SUBJECT: Proposed Natural Areas Acquisition Fund Strategy (PED09007(a)) (City Wide)

EXECUTIVE SUMMARY:

At its meeting of February 3, 2009, the Economic Development and Planning Committee approved the following recommendations, as amended, from Report PED09007.

(a) That staff be directed to prepare a Natural Areas Acquisition Fund Strategy and report back to Economic Development and Planning Committee by September 2009.
(b) That this strategy in (a) above include an appropriate governance, business, and financial model for a Natural Areas Acquisition Fund, including options which will not have any impact on the levy.

The general purpose of a Natural Areas Acquisition Fund Strategy is to outline the requirements for the implementation of the Natural Areas Acquisition Fund. It provides details on the suite of securement tools available for landowners who have natural heritage system lands located on their property. It also provides a framework for determining the natural heritage lands that would be suitable for acquisition by the City of Hamilton, and fosters relationships with Hamilton partners that currently participate in the securement of natural heritage system lands within the City of Hamilton.

The Natural Heritage System lands within the City of Hamilton have been identified within the Council adopted Rural and Urban Official Plans as “Core Areas” (those that have the highest ecological significance), and Linkage Areas (those lands that support the Core Areas).

The Natural Areas Acquisition Fund is designed to receive and hold monies in order to provide funds to the City and conservation bodies and organizations to use for the securement of Natural Heritage System lands. Organizations typically include: Conservation Authorities, non-government organizations, not-for-profit bodies, and other such organizations interested in preserving and managing natural heritage features. Such organizations would use such a fund for the acquisition or securement of natural areas within a municipality.

Through consultation with key stakeholders, the Natural Areas Acquisition Fund Strategy has been developed on the basis of the following key objectives:

1. To consider the full suite of securement tools available, including planning policy and private land stewardship, and to promote existing incentive and education programs.

2. To identify and develop eligibility criteria for securement or acquisition activities that prioritize Municipal interests and will complement related municipal initiatives and programs (e.g. Vision 2020, The City’s Corporate Strategic Plan).

3. To operate on a multi-agency and multi-stakeholder basis, and provide a source of leveraged funds that will complement partner agency contributions and/or grants.

4. To consider land securement or acquisition options in full consultation with all interested stakeholders, including relevant Municipal Citizen Advisory Committees (e.g. Environmentally Significant Areas Impact Evaluation Group), and administer it on a consistent and equitable basis.

5. To complement existing land securement activities by partner agencies, including Conservation Authorities and non-government organizations operating in the City of Hamilton.
Monies from the Natural Areas Acquisition Fund may be used to:

- Purchase available lands outright;
- Partner with a conservation organization to provide leveraged funds in exchange for management of the lands;
- Provide monies for education programs on land stewardship and preservation; or,
- Pay legal and other fees to finalize the sale and/or management agreement for natural heritage lands.

This report identifies that the development of a Natural Areas Acquisition Strategy would be consistent with numerous existing approved policies within the City, including the City of Hamilton’s Corporate Strategic Plan, Vision 2020, the Council adopted City of Hamilton Rural Official Plan, and the Council adopted City of Hamilton Urban Official Plan. Accordingly, further direction is required to develop a Natural Areas Acquisition Fund Strategy for the City of Hamilton, including an appropriate funding source or sources to implement the strategy.

The development of a Natural Areas Acquisition Fund Strategy will identify and prioritize the natural heritage features within the City that would qualify for acquisition, the different donation and fee-simple land securement options, the creation of a Stakeholder Working Group to determine high priority acquisition areas, how this Strategy will complement other land acquisition strategies, and the identification of appropriate funding sources, including options which have no impact on the levy.

**BACKGROUND:**

In January 2008, the following motion was approved by Council, directing staff to review the potential for a Hamilton Natural Areas Acquisition Fund:

“Whereas, other municipalities such as Halton, Niagara, and York have established municipal Natural Areas Acquisition Funds; and;

Whereas, there is an on-going need to protect natural areas such as wetlands and forests that provide important ecosystem services to Hamilton such as water storage and filtration, carbon storage, air purification, and biodiversity protection; and,

Whereas, the establishment of a Natural Areas Acquisition Fund may provide the City with an opportunity to leverage funds from non-governmental organizations, such as the Nature Conservancy of Canada.

Now, therefore, staff be directed to research different municipal models for establishment of a Hamilton Natural Areas Acquisition Fund and report back to the Economic Development and Planning Committee.”
In response to the motion, Planning staff reviewed existing and proposed “Natural Areas Acquisition Funds” of other government organizations, area municipalities and non-government organizations within the Greater Golden Horseshoe. To date, the Ministry of the Environment and the Ministry of Natural Resources, along with the Regions of York, Peel, and Halton, have established, or are in the process of adopting, property acquisition strategies for existing natural areas. In addition, the Cities of Kitchener, Cambridge, Toronto, and London are currently working on similar initiatives. Finally, the Oak Ridges Moraine Foundation and the Nature Conservancy of Canada are examples of Non-government Organizations (NGO) with similar land acquisition strategies.

Staff presented Report PED09007 to the Economic Development and Planning Committee on February 3, 2009, which outlined acquisition programs currently in place throughout the Greater Golden Horseshoe. In response to the presentation, Council approved the following recommendation, as amended:

“(a) That staff be directed to prepare a Natural Areas Acquisition Fund Strategy and report back to Economic Development and Planning Committee by September 2009.

(b) That this strategy in (a) above include an appropriate governance, business, and financial model for a Natural Areas Acquisition Fund, including options which will not have any impact on the levy.”

This report is in response to Council’s direction and outlines the objectives of the Natural Areas Acquisition Fund Strategy. In order to determine the objectives of the strategy, an understanding of what is trying to be achieved must be determined. Therefore, a “strategy” is a plan of action designed to achieve a particular goal (Wikepedia). The goal of the Natural Areas Acquisition Fund Strategy is to establish objectives that will provide specific, measurable, and time-targeted direction to Stakeholders who are interested in the acquisition of natural heritage system lands within the City of Hamilton. For the purposes of this strategy, acquisition refers to the possession of natural heritage system lands by a public Conservation Organization. The Conservation Organization will take title to the land and be responsible for its long term maintenance.

Based on discussions with existing Hamilton Partners (proposed “stakeholders”), and in reviewing other municipal acquisition programs, the goals of the City of Hamilton Natural Areas Acquisition Fund Strategy are based on the following five objectives:

**Objective 1:** To consider the full suite of securement tools available, including planning policy and private land stewardship, and to promote existing incentive and education programs.

**Objective 2:** To identify and develop eligibility criteria for securement or acquisition activities that prioritize Municipal interests and will complement related municipal initiatives and programs (e.g. Vision 2020, Strategic Plan).
Objective 3: To operate on a multi-agency and multi-stakeholder basis, and provide a source of leveraged funds that will complement partner agency contributions and/or grants.

Objective 4: Any land securement or acquisition will be undertaken in full consultation with all interested stakeholders, including relevant Municipal Citizen Advisory Committees (e.g. ESAIEG), and will be administered on a consistent and equitable basis.

Objective 5: To complement existing land securement activities by partner agencies including Conservation Authorities, and non-government organizations operating in the City of Hamilton.

The Natural Areas Acquisition Fund (“Fund”) will be a source of continued, secure funding to assist Partners with the acquisition of Natural Heritage System lands deemed to be of ecological importance to the City. The Natural Areas Acquisition Fund Strategy (“Strategy”) is the framework to determine how and to which lands the Fund will be dispersed. Based on a number of discussions with existing Stakeholders, the City of Hamilton program should be focused on providing leveraged funding for the purposes of acquiring natural heritage lands. There are funding programs available that allow Stakeholders to recover the majority of the administrative costs associated with land acquisition (e.g. legal survey, appraisal, baseline documentation report, legal fees, Phase 1 ESA). In addition, monies for stewardship projects tend to be more readily available.

Purchasing natural heritage lands is considered important for the overall health of a municipality. Increasing forest cover and preserving wetlands not only improves air quality, but also can improve the water quality within watercourses, and ultimately Lake Ontario. Forest cover also can mitigate some of the effects of erosion, sedimentation, and flooding by establishing a riparian zone along the edge of watercourses, allowing for filtering of surface runoff, and slowing and decreasing the amount of water directly entering a watercourse. Forest cover also shades and cools the water which benefits fish and their habitats. The Strategy will determine which lands are most suitable for acquisition and contribute to the overall quality of the City’s natural environment. These lands include:

- Critical areas in the Natural Heritage System, which are in danger of losing their ecological functions or features unless placed under public ownership or management;
- Areas that will significantly enhance the ecological functioning in parts of the Natural Heritage System;
- Essential linkages to provide a system of connected open space accessible by the public; and,
Other areas that are deemed to be of important ecological significance to the City, which may include farmland or significantly disturbed areas that can only be rehabilitated properly under public ownership and management.

With continued and increasing development pressure and GRIDS projecting an increase in Hamilton’s population by almost 200,000 persons, and an additional 100,000 (40,000 within the Urban Boundary) households by the year 2031, the remaining natural heritage lands need to have long term protection, which is only guaranteed through public ownership. There are a number of Provincial, Municipal, and other Initiatives that provide direction on the importance of maintaining and enhancing natural heritage lands. These policies also provide direction as to which natural heritage lands are best to focus on for acquisition. These policies and initiatives include:

**Provincial Policy Direction**

The Provincial Government has a number of policy documents which address the importance of maintaining and enhancing natural heritage features and their ecological functions (see Appendix 1 of Appendix “A”). These policies include: Section 2.0 and 2.1 within the Provincial Policy Statement, Section 4 within the Places to Grow Act, the Endangered Species Act, and Section 1.2.2 within The Greenbelt Plan. Environment Canada has also completed habitat restoration guidelines for the Greater Golden Horseshoe in order to provide sustainable natural heritage lands.

**Municipal Policy Direction**

The City of Hamilton has a number of Planning and Policy documents that support the establishment of a Natural Areas Acquisition Fund and the related Strategy (see Appendix 1 of Appendix “A”). These policies include: Focus Area 6 of the Corporate Strategic Plan; Nine of the Fourteen Theme Areas identified within Vision 2020; Chapter C, Section 2, and Chapter C, Section 2.12 within the Council adopted City of Hamilton Rural and Urban Official Plans; and, Direction 8 within GRIDS.

**Other Initiatives**

The Remedial Action Plan sets targets for improvements to Hamilton Harbour in order to delist the site and bring about sustainable natural ecosystems in Hamilton Harbour and its entire watershed. The Remedial Action Plan also looks at how to improve the potential for more extensive recreational uses, while maintaining the Harbour’s and the watershed’s essential economic function.

The foregoing policies provide a framework for establishing an appropriate strategy for the acquisition of natural heritage system lands. The five objectives, combined with existing policies, have provided the appropriate framework for establishing the proposed Natural Areas Acquisition Fund Strategy. The five objectives, and a discussion on the proposed program implementation, are detailed in the Analysis/Rationale section of the report.
ANALYSIS/RATIONALE:

Through the Growth Related Integrated Development Strategy (GRIDS), the City has projected that Hamilton will have a population of 700,000, and an additional 100,000 (40,000 within the current urban boundary) households by the year 2031. In order to achieve the objectives of sustainable development and the goals of Vision 2020, consideration for a balance between social, economic, and environmental pressures must be included.

There are a number of securement tools available for the acquisition of lands. The full suite of these securement tools would be considered for land acquisition under the City of Hamilton Natural Areas Acquisition Fund. The securement tools available include the donation of land (where the landowner does not receive monies from the Conservation Organization for the natural heritage lands), purchase of land (where the landowner receives monies from the Conservation Organization for title to the natural heritage lands), stewardship agreements, and current tax incentive programs.

