



**LYNDE CREEK WATERSHED
EXISTING CONDITIONS REPORT
CHAPTER 4 – LAND USE AND POLICY**

June 2008



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1.0 INTRODUCTION

The role of watershed plans as a tool to assess the impact on watershed resources occurring due to changes in land use is becoming increasingly recognized. Through watershed plans a unique perspective on the cumulative impact of development within an ecological unit is obtained. A large part of the implementation of watershed plans can occur through land use planning. Adoption of watershed plan recommendations in municipal planning documents such as official plans and zoning by-laws will ensure implementation of these recommendations during the development approval process.

Watershed plan recommendations can also be implemented through the "Development, Interference with Wetlands and Alteration to Shorelines and Watercourse Regulations". This is a regulation, replacing the previous "Fill, Construction and Alteration to Waterways Regulation" used by Conservation Authorities to prohibit or regulate development and activity within hazard lands such as floodways, erodible or unstable soils, and watercourses and wetlands.

This chapter identifies existing land uses within the watershed and provides information with respect to some of the pieces of legislation and regulations that impact land use planning decisions. In addition, a couple of key elements that will impact future land use decisions, such as population growth and the proposed Highway 407 are identified.

'through watershed plans a unique perspective on the cumulative impact of development within an ecological unit is obtained'



2.0 STUDY AREA AND SCOPE

The Lynde Creek watershed is situated entirely within the Regional Municipality of Durham and covers an area of approximately 130 km² (Figure 1). The watershed drains southerly towards Lake Ontario from its headwaters in the Oak Ridges Moraine. The Lynde Creek watershed is divided into 5 subwatersheds being Lynde Main, Heber Down, Kinsale, Ashburn, and Myrtle Station.

The purpose of this chapter is to identify existing land uses within the watershed and to highlight planned land use development as determined by municipal official plans. As well, the potential for major land use change is briefly mentioned, having regard for the role of federal, provincial and municipal levels of government in land use planning. A brief summary of the Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation utilized by the Authority to address development within areas susceptible to flooding, erosion, and/or within wetlands is also provided.



'the purpose of this chapter is to identify existing land uses within the watershed and to highlight planned land use development as determined by municipal official plans'

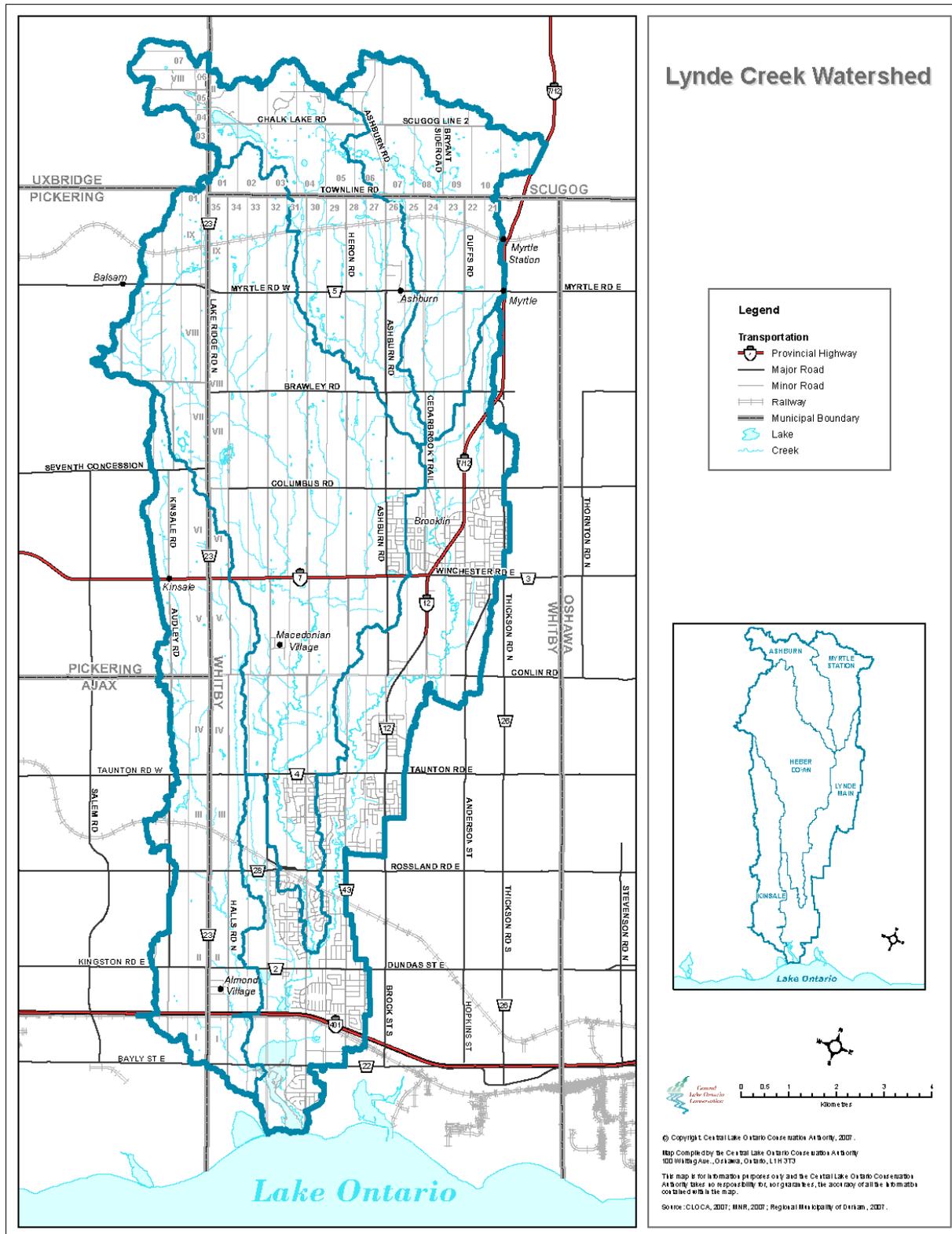


Figure 1: Lynde Creek watershed.

3.0 METHODOLOGY

Information for this chapter was obtained predominantly by means of a literature review, including relevant federal, provincial and local legislation, including municipal official plans.

CLOCA's land use information is derived from its Land Classification Mapping. This mapping is a desk top exercise using the latest orthophotography (2005) available to CLOCA. This information is not meant to reflect and/or represent planning land use designations or zoning, rather it provides an overview of dominant land uses within the watershed and subwatershed. The mapping is based on land use categories (Table 1), reflecting what existed in 2005 which provides the reader with an understanding of the dominant land uses existing at that time. By virtue of mapping the human influenced landscape (the anthropogenic land uses), the natural areas have been identified. These natural areas reflect that which is described and mapped in Chapter 17 – Terrestrial Natural Heritage.

Table 1: CLOCA Land Classification Categories.

Land Use Category	Examples of Land Use
Aggregate	Mineral aggregate operations
Agriculture	Barns, greenhouses, cropped fields, pasture, tree nursery, hay field, orchard, sod farm, irrigation pond
Commercial	Retail facilities, storage yards, marinas
Industrial	Factories, warehouses, scrapyards, landfill
Institutional	Schools, hospitals, libraries, school fields and play areas including lawns
Open Space	Park, water feature, athletic field
Recreational	Golf facility, ski hill
Residential	Urban and rural residential, stormwater pond, estate residential
Transportation and Utilities	Airport, railway, transportation corridor, transportation green space, utility transfer station

Source: CLOCA 2007

'CLOCA's land use information is derived from the Ecological Land Classification Mapping'

3.1 Legislation

The following provides a review of the role of various levels of government in land use planning and some of the major pieces of legislation impacting planning and development.

Federal Government

The role of the federal government in land use planning is minimal, generally only directly affecting federally owned lands, federal infrastructure (airports) and communications (telecommunications towers). This is not the case if a development proposal could have an impact upon fish habitat. In these situations, the federal government presence is quite strong. Development must satisfy the requirements of the federal Fisheries Act. CLOCA has a Level 3 agreement with Fisheries and Oceans

Canada (DFO) under Section 35 of the federal Fisheries Act. This agreement enables CLOCA to conduct the review of development occurring within a watercourse to determine if the proposed development will have any impact on fish and fish habitat. If impacts cannot be mitigated, CLOCA works with the proponent of the development and DFO to prepare a fish habitat compensation plan and to receive authorization from DFO under the Fisheries Act.

It is important to note that federal legislation supersedes all other levels of government and as such, the federal government is not bound by provincial or municipal land use policies.

Provincial Government

The provincial government has a more direct role in land use planning through the Planning Act. This Act sets out the rules for which municipalities must comply with when making land use planning decisions. The province also establishes other pieces of legislation and policy that have direct implications on land use planning. These include the Provincial Policy Statement, the Oak Ridges Moraine Conservation Act and Plan, the Greenbelt Act and Plan, and the Growth Plan. There are other pieces of legislation that, in certain planning applications, may be applicable and must be complied with. Some of these include the Environmental Assessment Act, the Environmental Protection Act, the Aggregate Resources Act, the Drainage Act, the Lake and Rivers Improvement Act, and the Conservation Authorities Act.

In the last few years, the Province has recognized that in order to ensure the resources of the province are available for future generations, growth and development must be economically and environmentally sustainable. This position has generated a suite of legislation that directs growth in a sustainable fashion. This includes an amended Planning Act, revised Provincial Policy Statement, the Oak Ridges Moraine Conservation Act and Plan, the Greenbelt Act and Plan, and the Places to Grow Act and Growth Plan. This suite of initiatives focus on sustainable development including promotion of more intensive development, efficient and cost-effective infrastructure, and protection of significant natural features and resources. A brief review of the Oak Ridges Moraine Conservation Plan and the Greenbelt Plan are provided below. For more information about the other pieces of legislation mentioned, the reader is referred the Province of Ontario web site www.gov.on.ca.

Oak Ridges Moraine Conservation Plan (ORMCP)

The Oak Ridges Moraine is an “environment – first” plan, protecting the ecological and hydrological features and functions that support healthy watersheds, healthy ecosystems, and support the health and well-being of residents (ORMCP, 2002). The ORMCP identified land use designations, being “Natural Core Area”, “Natural Linkage Area”, “Countryside Area” and “Settlement Area” across the moraine. The ORMCP also identified Landform Conservation Areas and Areas of High Aquifer Vulnerability. Information regarding Landform Conservation Areas and Areas of High Aquifer Vulnerability is provided in Chapter 6 - Physical Geography and Chapter 14 - Hydrogeology respectively. The ORMCP requires that for those watersheds which drain the ORM, watershed plans are to be prepared. Guidance as to what information is to be included in these watershed plans has been provided by the Province. Implementation of the ORMCP is the responsibility of municipalities. Municipalities are required to incorporate the policies of the ORMCP into their planning documents. All

‘the Province has recognized that in order to ensure the resources of the province are available for future generations, growth and development must be economically and environmentally sustainable’

the municipalities within the Lynde Creek watershed have adopted the necessary amendments to their respective Official Plans in order to implement the ORMCP.

The ORMCP designations that are represented within the Lynde Creek watershed include: "Countryside Area", "Rural Settlement Area", "Natural Linkage Area", and "Natural Core Area".

The "Natural Core Area" designation is only found in the vicinity of Chalk Lake. "Natural Core Areas" identify those areas having the highest concentration of key natural heritage features, hydrologically sensitive features or landform conservation areas. As such, this is the most restrictive land use designation, limiting many forms of development.

The "Natural Linkage Area" designation in the Lynde Creek watershed generally runs along the upper reaches of this watershed and is wider in the western portion of the watershed, narrowing towards the eastern limit of the watershed. "Natural Linkage Areas" form a corridor enabling the movement of plants and animals between "Natural Core Areas" and stream valleys.

Lands designated "Countryside Area" represents those areas where rural land uses such as agriculture, recreation, and aggregate extraction operations dominant. "Rural Settlements" (hamlets) are considered part of the "Countryside Area" designation. The hamlets of Ashburn, Myrtle and Myrtle Station are designated "Rural Settlements" in the ORMCP (APPENDIX A: Oak Ridges Moraine Conservation Plan Land Use Designations).

the ORMCP designations that are represented within the Lynde Creek watershed include: "Countryside Area", "Rural Settlement Area", "Natural Linkage Area", and "Natural Core Area"



Greenbelt Plan

The provincial Greenbelt Plan includes lands within the ORM. But for the purpose of the discussion within this chapter, and in order to better convey the intent and implication of these provincial documents, lands within the Greenbelt and lands within the ORM will be considered individually.

The provincial Greenbelt Plan is an “agriculture-first” plan, permanently protecting agricultural lands. The Plan identifies agricultural lands and a natural system. The agricultural lands are identified as “Protected Countryside”. Lands within the Protected Countryside are either identified as “Prime Agricultural Areas” or “Rural Areas” to coincide with the land use designation of local municipal plans.

Like the ORMCP, implementation of the Greenbelt plan is the responsibility of municipalities. The Regional Municipality of Durham’s Official Plan has been amended to reflect the provisions of the Greenbelt Plan (Amendment #114), but the local municipalities have yet to incorporate the Greenbelt provisions into their local Official Plans. The Region of Durham, when incorporating the Greenbelt provisions into the Region’s Official Plan, designated all lands within the Protected Countryside, “Prime Agricultural Areas” and “Major Open Space”.

With respect to natural features and functions, the Greenbelt Plan provides permanent protection to the natural heritage and water resource systems that sustain ecological and human health (Greenbelt Plan, 2005). The Greenbelt “Natural System” identifies those areas where regard for the natural and hydrological features shall be given, and includes the Natural Heritage System, Water Resources System and key natural heritage and hydrologic features. In other words, development of land is subject to the constraints of the “Natural System” as outlined in the Greenbelt Plan. Within the “Protected Countryside” area, key natural heritage and hydrologic features may exist, but have not been identified on the schedules to the Plan. However this does not negate the policies of the “Natural System” which continue to apply in the “Protected Countryside”, even through these features may not be identified in the mapping.

The Greenbelt Plan recognizes the importance of valley lands in providing broader landscape connectivity at a local, regional and provincial scale. Although identified within the Greenbelt Plan, these external connectors are not considered within the regulatory boundary of the Greenbelt Plan (APPENDIX B: Greenbelt).

Growth Plan for the Greater Golden Horseshoe

In response to the fact that the Greater Golden Horseshoe is one of the fastest growing regions in North America, the Province prepared “The Growth Plan for the Greater Golden Horseshoe” under the Places to Grow Act. The Act was passed in 2005 and the Growth Plan was approved in 2006. The intent of the Growth Plan is to provide a growth management framework that will guide decisions regarding “transportation, infrastructure planning, land use planning, urban form, housing, natural heritage and resource protection in the interest of promoting economic prosperity” (Growth Plan, 2006). This framework builds on other provincial initiatives including the Greenbelt and the Provincial Policy Statement (PPS). Municipalities are required to implement the Growth Plan through amendments to their Official Plans.

