.



Urban agriculture in the form of community gardens.

Opportunities for the New Official Plan

The Official Plan has an opportunity to reassess and potentially create a new policy framework for sustainable development that will:

- Locate growth near existing services and amenities to avoid sprawl and maximize existing infrastructure;
- Result in efficient land use patterns that support active transportation and transit thereby reducing reliance on single-occupant transportation;
- Encourage urban agriculture as a means of promoting food security;
- Promote urban tree cover to reduce the urban heat island effect;
- · Promote the use of district energy systems and other green energy solutions;
- Promote sustainable building practices that result in reduced energy consumption, greater accessibility, and reduced impact on the surrounding environment (e.g. bird-friendly design).
 - 8. What else can Pickering do to increase sustainable development in 'new' neighbourhoods?
 - 9. How can Pickering promote sustainability in 'existing' neighbourhoods?



Conclusion

This is the third of six discussion papers, which follow the focus areas of the City's Official Plan Review. Public input, together with ongoing policy analysis, will be integrated into the drafting of a new Official Plan and map schedules.

The many benefits of environmental protection include preserving the City's natural resources, preventing pollution, and promoting sustainable development. To address these issues, Pickering's Official Plan will need a variety of policies designed to protect the environment and promote sustainability.

The goal of natural environment protection in Ontario is to ensure that systems, features, resources, species, and landscapes are preserved for current and future generations while balancing the needs of future growth.



Collaboration for the Butterfly Garden.



Next Step

The Official Plan Review is partly about sharing information with the public (education) but mostly, it is about receiving information from the public (community engagement). To assist with this process, the City will host six public information centres (PICs) from fall 2024 to spring 2025.

Prior to each Public Information Centres (PIC), the City will release a discussion paper to describe the topic and "set the table" for a conversation with the public. The PICs will be based on the following themes and general schedule:

- 1. Community Vision and Priorities (September 2024)
- 2. Growth Management and Urban Structure (November 2024)
- 3. Natural Heritage, Hazards and Sustainability (February 2025)
- 4. Agriculture and Rural Areas (March 2025)
- 5. Community Components/Elements (May 2025)
- 6. Housing and Affordability (June 2025)

The PICs will provide an opportunity for more detailed conversations on how legislative changes, Pickering initiatives, and best practices will impact each of the listed topics. Further details on the six main themes are included in Appendix I at the end of this discussion paper.

After each engagement session we will prepare a report that outlines the comments that have been received. Those engagement reports, together with background research, will inform the draft policies that are brought forward in the proposed Official Plan.

Interested community members and stakeholders are encouraged to add their names to the contact list for the Official Plan Review by connecting with staff through the Pickering Forward web page and the e-mail listed below.

Connect with Us! We want to hear from you!

Pickering Forward Web Page: <u>Pickering.ca/PickeringForward</u>

Pickering Forward E-mail: PickeringForward@Pickering.ca



Appendix

Appendix 1 – Engagement Topics

Community Vision and Priorities – Released September 2024

A review and refresh of the current Official Plan vision. A facilitated discussion of local priorities related to the Official Plan Review topics.

Growth Management and Urban Structure – Released November 2024

This includes a discussion of where and how Pickering will grow to 2051. This growth will occur within the City's intensification areas (the City Centre and the Kingston Corridor / Brock Node), on currently undeveloped land, and also to a much smaller extent within existing neighbourhoods. This discussion also explores the changing nature of employment and how Pickering will plan to accommodate future jobs to maintain the vitality of the community.

Natural Heritage, Hazards, and Sustainability

At the same time that we look at where the City will grow, we must also look at what the City must protect. It has always been important to ensure human safety, and avoid destruction to property from extreme weather events. Maintaining this priority is even more important in light of a changing climate. In conjunction with protecting the natural environment and avoiding natural hazards, it is also essential that new development outside of these areas is sustainable and contributes to making our City more resilient and livable.

Agriculture and Rural Areas

The majority of growth in Pickering is directed to occur within the City's urban residential areas and mixed-use areas. Outside of this is the City's rural areas, which include hamlets and the open space system. These areas, which include farmland and hamlets, contribute a number of vital functions, such as producing food and other crops, providing jobs, housing the rural community, and being the location for many of the City's natural heritage features. Rural areas have unique needs that deserve distinct recognition.

Community Elements and Infrastructure

A successful community contains a variety of services and amenities that contribute to the quality of life, such as parks and community facilities. Successful communities are inviting and contribute to a "sense of place" that helps people connect to one another and have a shared sense of identity. One way this can be reflected is through the preservation of our cultural heritage. In order to function well, a successful community includes a combination of all of the elements that are often taken for granted, including safe transportation connections such as roads, sidewalks, and trails.



Housing and Affordability

The topic on everyone's minds these days is housing affordability. Whether you are trying to purchase your first home, looking to downsize to a neighbourhood that is more walkable, or you are searching for an apartment, everyone needs a safe and comfortable place to live. That does not mean that future development will/should look the same as it has in the past. Challenges, like affordability, require a variety of solutions. One area that will be further explored is expanding housing options to serve people at all income levels and at all walks of life.



Appendix 2 – Official Plan Review Timeline