While funding for direct stewardship projects is not a component of this strategy, education to landowners regarding different stewardship options and existing government tax incentive programs is. These educational components are included as part of Objective 1.

Objective 1: To consider the full suite of securement tools available, including planning policy and private land stewardship, and to promote existing incentive and education programs.

1. Land Securement Options

When landowners look at estate planning, they often are only aware of two options for their property: 1) sell it; or, 2) leave it to their children. However, there are a number of securement tools available which fall into one of two categories: donations of land or conservation easement agreements, and purchases of land. (See Table 1 - Summary of Natural Areas Acquisition Methods)

Donations of land include a variety of different options. They can fall into one of five different categories which include: outright donation of land (could be viewed as a charitable donation under the Federal Income Tax Act), bequests of land (included within their will), a split receipt option (the landowner receives a portion of the appraised value of the land back in cash), partial takings/direct conveyance (only the natural heritage lands are acquired), and Tradelands (natural heritage lands in exchange for tableland).

Fee-simple purchases of land can fall into one of seven categories which include: property purchase (the full title and rights to the property as purchased), right of first refusal (gives the Partner an opportunity to match any third party offer to buy a specific piece of property), life interest agreement/lease back arrangements (the vendor wishes to retain an interest in the property), project requirements (a
mutually beneficial project that requires the property owner to deed property rights, for a nominal fee, to a portion of their lands for access), municipally owned lands (Conservation Organization acquire property interest in municipal lands when located within approved acquisition project), and land exchange (exchange natural heritage lands for publicly owned tableland).

Property acquisition (fee-simple) by a public conservation body is the most secure way to preserve natural areas in perpetuity. However, it is also the most costly. Based on discussions with Conservation Organizations currently involved in land acquisition and the City’s Real Estate Section, the price of natural heritage lands could be as high as $15,000 per hectare. There are other options for land securement that benefit not only the City of Hamilton, but the landowner as well. The Natural Areas Acquisition Fund Strategy considers the full suite of securement tools available, as well as the use of two or more securement methods on a single parcel of land. A case-by-case assessment should be undertaken to determine the quality and significance of the resources or function of each property. Additionally, each Partner shall determine the most appropriate type of securement method to use to ensure the protection of the features and functions of the land.

Table 1 provides a summary of the current suite of land acquisition options that are available to a landowner with Natural Heritage System lands. Through discussions with the landowner and the Stakeholder interested in acquiring the natural heritage lands, the most suitable acquisition method will be determined. While fee-simple purchase is the most common method, it is often not the most effective means of protection when looking at the long term maintenance of the lands, or long-term use of the lands (i.e. is there public access?). The Stakeholder may not have an interest in acquiring the entire parcel of land, and may recommend split receipt of the parcel, or the landowner may wish to remain on the property but provide access to the natural lands (lease back arrangement). Once there is a willing seller, willing buyer scenario, determining the most suitable securement method is often not difficult.

**Table 1 - Summary of Natural Areas Acquisition Methods**  
(Source: Halton Region Greenlands Securement Strategy, July 2009)

<table>
<thead>
<tr>
<th>Type and Method of Description</th>
<th>Additional Comments</th>
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<tbody>
<tr>
<td><strong>Donations of Land or Conservation Agreements</strong></td>
<td>All donations of ecologically sensitive lands through the federal Ecological Gifts (Ecogifts) Program are subject to 0% capital gains tax. As part of the Ecogifts Program, all appraisals...</td>
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</table>

**Donations**  
Donations of land or property rights (e.g. fee simple or conservation easement agreements). Gifts, at appraised value, may qualify as...
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<td>charitable donations under the <em>Federal Income Tax Act</em> through the Ecological Gifts Program, which is administered by Environment Canada.</td>
<td>are reviewed by an expert panel of appraisers, therefore, landowners and eligible Ecogift recipients can be assured that the appraisal is accurate and legitimate.</td>
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<td><strong>Bequests</strong></td>
<td>The biggest advantage of making a bequest is that it costs nothing during the landowners' lifetime, while they can be cost effective from a tax perspective against the estate and create a legacy for the donor and their family.</td>
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<tr>
<td>Landowners may elect to provide for a gift to a conservation organization or land holding agency in their will - perhaps a gift of property.</td>
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<tr>
<td><strong>Split Receipt</strong></td>
<td>Once the land value is determined by a qualified appraiser, the percentage of the fair market value of the land to be donated versus the amount to be accepted in cash will be negotiated. Through the Ecogifts Program, the donated portion must be a minimum of 20% of the value to qualify for a split receipt. Conversely, the landowner cannot receive more than 80% cash for the appraised value.</td>
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<tr>
<td>This can be viewed as either a donation of land or easement with cash consideration back to the donor, or a purchase of land with a donation of land value in cash back to the purchaser.</td>
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<tr>
<td><strong>Purchases of Land (Fee-Simple)</strong></td>
<td>The advantage to this method is that usually the part of the property severed for conservation purposes does not include the bulk of the value of the property. Therefore, landowners can retain a residential lot and acreage around their residence, and maintain the majority of the value of the property. The land severed is then owned and managed by the Hamilton Partner, and the landowner is then adjacent to publicly owned lands that they no longer have to manage or have liability for. In addition, if the landowner wants to sell the property in the future, they have a much more manageable property to sell, and will have ultimately increased the number of potential buyers. Lastly, if the landowner wishes, they can retain a life interest agreement to use the severed portion (e.g. for</td>
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<tr>
<td><strong>Partial Takings/Direct Conveyance</strong></td>
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<td>Type and Method of Description</td>
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<td>hiking) for a specified term. It is recommended that each Conservation Authority submit a proposal to MNR based on this securement strategy and the areas outlined as priority areas for land securement. Once approved by MNR, it would permit the direct conveyance (partial taking) of lands containing environmentally significant features by a Partner, as allowed under Section 50 (3)(e) of the Planning Act.</td>
<td></td>
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<tr>
<td>Tradableڵs</td>
<td>Where a Partner accepts these donations, these properties would be sold with the proceeds being directed into land securement of ecologically significant lands or other program areas as directed by the donor. It is recommended that all Partners develop a Tradableڵs policy.</td>
</tr>
<tr>
<td>Property Purchase</td>
<td>Purchase of full title and rights to a property, these are typically situations with a willing buyer and a willing seller. Below are some different scenarios using this approach.</td>
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<tr>
<td>Option to Purchase</td>
<td>It is a written contract by the landowner to sell the property and not to withdraw this offer during the stipulated period of time. The Partner pays a fee for this option. This mechanism is often used by a conservation group as a means of “buying time” in its attempts to acquire a specific piece of land, and is the perfect time to fundraise for the purchase cost.</td>
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<tr>
<td>Right of First Refusal</td>
<td>It sets out the conditions of sale and is registered on title to the property. It is an interim measure, allowing the Partner to acquire a key property some time in the future. It can be a good tool to use if negotiations have been halted (e.g. unacceptable appraised value). Or it can be</td>
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<td>Type and Method of Description</td>
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<td>registered on title, to allow the Partner to buy a property that already has a conservation easement agreement in cases where the Partner decides they would rather own title than be the easement holder.</td>
<td>Right of First Refusal is also a means by which to discourage other potential buyers as they will know they have competition and the holder of the first rights has priority. There is a fee associated with Right of First Refusal.</td>
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**Life Interest Agreement/Lease Back Arrangements**

When the vendor/donor wishes to retain an interest in the property they can enter into either a life interest agreement or a lease back arrangement.

In either case, the land can be donated, purchased or split-receipted. The value of the retained interest would be determined by a qualified appraiser. The agreement would specify a set term or would continue as long as the vendor resides on the subject property.

**Project Requirements**

When lands become part of an approved Hamilton Partner project, they may be purchased outright or a limited interest obtained directly from the owner at Market value.

Where the project is mutually beneficial (e.g. erosion work on all or part of which is on private land), landowners may be required to deed property rights to the Partner for a nominal amount to ensure access for future maintenance.

**Municipally Owned Lands**

A Conservation Authority may acquire property interest in municipal lands, at a nominal cost, when they are located within the boundaries of approved Conservation Authority acquisition projects.

Examples of these types of municipally owned lands include unopened road allowances, riparian areas and floodplain.

**Exchanges**

Landowners who own property within a valley system, flood plain, or environmentally sensitive feature may exchange their parcels for surplus tableland owned by a Hamilton Partner.

These arrangements may bring funds to the Hamilton Partner which can be used to acquire additional conservation lands. While these transactions traditionally consist of the exchange of fee simple interests, they can consist of any combination of property.
interests. Note that land exchanges are not necessarily acre for acre. Any exchange would be based on appraised value as valley lands would not be valued the same as developable tableland.

The main focus of the Natural Areas Acquisition Fund Strategy is to provide monies for securement of natural lands. While stewardship is an important component for protecting natural lands, this Strategy would not provide monies for stewardship projects. Monies would be used to educate landowners about the variety of land securement, stewardship, and government tax incentive programs available through workshops and educational materials.

2. **Stewardship Agreements**

Stewardship Agreements are normally handshake agreements whereby a landowner agrees to be a steward of their land in order to protect any existing natural heritage features. The conservation body will be a source of information on the numerous stewardship options available.

While stewardship does not involve any legally binding contracts, it is an inexpensive way to promote the preservation of *Natural Heritage System* lands on privately owned property.

3. **Government Tax Incentive Programs**

Both the Federal and Provincial Governments have implemented tax incentive programs for landowners who have significant natural heritage features on their lands.

- **Ecological Gifts Program**

The Federal Government has implemented the Ecological Gifts Program for Canadians with ecologically sensitive land to protect nature and leave a legacy for future generations. The program is administered by Environment Canada, and as part of the Ecogifts Program, within the terms of the Income Tax Act, provides favourable income-tax treatment to donors, for gifts of ecologically sensitive land and partial interest in land.

This includes the provision of a non-refundable tax credit or deduction to donors, and a reduction in the taxable capital gain realized on the disposition of the property. The donor transfers ownership to a qualified recipient, the donation must be voluntary, and no benefit is provided to the donor or a person selected by the donor.
Eligible lands are areas or sites that currently or could, at some point in the future, contribute significantly to the conservation of Canada’s biodiversity and environmental heritage.

- **Managed Forest Tax Incentive Program**

  The Managed Forest Tax Incentive Program (MFTIP) is a voluntary program for landowners with Managed Forest areas larger than 4 hectares (9.88 acres), which can include up to 10% forest openings or abandoned farm fields. Landowners need to submit a Managed Forest Plan to apply for eligibility status. The forest plan period is 10 years, with a 5 year progress report requirement.

  Eligible lands are taxed at 25% of the municipal tax rate set for residential properties. The program is administered by the Ontario Woodlot Association (OWA) and the Ontario Forestry Association (OFA).

- **Conservation Land Tax Incentive Program**

  The Conservation Land Tax Incentive Program (CLTIP) is currently run by the Ministry of Natural Resources, and usually involves landowner solicitation based on mapping of eligible lands (>0.5 acres). Eligible lands include PSW's, Provincial ANSI's, and habitat of endangered species, lands designated as Escarpment Natural Area (NEP) and community conservation lands.

  Landowners need to apply every year and agree to not carry out activities which would degrade, destroy, or result in the loss of natural values of the site. Lands placed under CLTIP are 100% tax exempt.

Once the full suite of securement tools have been examined, the next objective is to determine which lands are eligible for acquisition through the Natural Areas Acquisition Fund. Objective 2 provides a detailed examination of those lands within the City of Hamilton that provide important ecological significance to the City. The eligible criteria include Primary Criteria (i.e. those lands currently identified within the Natural Heritage System), and Secondary Criteria (i.e. those lands not within the Natural Heritage System but support the Natural Heritage System ecologically).