‘like the ORMCP, implementation of the Greenbelt plan is the responsibility of municipalities’

The Growth Plan identifies that by 2031 the population of Durham Region will be 960,000 and the number of people working in the Region will be 350,000. The Region of Durham, in planning for this growth, has initiated their Official Plan conformity amendment process with the release of 3 documents collectively referred to as "Growing Durham Growth Plan Implementation Study" in January and March 2008. These documents are examining how growth can be accommodated including not only a hard look at how and where intensification can occur, as well as whether there are any additional urban land needs.

Currently the Growing Durham documents identify 3 possible growth scenarios, all recognizing a need for additional urban land. Each of the 3 growth scenarios identify lands between the existing urban limits and the limit of the Greenbelt, within the Lynde Creek Watershed, specifically within the Kinsale and/or Heber Down Subwatersheds, as being required to accommodate some of this future growth. Although this planning study is currently underway and no conclusions regarding outcomes can be made at this time, it is worthy of noting as the results of the study could very well have an impact on the future development potential of lands within this watershed.

Regional Government

With respect to land use planning, the Region of Durham sets out broad policy initiatives and objectives having a regional context. These policies implement provincial legislation and provide planning guidance to the lower tier municipalities. The Region of Durham has been amending their planning policies, specifically the Official Plan, to ensure compliance with the recent Provincial changes. To start, the Region prepared and adopted Oak Ridges Moraine Conformity Amendments receiving Ministerial Approval in October 2004. In September 2006, the Region adopted Amendment 114 providing some new environmental, rural, commercial and transportation policies. This amendment also incorporated the necessary provisions implementing the Greenbelt Plan. The Region is currently working on amendments that implement the Growth Plan and recent changes to the Planning Act and it is anticipated that these amendments will be completed by late 2008.

Local Government

Local municipalities are required to implement provincial legislation and policies when making land use planning decisions. They are also required to ensure that all land use decisions are in conformity with both provincial and regional policies. In that the policies of the Province are at a provincial scale and the policies of the Region are at a regional scale, the local municipalities can provide more detail to their policies, better reflecting local growth patterns, local circumstances and needs, as well as diverse neighbourhoods or areas. It is important to note that while municipal policies can be more restrictive than higher tier government policies; local policies cannot be more lenient or flexible unless so prescribed.

Official Plans

An Official Plan is a document that guides the future growth and development of a municipality over 20 to 30 years. The plan establishes future growth objectives, including setting out the population and employment numbers to be achieved during the life of the plan. It also identifies where growth shall occur, including where residential, commercial and industrial land uses shall locate, and contains policies

'an Official Plan is a document that guides the future growth and development of a municipality over 20 to 30 years'

regarding services and infrastructure. In addition to identifying how an area shall grow and to what extent, Official Plans also identify those areas, such as creeks, valley systems, wetlands, and woodlots, which shall be protected and or preserved, including areas where restoration may be warranted. As well, these plans must identify hazard lands, being those lands where damage to property or human life may occur if developed. Natural hazards can include flooding, organic soils, steep slopes, etc. Lastly, municipal Official Plans, not only reflect, but implement the planning framework established by the Province through legislation and policies such as the Planning Act, Greenbelt, Oak Ridges Moraine Conservation Plan, Growth Plan for the Greater Golden Horseshoe, and the Provincial Policy Statement.

Zoning By-laws

A zoning by-law implements the policies of the Official Plan. It specifies permitted land uses and provides regulations for establishing those land uses. An application for development must conform with the zoning by-law prior to receiving a building permit.

Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation

This regulation is made under the Conservation Authorities Act, specifically, Section 28 (1). The purpose of the regulation is to provide the tools necessary to prevent loss of life and property from flooding and erosion. This regulation also offers mechanisms to conserve and enhance natural resources. Specifically, the regulation allows conservation authorities to prohibit, regulate or provide permission for development in “regulated areas”. These “regulated areas” are identified in Ontario Regulation 42/06, and can be generally described as areas subject to flooding and erosion (including dynamic beaches), wetlands and their adjacent lands (30 – 120m), river or stream valleys or hazard lands. The Conservation Authority may grant permissions for development in or on the areas described in the Regulation if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development.

In this regulation, development is defined as being:

- construction, reconstruction or placing of a building or structure;
- any change to a building whereby the use is altered, increasing the size or increasing the number of dwelling units in the structure;
- site grading; and
- temporary or permanent placing, dumping, or removal of material.

'Official Plans also identify those areas, such as creeks, valley systems, wetlands, and woodlots, which shall be protected and or preserved, including areas where restoration may be warranted'

4.0 FINDINGS

4.1 Lynde Creek Watershed

From a very simplified point of view, the Lynde Creek watershed comprises urban and rural land uses. Urban type land uses typically include residential, commercial, employment, institutional and parks/open space. Rural type land uses are often dominated by agriculture, but also include rural residential, mineral aggregate extraction, and recreational uses such as golf courses. Interwoven through these urban and rural land uses are the green space areas which include natural areas, hazard lands, and parkland. Present within the Lynde Creek watershed is the Oak Ridges Moraine and the Provincial Greenbelt as well as the significant landform known as the Lake Iroquois Beach.

Just over 20% of the Lynde Creek watershed is within an urban area (Figure 2). The remaining 80% is comprised of the Oak Ridges Moraine (26%), the Greenbelt (32%), and rural areas (22%). Although not identified as a specific designation, the Lake Iroquois Beach comprises almost 12% of the watershed area. Also of interest is the fact that 4% of the watershed is in a Conservation Area such as Lynde Shores, Heber Down, Audley Woods, and Crow’s Pass (Figure 3).

‘just over 20% of the Lynde Creek watershed is within an urban area’



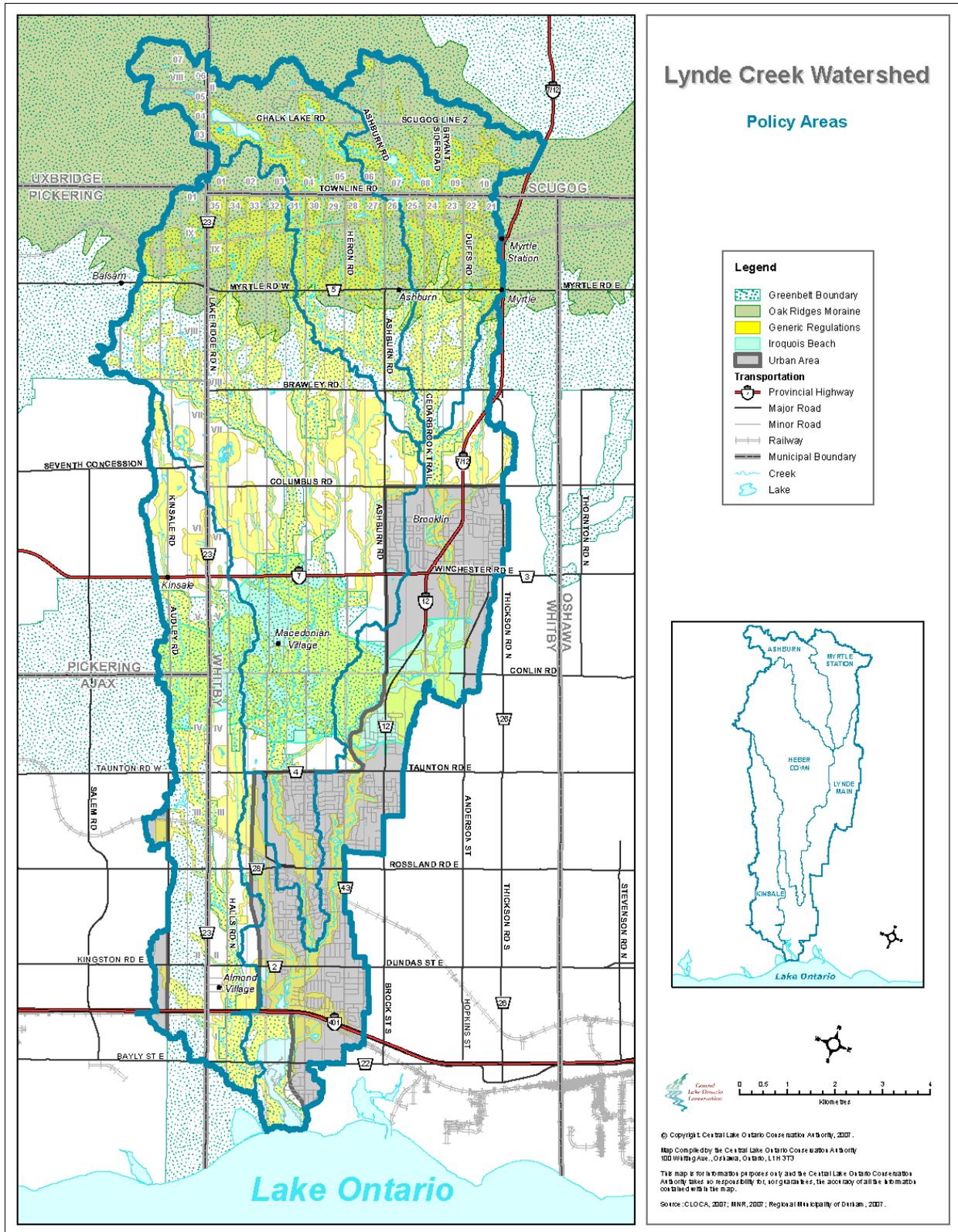


Figure 2: Lynde Creek watershed policy areas.

Oak Ridges Moraine and Greenbelt

The Oak Ridges Moraine (ORM) crosses through the northern portion of the Lynde Creek watershed covering 3419 ha of land and represents 26% of the watershed. Development of lands within the Oak Ridges Moraine is subject to the policies of the Oak Ridges Moraine Conservation Plan (ORMCP). The Regional Municipality of Durham and the local municipalities have incorporated the provisions of the ORMCP into their respective Official Plans.

Just over 32% of the Lynde Creek watershed is within the Greenbelt. Large portions of the Greenbelt exist between Brawley Road and the south limit of the ORM, along the western edge of the watershed, and in the area representative of the Lake Iroquois Beach. The Greenbelt also follows some of the watershed's stream valleys, connecting the northern, central and southern portions of the Greenbelt. Those lands identified as "Natural Heritage System" includes large portions of the Lake Iroquois Beach and portions of the Lynde Creek valleylands. The area identified as "Protected Countryside" include lands south of the ORM and an area adjacent to the Ajax Urban Area. External connectors follow two branches of the Lynde Creek through the urban area of Whitby and Brooklin. The reader is referred to and APPENDIX A: Oak Ridges Moraine Conservation Plan Land Use Designations and APPENDIX B: Greenbelt for complete mapping.

Local Official Plan

As the majority of the Lynde Creek watershed falls within the Town of Whitby, much of the land use discussion will focus on Whitby's policies. That being said, it is equally important to know the existing and future land use policies for the other municipalities in the Lynde Creek watershed.

For the most part, the lands within the Pickering portion of the watershed are designated "Natural Areas", "Active Recreational Areas" (golf courses), or "Agricultural Areas" in the City of Pickering Official Plan. In addition, some of the Lynde Creek watershed within the City of Pickering is within the Oak Ridges Moraine and Greenbelt.

A portion of the Town of Ajax is within the Lynde Creek Watershed. This area is predominantly designated "Rural" in the Ajax Official Plan and is situated within the Greenbelt. However, there is a small portion of the watershed located within the Ajax Urban Area. These lands are designated either "Employment Area" or "Low Density Residential" in the Ajax Official Plan.

The upper reaches of the watershed are located within the Township of Scugog and the Town of Uxbridge. This part of the watershed is within the Oak Ridges Moraine and as such, the Official Plans for these townships reflect the policies of the Oak Ridges Moraine Conservation Plan.

For the most part, those watershed areas within the Town of Ajax, City of Pickering, Township of Scugog and Township of Uxbridge are not situated within the limit of urban development and as such will not see major residential, commercial or industrial development.

'the ORM covers 26% of the watershed and the Greenbelt covers 32% of the watershed'

Whitby Official Plan

The Town of Whitby has initiated a review of the Whitby Official Plan. The last comprehensive review of the Whitby Official Plan took place in the early 1990's culminating in adoption of the 1995 Whitby Official Plan. This current review will address the changes that have been made in recent years to provincial legislation and will update the Plan's policies to reflect changes in development trends, including infrastructure. Whitby is a growing community and review of the Official Plan will take this growth into consideration, examining potential growth trends, and determining where growth shall occur. Review of the Plan will also consider policies to promote and implement sustainable community planning and the incorporation of a natural heritage system.

With respect to growth, the Town of Whitby's population has been increasing over the years, reaching 116,000 in 2006. The latest population forecasts for the Town of Whitby were released in January 2006 forecasting Whitby's population to reach 226,190 in 2031 (Town of Whitby, 2007). In addition to residential population growth, the Town of Whitby is forecasting that employment growth will continue reaching between 22,200 – 27,900 "industrial- type" jobs by 2031 (Town of Whitby, 2007). All this growth requires land. The Town of Whitby has determined that 2300 to 3000 gross hectares of additional land will be required for residential growth and that 45 to 240 gross hectares of employment lands will also be needed (Town of Whitby, 2007).

Proposed Highway 407

There is merit in identifying the proposed Highway 407 in this chapter as this will be a major piece of infrastructure that, when completed, will have an impact on this watershed. If built, Highway 407 will cross through the central portion of the watershed, impacting the Lynde Main, Heber Down and Kinsale subwatersheds. In addition, there is also proposed a north-south highway link from Highway 401 – 407 which also goes through this watershed, impacting the Kinsale and Lynde Main subwatersheds. At the time of writing this chapter, the province has stated that the Environmental Assessment will be submitted in 2009 and that initial construction will be completed by 2013. However, this timeline assumes the project will proceed without any delays (APPENDIX C: Highway 407 East Technically Recommended Route DRAFT).

West Whitby

Recognizing a long term need to expand both the employment and residential landbase, the Town of Whitby has initiated the "West Whitby Background Urban Planning Studies" project. Consisting of four components: Strategic Urban Structure Study, Environmental Study, Municipal Servicing Study and Transportation Study, the project endeavours to identify land use options recognizing servicing and transportation requirements while respecting and protecting important environmental features and functions. The study area extends from Highway 401 north to Lyndebrook Road, and from Lake Ridge Road, to just east of Coronation Road, south of Taunton Road, and further east to almost Brock Street/Baldwin Street north of Taunton Road. The lands include portions of the following subwatersheds; Lynde Main, Heber Down and Kinsale.

'the latest population forecasts for the Town of Whitby were released in January 2006 forecasting Whitby's population to reach 226,190 in 2031 (Town of Whitby, 2007)'

North Brooklin

A similar Background Study has been commissioned by a landowners group in North Whitby, taking in lands from Lake Ridge Rd. to Garrard Rd. from just south of Hwy 7 north to Brawly Rd. This is not a municipal study and how it will be used is unclear. Portions of all 5 subwatersheds are within this study area.

In that the Whitby Official Plan is under review, the following discussion on applicable policies and land use within the subwatersheds is limited. The focus of the following discussion is on existing land use and potential major land use changes.