**Objective 2:** To identify and develop eligibility criteria for securement or acquisition activities that prioritize Municipal interests and will complement related municipal initiatives and programs (e.g. Vision 2020, Strategic Plan).

The City of Hamilton has defined the Natural Heritage System as an inter-related system of natural areas and features of varying ecological significance within the City of Hamilton. Areas or features included in the system may be designated or regulated by Provincial or Regional Policy. They include designated “Core Areas” and “Linkage Areas”.
The criteria used to determine which lands are most important for acquisition is based on those lands that have been identified as "Core Areas" and "Linkage Areas".

Those lands identified within the City of Hamilton Natural Heritage System (Core Areas, Linkages and Local Natural Areas) are considered Primary Criteria when determining suitable lands for acquisition. These are the lands that would be targeted for acquisition and contribute the most ecological benefit to the City of Hamilton Natural Heritage System.

Secondary Criteria are not necessarily those lands identified within the Natural Heritage System, but they provide an ecological function to the Natural Heritage System lands. While these lands would not be the focus of acquisition, should there be no Primary Criteria lands available for acquisition, then the Secondary Criteria lands are a viable option.

**Primary Criteria:**

1. **Core Areas**

Core Areas are the most significant areas within the Natural Heritage System in terms of biodiversity, productivity and hydrological functions. They are given priority in terms of conservation policy and management. They include key natural heritage features, key hydrologic features, and local natural areas.

   - **Key Natural Heritage Features (KNHF) includes:**
     
     (a) Significant habitat of endangered, threatened, and special concern species;
     (b) Fish habitat;
     (c) Wetlands;
     (d) Life Science Areas of Natural and Scientific Interest (ANSIs);
     (e) Significant valleylands;
     (f) Significant woodlands;
     (g) Significant wildlife habitat;
     (h) Sand barrens, savannahs, and Tallgrass prairies; and,
     (i) Alvars.

   - **Key Hydrologic Features (KHF) includes:**
     
     (a) Permanent and intermittent streams;
     (b) Lakes (and their littoral zones);
     (c) Seepage areas and springs; and,
     (d) Wetlands.
Local Natural Areas

Local Natural Areas include: Environmentally Significant Areas (ESAs), as identified by the City of Hamilton (see the criteria listed below), unevaluated wetlands, and Earth Science Areas of Natural and Scientific Interest (ANSI).

Environmentally Significant Area

In order to determine whether natural lands should be designated as Environmentally Significant Areas (ESAs), the land must meet any one of the following criteria:

(a) The area is a good representative of a biotic community characteristic of the natural landscapes of the City and not adequately represented in existing protected areas, or the area is a good representative of pre-settlement biotic community;

(b) There are biotic communities that are rare in the City, Province, or Canada;

(c) The area is a large natural area (20 hectares or more in size); it may be sufficiently large to provide habitat for species requiring large habitat areas;

(d) There is habitat for species considered significant in the City, Province, or Canada;

(e) The site fulfills a significant hydrological function (groundwater recharge or discharge, ground or surface water quality, or flood attenuation);

(f) The site contains a significant earth science feature (distinctive and unusual landform);

(g) There is a high diversity of native species or biotic communities;

(h) The area provides essential habitat for the continuation of species; for example, significant areas of species concentration, areas essential for certain stage of the life cycle, source areas for species;

(i) There are significant seasonal concentrations of wildlife;

(j) The area acts as a link between natural areas or functions as a corridor for wildlife;
(k) The area is in good natural condition, with few non-native species, particularly invasive non-natives; or,

(l) The area contains significant fish habitat.

2. **Linkages**

Linkages mean landscape areas that connect natural areas. Linkages are also important natural features, either in their own right or through restoration activities. They are avenues along which plants and animals can propagate, genetic interchange can occur, populations can move in response to environmental changes and life cycle requirements, and species can be replenished from other natural areas. Conserving linkages also protects and enhances Core Areas.

Also important to consider are those lands: designated as Niagara Escarpment Plan "Escarpment Natural Area"; designated as Greenbelt Plan "Natural Heritage System"; and identified as a priority within a strategy by a Conservation Authority or other partner agency.

Aside from these Primary Criteria, a set of Secondary Criteria should also be considered which could include those lands not identified within the Natural Heritage System of the City of Hamilton, but are important ecologically.

**Secondary Criteria:**

Secondary Criteria includes those lands that do not form a part of the Primary Criteria (Core Areas, Local Natural Areas or Linkage Areas), but are still important ecologically to the City of Hamilton. They perform a function in supporting the natural heritage system, and should be considered for acquisition should they become available and no suitable primary criteria lands are available. The Secondary Criteria include the following:

- Lands contiguous to Conservation Areas, Municipal lands adjacent to eligible Primary Criteria lands, or other public and/or protected lands;
- Lands identified as Niagara Escarpment Plan "Escarpment Protection Area";
- Lands identified as Greenbelt Plan “Protected Countryside”;
- Priority Areas for protection and/or restoration (e.g. as identified within a Watershed, Subwatershed or ESA Study and agricultural lands);
- Significant water resources (e.g. floodplain, streams, headwater area, source water area, non-evaluated wetland, estuaries);
- Trail corridor/linkage (e.g. Bruce Trail);
• Significant wildlife habitat;

• Regionally rare communities;

• Agricultural lands offered for:
  - Donation;
  - Significantly leveraged by funding partners; or,
  - Agricultural easements;

• Lands which provide opportunity/potential for enhanced connectivity between any of the above features;

• Unopened road allowances (e.g. for conservation, trail purpose);

• Rehabilitated aggregate pits and quarries offered for donation; and,

• Designated Wellhead Protection Area.

It is hoped that other Conservation Organizations will have targeted similar natural heritage system lands for acquisition. The proposed City of Hamilton Natural Areas Acquisition Fund Strategy is intended to work in conjunction with other existing acquisition strategies.

Currently, there are a number of Conservation Organizations (Stakeholders) within the City of Hamilton that have an interest in natural heritage system lands. The City of Hamilton would work with these stakeholders to ensure the Natural Areas Acquisition Fund will complement partner agency contributions and/or grants. Objective 3 identifies the current Stakeholders within the City of Hamilton, and how the funds will be leveraged with existing partner agency contributions and/or grants.

**Objective 3:** To operate on a multi-agency and multi-stakeholder basis and provide a source of leveraged funds that will complement partner agency contributions and/or grants.

In order to achieve successful land acquisitions, involvement with interested stakeholders is critical. Objective 3 focuses on those Conservation Organizations (i.e. stakeholders) that currently have land holdings, funding sources and/or provide education on natural heritage systems within the City of Hamilton. These organizations may own land, manage land, or are stewards of the land.

The following organizations would either be applying for funding to the City of Hamilton through the Natural Areas Acquisition Fund, and would be responsible for ownership and the long-term maintenance of the acquired natural heritage lands, or would have an interest in providing funding and/or education for the securement and/or acquisition of natural heritage system lands. These Conservation Organizations include:
Land Securement Partners

- Bruce Trail Conservancy
- Carolinian Canada
- Grand River Conservation Authority
- Halton Conservation Authority
- Hamilton-Halton Stewardship Program
- Hamilton Naturalists Club/Head-of-the-Lake Land Trust
- Hamilton Region Conservation Authority
- Niagara Escarpment Commission
- Niagara Peninsula Conservation Authority
- Royal Botanical Gardens

Funding Partners

- Ducks Unlimited
- Escarpment Biosphere Conservancy
- Greenbelt Foundation
- Hamilton-Wentworth Stewardship Council
- Ministry of Natural Resources
- Ontario Farmland Trust
- Ontario Heritage Trust
- Trillium Foundation

Education Partners

- Bay Area Restoration Council
- Environment Hamilton

In order to have an understanding of the amount of natural heritage system lands currently within public ownership, Table 2 provides an approximate calculation of the amount of lands and number of Stakeholders currently holding natural heritage system lands within public ownership. The hectare of land holdings represents the entire parcel, which could include both Natural Heritage System lands and those located outside of the identified natural system.

<table>
<thead>
<tr>
<th>NAME OF ORGANIZATION</th>
<th>AREA OF LAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Hamilton</td>
<td>1,672</td>
</tr>
<tr>
<td>Hamilton Conservation Authority</td>
<td>8,652</td>
</tr>
<tr>
<td>Grand River Conservation Authority</td>
<td>78</td>
</tr>
<tr>
<td>Halton Conservation Authority</td>
<td>57</td>
</tr>
<tr>
<td>Niagara Peninsula CA</td>
<td>378</td>
</tr>
<tr>
<td>Head-of-the-Lake Land Trust</td>
<td>4</td>
</tr>
<tr>
<td>Bruce Trail Conservancy/Association</td>
<td>445</td>
</tr>
<tr>
<td>Royal Botanical Gardens</td>
<td>716</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12,602</strong></td>
</tr>
</tbody>
</table>
*NOTE: 12,602 ha refers to the entire land holdings, not just the Natural Heritage System lands.

The table identifies that approximately 12,602 hectares of land within the City of Hamilton is within public ownership and include not just those lands identified within the Natural Heritage System (Core Areas, or Linkage Areas). However, based on current information, of the 12,602 hectares of publicly owned lands, approximately 4,559 hectares (11,265 acres) or 36% are located within the Natural Heritage System. In addition, the HHSP (Hamilton-Halton Stewardship Program) currently has 207 stewardship agreements, totalling about 2,700 hectares of land within the City of Hamilton.

Currently, the City of Hamilton has identified approximately 32,894 hectares (81,283 acres) of lands within the Natural Heritage System. With the securement of approximately 4,559 hectares (11,265 acres) of natural heritage system lands, the remaining 28,355 hectares of natural heritage system lands are within private ownership, and could be available for acquisition.

In order to achieve the greatest success, leveraging opportunities should be available to all interested Stakeholders for the acquisition of natural heritage system lands. The City of Hamilton’s Natural Areas Acquisition Fund would be no different. It would provide leveraged funding on a 1:1 basis, up to a maximum of $50,000 (based on a budget of $300,000 and a target of 6 acquisitions per year - as described within the Proposed Program Implementation Section).

Once the full suite of securement tools have been determined (Objective 1), the lands suitable for acquisition (Objective 2), and the current Conservation Organizations (Stakeholders) have been determined (Objective 3), it is important to determine where available monies should be directed. The existing Stakeholders often have established relationships with landowners who may have an interest in donating their Natural Heritage System lands. In addition, the majority of these organizations have specific criteria to determine which lands they would be most interested in acquiring. Objective 4 allows all interested stakeholders and the City of Hamilton to discuss which properties and/or areas of the Natural Heritage system should be targeted for acquisition.

**Objective 4: Consideration of any land securement or acquisition will be undertaken in full consultation with all interested stakeholders, including relevant Municipal Citizen Advisory Committees (e.g. ESAIEG), and will be administered on a consistent and equitable basis.**

With the vast array of Natural Heritage Features located within the City of Hamilton, it is important to determine which of these lands can be protected through policy/planning and stewardship, and which land should be secured by public agencies or land trusts.

In order to coordinate efforts and avoid duplication, a Stakeholder Working Group (“SWG”) should be formed, comprised of staff from the City and Land Securement Partners. The SWG will meet a minimum of two times per year to identify and
recommend to Council the Priority Acquisition Areas for securement. The SWG may include staff or members from any of the land securement partners listed under Objective 3. In addition, staff from relevant internal City Departments, including Planning, Real Estate, Legal, Corporate Services, Finance and Administration, Public Works, Legislative Approvals, or any other area that may have an interest in Natural Heritage lands, would provide technical support and recommendations.