CLOCA Land Use

Figure 4, developed using CLOCA's land cover classification system, indicates that agriculture is the dominant land use within the watershed followed by residential and natural areas. Of note are 6 aggregate extraction operations, not all are actively being operated. There are 11 golf courses and 2 ski hills within the watershed, and a multitude of parks, almost all within the urban areas. As well, there are a few commercial and industrial areas, found mostly within the urban areas of Whitby and Brooklin.



'there are 11 golf courses and 2 ski hills within the watershed, and a multitude of parks, almost all within the urban areas'

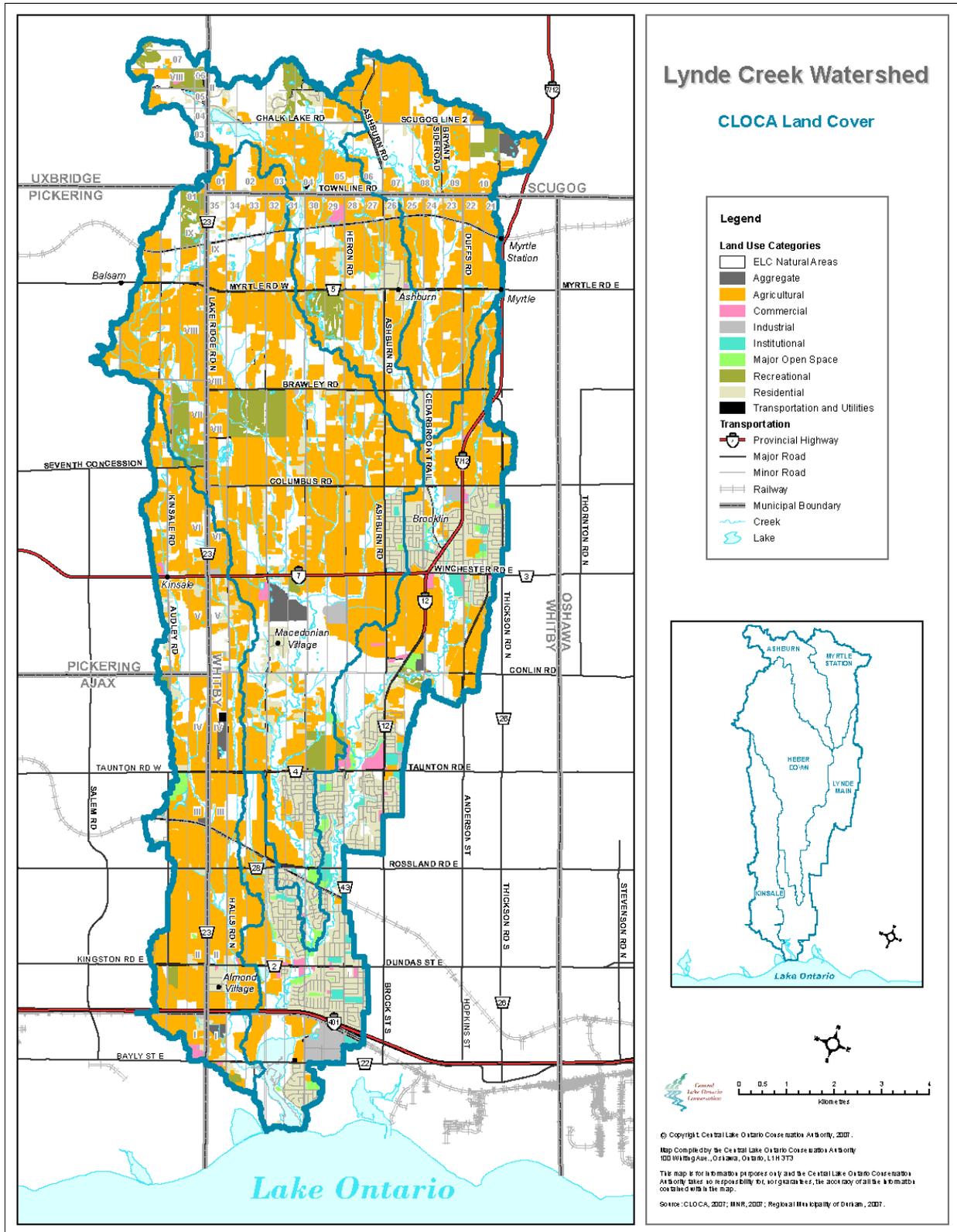


Figure 4: Lynde Creek watershed land cover.

4.2 Subwatershed Findings

4.2.1 Lynde Main Subwatershed

This subwatershed is completely within the Town of Whitby (Figure 5) and drains 2981 ha of land. The subwatershed divides just north of Dundas Street, having a west portion and an east portion with the west portion ending at Taunton Road. The eastern side extends north through Brooklin and ends just within the limits of the Oak Ridges Moraine, south of the hamlet of Myrtle.

Oak Ridges Moraine, Greenbelt, Conservation Areas and Conservation Authority Regulated Areas

Almost 72% of this subwatershed is within the urban boundary of Whitby and Brooklin, 16% within the Greenbelt, and less than 1% in the ORM, leaving about 11% of the subwatershed area as agricultural. The Lake Iroquois Beach crosses this subwatershed, generally between Whitby and Brooklin. The Lake Iroquois Beach represents 16% of the subwatershed, with the area beyond the Whitby Urban Area in the Greenbelt. Due to the presence of Lynde Shores Conservation Area and Heber Down Conservation Area, 9% of this subwatershed is within a Conservation Area (Figure 6).

The lands within the ORM in this subwatershed are designated "Countryside" in the ORMCP. The Greenbelt is located within 4 distinct areas of this subwatershed being the south portion at Lynde Shores, the west part of the Lake Iroquois Beach, the area north of Brawley Road, and a portion of the stream valley north of Columbus Road East. The Greenbelt identifies an external connection following the main tributary in the east branch of this subwatershed going through the urban area of Brooklin and Whitby, down to Highway 401.

CLOCA's regulated area follows the stream tributaries and includes wetlands associated with Lynde Shores and Heber Down Conservation Area, as well as some wetlands on the Lake Iroquois Beach.



'72% of this subwatershed is in the urban boundary of Whitby and Brooklin'

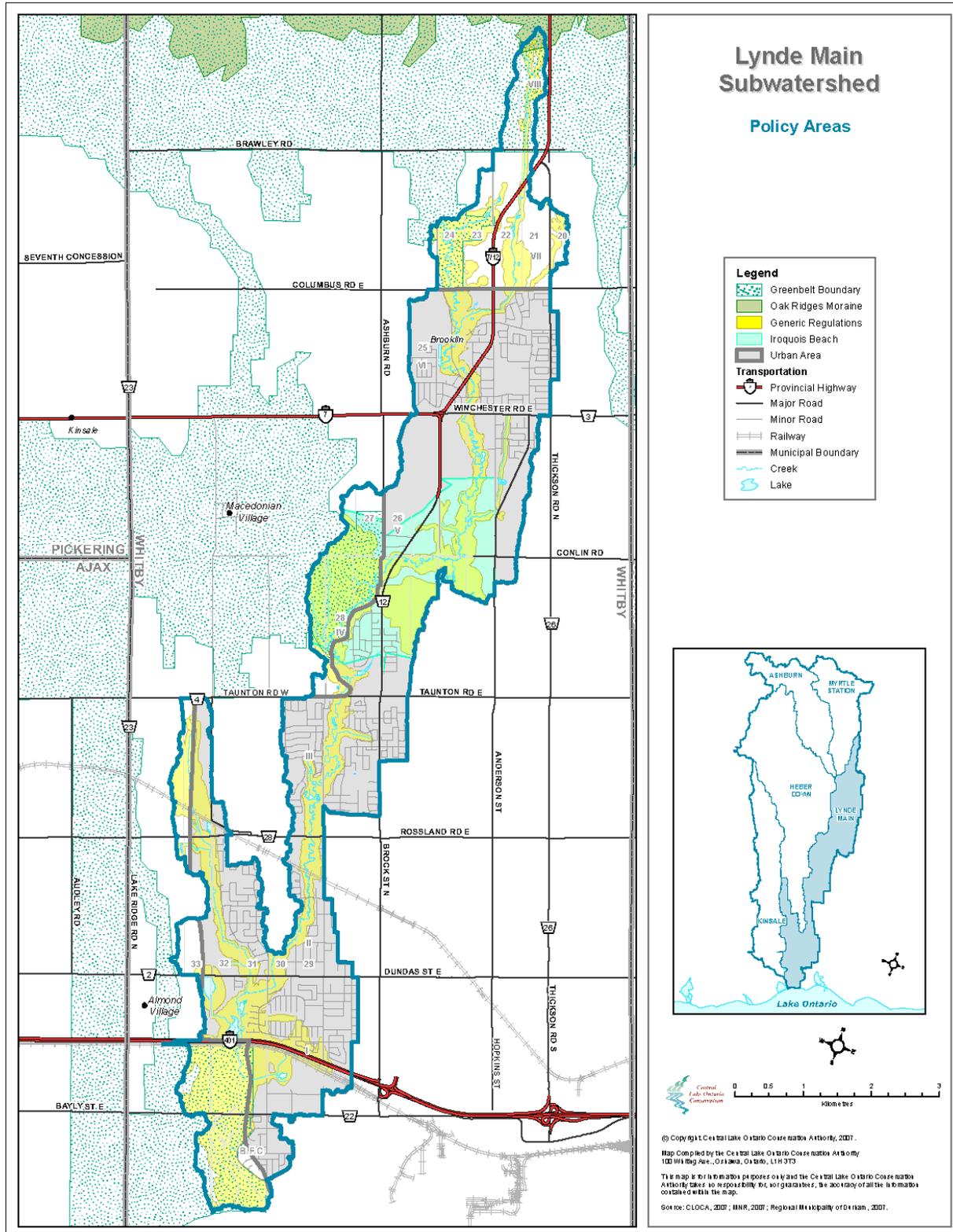


Figure 5: Lynde Main subwatershed policy areas.

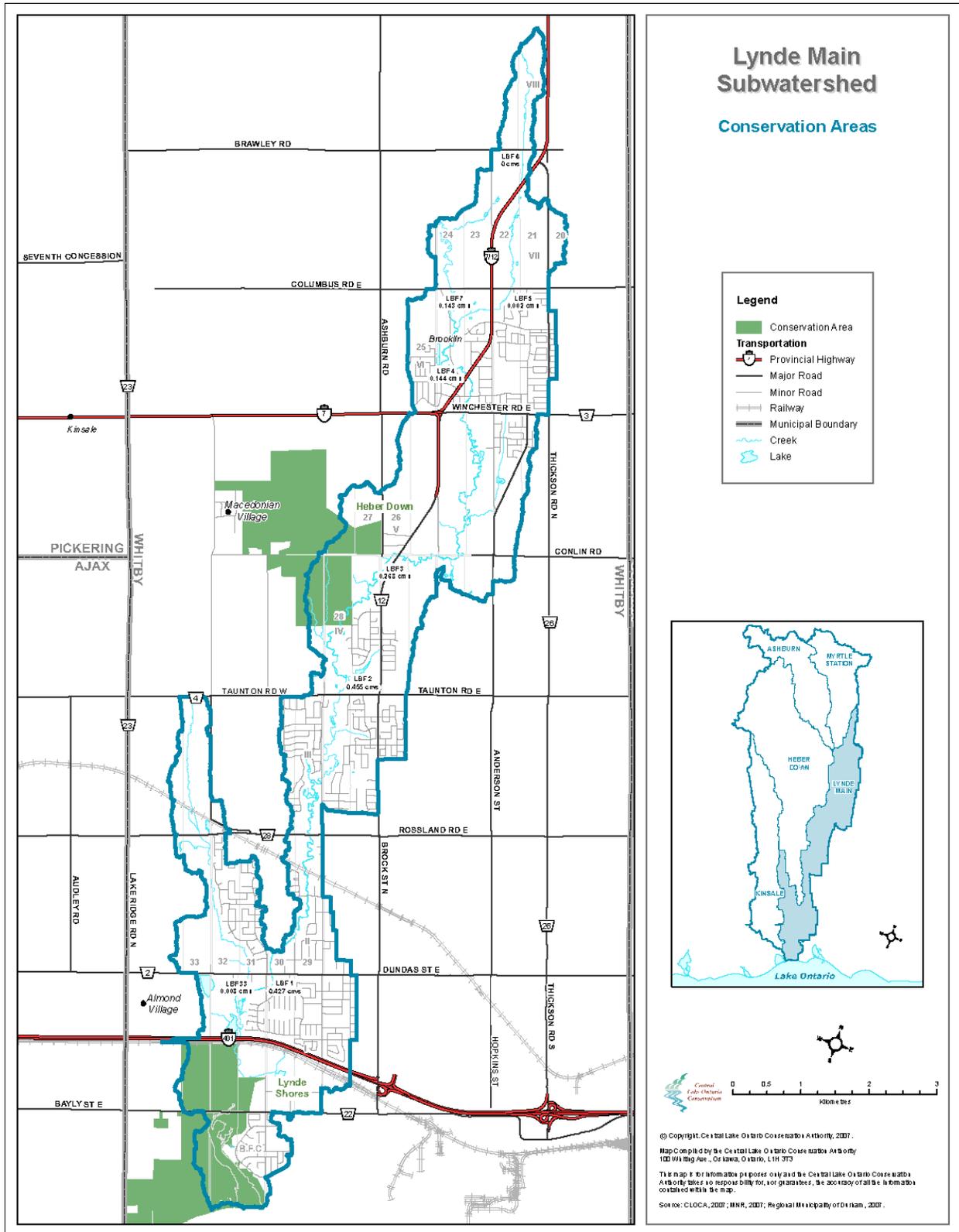


Figure 6: Conservation Areas in the Lynde Main subwatershed.

Official Plan

Much of the lands within the western branch of this subwatershed, north of Highway 401, are within the Whitby Urban Area. The area between Dundas Street W. and Rossland Road, east of the tributary is designated "Residential" and is an established residential area. The area west of the tributary and the lands north of Rossland Road are designated "Future Urban Development Area". This designation has been deferred, pending a decision of the Highway 401-407 connecting link. There are however, lands at the very western extreme of this branch that are not within the Whitby Urban Area. These lands are designated "Major Open Space" or "Hazard Land".

Large parts of the eastern portion of the subwatershed are within the Whitby Urban Area, or the Village of Brooklin Urban Area. For the most part, these lands are designated "residential" and are developed. There are two "Prestige Industrial" areas within this subwatershed, being south of Highway 401 and south of Highway 7/Winchester Road in Brooklin. The majority of the "Prestige Industrial" areas have yet to be developed. The lands north of the Brooklin Urban Area are for the most part designated "Agriculture", with the exception of the tributary connecting to the confluences of the Ashburn and Myrtle Station subwatersheds. This tributary is identified as "Natural Heritage System" in the Greenbelt. Part of the lands between Highway 7 and Taunton Road in this subwatershed are not in the urban area. These lands are for the most part designated either "Hazard Land" or "Major Open Space" and are predominantly within the Lake Iroquois Shoreline. Also, much of this land is within the Heber Down Conservation Area.

About half of this subwatershed south of Highway 401 is not within Whitby's urban limits. The lands within the urban area north of Victoria Road are designated "Business Park". The lands south of Victoria Road are developed residentially and are commonly referred to as the Lynde Shores Community. The lands beyond the urban area is designated "Hazard Lands" representing the Lynde Creek Marsh.

The Whitby Official Plan identifies the Lynde Main stream corridor as Environmentally Sensitive Area (ESA) with the exception of the upper reaches of both the east and west tributaries which are identified as hazard lands. A mature woodlot is identified south of the Canadian Pacific Railway which provides a connection between the west tributary and the Kinsale tributary.

Proposed Highway 407 will have an impact on this subwatershed as it will pass south of the Village of Brooklin, between Brooklin and Whitby. In addition the proposed Highway 401-407 link, although only minimally within this subwatershed, does travel along the western edge of this subwatershed.

CLOCA Land Use

As expected, the dominant land use in this subwatershed is residential followed by agriculture and natural areas (Figure 7). The natural areas are prevalent at the shore of Lake Ontario (Lynde Shores Conservation Area), in the central portion of this subwatershed, and along the stream valleys. This subwatershed exhibits the greatest

'the Whitby Official Plan identifies the Lynde Main stream corridor as Environmentally Sensitive Area (ESA) with the exception of the upper reaches of both the east and west tributaries which are identified as hazard lands'

diversity of land uses which can be expected due to the fact that much of this subwatershed is located within an urban area.

A good portion of this subwatershed is situated within the Whitby Urban Area and is planned for development. As such, development pressures will continue in this subwatershed. The exception being the northern most portion between Brooklin and the hamlet of Myrtle, where urban development is restricted due to being within the Greenbelt and Oak Ridges Moraine. It should be noted that the 11% of the watershed is not within the Greenbelt, ORM or existing urban area and these area may experience pressure for inclusion within an expanded urban boundary in order to accommodate future population growth.



Lynde Main Subwatershed

© CLOCA



Lynde Main Subwatershed

© CLOCA

'development pressures will continue in this subwatershed'

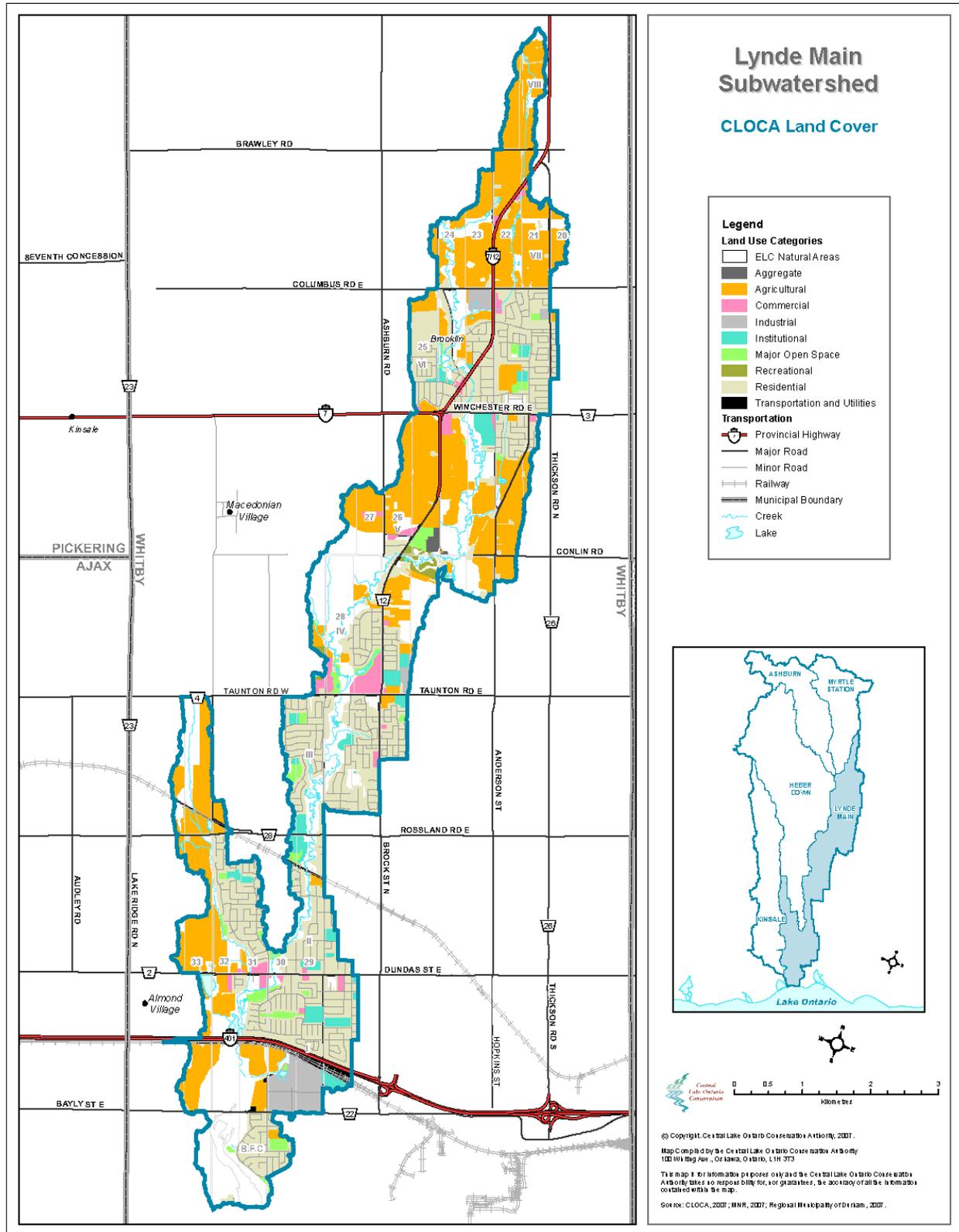


Figure 7: Lynde Main subwatershed land cover.

4.2.2 Heber Down Subwatershed

The majority of this subwatershed is within the Town of Whitby and drains 4634 ha of land. The west portion, north of Seventh Concession is within the City of Pickering. The very north part of the subwatershed is situated within the Township of Scugog, with a small part being in the Town of Uxbridge (Figure 8). This subwatershed has 9% of its land area within the urban boundary of Whitby and Brooklin. Next to Lynde Main subwatershed, the Heber Down subwatershed has the most land within an urban area.

Oak Ridges Moraine, Greenbelt, Conservation Areas and Conservation Authority Regulated Areas

This subwatershed reaches up into the ORM having 18% of its land area within the ORM. Even more of this subwatershed is within the Greenbelt (40%), leaving 33% of this subwatershed as agricultural. Just over 15% of this subwatershed is within the Lake Iroquois Beach, most of which is in the Greenbelt. The Heber Down Conservation Area is located within this subwatershed and represents a little more than 4% of the subwatershed area (Figure 9).

The ORM straddles Myrtle Road West and within the ORMCP, these lands are designated "Countryside" or "Natural Linkage". The Greenbelt occurs in predominantly two areas of this subwatershed, being the northern part and within the Lake Iroquois Beach area. Most of the Greenbelt west of Lake Ridge Road, north of Brawley Road is identified as "Protected Countryside" while the remainder of the Greenbelt in this subwatershed is part of the "Natural Heritage System". Of note is the fact that the Greenbelt extends south to Taunton Road east of Coronation Road. An external connection has been identified following this subwatershed's main tributary through the urban area down to the confluence of this branch with the Lynde Main subwatershed.

Figure 8 identifies those areas subject to the Authority's generic regulations. Generally the regulated areas follow the stream tributaries and include wetlands associated with Heber Down, as well as some wetlands on the Lake Iroquois Beach. There is a strong correlation between the Authority's generic regulation limits and the limits of the "Natural Linkage Area" designation in the ORMCP. In other words, the areas beyond CLOCA's regulated areas are generally designated "Countryside" in the ORMCP (APPENDIX A: Oak Ridges Moraine Conservation Plan Land Use Designations).



'9% of the Heber Down subwatershed is within the urban area of Whitby and/or Brooklin, 40% within the Greenbelt and 18% in the ORM'

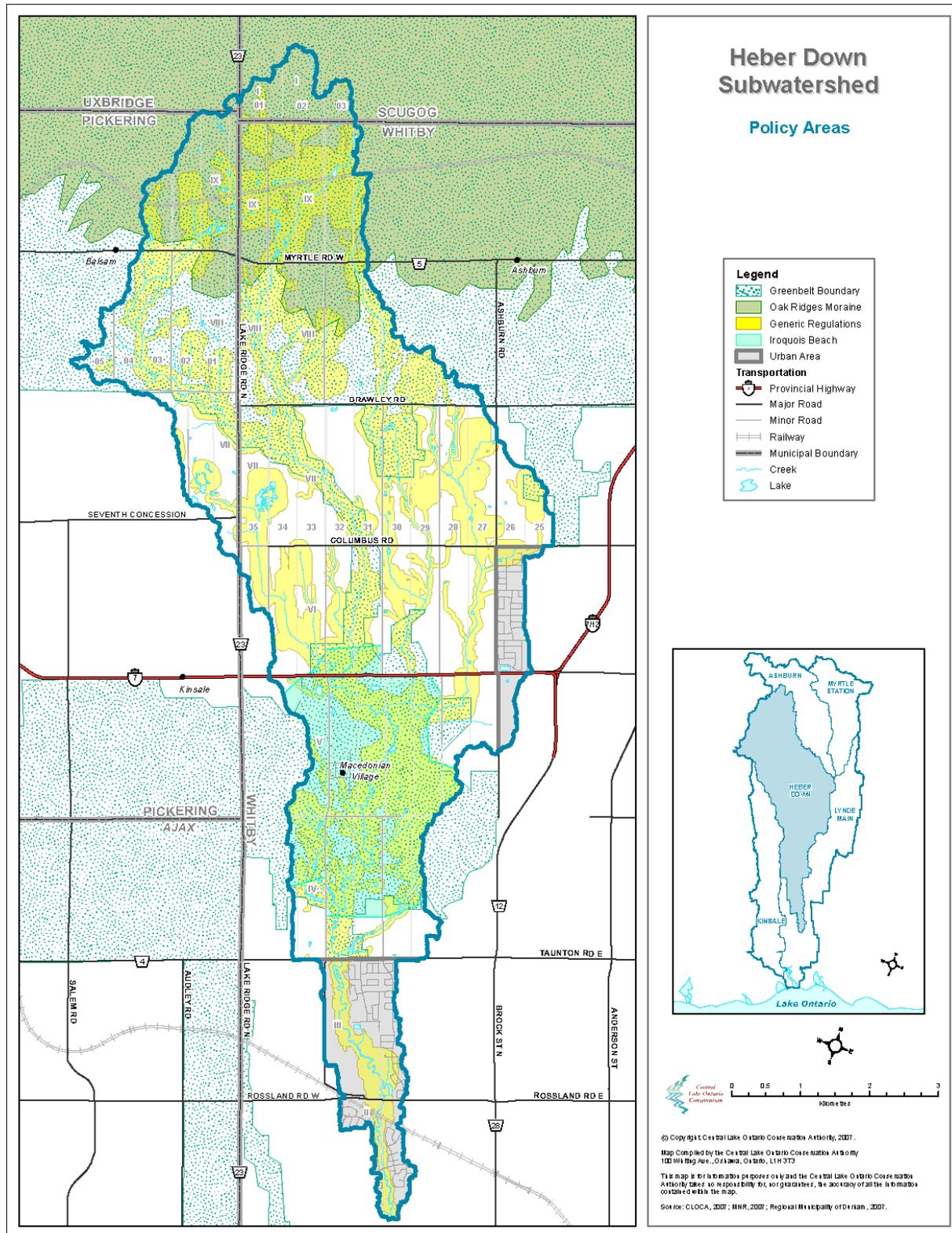


Figure 8: Heber Down subwatershed policy areas.

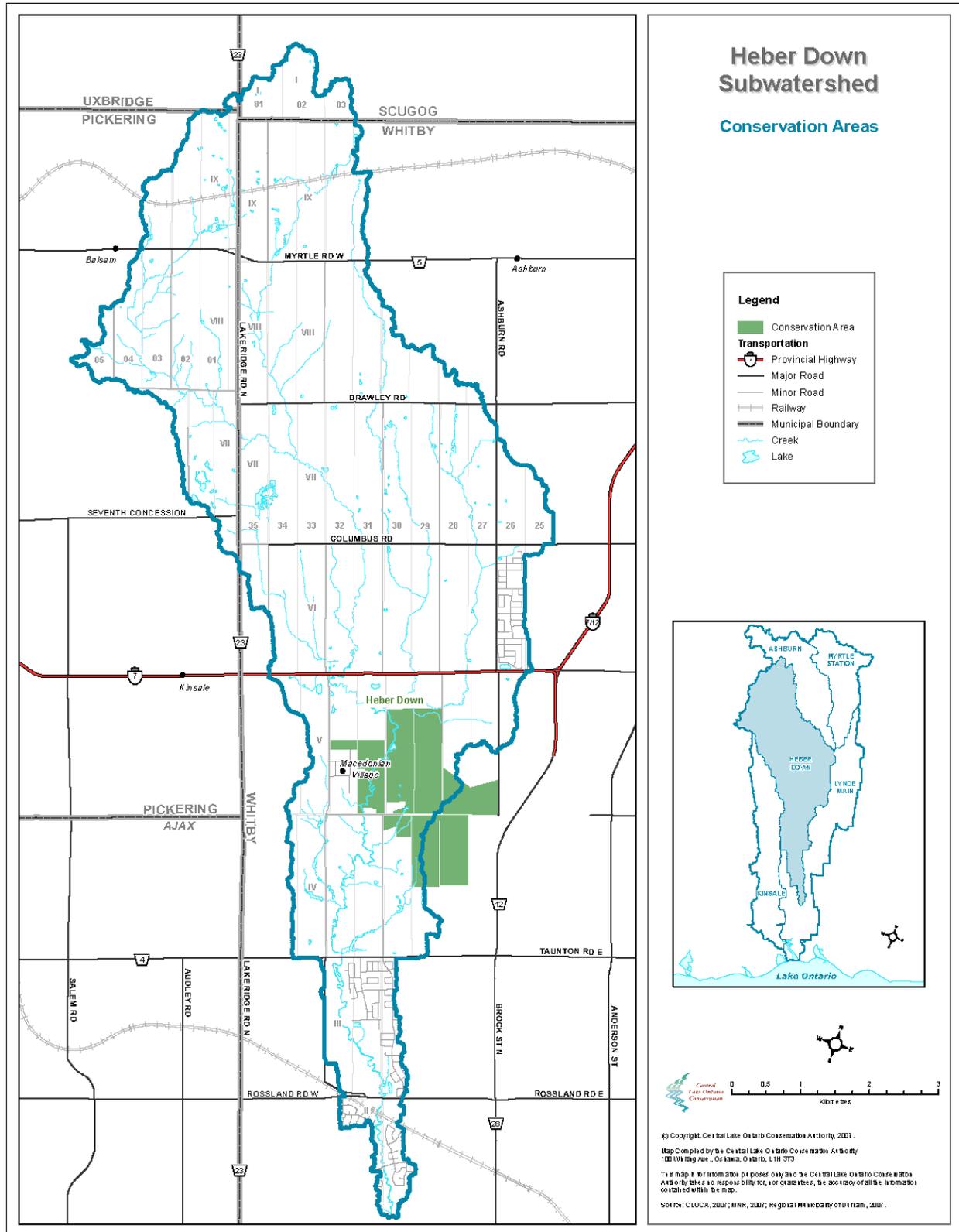


Figure 9: Conservation Areas in the Heber Down subwatershed.