When assessing the suitability of land for securement, consideration should be given to the cost of acquiring the property, as well as the ongoing long term associated land care costs such as taxes and annual maintenance. Arrangements with Conservation Authorities or other NGO’s for the management of these lands are to be made in advance with an agreement, in principle in place at the time of the property closing.

The SWG will determine target acquisition areas within the City of Hamilton that would meet the eligible funding criteria under the Natural Areas Acquisition Fund. Once these target acquisition areas have been determined, it would be the responsibility of the interested Stakeholder to pursue the acquisition, provide the appropriate documentation which demonstrates the landowner is supportive of the acquisition, outlining other potential funding sources, and financial and legal documents identifying the total acquisition cost. Funding from the Natural Areas Acquisition Fund would then take place.

The SWG would determine the priority acquisition areas on an annual basis. The City of Hamilton would provide technical support and recommendations for target acquisition areas.

The final Objective for the Natural Areas Acquisition Fund is to complement existing land securement activities in order to eliminate duplication of effort and provide a source of funding to all interested Stakeholders. There are a number of funds available for administrative costs associated with land securement and stewardship programs; however, funds for acquisition are often difficult to receive or do not provide enough funding to allow for acquisition. In order to complement existing land securement activities, the Natural Areas Acquisition Fund should provide funding strictly for acquisition costs.

**Objective 5: To complement existing land securement activities by partner agencies, including conservation authorities, and non-government organizations operating in the City of Hamilton.**

The City of Hamilton covers 112,790 hectares, with a total of approximately 32,894 hectares (or 29%) of land included within the Natural Heritage System (NHS). Of these lands, approximately 4,559 hectares (14%) are within public ownership (as previously discussed in Objective 3). In comparison, Halton Region currently has about 30% of their Halton Greenlands System secured.

The following sections provide a summary of existing programs and potential Partners for land securement within the City of Hamilton.
Federal Government

Historically, the Federal Government, in Partnership with the Nature Conservancy of Canada (NCC), initiated the Canada Millennium Partnership Program. Part of this program was a country wide land and conservation easement donation program called Natural Legacy 2000. Soon after the turn of the century, this program ended.

Currently, the Federal Government has focused their efforts on acquiring lands of National Significance that would contribute to a National Park. While this may mean the Federal Government has little or no direct involvement in the land holding aspect of lands acquired through this Strategy, they support securement through the tax incentive programs offered by the Ecogift Program.

The Ecological Gifts Program was launched in 1995 as part of the federal government's efforts to protect Canada's biodiversity and environmental heritage. The Ecological Gifts Program is administered by Environment Canada in cooperation with federal, provincial, and municipal governments, and non-governmental partners.

Since 1995, Environment Canada's Ecological Gifts Program has enabled individual and corporate landowners to protect their cherished pieces of nature forever by donating ecologically sensitive lands to environmental charities or government bodies.

An "ecogift" can be a donation of land or a partial interest in land.

The Program is made possible by the terms of the Income Tax Act. Amendments to the Act in the 1995, 1997, 2000, 2002, and 2006 federal budgets significantly enhanced the tax assistance for donations of ecologically sensitive land, easements, covenants and servitudes. This favourable treatment includes the provision of a tax credit or deduction to donors and a reduction in the taxable capital gain realized on the disposition of the property. Corporate donors may deduct the amount of their gift directly from their taxable income, while the value of an individual's gift is converted to a non-refundable tax credit. Any unused portion of the credit or deduction may be carried forward for up to five years, and 0 percent of the capital gain is taxed instead of the usual 50 per cent.

To date, over 740 ecogifts valued at over $494 million have been donated across Canada, protecting 126,211 hectares of wildlife habitat. More than one-third of these ecogifts contain areas designated as being of National or Provincial Significance, and many are home to some of Canada's species at risk.

Provincial Government

The Ministry of Natural Resources (MNR), Ontario Heritage Trust (OHT), Management Board Secretariat (MBS), Ontario Realty Corporation (ORC), and Ontario Parks (OP) all have the mandate to hold conservation lands. While they would only be interested in acquiring land of Provincial Interest, the MNR has transferred monies to both OHT and NCC in order to set up land securement funding programs. The OHT is currently operating a land securement funding program in Ontario entitled Natural Spaces Land Acquisition and Partnership Program.
Conservation Authorities

There are four Conservation Authorities that have jurisdiction within the City of Hamilton. These include the Hamilton Conservation Authority (HCA), Grand River Conservation Authority (GRCA), Niagara Peninsula Conservation Authority (NPCA), and Conservation Halton (CH). The Hamilton Conservation Authority covers the majority of the watersheds within the City of Hamilton. Each of the Conservation Authorities is involved in land securement projects within the City of Hamilton.

Land Trusts and Non-Government Organizations

There are a number of Land Trusts and Non-Government Organizations that are currently working within the City of Hamilton to secure natural heritage lands and to protect significant ecological features. These include the Bruce Trail Conservancy, Head-of-the-Lake Land Trust, Ontario Nature, and Ducks Unlimited. These groups each have different mandates for land securement within the City of Hamilton. It is important that each group’s efforts are well communicated and coordinated when dealing with landowner contact. A component of the Natural Areas Acquisition Fund Strategy is to organize stakeholder meetings and strategies to develop and expand on Partnerships with these and other organizations involved in holding title to or providing funding for the acquisition of ecologically sensitive and significant lands.

By complementing existing land securement activities, the City of Hamilton is able to ensure the targeted Natural Heritage System lands are secured and the interests of the public are addressed. Certain lands within the City of Hamilton may not necessarily be defined as a Core Area or Linkage Area, but are important ecologically to the residents of Hamilton. The Natural Areas Acquisition Fund would provide the monies to publicly secure these lands and work with other Conservation Organizations to ensure these lands are properly maintained in perpetuity.

In order to fully implement the Natural Areas Acquisition Fund Strategy, appropriate Implementation Guidelines would need to be completed. The Implementation Guidelines would provide the framework necessary to implement the five objectives of the Natural Areas Acquisition Fund Strategy.

Proposed Program Implementation

A primary goal of the Natural Areas Acquisition Strategy is to educate landowners with significant landholdings (e.g. >10 acres or 4 hectares) about various long-term conservation methods. Deciding to protect one’s property for the long-term is a big decision that can take a landowner several years to make. While a landowner may not be interested in land conservation at this time, they have the knowledge about conservation options should they change their mind in the future. Building relationships is the key.
Step 1: Landowner Contact

Many of the Hamilton partners have built relationships with landowners and created a landowner contact list based on securement criteria, and included landowner packages containing mapping and securement options. The City of Hamilton would supplement these lists to ensure landowners within high priority acquisition areas are notified. Portions of the initial budget of $100,000 would be used to organize workshops, create information brochures, and promote the Natural Areas Acquisition Fund Strategy. The remaining funds would be directed into the Natural Areas Acquisition Fund Reserve to be used for future land acquisitions.

Step 2: Successes

Once there has been a securement success, the appropriate recognition is necessary. This could involve media and all levels of government involved. In addition, all partners involved within the securement process would be appropriately recognized, and the landowner(s) would be acknowledged for their conservation efforts. Hopefully, this will breed more successes in the future.

Step 3: Annual Report

In order to provide transparency, annual reports would be prepared that would document the progress of the Natural Areas Acquisition Fund. The annual report could include: the acreage secured (grouped by securement method), the acreage secured (grouped by type of natural feature), the acreage secured (grouped by Priority Area), total funding required by the Municipality, total funding matched by partners, and the number of landowners contacted through outreach and education.

In order to determine the Natural Heritage System lands most suitable for acquisition, and also how much funding would be required, some acquisition targets would need to be established. The acquisition targets are necessary to ensure the City of Hamilton’s policies (Council adopted Rural and Urban Official Plans), and plans (Corporate Strategic Plan, Vision 2020) are achieved.

Land Acquisition Targets

The most difficult question to answer is “how much habitat is enough”? There have been numerous scientific studies that have produced a variety of suggestions for the amount of habitat that is required in order to sustain a healthy ecological system.

Environment Canada (2004) presented a minimum target of 30% for forest cover, and a minimum of 10% cover for wetlands; however, others have set targets higher (50% by Noss (1991) and Odum & Odum (1972)), or set targets based on habitat representation as the most accurate determination of minimum habitat requirements (the Ministry of Natural Resources’ Big Picture and Nature Conservancy of Canada’s Ecoregional Planning).
The World Commission on the Environment and Development (1987) recommended tripling the amount of protected areas around the world putting the number at about 12%. Canada instituted the Protected Areas Strategy (PAS) based on this 12% land area target. The goal is to protect critical wildlife habitat, as well as a part of each of Canada’s ecosystems, which will add up to about 12%.

The City of Hamilton has set targets for forest cover, as stated in Focus Area 6 of the Corporate Strategic Plan. It states that the City should “maintain or increase the cumulative amount of tree cover in the City, with the objective of moving towards the Environment Canada guideline of 30%.”

With this 30% target in mind, Gartner Lee prepared a report (1998) which analyzed forest cover in the former Hamilton-Wentworth Region and compared it to the Environment Canada report. The Gartner-Lee report indicated that average forest cover across the City of Hamilton is 17.7%, with 4.2% encompassing Interior Forest Cover (100m inside from edge), and 1.4% Interior Forest Cover (200m inside from edge). In addition, only about 35% of watercourses have a riparian buffer greater than 30 metres wide, with 75% being the target. Furthermore, 10% wetland cover is recommended, whereby the City currently has about 8.3%. Table 3 outlines the habitat restoration targets, as identified within Chapter F, Section 3.4.4.7 of the Council adopted Hamilton Rural and Urban Official Plans.

<table>
<thead>
<tr>
<th>Table 3: Habitat Restoration Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NATURAL COVER TYPE</strong></td>
</tr>
<tr>
<td>Forest Cover</td>
</tr>
<tr>
<td>Interior Forest Cover (100 metres inside from edge)</td>
</tr>
<tr>
<td>Interior Forest Cover (200 metres inside from edge)</td>
</tr>
<tr>
<td>Riparian Vegetation greater than 30 metres wide</td>
</tr>
<tr>
<td>Wetland cover</td>
</tr>
</tbody>
</table>

The City of Hamilton covers almost 112,790 hectares of land (276,068 acres), and is home to 518,181 residents (OMBI Final Chart 2007) and almost 250,000 residential units (2006 Census). The City of Hamilton has included approximately 32,894 hectares (or 29%) of land within the Natural Heritage System (NHS).

Of this land, approximately 13,642 hectares (41%) are protected by Official Plan policies, or zoning. The remaining 19,252 hectares are currently not protected by Official Plan policies, zoning, or public ownership. These lands would be eligible for acquisition under the Natural Areas Acquisition Fund Strategy. While it is not realistic to assume that all of the remaining Natural Heritage System lands should be acquired as part of this strategy, some specific targets should be used to determine which lands are most appropriate.
For the purposes of this Strategy, Table 3 will provide the minimum percentage target for acquisition within the City of Hamilton. With this in mind, the following calculations will be used: The City of Hamilton covers a total of 112,790, with a projected 30% forest cover across the City, approximately 33,831 hectares should be forest cover. In 1998, Gartner Lee projected 18% forest cover (20,302 ha) across the City. Today there is approximately 12,000 ha (11%) forest cover across the City of Hamilton. This decrease in forest cover could be attributed to a number of factors including: lack of policies to protect the natural heritage features, increased development pressures, or previously approved developments within new protected areas.