Official Plan

The portion of this subwatershed south of Taunton Road, is within the urban area, and much of this area is residentially developed, with the exception of those lands located west of the tributary between Rossland and Taunton Roads. This area is designated "Future Urban Development Area (Deferral 6)". The most westerly portion of Brooklin Urban Area is within this subwatershed. The lands north of Highway 7 in Brooklin are residentially developed, the lands south of Highway 7 and north of proposed Highway 407 are designated "Prestige Industrial". Lands south of proposed Highway 407 are within the urban area and are designated "Residential". Lastly, the hamlet of Macedonian Village is in this subwatershed.

The area between Highway 7 and Taunton Road, west of Brooklin, is mostly designated "Open Space" in the Whitby Official Plan, and the lands north of Highway 7 are generally designated "Agriculture" reflecting the dominant land use in this area. Since much of this subwatershed is within the Greenbelt and/or ORM, development will be guided by the Oak Ridges Moraine Conservation Plan, the Greenbelt and the Town of Whitby's conformity amendments. An estate residential subdivision is designated in the Whitby Official Plan south of Brawley Road, west of Country Lane, however, this area has not been developed as an estate residential subdivision to date, rather a golf course is located here.

The Whitby Official Plan identifies the main Heber Down stream corridor as Environmentally Sensitive Area (ESA). Other tributaries within this subwatershed are either identified as ESA or Hazard Land. A number of mature woodlots have been identified, predominantly within the subwatershed's headwater areas. Heber Down Conservation Area is designated either "Open Space" or Hazard Land, with the provincially significant wetland identified as an Environmentally Sensitive Area.

Proposed Highway 407 will cross through the middle of this subwatershed, in fairly close proximity to existing Highway 7. Another future highway project in this subwatershed is the proposed widening of Highway #7. Recent work on the environmental assessment to widen Highway 7 to 4 lands has been completed. The Authority was involved in this review, providing comments and input.

Urban development within this subwatershed is limited to the urban area of Whitby and Brooklin. When and if the deferral is lifted from the lands between Rossland and Taunton Road (Deferral 6), these lands will be available for development, having an impact on this subwatershed. Limited development in Macedonian Village may be permitted in the form of minor rounding out when the Municipality undertakes its Greenbelt conformity amendment or infilling between 2 existing dwellings. However, major development is not permitted until such time as a hamlet secondary plan is adopted in accordance with the Durham Region Official Plan and Whitby Official Plan.

CLOCA Land Use

The dominant land use in this subwatershed is agriculture followed by natural areas (Figure 10). In the south portion of this subwatershed residential land uses are quite prevalent, reflecting the fact that 9% of this subwatershed is located within the urban area of Whitby or Brooklin. However, residential land uses, although concentrated

'the Whitby Official Plan identifies the main Heber Down stream corridor as Environmentally Sensitive Area (ESA)'

within the urban areas, are scattered throughout the subwatershed, with concentrations at Macedonian Village, along Ashburn, Cochrane, Country Lane and Brawley Roads. Dispersed throughout the subwatershed are 6 golf courses, more than any other subwatershed. One large aggregate operation is located in the central portion of this subwatershed.

It is unlikely that significant changes in land uses will occur in the majority of the subwatershed due to the fact that 58% of this subwatershed is within the ORM and Greenbelt. However, portions of the remaining 33% of the watershed may experience pressure for inclusion within an expanded urban boundary in order to accommodate future population growth. In particular, the lands north of Taunton Road and the lands west of Brooklin may be subject to future development pressures.



It is unlikely that significant changes in land uses will occur in the majority of the subwatershed due to the fact that 58% of this subwatershed is within the ORM and Greenbelt'



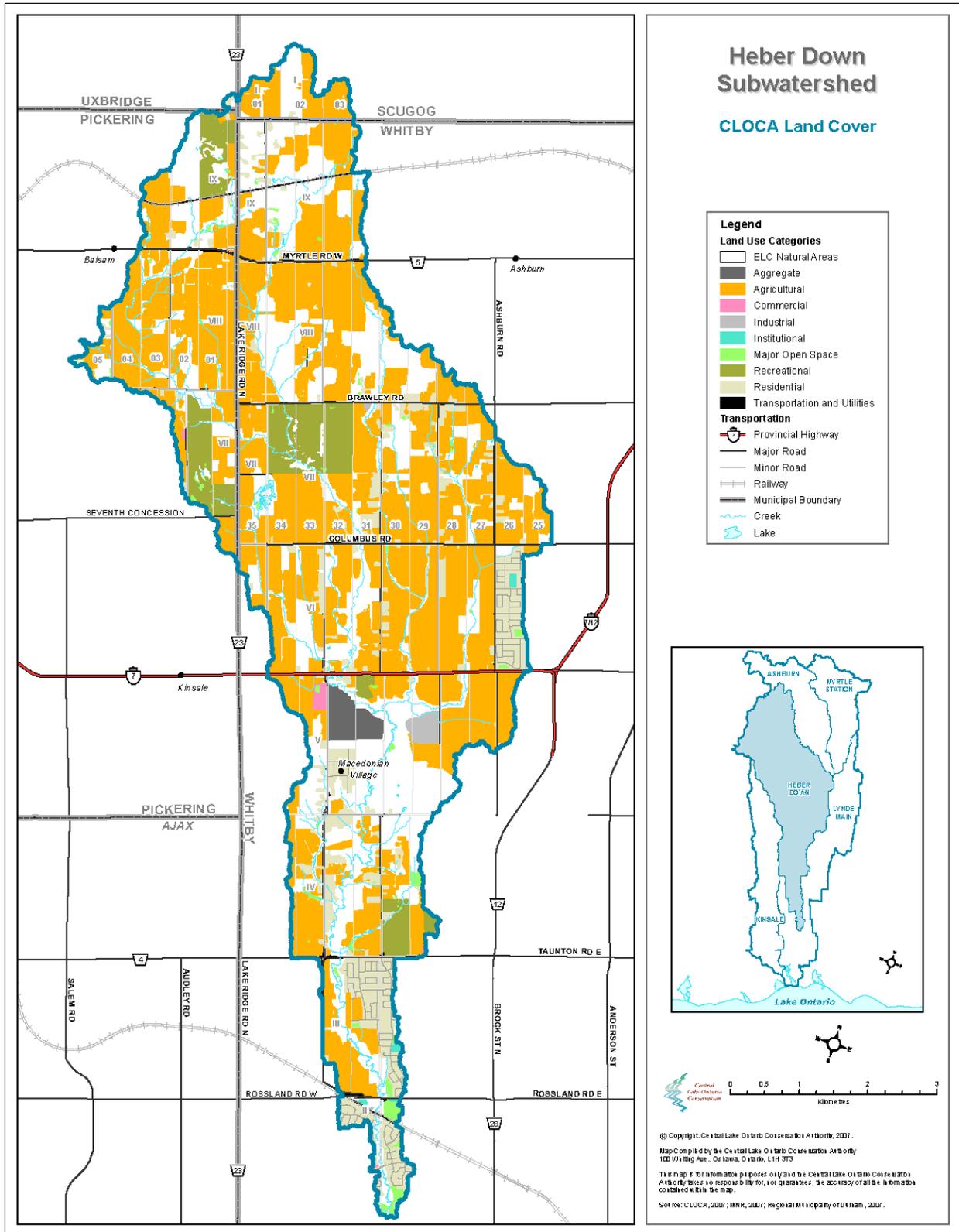


Figure 10: Heber Down subwatershed land cover.

4.2.3 Kinsale Subwatershed

This subwatershed is within the Town of Whitby, Town of Ajax and the City of Pickering (Figure 11) and drains 2198 ha of land.

Greenbelt, Conservation Areas and Conservation Authority Regulated Areas

This is the only subwatershed that does not extend to the Oak Ridges Moraine. However, this subwatershed has by far the greatest percentage of Greenbelt lands (56%). Lands within the urban boundary comprise just 5%, but it is the only subwatershed that has lands in both the Whitby and Ajax Urban Areas. This subwatershed has the greatest percentage, being 33% of land its area that is not within the Greenbelt, ORM or urban areas. Over 17% of this subwatershed is within the Lake Iroquois Beach. Audley Woods is located within this subwatershed, as is a portion of Lynde Shores Conservation Area, but these landholdings only represent 1.6% of the subwatershed (Figure 12). Still, the Greenbelt dominates this subwatershed. The only lands not subject to the Greenbelt are generally those lands that straddle Highway 7 and north, and the area in Whitby, south of the Lake Iroquois Beach. For the most part, the lands within Ajax in the Greenbelt are "Protected Countryside".

CLOCA's regulated area follows the stream tributaries and includes wetlands associated with Lynde Shores. Also included in the regulated area are wetlands associated with the Lake Iroquois Beach, and wetlands situated just north of the railway tracks around Halls Road.

'this is the only subwatershed that does not extend to the Oak Ridges Moraine. However, this subwatershed has by far the greatest percentage of Greenbelt lands (56%)'



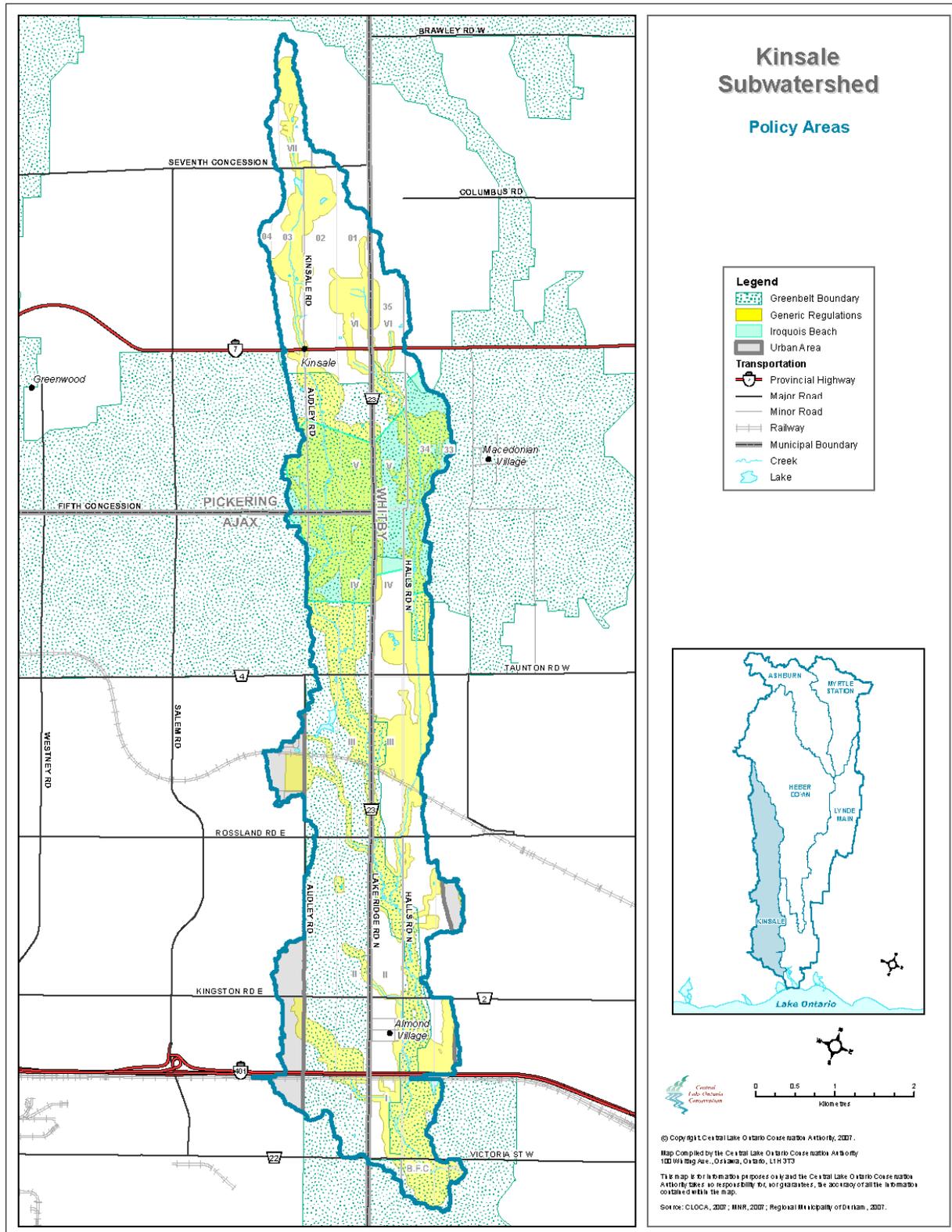


Figure 11: Kinsale subwatershed policy areas.

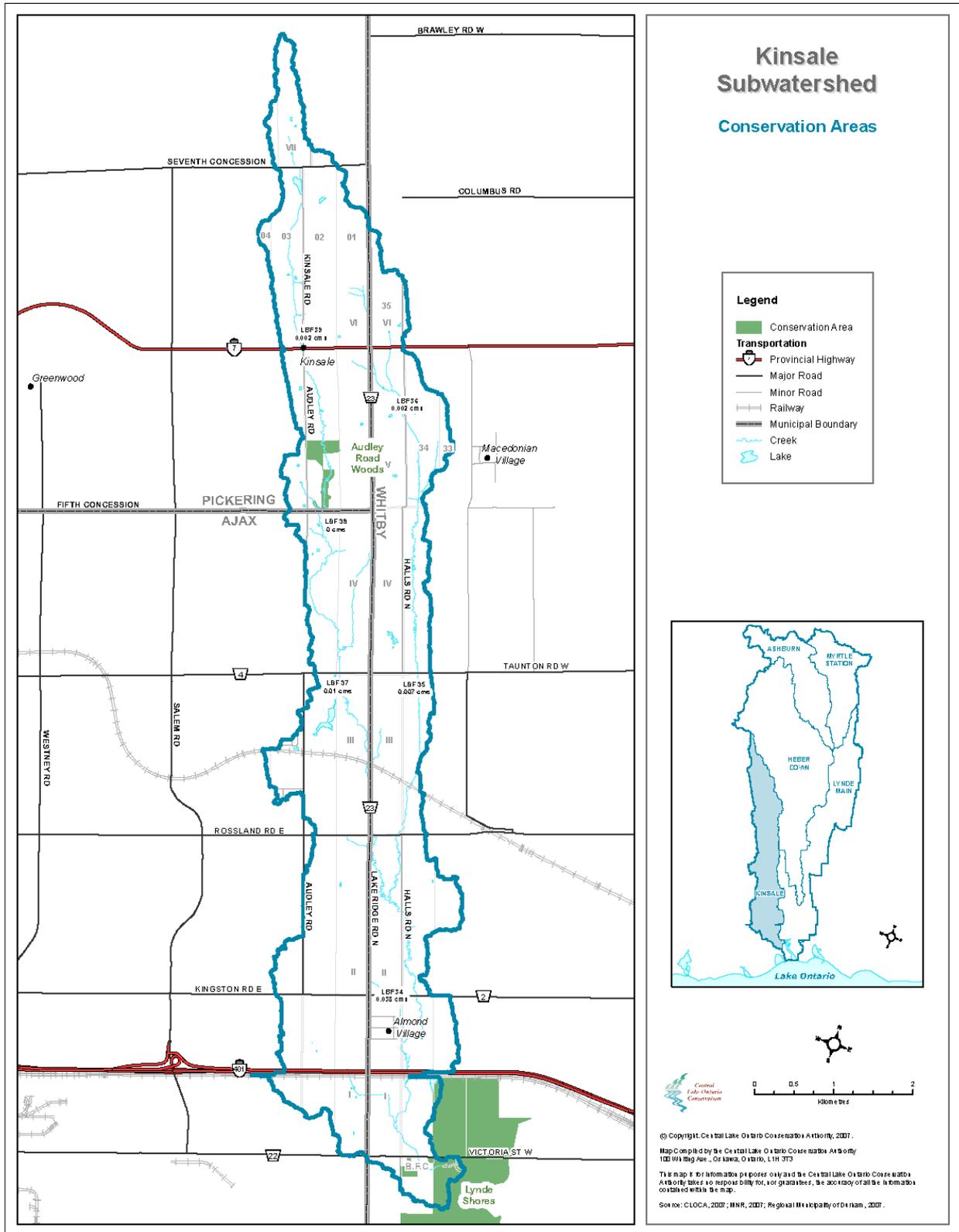


Figure 12: Conservation Areas in the Kinsale subwatershed.

Official Plan

The portion of this subwatershed within Pickering is not within any settlement areas, with the exception of the hamlet of Kinsale. The area between Fifth Concession Road and Highway 7 is within the Greenbelt and land uses are subject to the provisions of the Greenbelt Plan. The portion of the subwatershed north of Highway 7 is for the most part designated "Natural Areas", "Active Recreational Areas" (golf courses), or "Agricultural Areas". An approved but unbuilt estate residential subdivision is located adjacent to Audley Woods on the east side of Audley Road. This estate residential subdivision is approved for 14 lots.

Most of the area within the Town of Ajax is designated "Rural" and is within the Greenbelt. Yet, there is some of this subwatershed within the Ajax Urban Area designated either "Employment Area" or "Low Density Residential". Not all of these lands have been developed.

There is a small portion of this subwatershed located within the Whitby Urban Area identified for future urban growth and is designated "Future Urban Development Area (Deferral 6)". This designation has been deferred, pending a decision regarding the Highway 401-407 connecting link. For the most part, the remainder of the lands within the Town of Whitby within this subwatershed is designated "Open Space".

The Whitby Official Plan identifies most of the Kinsale subwatershed stream corridors as Hazard Land. Similar designations of Stream Corridor and Valley Systems designate the stream corridor in the Pickering Official Plan and the Ajax Official Plan respectively. The Audley Woods are located within Pickering and are designated "Natural Areas".

There are 2 hamlets in this subwatershed, being Kinsale and Almond Village. Kinsale is identified as a priority area for rural growth in the Pickering Official Plan. Prior to growth occurring, a hamlet expansion review is required to be undertaken. Similarly, major development in Almond Village is not permitted until such time as a hamlet secondary plan is adopted in accordance with the Durham Region Official Plan and Whitby Official Plan. However, development in the form of minor rounding out or infilling between 2 existing dwellings may be permitted. As such, these hamlets may provide the ability to support additional rural growth in the form of residential lots.

A decision with respect to the proposed extension to Highway 407 will have direct and indirect impacts on this subwatershed. The highway, if built, will cross through the upper portion of this watershed and the Highway 401-407 link runs up the eastern limit of this subwatershed. Upon issuance of a final decision with respect to the preferred location of the highway and its link, Deferral 6 can be lifted and planning and development of Whitby's Future Urban Development Area within this subwatershed can begin. Another future highway project in this subwatershed is the proposed widening of Highway #7. Recent work on the environmental assessment to widen Highway 7 to 4 lanes has been completed. The Authority was involved in this review, providing comments and input.

'the Whitby Official Plan identifies most of the Kinsale subwatershed stream corridors as Hazard Land'

CLOCA Land Use

As seen in Figure 13, the dominant land use is agriculture. Natural areas have a presence in this subwatershed, with large areas located at the south end (Lynde Shores Conservation Area) and in proximity to, and including, Audley Woods. Although 5% of this subwatershed is located within an urban boundary, residential land uses as mapped in Figure 13 are not representative of this fact. Existing residential land uses are scattered throughout the subwatershed with concentrations within the hamlet of Almond Village, and along Audley Road, the south portion of Lake Ridge Road and the north part of Halls Road. There are 2 golf driving ranges within this subwatershed, and portions of 2 golf courses. While depicted as agricultural land use in Figure 13, a small parcel located on the north side of Concession Rd. 7 just east of the existing recreation lands has recently been reclassified as golf course. There are 3 aggregate land uses, but the one in proximity to Lynde Shores is not active.

A good portion of this subwatershed south of Taunton Road will be urbanized, and it can be expected that this urbanization will impact the ecological integrity of the subwatershed. In addition, those lands not within the Greenbelt, may be subject to development pressures. Those lands within the Town of Whitby and not within the Greenbelt may experience pressures for urban expansion, particularly once a final decision with respect to Highway 407 is made. However, it is anticipated that the headwaters of this subwatershed will not experience a lot of development and will likely remain for the most part, in agricultural production.



'a good portion of this subwatershed south of Taunton Road will be urbanized, and it can be expected that this urbanization will impact the ecological integrity of the subwatershed'

4.2.4 Ashburn Subwatershed

This subwatershed is within the Town of Whitby, Township of Scugog and the most north westerly portion being within the Town of Uxbridge (Figure 14) and drains 1728 ha of land.

Oak Ridges Moraine, Greenbelt, Conservation Areas and Conservation Authority Regulated Areas

A good portion of this subwatershed is within the Oak Ridges Moraine (80%) or Greenbelt (18%). Crow's Pass Conservation Area is partially located within this subwatershed and accounts for just over 1.5% of the land area (Figure 14).

The lands around the hamlet of Ashburn and Myrtle Road West, north to the railway are designated "Countryside Area" in the ORMCP. The hamlet of Ashburn is designated "Rural Settlement". A designation of "Natural Core Area" exists around Chalk Lake. This is the only area within the Lynde Creek watershed that is designated "Natural Core Area". Chalk Lake, being a kettle lake, is the only kettle lake within CLOCA's jurisdiction and as such is a unique and important feature in the landscape. About half of the north shore of this lake is developed residentially. The remainder of the lands within the ORM in this subwatershed are designated "Natural Linkage Area", with the exception of the area north of Chalk Lake Road in Lots 3 and 4 in Scugog Township. These lands are designated "Countryside Area", reflecting an estate residential subdivision and golf course.

With respect to the Greenbelt within this subwatershed, most of the area is identified as "Protected Countryside" with the exception of the stream corridors. The Greenbelt designation follows the tributary south to its confluence with the Lynde Main subwatershed and then is identified as an external connector. A very small portion of this subwatershed, at the south end, is not within the Greenbelt or ORM. In the Whitby Official Plan, these lands are designated "Agriculture".

Figure 14 also identifies those lands subject to the Authority's generic regulations. Generally, the regulated area is similar to that depicted as "Natural Heritage System" in the Greenbelt. Along the north side of Myrtle Road West, there is a lot of land within the regulation limits, reflecting a series of wetland areas.

Chalk Lake Capacity Study

To address potential cumulative impact from development around Chalk Lake, the Ministry of the Environment (MOE) recommended using the Lakeshore Capacity Model to investigate nutrient loadings. From 2002 to 2005, CLOCA sampled the lake monthly from May to September to obtain phosphorous levels. Monthly sampling was reduced to two samples per summer in 2006 and 2007. Due to the unique hydraulic and hydrogeological functions of this lake, which came to light during this sampling period, it was discovered that the Lakeshore Capacity Model was not the best method to obtain adequate representation of phosphorous levels. Rather, the sampling provided real time data for phosphorous levels, offering a better understanding of the nutrient dynamics of the Lake. It is anticipated that this study will be finalized in the near future with the release of a findings report.

'a designation of "Natural Core Area" exists around Chalk Lake. This is the only area within the Lynde Creek watershed that is designated "Natural Core Area"'

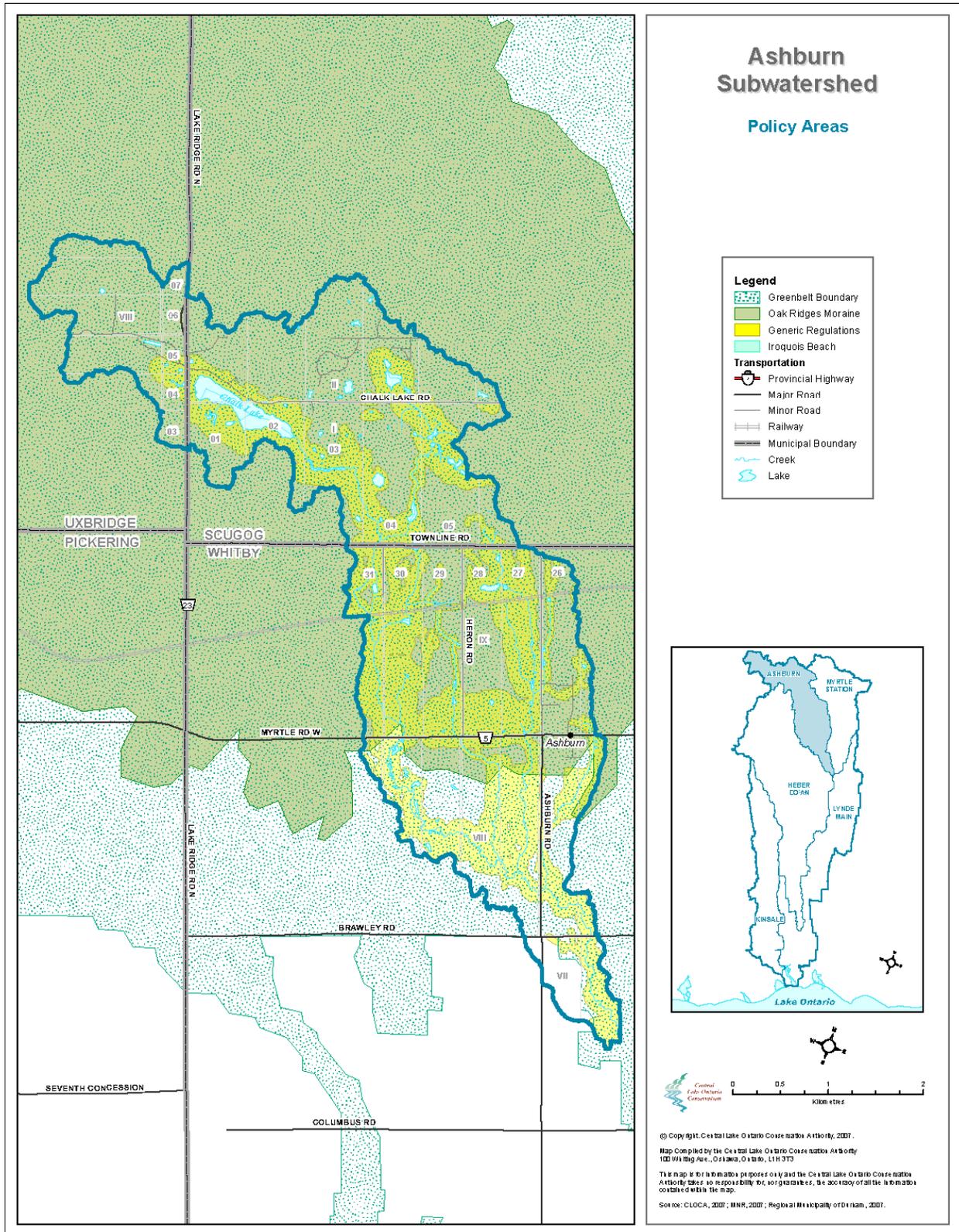


Figure 14: Ashburn subwatershed policy areas.

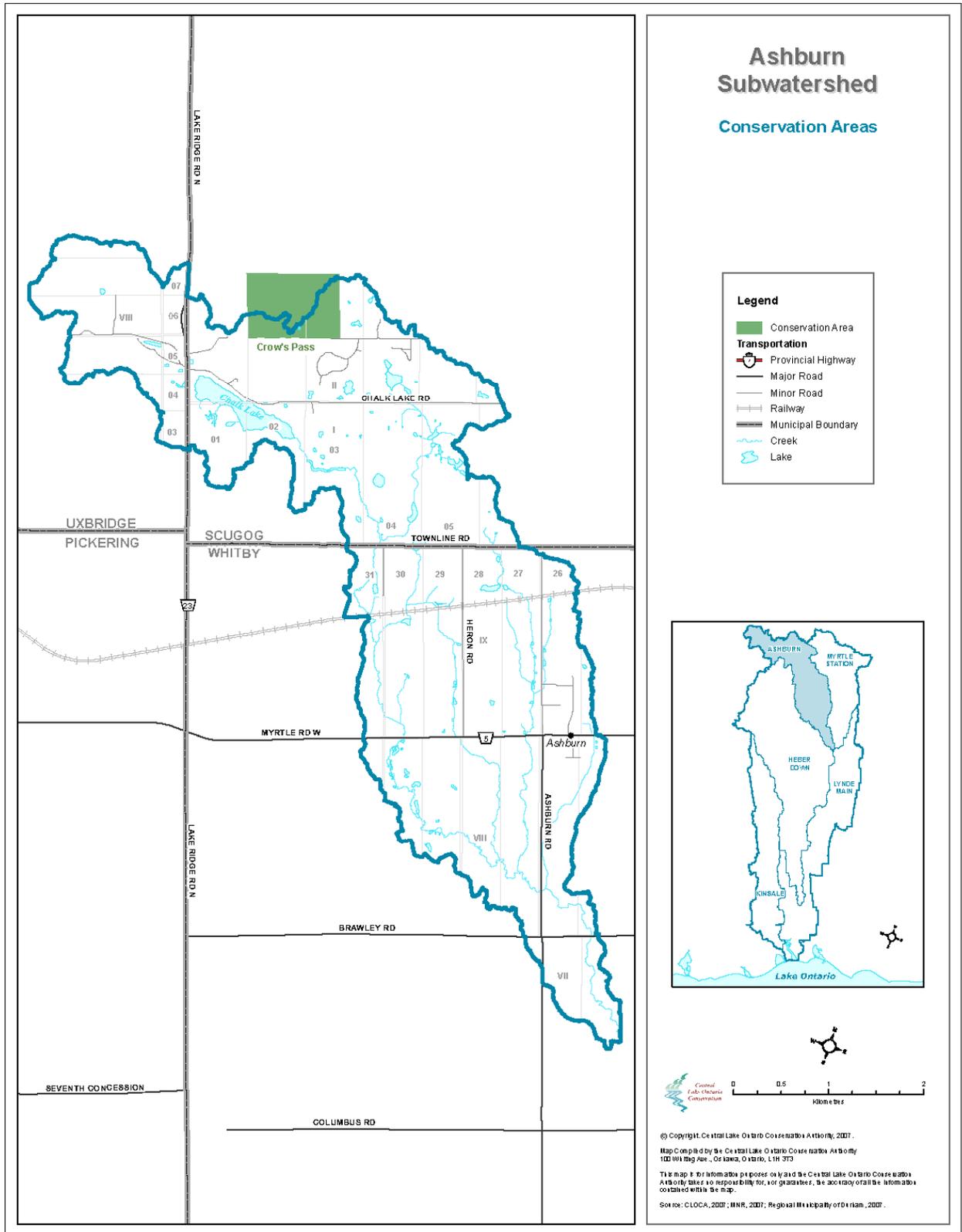


Figure 15: Conservation Areas in the Ashburn subwatershed.