In order to achieve a 30% target, an additional 21,831 ha of land would need to be in forest cover. The average size of lands currently owned by public bodies/agencies is approximately 40 hectares. Using this as a target acquisition size, this would equate to a total of 545 acquisitions. When projecting this over a 10 year time frame (a 10-year time frame has been used since this coincides with many of the Official Plan review and approval timelines, coincides with Vision 2020 timeline targets and allows any new Federal or Provincial Policies to be incorporated in a timely manner), this would calculate to 55 acquisitions per year.

It is noted that the number of acquisitions per year will be dependant upon the available funding and willingness of landowners. Accordingly, this 10 year projection should be re-evaluated every 5 years with adjustments as needed.

Total Acquisition Cost Projections

The full array of securement methods would be used for lands acquired under this Strategy. Program funds would have to be provided through the Capital Budget, and would be renewed and adjusted, when necessary, on an annual basis. The funds are meant to support leveraged funding from other available sources, aided by building a strong relationship with others undertaking securement projects within the City of Hamilton.

Costs will vary from year-to-year and property-to-property, with the possibility of several levels of government and Partners being involved. It is anticipated that leveraged funding will come from Federal and Provincial government programs, Foundations (e.g. Conservation Authority Foundations), Land Trust and Non-Government Organizations, and private and corporate donations.

Based on consultation with Hamilton Partners, the projected cost per hectare for Natural Heritage System lands varies depending on location of the property and if the lands hold any development potential. Natural Heritage lands within the GTA tend to range from $4,000-$6,000 per hectare ($10,000-$15,000 per acre); however, land prices within Hamilton tend to be a bit lower, and costs for similar lands can range from $800-$2,500 per hectare ($2,000-$6,000 per acre). This would mean for an average acquisition of 40 hectares, the cost could run as high as $100,000 ($2,500 x 40) for an outright fee-simple purchase. With the City of Hamilton providing leveraged funding (up to 50% of the acquisition cost), then each acquisition could require a contribution of $50,000, for a total of $2,750,000 ($50,000 x 55 properties) annually. In order to
acquire the full 21,831 ha of land in forest cover, the cost to the municipality could be as high as $27,500,000. It should be noted that not every acquisition involves outright fee-simple purchase as there are a full suite of securement tools available that could be more beneficial and could offset the acquisition costs.

When looking at Municipalities with similar securement strategies, there is a wide range in funding that has been approved. The following provides a brief summary of current funding for Greater Golden Horseshoe Upper and Lower Tier Municipalities.

### Table 4: Existing Natural Areas Securement Strategies

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>FUNDING PROGRAM</th>
<th>FUNDING ALLOCATED TO DATE</th>
<th>PURPOSE</th>
<th>WHO ALLOCATES FUNDS</th>
<th>FUNDING SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Canada</td>
<td>Habitat Stewardship Program for Species at Risk</td>
<td>$62 million plus an additional $153 million from leveraging</td>
<td>Protect Canada’s Species at Risk</td>
<td>Administered by Environment Canada, managed by Department of Fisheries and Oceans, and Parks Canada Agency</td>
<td>Federal Government</td>
</tr>
<tr>
<td>Ministry of Natural Resources</td>
<td>Natural Spaces Program</td>
<td>$6 million ($4.5 million for acquisition, $1.5 million for stewardship)</td>
<td>Acquisition and stewardship of provincially significant natural heritage lands.</td>
<td>Ontario Heritage Trust</td>
<td>Provincial Government</td>
</tr>
<tr>
<td>Region of York</td>
<td>Greenlands Property Securement Strategy</td>
<td>$1.4 annually ESAs, ANSIs, PSWs with the main focus on lands that provide linkages.</td>
<td>ESAs, ANSIs, PSWs with the main focus on lands that provide linkages.</td>
<td>Regional Council</td>
<td>Capital reserve</td>
</tr>
<tr>
<td>Halton Region</td>
<td>Halton Green Fund/Greenlands Securement Strategy</td>
<td>$500,000</td>
<td>All lands identified within their Greenlands System.</td>
<td>Regional Council (1:1 funding up to 50% of the cost)</td>
<td>Either through Regional Council resolution or annual budget process.</td>
</tr>
<tr>
<td>Region of Peel</td>
<td>Greenlands Securement Project</td>
<td>$2 million total $500,000 annually but due to overwhelming</td>
<td>PSWs, Regionally Significant Woodlands, ESAs, ANSIs,</td>
<td>Greenlands Securement Subcommittee provides fiscal oversight with Regional</td>
<td>2006 was $500,000 from existing CA Reserve and $500,000</td>
</tr>
<tr>
<td>ORGANIZATION</td>
<td>FUNDING PROGRAM</td>
<td>FUNDING ALLOCATED TO DATE</td>
<td>PURPOSE</td>
<td>WHO ALLOCATES FUNDS</td>
<td>FUNDING SOURCE</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>City of Kitchener</td>
<td>Natural Lands Acquisition Fund</td>
<td>$50,000</td>
<td>No specific criteria but focus is on those lands not yet protected in policy or zoning.</td>
<td>Council</td>
<td>2007 budget process</td>
</tr>
<tr>
<td>City of Kitchener</td>
<td>Local Environmental Action Fund (LEAF)</td>
<td>$5 million</td>
<td>Act as a catalyst to leverage participation and investment by all stakeholders in the community to improve the environment of the City of Kitchener.</td>
<td>No one to date as criteria has not been finalized.</td>
<td>$2 million from proceeds from sale of Atria in 2007 with $1 million per year for three years from the Economic Development Investment Fund</td>
</tr>
<tr>
<td>City of Cambridge</td>
<td>Natural Heritage Trust Fund</td>
<td>None to date</td>
<td>Evaluated wetland, ANSI, Regional ESPA, High Quality Woodlot, Open Space zoned lands, an area necessary or desirable to</td>
<td>Council</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
The above table indicates that on average Regional Municipalities have an acquisition budget ranging from $500,000 to upwards of $2 million, with lower-tier municipalities tending to have a lower acquisition budget ranging from $50,000 up to approximately $500,000.

It is difficult to know in advance the exact cost associated with implementation of this Strategy. Not only do different securement tools have different costs, purchase price for a property will vary depending on the location with the City of Hamilton, as well as features of the property. Lands with existing development or potential for development tend to have a greater cost than a vacant property with no development potential. Even a donation, which does not have a purchase price, incurs ancillary costs associated with the securement.

One fee-simple land donation of a conservation easement could potentially incur the following approximate ancillary securement costs:

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>$3,000-$6,000</td>
</tr>
<tr>
<td>Legal</td>
<td>$1,500-$2,500</td>
</tr>
<tr>
<td>Survey</td>
<td>$2,500-$7,000</td>
</tr>
<tr>
<td>Phase 1 Environmental Site Assessment</td>
<td>$5,000-$7,000</td>
</tr>
<tr>
<td>Baseline Documentation Report</td>
<td>$5,000-$10,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$17,000-$32,500</strong></td>
</tr>
</tbody>
</table>
Based on current acquisition costs, the City of Hamilton Natural Areas Acquisition Fund should budget at least $50,000 per securement ($2,500 x 40 hectares per securement). It should be noted that through the Natural Areas Acquisition Fund, the City of Hamilton can determine how much, if any, monies will be used.

There are a number of options which would also need to be considered as part of the Implementation Guidelines. The distribution of funds could include: full funding to an interested Stakeholder, the City of Hamilton could purchase the lands (only if there is no interested Stakeholder and the acquisition is supported by Council), the City could accept donations of land, use of the funds for educational programs, and/or use of the funds for recovering administrative costs.

Options to consider for distribution of funds:

The Natural Areas Acquisition Fund Strategy does not imply that the outright purchase of Natural Heritage System lands is the only option. While fee-simple purchase is ultimately the most secure option to guarantee the maintenance of these lands in perpetuity, the City could simply provide funding to be used by other organizations (e.g. Conservation Authorities, Hamilton Naturalists Club, Royal Botanical Gardens, and Bruce Trail Conservancy) for acquisition and/or securement of the natural areas.

There are a number of options to consider for the potential distribution of the funds, including land acquisition, conservation easements, coordination with other agencies, land management, community land trust and stewardship programs. These options are summarized below:

1.  **Land Acquisition:**

   - The Natural Areas Acquisition Fund could provide funds to a registered non-profit organization to acquire natural areas. The organization would be responsible for purchasing, owning, and managing the land. The funds could be directed towards paying the legal fees, background report fees, or other fees associated with land securement. In consultation with Stakeholders, there are a number of funding programs available that would provide these recovery costs.

   - The City could purchase and own natural areas itself, but enter into an agreement with a partner organization to manage the lands (similar to Confederation Park). While this fund is mainly to be used by interested Stakeholders, this is an option that can be considered should no other option be available.

   - A Conservation Organization agrees to take title to the land and provide maintenance of the lands in perpetuity. The monies would be used for the acquisition of these lands. Interested Stakeholders seem to support this option the most, as finding sources of funding for outright acquisition is often difficult. They tend to rely heavily on monetary donations in order to obtain the required funds.
The City could accept donations of land from individual or corporate landowners, provided no other agreements or legislation (i.e., Bonusing under the Municipal Act) are violated, and either manage the land or enter into an agreement with a partner organization to manage the land. The dedication of natural area lands would not be used as part of any parkland dedication under the Planning Act. Also, the City does not wish to compete with existing local organizations that do accept donations of money.

The Planning Act allows a municipality to increase the density of development on less sensitive portions of a site, in exchange for protecting the significant natural features on site. This provision is found in Section 37(1) of the Planning Act, which states:

“The Council of a local municipality may, in a by-law passed under Section 34, authorize increases in the height and density of development otherwise permitted by the by-law that will be permitted in return for the provision of such facilities, services, or matters as are set out in the by-law.”

To allow for this option, the City would need to include a policy in its Official Plan which contains provisions authorizing increases in height and density of development, as outlined in Section 37(2) of the Planning Act:

“A by-law shall not contain the provisions mentioned in Subsection (1) unless there is an Official Plan in effect in the local municipality that contains provisions relating to the authorization of increases in height and density of development”.

2. Conservation Easements Or Other Securement Options:

• The funds could be used to pay for information sessions or mail-outs to educate the landowners on the Conservation Land Tax Incentive Program (CLTIP) and Managed Forest Tax Incentive Program (MFTIP), and how they relate to their properties.

3. Coordination With Other Agencies:

The Natural Areas Acquisition Fund could develop a supportive and coordinated relationship (e.g. providing monies for clearly defined programs of stewardship opportunities, meeting with relevant agencies to determine high priority acquisition areas, and providing leveraging opportunities) with other Conservation Organizations in Hamilton who receive land donations, purchase natural areas, or negotiate conservation easements. Coordinating these activities will make it easier for landowners interested in protecting their property to be aware of their options and to be directed to the appropriate agency for assistance.
4. **Land Stewardship**

- Non-profit organizations could apply for funding from the Natural Areas Acquisition Fund to assist in land management costs for newly acquired land, such as trail maintenance, prescribed burns, controlling invasive exotic species, controlling public access and restoration. The program would not provide ongoing funding for such stewardship programs, but it would be available to Stakeholders to use for any initial costs for newly acquired lands. The Stakeholders may wish to post signage or construct a trail through the property. This funding would occur once, and then the Stakeholder would be responsible for the long-term maintenance of these lands.

- A key objective of a stewardship program is to educate landowners on the benefits of protecting natural heritage features in perpetuity. Educational initiatives could be advanced through seasonal or annual Open Houses, door-to-door contact, and local newspaper inserts.

5. **Establishment of Community Land Trust:**

A land trust is an agreement whereby one party (the trustee) agrees to hold ownership of a piece of real property for the benefit of another party (the beneficiary). Land trusts are used by nonprofit organizations to hold conservation easements, by corporations and investment groups to compile large tracts of land, and by individuals to keep their real estate ownership private, avoid probate, and provide several other benefits. A community or conservation land trust is an organization established to hold land and to administer use of the land according to the charter of the organization.

The land trust is not a suitable option as the process is lengthy and the same objective can be achieved through the establishment of a Foundation or Reserve Fund. Specific direction would be provided as to the use of the funds. In addition, the Head-of-the-Lake Land Trust (through the Hamilton Naturalists’ Club) currently holds title to conservation lands within the City of Hamilton. This organization achieves the same objectives as a municipal land trust.

**Options To Consider For Sources Of Funding:**

1. **Funding Options:**

Staff has identified three (3) funding options available to the City for a Natural Areas Acquisition Fund. These funding sources could be used in the event that a Natural Areas Acquisition Fund program is established:
Option A: **Annual Capital Budget Commitment**

City Council could commit a set amount of funds, through the capital budget, each year to the Natural Areas Acquisition Fund. The majority of municipalities with acquisition funds use this option. Their funding has been implemented over a few years with the majority of the seed monies coming from the capital budget.

Private landowners may be more willing to consider land securement options if there is a consistent and continual supply of funding. Other municipalities within the Golden Horseshoe currently have annual budgets ranging from $500,000 to $1.6 million for land acquisition funds, as outlined in Table 4 on Page 27 above.

Over the next 3 years, a total capital budget commitment of $300,000 could be phased in: $100,000 in 2011, $100,000 in 2012, and $100,000 in 2013. It would most likely take 3 years to achieve any measures of success. It is hoped that by 2014, the accumulated capital budget would be $300,000 and continue in perpetuity.

The capital budget commitment of $300,000 does not include any monies required for staffing.

This is the preferred option, as it provides the most consistent source of funding. The other options provide funding sources but would not be consistent from year to year.

**Option B: ** **Hamilton Futures Fund**

The purpose of the Hamilton Futures Fund is to provide monies for programs that improve the economic, social, and environmental well-being of the City of Hamilton. While currently there are no monies available, future funding could be allocated from this fund once monies become available.

This is a viable option for a one-time contribution; however, it is not secure from year to year as there are a number of applications received annually, and it would not be available on an annual basis to the same fund.

2. **Distribution of Funds**

There are several options for distributing funds from a Natural Areas Acquisition Fund. The following describes three options:

a) The City could buy and own the property, and a non-profit agency could manage it. This type of agreement is already being used (e.g. the City of Hamilton owns Confederation Park and the Hamilton Region Conservation Authority manages and operates it).
b) The City could provide leveraged funding (i.e. up to 50% of the acquisition cost to a maximum of $50,000) with the non-profit organization buying, owning, and managing the land.

c) The City could have complete ownership of the lands and would be responsible for the management of the lands. While this is the least preferred option, it would only be considered should no other Conservation Organization be willing to accept the lands and the City of Hamilton deems these natural heritage lands to be of ecological importance to the City.

In consultation with existing Stakeholders and internal City departments, Option b) is the preferred option. The City would not own or manage the lands; they would only provide funding to the interested Stakeholder who would take title to the land and be responsible for the long term maintenance of the lands.

There are many options to consider in the distribution of the funds if a funding source has been established.

3. Uses for Fund

Permitted uses for the Natural Areas Acquisition Fund include:

- Direct property costs for acquiring partial (conservation easements) or full rights to land (fee simple purchase).

- Costs directly associated with providing materials for public education or stewardship initiatives to promote the Natural Areas Acquisition Fund.

**ALTERNATIVES FOR CONSIDERATION:**

**Option A: Do Nothing**

Currently, the City of Hamilton has no source of funding available for the purchase and/or protection of existing natural areas. The option of “do nothing” would maintain the existing situation within the City. The only source of protection for natural areas is relying on current policies, guidelines, and zoning.

With increasing development pressures within both the urban and rural areas, there continues to be stresses placed on the remaining natural heritage features and areas within the City. Long term protection of the remaining natural heritage features through acquisition represents a reasonable option available to ensure the unique natural features within the City of Hamilton are maintained for future generations to enjoy. Accordingly, the “do nothing” option is not preferred.
Option B: Accept the Natural Areas Acquisition Fund Strategy with no impact on Levy

The adoption of the Natural Areas Acquisition Fund Strategy (Appendix “A”) is the preferred option. This option would allow the City of Hamilton to direct monies towards the acquisition of targeted Natural Heritage System lands based on the specific goals of the municipality. This option would allow the City of Hamilton to continue to work with interested stakeholders in securing natural heritage system lands in public ownership.

However, in order to have no impact on the levy, the implementation of the strategy would not be effective. There are no alternative funding sources with monies available for land acquisition purposes. As illustrated on Table 4, municipalities with similar securement strategies have allocated funding which is primarily sourced through the budget process. Accordingly, this option is not considered appropriate.

Option C: Accept the Natural Areas Acquisition Fund Strategy and Recommendations

The adoption of the Natural Areas Acquisition Fund Strategy (Appendix “A”) is the preferred option. This option would allow the City of Hamilton to direct monies towards the acquisition of targeted Natural Heritage System lands based on the specific goals of the municipality. This option would allow the City of Hamilton to continue to work with interested stakeholders in securing natural heritage system lands in public ownership.

FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

Financial:

The following financial implications would occur:

- 1 permanent full-time staff member (1.0 FTE) would cost approximately $100,000 annually including salary and benefits. Alternatively, implementation of the Strategy would have to be allocated from existing staff, which would impact service delivery times and work programs from other division areas.

- An annual Capital Budget commitment of $300,000 for the Natural Areas Acquisition Fund. This is to be phased in with $100,000 in 2011, $100,000 in 2012, and $100,000 in 2013, with the full $300,000 commencing in 2014, and continuing in perpetuity.

Legal:

There would no legal requirements from this Strategy.
Staffing:

The adoption of the Natural Areas Acquisition Fund Strategy will require:

- One full-time permanent staff member (1.0 FTE) to implement the program, which includes:
  - Contacting approximately 100 landowners per year;
  - Receiving and reviewing applications (from Conservation Authorities, Bruce Trail Conservancy, Head-of-the-Lake Land Trust, etc) for eligibility and directing the approved applications to the appropriate staff member (e.g. Real Estate to confirm appraised value) for acquisition including funding allocation;
  - Organizing Stakeholder Working Group meetings (a minimum of two per year) to determine priority acquisition areas and forwarding to the Portfolio Management Committee for final approval; and,
  - Writing the necessary reports (e.g. Committee and Council Reports and Annual Natural Areas Acquisition Fund Report) and documents (information brochures, landowner contact lists), and liaising with stakeholders (Workshops) throughout the funding approval process.

At this point, re-allocation of work to existing FTEs can cover these responsibilities. However, as development activity increases in the years ahead, there may be a need to request additional staffing for this initiative in the future.

Administrative support can be supplied by current staffing.

- Real Estate currently has the staff to complete the necessary review of the appraisal documents included as part of the funding application. However, budgeting may be required for peer review of the appraisal reports, should it be needed. The monies for this would be debited from the Natural Areas Acquisition Fund Reserve as part of the review process.

In addition, a Stakeholder Working Group (comprised of Hamilton Partners and City staff) would be set up to determine priority acquisition areas. These priority acquisition areas would need to be reviewed and approved by the Portfolio Management Committee prior to dispersal of any funds.

POLICIES AFFECTING PROPOSAL:

Provincial Policy Statement

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. The Provincial Policy Statement
provides for appropriate development, while protecting resources of provincial interest, public health and safety, and the quality of the natural environment.

Section 2.0 of the PPS specifically deals with the Wise Use and Management of Resources. It states that Ontario’s long-term prosperity, environmental health, and social well-being depends on protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental, and social benefits.

Section 2.0 also outlines specific guidelines when dealing with both Natural Heritage and Water Resources, including direction as to which natural features require complete protection with no new development permitted within them (e.g. Provincially Significant Wetlands, Significant Habitat of endangered and threatened species), and which features could support new development provided it can be demonstrated that there will be no negative impacts on the features or their ecological functions (e.g. significant woodlands, significant valleylands, significant wildlife habitat, and significant areas of natural and scientific interest). When looking at water resources, planning authorities shall protect, improve, or restore the quality and quantity of water.

**Places to Grow**

The Province’s Growth Plan for the Greater Golden Horseshoe, as prepared and approved under the Places to Grow Act, 2005, took effect on June 16, 2006. This Act requires that all decisions under the Planning Act conform to the Growth Plan.

Section 4.2.1 of the Growth Plan sets out policies for protecting natural systems and states that the Minister of Public Infrastructure Renewal and other Ministers of the Crown, in consultation with municipalities and other stakeholders, will identify natural systems for the GGH; with the policies related to natural systems for those lands within the Greenbelt Area, the current policies continue to apply; planning authorities are encouraged to identify natural heritage features and areas that complement, link, or enhance natural systems; Municipalities, conservation authorities, non-governmental organizations, and other interested parties are encouraged to develop a system of publicly accessible parkland, open space and trails, including shoreline areas; and Municipalities are encouraged to establish an urban open space system within built-up areas, which may include rooftop gardens, communal courtyards, and public parks.

**Endangered Species Act**

The original Endangered Species Act was written in 1971, with no major changes in the document since that time. In 2007, a new Endangered Species Act was written to incorporate changes in land use planning and increasing threats to our native species. The new Endangered Species Act (2007) provides:

- Broader protection for species at risk and their habitats;
- Greater support for volunteer stewardship efforts of private landowners, resource users, and conservation organizations;
• A stronger commitment to recovery of species;
• Greater flexibility;
• Increased fines;
• More effective enforcement; and,
• Greater accountability, including government reporting requirements.

An identified species at risk would fall into one of four categories which include: Extirpated (a native species that no longer exists in the wild in Ontario, but still exists elsewhere); Endangered (a native species facing imminent extinction or extirpation; Threatened (a native species at risk of becoming endangered in Ontario); and Special Concern (a native species that may become endangered or threatened because of a combination of biological characteristics and identified threats).

The Endangered Species Act provides direct protection for endangered, threatened, or extirpated species and their habitats. In addition, recovery strategies are required for endangered and threatened species, with management plans provided for Special Concern species. The Province also encourages Stewardship under the new Endangered Species Act with some flexibility provided to enter into agreements, issue permits, or make regulations for works that would have previously not been permitted under the Act.

The City of Hamilton is located within the Guelph District of the Ministry of Natural Resources. Of the 183 Total Species currently on the Endangered Species list, approximately half are found within the Guelph District alone. This provides a strong rationale for the City of Hamilton to protect, through public ownership, any areas of land that currently support an endangered species and/or its habitat. The Natural Areas Acquisition Fund Strategy would provide a more detailed assessment of those natural heritage lands to be secured in perpetuity.

**The Greenbelt Plan**

The Greenbelt Plan identifies where urbanization should not occur in order to provide permanent protection to the agricultural land base and the ecological features and functions occurring on this landscape. The land identified as Protected Countryside is intended to enhance the spatial extent of agriculturally and environmentally protected lands (under the Niagara Escarpment Plan and Oak Ridges Moraine Conservation Plan), while improving linkages between these areas and the surrounding major lake systems and watersheds. The Protected Countryside includes both the Agricultural System and the Natural System (those lands that support both natural heritage and hydrological features and functions).
Regional Municipality of Hamilton-Wentworth Official Plan

Policy C-1.1 k) of the Hamilton-Wentworth Regional Official Plan (2003) supports investigating the establishment of a Natural Areas Acquisition Fund for acquiring and managing natural areas.