Official Plan

Land use in this subwatershed is predominantly rural and agricultural in nature and is so reflected in the relevant Official Plans. However, an estate residential designation, partially within this subwatershed and Myrtle Station subwatershed, located at the intersection of Brawley Road and Cedarbrook Trail (Figure 18) and the hamlet of Ashburn are the exceptions within the Whitby Official Plan. Like the other hamlets, development within the hamlet of Ashburn is limited to minor rounding out and infilling between two existing residences until such time as a hamlet secondary plan is completed in accordance with the Region of Durham and Whitby Official Plans.

CLOCA Land Use

Agriculture is the dominant land use (Figure 16) in this subwatershed. Natural areas are prevalent in the north part of the subwatershed and along stream valleys. Residential land uses exist within the hamlet of Ashburn, along Heron Road, on the shores of Chalk Lake, and in proximity to the golf course located in Scugog Township. Although there are only 2 golf courses in this subwatershed, the land extent of these golf courses is quite substantial. This subwatershed has the only ski hills within the entire Lynde Creek watershed.

For the most part, development in this subwatershed is determined by the Oak Ridges Moraine Conservation Plan and the Greenbelt Plan. It is anticipated that this subwatershed will not see a significant change in land uses nor the introduction of urban land uses, with the exception of a few residential dwellings.

'land use in this subwatershed is predominantly rural and agricultural in nature and is so reflected in the relevant Official Plans'



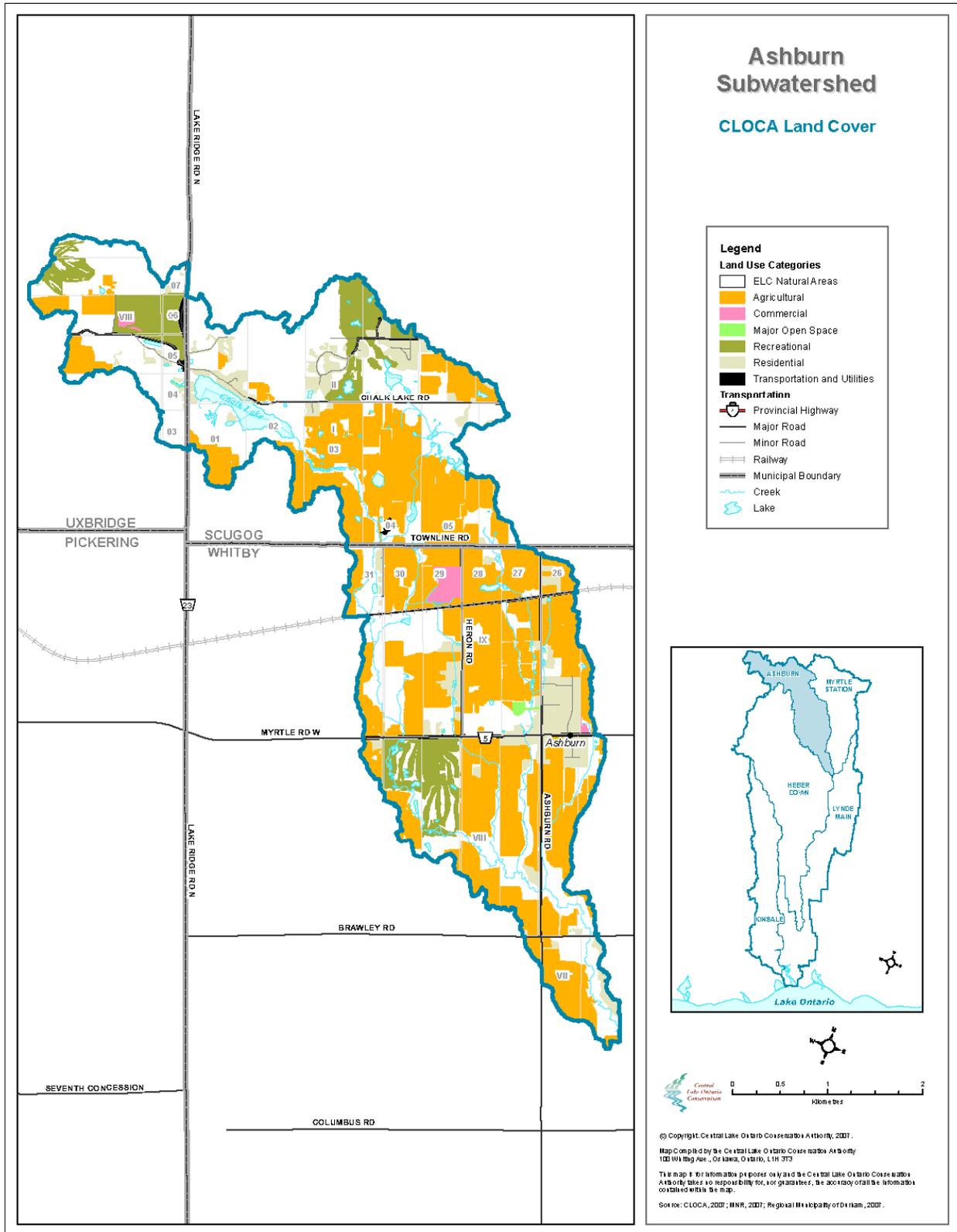


Figure 16: Ashburn subwatershed land cover.

4.2.5 Myrtle Station Subwatershed

This subwatershed is within the Town of Whitby and the Township of Scugog (Figure 17) and drains 1562 ha of land. This is the only subwatershed that does not have any CLOCA Conservation Areas within it.

Oak Ridges Moraine, Greenbelt and Conservation Authority Regulated Areas

Like the Ashburn subwatershed, this subwatershed is almost entirely within the Oak Ridges Moraine (76%) or the Greenbelt (22%), with the Greenbelt designation following the tributary south to its confluence with the Lynde Main subwatershed.

The north east quadrant of this subwatershed is designated "Countryside" in the ORMCP as is generally the area between the south extent of the ORM and the railway. There is some "Countryside" directly north of the tracks, west of Mud Lake Road. The remainder of the area in this subwatershed within the ORM is designated "Natural Linkage Area". The Hamlets of Myrtle and Myrtle Station are designated "Rural Settlements" in the ORMCP.

The west tributary, north of Brawley Road, is identified within the "Natural Heritage System" of the Greenbelt. The remainder of the subwatershed within the Greenbelt is "Protected Countryside".

Like the Ashburn subwatershed, a very small portion of this subwatershed, at the south end, is not within the Greenbelt or ORM. In the Whitby Official Plan, these lands are designated "Agriculture".

Figure 17 identifies those lands subject to the Authority's generic regulations. For the most part, the regulated areas in this subwatershed represent the stream corridors.

Official Plan

Land use in this subwatershed is predominantly rural and agricultural in nature and is so reflected in the relevant Official Plans. However, in the Whitby Official Plan, a designation of estate residential exists where Cedarbrook Trail intersects with Brawley Road. This area is known as Brawley Estates.

The hamlets of Myrtle and Myrtle Station straddle the Lynde Creek and Oshawa Creek watersheds and are just within this subwatershed. These hamlets may provide some opportunity for limited development in the form of minor rounding out or infilling between existing residential development. Major development within these hamlets cannot be undertaken until such time as a hamlet secondary plan is prepared in accordance with the Durham Region Official Plan and the Whitby Official Plan.

'76% of this subwatershed is within the ORM and 22% is within the Greenbelt'

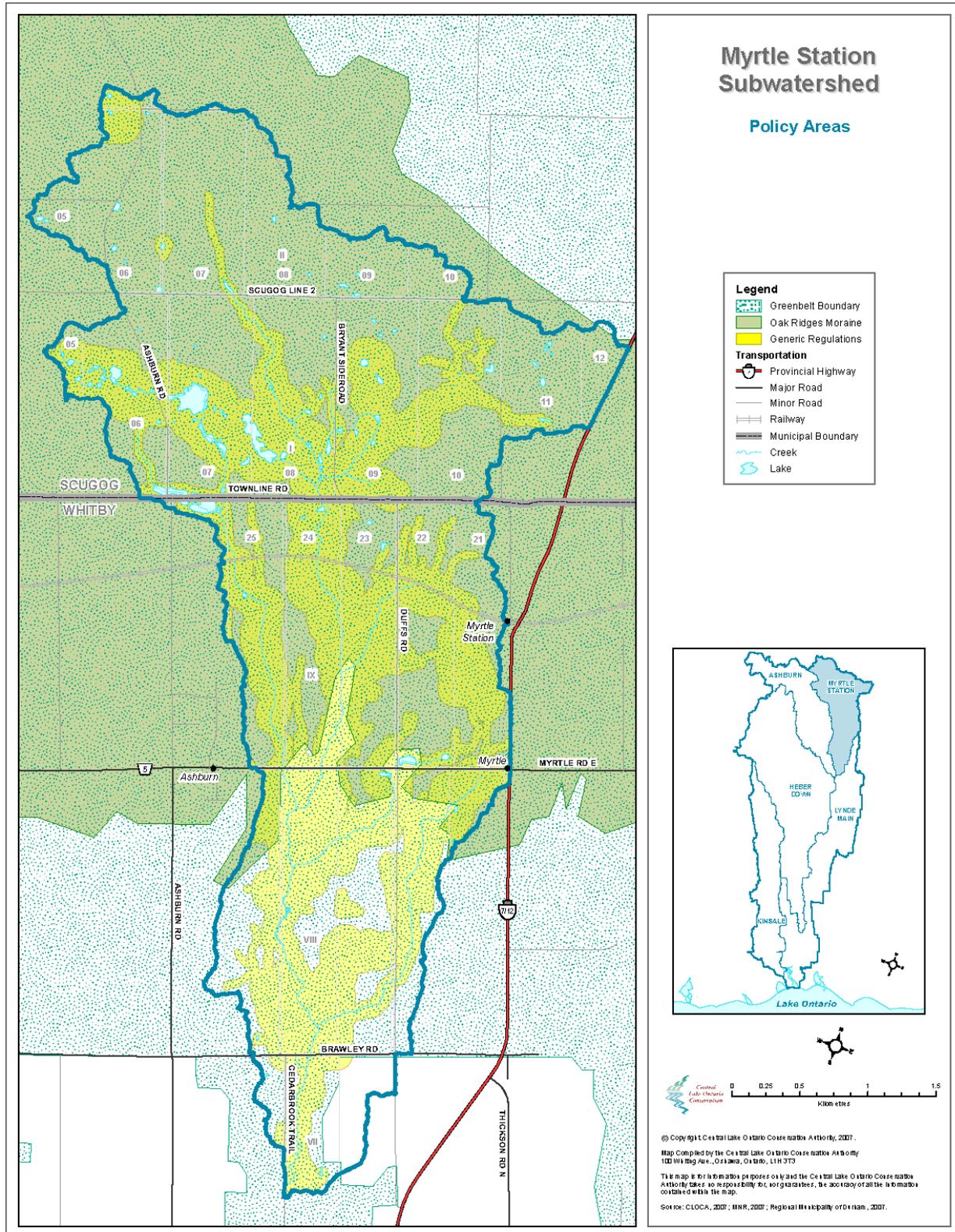


Figure 17: Myrtle Station subwatershed policy areas.

CLOCA Land Use

Throughout this subwatershed, agriculture is the prevalent land use (Figure 18). The westerly portions of the Hamlets of Myrtle and Myrtle Station are within this subwatershed. In addition to the residential land uses within these hamlets, pockets of residential land uses are also found at the south end of the subwatershed along Cedarbrook Trail, Myrtle Road, Townline Road, Scugog Line 2 and Ashburn Road. One large golf course is located at the north end of the subwatershed in proximity to 2 aggregate land uses. Natural areas in this subwatershed are predominant along the stream valleys and in the northern portion of the subwatershed adjacent to Ashburn Road, between Townline Road and Scugog Line 2.

For the most part, development in this subwatershed is determined by the Oak Ridges Moraine Conservation Plan and the Greenbelt Plan. It is anticipated that this subwatershed will not see a significant change in land uses nor the introduction of urban land uses, with the exception of a few residential dwellings



'the westerly portions of the Hamlets of Myrtle and Myrtle Station are within this subwatershed'

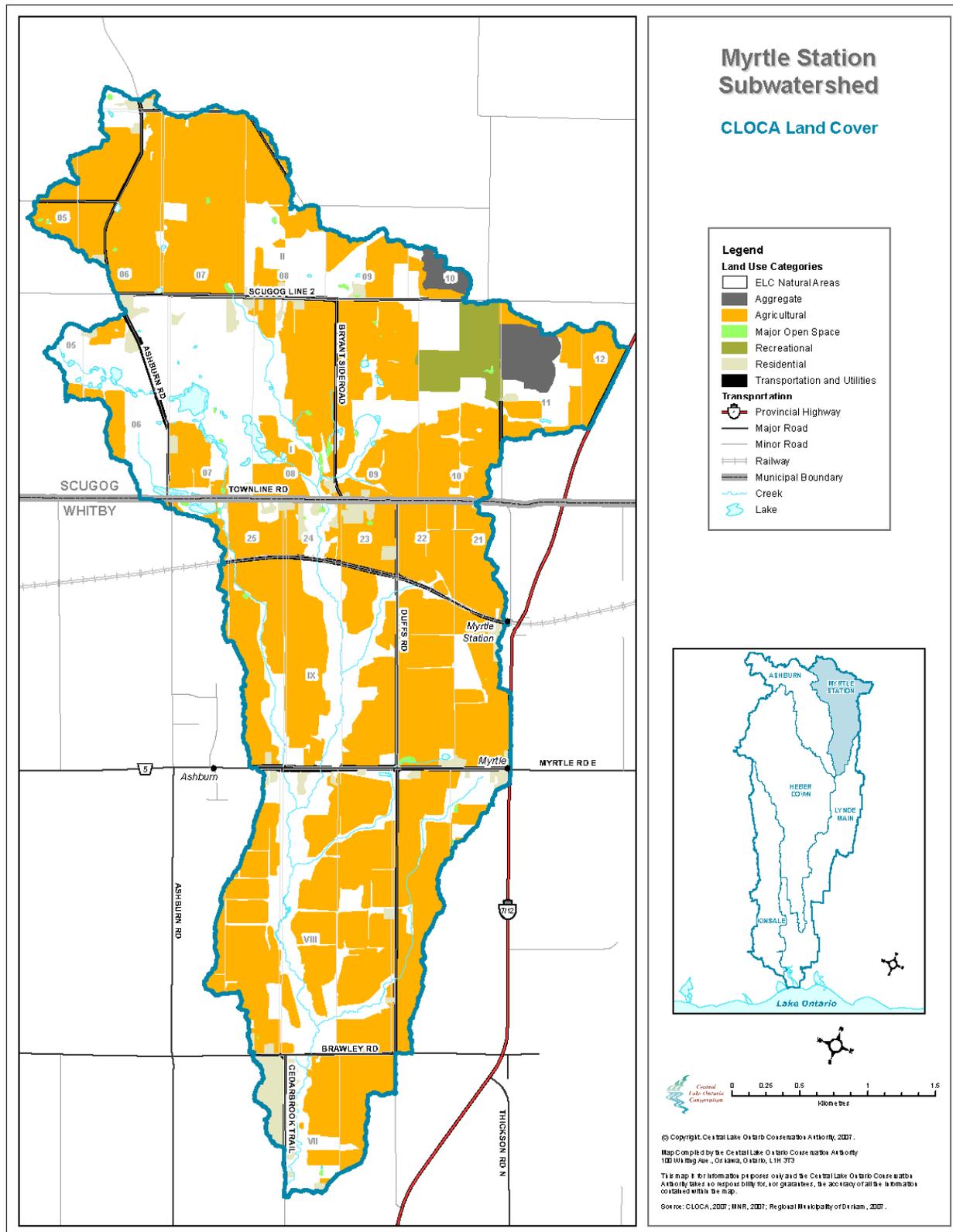


Figure 18: Myrtle Station subwatershed land cover.

5.0 CONCLUSION

The north part of the Lynde Creek watershed is within the Oak Ridges Moraine and as such, development and land use is subject to the policies of the Oak Ridges Moraine Conservation Plan. The area just south of the moraine is, for the most part, within the provincial Greenbelt, and like the lands in the moraine, development and land use will be subject to the policies of the Greenbelt Plan. As these plans promote protection of the natural environment and agriculture, urban development is not expected. As such, the Ashburn and Myrtle Station subwatersheds will not see major development pressures. This can also be said for the north portions of Kinsale, Heber Down and Lynde Main subwatersheds.

Highway 407 will have a large impact on this watershed as it will have an impact on urban growth patterns. A project of this scale could have a major impact on the environmental health of the watershed. It is important that Highway 407 does not environmentally sever the Lynde Creek watershed and the subwatersheds through which it passes. Every attempt should be made to ensure connectivity and wildlife movement is maintained and that surface water flows and groundwater flows are not adversely affected.

The Town of Whitby continues to grow, with the majority of this development anticipated to occur within the Future Urban Development Areas in the Kinsale and Heber Down subwatersheds. Approval for development of these areas has been deferred and it is not until resolution of the deferral that development can be considered. The majority of the Lynde Main subwatershed is developed and future growth is anticipated to predominantly be in the form of infill and intensification. Growth pressures in this watershed will be felt, particularly on those lands adjacent to the urban area and not within the Greenbelt and ORM. It is anticipated that in the long term, urban expansion within these areas may occur.

'Highway 407 will have a large impact on this watershed as it will have an impact on urban growth patterns'



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WHAT WE DO ON THE LAND IS MIRRORED IN THE WATER

APPENDIX A: Oak Ridges Moraine Conservation Plan Land Use Designations

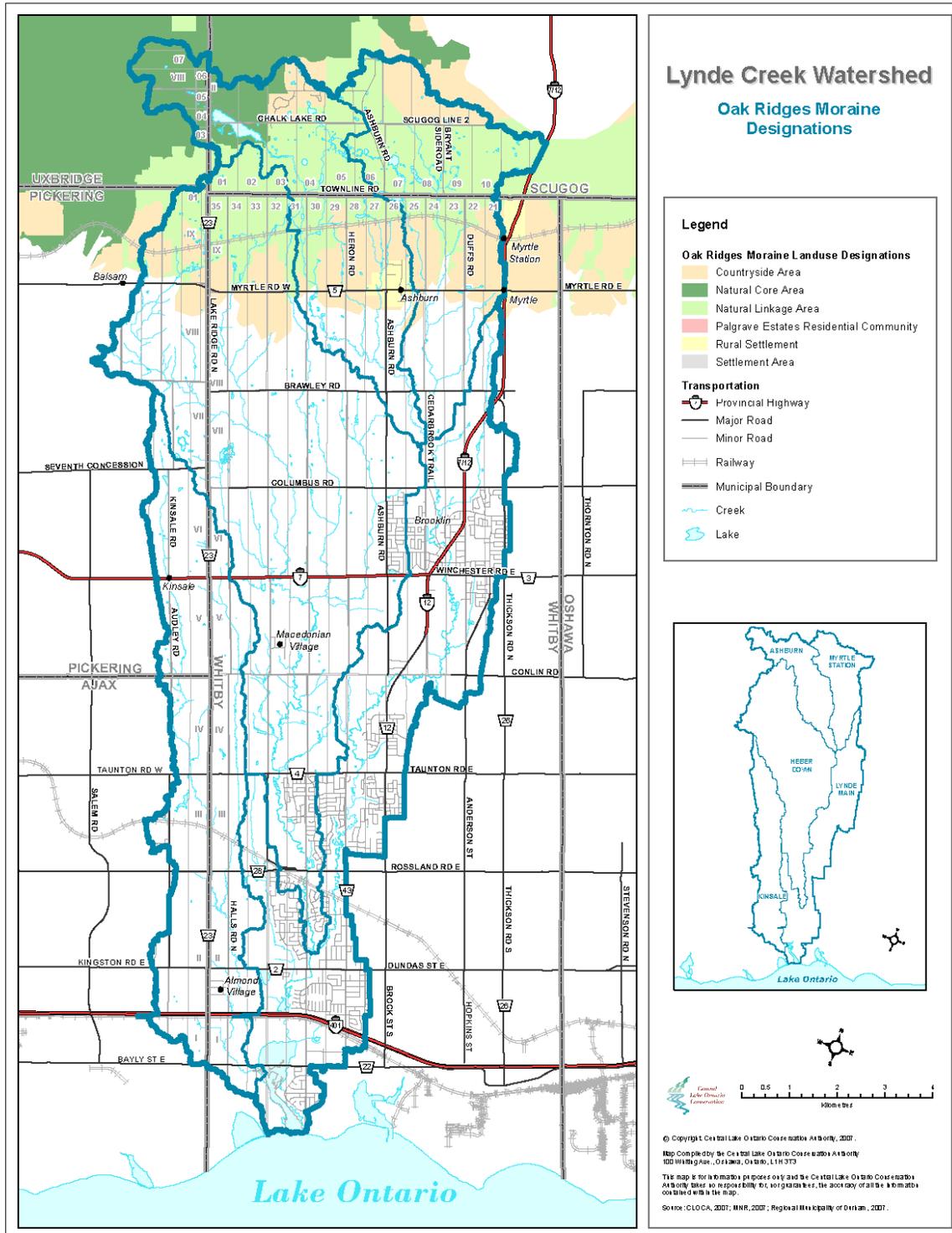


Figure 19: Oak Ridges Moraine Conservation Plan Land Use Designations.

APPENDIX B: Greenbelt

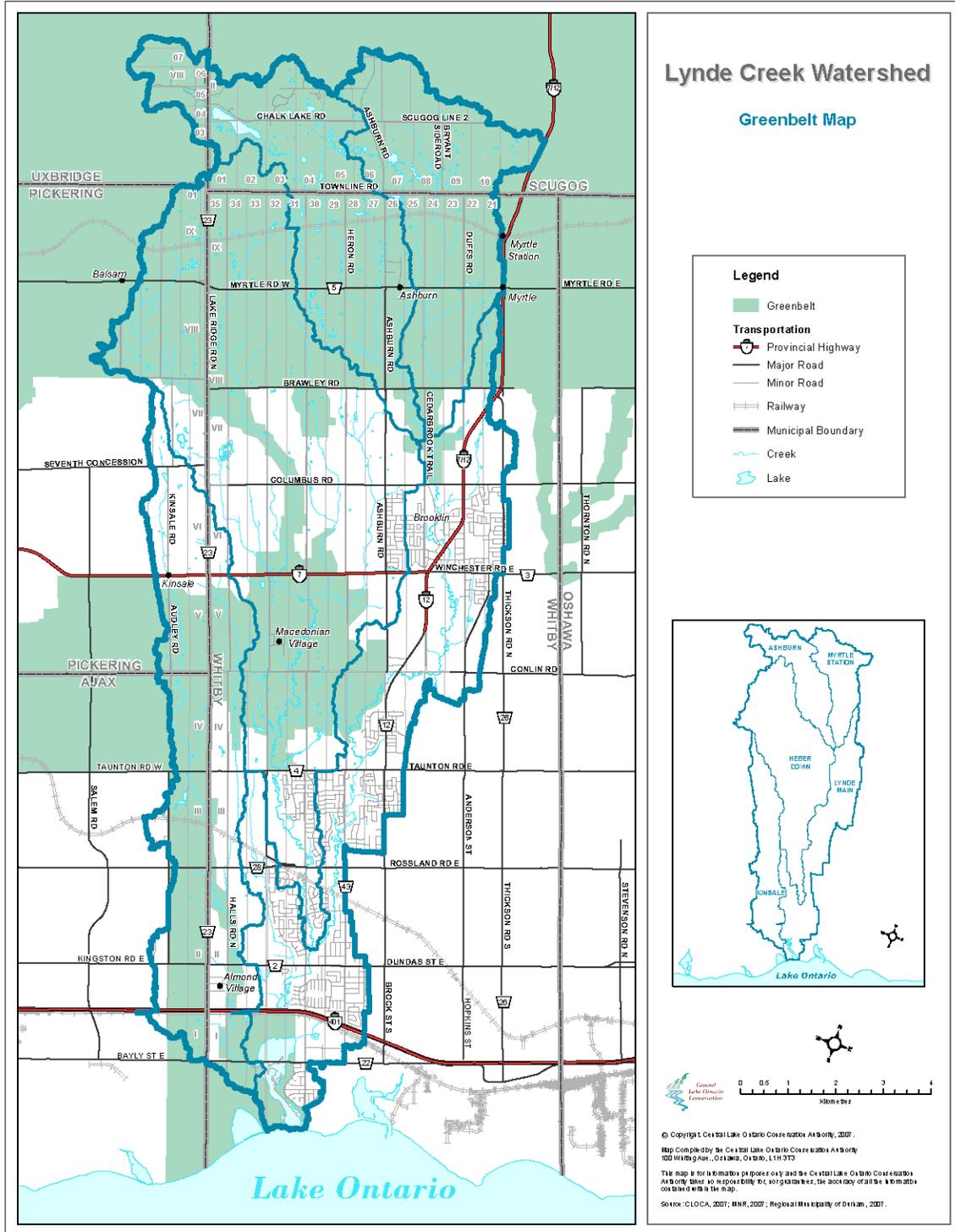


Figure 20: Greenbelt.

APPENDIX C: Highway 407 East Technically Recommended Route DRAFT

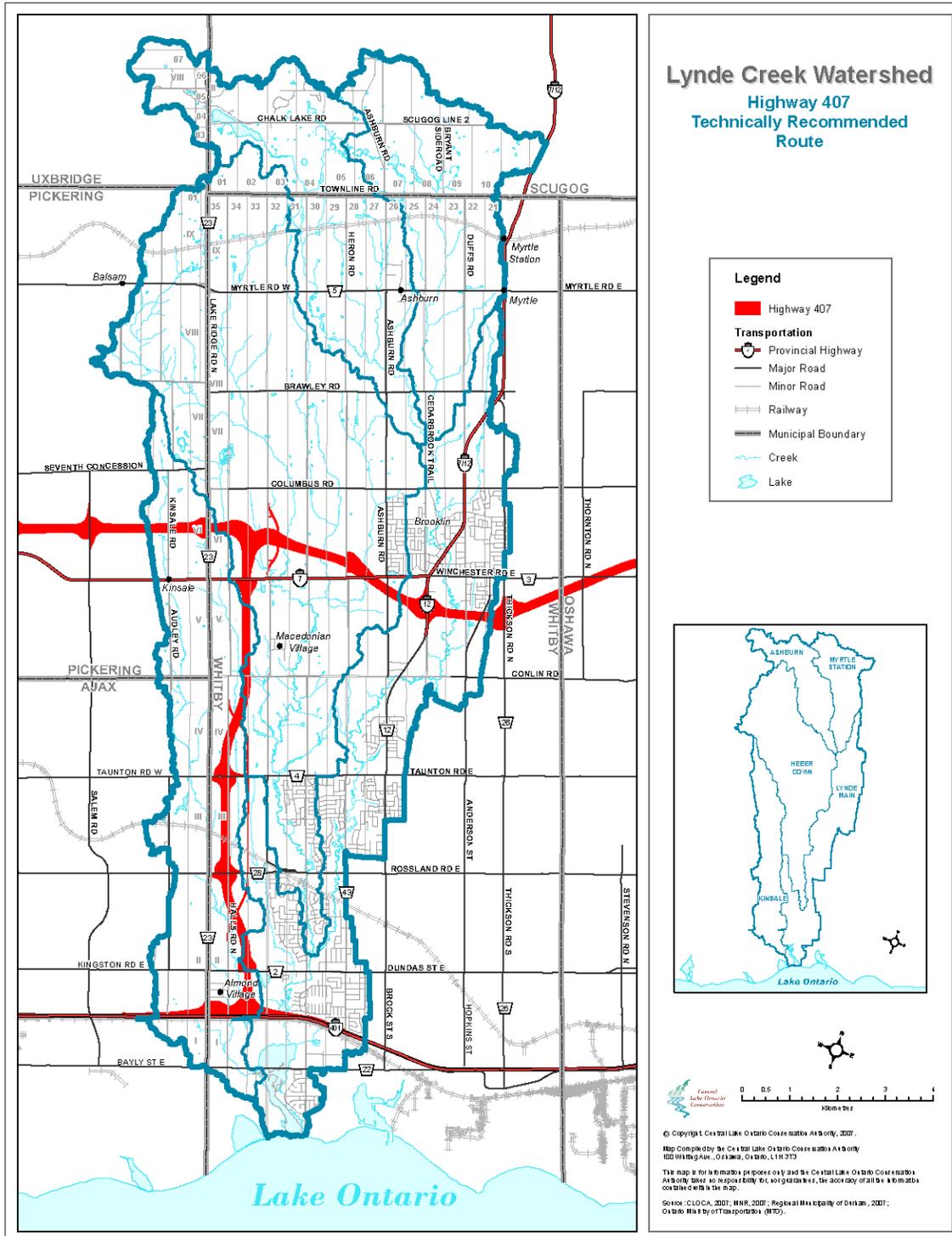


Figure 21: Highway 407 Technically Recommended Route (subject to change) (MTO, 2007).