New City of Hamilton Rural and Urban Official Plans

Within the Council adopted City of Hamilton Rural and Urban Official Plans, policies outline the Natural Heritage System and the goals envisioned by the residents of the City of Hamilton. Within Chapter C, Section 2.0 of the Official Plan, policy, goals are set out which support and promote the Conservation Authorities and other agencies and organizations which promote land stewardship, acquisition, and other similar securement options. These plans are adopted but not yet in effect.

City of Hamilton Corporate Strategic Plan

Focus Area 6 of the Strategic Plan deals with Environmental Stewardship. It states the following:

“6.4 Maintain or increase the quantity and quality of Significant Natural Areas that are protected.

6.5 Maintain or increase the cumulative amount of tree cover in the City with the objective of moving towards the Environment Canada guideline of 30%.”

RELEVANT CONSULTATION:

The following departments and agencies were consulted with in the preparation of this report:

Internal Departments:

- Corporate Services Department, Budgets and Finance Division.
- Corporate Services Department, Geographic Information Systems (GIS) Services.
- Legal Services Department.
- Public Works Department, Capital Planning and Implementation Division.
- Public Works Department, Operations and Maintenance Division.

Conservation Authorities:

- Conservation Halton.
- Hamilton Region Conservation Authority.
- Grand River Conservation Authority.
- Niagara Peninsula Conservation Authority.
Provincial Ministries:

- Ontario Ministry of Natural Resources.

Other Organizations:

- Bay Area Restoration Council.
- Bruce Trail Conservancy.
- Edmonton Area Land Trust.
- Hamilton-Halton Stewardship Program.
- Hamilton Naturalists Club/Head-of-the-Lake Land Trust.
- Niagara Escarpment Commission.
- OrLand Conservation.
- Royal Botanical Gardens.
- The Greenbelt Foundation.

**CITY STRATEGIC COMMITMENT:**

By evaluating the “Triple Bottom Line”, (community, environment, and economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

**Community Well-Being is enhanced.** ☑ Yes  ☐ No
Participation in community life is accessible to all Hamiltonians. Public ownership of natural heritage lands promotes physical fitness and an increase in education and appreciation for the environment and community.

**Environmental Well-Being is enhanced.** ☑ Yes  ☐ No
Ecological function and the natural heritage system are protected. Protection of Natural Heritage Features creates a healthy environment, and provides an opportunity to create linkages to support existing core areas.

**Economic Well-Being is enhanced.** ☑ Yes  ☐ No
Hamilton's high-quality environmental amenities are maintained and enhanced. Maintaining high quality environmental amenities will help to encourage new business growth within the City by establishing a unique, sustainable, and healthy environment.

Does the option you are recommending create value across all three bottom lines? 
☑ Yes  ☐ No
Community well-being, environmental well-being and economic well-being are all improved and enhanced.

Do the options you are recommending make Hamilton a City of choice for high performance public servants?  
☑ Yes  ☐ No
Life-long learning is supported. Acquisition of natural heritage features provides an opportunity to create a community where everyone has the opportunity to enjoy and appreciate the unique natural features within the City of Hamilton. Acquiring a variety of different natural heritage features creates a framework for continued education and preservation.

:TR
Attach. (1)
City of Hamilton
Natural Areas Acquisition Fund
Strategy

Draft Report
October 2009
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EXECUTIVE SUMMARY

The City of Hamilton covers over 112,790 hectares of land (276,068 acres) and is home to 518,181 residents (OMBI Final Chart 2007) and almost 250,000 residential units (2006 Census). The Niagara Escarpment and the Lake Ontario waterfront are prominent features within the City of Hamilton which form part of the 32,894 hectares (or 29%) of land within the Natural Heritage System (NHS). Of the identified Natural Heritage System lands, approximately 13,642 hectares (41%) are protected by Official Plan policies, or zoning. The remaining 19,252 hectares are currently not protected by Official Plan policies, zoning or public ownership and would be suitable for acquisition under the Natural Areas Acquisition Fund Strategy.

This Strategy is intended to provide a framework for land securement Partners, funding Partners and other interested Partners within the City of Hamilton to work cooperatively towards securing further City of Hamilton Natural Heritage System Lands. In order to provide appropriate direction, a definition of a strategy is necessary.

Wikipedia describes a “strategy” as a plan of action designed to achieve a particular goal. Goal-setting ideally involves establishing specific, measurable and time-targeted objectives. The goal of the Natural Areas Acquisition Fund Strategy is to establish objectives that will provide specific, measurable and time-targeted direction to Stakeholders who are interested in the acquisition of natural heritage system lands within the City of Hamilton. For the purposes of this strategy, acquisition refers to the possession of natural heritage system lands by a public Conservation Organization. The Conservation organization will take title to the land and be responsible for its long term maintenance.

Based on discussions with existing Hamilton Partners (“Stakeholders”) and in reviewing other municipal acquisition programs, the goals of the City of Hamilton Natural Areas Acquisition Fund Strategy will be determined based on five objectives which include:

**Objective 1:** To consider the full suite of securement tools available, including planning policy and private land stewardship and to promote existing incentive and education programs.

**Objective 2:** To identify and develop eligibility criteria for securement or acquisition activities that prioritize Municipal interests and will complement related municipal initiatives and programs (e.g. Vision 2020, Corporate Strategic Plan).

**Objective 3:** To operate on a multi-agency and multi-stakeholder basis and provide a source of leveraged funds that will complement partner agency contributions and/or grants.
Objective 4: Any land securement or acquisition will be undertaken in full consultation with all interested stakeholders, including relevant Municipal Citizen Advisory Committees (e.g. ESAIEG) and will be administered on a consistent and equitable basis.

Objective 5: To complement existing land securement activities by partner agencies including conservation authorities, and non-government organizations operating in the City of Hamilton.

Prior to creating the Natural Areas Acquisition Fund Strategy, Planning staff presented a report (PED09007) to the Economic Development and Planning Committee on February 3, 2009, which outlined different acquisition strategies currently being implemented by a number of area Municipalities. The Committee recommended that staff continue with the completion of a Natural Areas Acquisition Fund Strategy and report back to the Economic Development and Planning Committee.

Direction by Council was:

(a) That staff be directed to prepare a Natural Areas Acquisition Fund Strategy and report back to Economic Development and Planning Committee by September 2009.

(b) That this strategy in (a) above include an appropriate governance, business and financial model for a Natural Areas Acquisition Fund, including options which will not have any impact on the levy.

The following Strategy is in response to Council direction.

The Natural Areas Acquisition Fund Strategy is intended to assist Partners, through leveraging opportunities, with securement projects while keeping costs to a minimum. In order to stretch limited available funds, the City of Hamilton program will be focused on providing funding to other Conservation Organizations interested in securing natural heritage lands.

The goal is not to purchase all Natural Heritage System lands but to secure those lands deemed to be of most significance to the overall health of the City of Hamilton.

Another component of the Natural Areas Acquisition Fund Strategy is to educate landowners with significant landholdings within the City of Hamilton about the various long-term conservation options that are available to them. This will be achieved through strategic landowner contact and consultation with partner Conservation Organizations.
This Strategy will outline the suite of securement/acquisition tools available, provide a description of lands suitable for acquisition, determine those lands eligible for stewardship agreements and examine different sources of funding.
1.0 INTRODUCTION

The City of Hamilton covers over 111,721 hectares of land (276,068 acres) and is home to 518,181 residents (2006 Census). The former Regional Municipality of Hamilton-Wentworth amalgamated with the former City of Stoney Creek, City of Hamilton, Town of Ancaster, Town of Dundas, Township of Flamborough and Township of Glanbrook to form the New City of Hamilton in 2001.

Through the Growth Related Integrated Development Strategy (GRIDS), the City has projected that Hamilton will have a population of 700,000 and an additional 100,000 (40,000 within the current urban boundary) households by the year 2031. In order to achieve the objectives of sustainable development, the Corporate Strategic Plan and the goals of Vision 2020, consideration for a balance between social, economic and environmental pressures must be included.

There are a number of unique geologic and terrestrial features within the City of Hamilton that need to be considered when adopting a Natural Areas Acquisition Strategy. These features should be considered when developing and implementing the Natural Areas Acquisition Strategy.

1.1 Geology

The City of Hamilton has a rich and diverse natural legacy that includes a wide range of plants and animals, unique ecosystems and areas of spectacular beauty. The City of Hamilton landscape includes seven distinct physiographic regions (Niagara Escarpment, Iroquois Plain, Flamborough Plain, Horseshoe Moraine, Norfolk Sand Plain, Haldimand Clay Plain and the adjacent Peel Plain and South Slopes). There are three prominent landform features found within the City of Hamilton, which include: the western Lake Ontario shoreline including the Hamilton Harbour embayment, the Niagara Escarpment (a World Biosphere Reserve) and the Dundas Valley (including Cootes Paradise - considered one of the most important waterfowl staging habitats on the lower Great Lakes and the largest nursery habitat for fish in the region).

There are twelve major watersheds, covered by four Conservation Authorities, within the City of Hamilton. These include: Spencer Creek, Borers Creek, Redhill Creek, Stoney Creek and Fifty Creek Watersheds (Hamilton Conservation Authority), Bronte Creek and Grindstone Creek Watersheds (Halton Region Conservation Authority), Fairchild Creek and Big Creek sub-watersheds (Grand River Conservation Authority) and Upper Welland River, Twenty Mile Creek and Forty Mile Creek sub-watersheds (Niagara Peninsula Conservation Authority).

Within the City of Hamilton the Ontario Ministry of Natural Resources has included a number of sites within their earth science theme studies. Eight were selected as provincially significant Areas of Natural and Scientific Interest (ANSI)
and thirteen as regionally significant ANSIs. These sites include natural features associated with the Niagara Escarpment, road cuts associated with the Niagara Escarpment, glacial features, and bedrock exposures in quarries and other bedrock exposures. The geological features found throughout the City of Hamilton support unique vegetation and faunal communities. Through the acquisition of key natural heritage features and key hydrologic features the diversity unique to the City of Hamilton can be maintained in perpetuity.

1.2 Terrestrial and Aquatic Resources

The City of Hamilton is located within a transition zone between two major forest regions: The Carolinian Zone and the Great Lakes-St. Lawrence Forest. This creates a natural environment with diverse flora and fauna including many species which are at or near their northern or southern limits. While the City of Hamilton has retained a high proportion of its upland natural wetland areas, the terrestrial environment is dominated by agriculture and urban land use. The largest remaining natural terrestrial habitats include the Dundas Valley and Niagara Escarpment corridors.

The Region of Hamilton-Wentworth, in Partnership with the Hamilton Conservation Authority and the Hamilton Naturalists’ Club completed the Hamilton-Wentworth Natural Areas Inventory (1995) which targeted approximately 99 natural areas within the former Region. The purpose was to complete a detailed analysis of the existing natural heritage features and their functions. Through this study approximately 1269 species of vascular plants, 90 butterfly taxa, 85 fish species (including native and introduced), 29 herpetofauna species, 162 bird species and 38 mammal species were found within the City of Hamilton.

Of the 1,269 vascular plants, 884 species (70%) are considered native to the Hamilton-Wentworth Region, with approximately 342 taxa (38%) considered rare in the Hamilton-Wentworth Region. The flora within the City of Hamilton includes 50 taxa which are rare in Canada and 61 taxa which are rare in Ontario with most of these being Carolinian species.

Of the total butterfly species, 72 taxa are classified as resident species (can overwinter in Hamilton), with 15 of these species considered highly significant species, 18 are considered moderately significant species regionally and 6 species are considered provincially significant.

Of the 75 existing native fishes reported, 25 are considered highly significant and another 20 are considered moderately significant. Only the redside dace is considered nationally significant. Of the 85 species present, 34 (40%) are restricted to the Hamilton Harbour-Cootes Paradise complex. There are a total of 49 species reported from stream systems with over 40 species occurring within the Spencer Creek watershed.
Nine herpetofauna species are considered regionally rare and 7 are considered regionally uncommon. There are 2 species (Jefferson Salamander and Eastern Spiny Softshell) which are listed as nationally and provincially rare.

Five of the 162 bird species are considered extirpated (no longer present in the area), with 52 species considered highly significant regionally and 52 species are moderately significant regionally. Seventeen species are identified as provincially significant and another 17 species identified are listed as nationally significant.

Seven mammal species are considered rare and 5 are regionally uncommon within the Region of Hamilton-Wentworth. Three mammal species are rare in Ontario and Canada with the northern flying squirrel considered vulnerable nationally.

In order to ensure this diverse range of flora and fauna are maintained within the City of Hamilton, preservation of suitable habitat is crucial. The Natural Areas Acquisition Fund Strategy will provide appropriate guidance to determine which critical areas of natural habitat within the City of Hamilton should be targeted for preservation in perpetuity.
2.0 PURPOSE OF THE NATURAL AREAS ACQUISITION FUND

The purpose of the Natural Areas Acquisition Fund Strategy is to provide detailed direction as to the lands eligible for acquisition, the types of securement strategies available, the approved uses for the funds, and the application process. This Strategy is intended to complement existing programs by Conservation Authorities and other agencies involved in land securement for permanent natural heritage protection in support of the policies of the City of Hamilton.

The City of Hamilton has a number of Planning and Policy documents that support the establishment of a Natural Areas Acquisition Fund and the related Strategy. These policies include: Focus Area 6 of the Corporate Strategic Plan; Nine of the Fourteen Theme Areas identified within Vision 2020; Chapter C, Section 2 and Chapter C, Section 2.12 within the Council adopted City of Hamilton Rural and Urban Official Plans; and, Direction 8 within GRIDS. (See Appendix 1)

In addition, the Provincial Government has a number of policy documents which address the importance of maintaining and enhancing natural heritage features and their ecological functions. These policies include: Section 2.0 and 2.1 within the Provincial Policy Statement, Section 4 within the Places to Grow Act; the Endangered Species Act; and, Section 1.2.2 within The Greenbelt Plan. Environment Canada has also completed habitat restoration guidelines for the Greater Golden Horseshoe in order to provide sustainable natural heritage lands. (See Appendix 1)

Finally, the Remedial Action Plan, which sets targets for improvements to Hamilton Harbour, is being implemented with the goal of having Hamilton Harbour removed from the Great Lakes Areas of Concern List of highly polluted areas by the year 2015. The goal is to bring about sustainable natural ecosystems in Hamilton Harbour and its entire watershed. The Remedial Action Plan also looks at how to improve the potential for more extensive recreational uses while maintaining the Harbour’s and the watershed’s essential economic function.

The Natural Areas Acquisition Fund Strategy is a means by which other Conservation organizations, interested in land acquisition and/or stewardship programs, have a secure source of funding available in order to secure natural heritage lands. The City of Hamilton has not historically owned or managed large areas of Natural Heritage System lands but has provided funding and leveraging opportunities with other interested stakeholders on an ad hoc basis. This strategy will allow the City of Hamilton to direct monies only towards the Natural Heritage System lands that fulfill the mandate of the policies of the City of Hamilton.
Purchasing natural heritage lands is important for the overall health of a municipality. Increasing forest cover and preserving wetlands not only improves air quality but can also improve the water quality within watercourses and ultimately Lake Ontario. Forest cover also can mitigate some of the effects of erosion, sedimentation and flooding by establishing a riparian zone along the edge of watercourses, allowing for filtering of surface runoff, slowing and decreasing the amount of water directly entering a watercourse. Forest cover also shades and cools the water which benefit fish and their habitats.

The prime objective of the program is to secure ownership or permanent stewardship of lands that will contribute to the overall quality of the City’s natural environment. These include:

- Critical areas in the Natural Heritage System which are in danger of losing their ecological functions or features unless placed under public ownership or management;
- Areas that will significantly enhance the ecological functioning in parts of the Natural Heritage System;
- Essential linkages to provide a system of connected open space accessible by the public; and,
- Other areas that are deemed to be of important ecological significance to the City which may include farmland or significantly disturbed areas that can only be rehabilitated properly under public ownership and management.
3.0 **KEY OBJECTIVES**

There are five key objectives that will be addressed within the Natural Areas Acquisition Fund Strategy. These objectives will provide the direction necessary to determine the types of land securement available, the lands eligible for acquisition, the other agencies currently involved in land acquisition, the proposed distribution of funding and how this strategy will complement other existing land securement programs.

3.1 **Objective 1**: To consider the full suite of securement tools available, including planning policy and private land stewardship and to promote existing incentive and education programs.

There are a number of securement tools available which fall into one of two categories: donations of land or conservation easement agreements, and purchases of land. Donations involve the donation of land or property rights while purchases of land involve the outright purchase of title and property rights of the land.

Property acquisition by a public conservation body is the most secure way to preserve natural areas in perpetuity. However, it is also the most costly as the price of natural heritage lands could be as high as $15,000/ha. There are other options for land securement that benefit not only the City of Hamilton but the landowner as well.

The Federal Government has initiated the Ecological Gifts program, which is administered by Environment Canada. It is a program designed to provide tax relief to landowners who donate natural heritage lands to conservation organizations. This appears to be the most commonly used method for land acquisition by conservation bodies within the City of Hamilton.

The Province of Ontario has initiated two tax incentive programs for conservation lands. These are the Conservation Land Tax Incentive Program (CLTIP) and the Managed Forest Tax Incentive Program (MFTIP). Providing education and resources to landowners that may benefit from one of these programs is an important step in promoting land stewardship and the long term securement of Natural Heritage System lands.

In addition to the Provincial initiatives, there are numerous other securement options available to secure an interest in title of key environmentally sensitive or significant lands. The City of Hamilton, through the Natural Areas Acquisition Fund Strategy will promote the method of using outright donation first, followed by split-receipts and acquisition as the final option.
Options to use two or more securement methods on a single parcel of land should also be considered. A case by case assessment should be undertaken to determine the quality and significance of the resources or function of each property. Additionally, each partner shall determine the most appropriate type of securement method to use to ensure the protection of the features and functions of the land.

3.1.1 **Key Securement Methods**

1. **Donation of Land or Conservation Easement Agreements**

These are legally binding agreements registered on title and running in perpetuity, whereby a landowner transfers specific rights, such as the ability to create building lots or cut trees, to an easement holder such as a Land Trust, Municipality or Conservation Authority. The easement holder usually has the right and responsibility to monitor the property and ensure that the terms of the conservation agreement are being respected. If no easement is granted then the agreement can be referred to as a “restrictive covenant.”

The goal of a conservation easement is to prevent the destruction of a resource on a particular property. There are normally “restrictions” in conservation, included within a separate schedule, which restrict activities and land uses to protect the natural features on the property by eliminating threats to those natural features. These easements/covenants are tailored to each property. The rights to the uses of a property (e.g. subdivision rights, development rights, tree cutting rights) can be donated or purchased from the landowner; however, it is more common to have a conservation easement donated.

2. **Purchases of Land (Fee-simple)**

This land securement method acquires the total interest in a property and is the most effective way for the protection of sensitive Natural Heritage lands. Fee-Simple securement can be obtained through a donation or purchase of land. In some instances only a portion of the land is acquired leaving behind the developable area with the landowner. This is known as a partial taking. Acquiring fee-simple title to a property allows the purchaser or recipient total control of the management and stewardship rights of the property.

Table 1 provides a summary of the current suite of acquisition tools available. There are currently five options to consider for donation of land and seven options to consider as a fee-simple option. When looking at securing natural heritage lands, the most suitable and effective acquisition method would be determined. It is also possible to use more than one acquisition method when securing natural heritage system lands.
### Table 1 – Summary of Natural Areas Acquisition Methods

<table>
<thead>
<tr>
<th>Type and Method of Description</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Donations of Land or Conservation Agreements</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Donations</strong></td>
<td>All donations of ecologically sensitive lands through the federal Ecological Gifts (Ecogifts) Program are subject to 0% capital gains tax as opposed to the previous amount of 25%. All lands donated outside of this program are still subject to 50% capital gains. As part of the Ecogifts Program all appraisals are reviewed by an expert panel of appraisers, therefore landowners and eligible Ecogift recipients can be assured that the appraisal is accurate and legitimate.</td>
</tr>
<tr>
<td>Donations of land or property rights (e.g. fee simple or conservation easement agreements). Gifts, at appraised value, may qualify as charitable donations under the Federal Income Tax Act through the Ecological Gifts Program which is administered by Environment Canada.</td>
<td></td>
</tr>
<tr>
<td><strong>Bequests</strong></td>
<td>The biggest advantage of making a bequest is that it costs nothing during the landowners’ lifetime, while they can be cost effective from a tax perspective against the estate and create a legacy for the donor and their family.</td>
</tr>
<tr>
<td>Landowners may elect to provide for a gift to a conservation organization or land holding agency in their will – perhaps a gift of property.</td>
<td></td>
</tr>
<tr>
<td><strong>Split Receipt</strong></td>
<td>Once the land value is determined by a qualified appraiser, the percentage of the fair market value of the land to be donated versus the amount to be accepted in cash will be negotiated. Through the Ecogifts Program, the donated portion must be a minimum of 20% of the value to qualify for a split receipt. Conversely, the landowner cannot receive more than 80% cash for the appraised value.</td>
</tr>
<tr>
<td>This can be viewed as either a donation of land or easement with cash consideration back to the donor or a purchase of land with a donation of land value in cash back to the purchaser.</td>
<td></td>
</tr>
<tr>
<td><strong>Partial Takings/Direct Conveyance</strong></td>
<td>The advantage to this method is that usually the part of the property severed for conservation purposes, does not include the bulk of the value of the property.</td>
</tr>
<tr>
<td>This is an acquisition of part of a</td>
<td></td>
</tr>
<tr>
<td>Type and Method of Description</td>
<td>Additional Comments</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>property by either a fee simple purchase or donation scenario. For example, if a landowner has a residence he/she may be willing to dispose of the majority of the property while retaining the residence and amenity area.</td>
<td>Therefore landowners can retain a residential lot and acreage around their residence, and maintain the majority of the value of the property. The land severed is then owned and managed by the Hamilton Partner and the landowner is then adjacent to publicly owned lands that they no longer have to manage or have liability for. In addition, if the landowner wants to sell the property in the future, they have a much more manageable property to sell and will have ultimately increased the number of potential buyers. Lastly if the landowner wishes they can retain a life interest agreement to use the severed portion (e.g. for hiking) for a specified term. It is recommended that each conservation authority submit a proposal to MNR based on this securement strategy and the areas outlined as priority areas for land securement. Once approved by MNR, it would permit the direct conveyance (partial taking) of lands containing environmentally significant features by a Partner, as allowed under Section 50 (3)(e) of the Planning Act.</td>
</tr>
</tbody>
</table>

**Tradelands**

Tradelands are similar to donations where a landowner wishes to donate or bequeath their property to a Hamilton Partner. However, in these instances the property does not contain any significant environmental features. | Where a Partner accepts these donations these properties would be sold with the proceeds being directed into land securement of ecologically significant lands or other program areas as directed by the donor. It is recommended that all Partners develop a trade lands policy. |
<table>
<thead>
<tr>
<th>Type and Method of Description</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases of Land (Fee-Simple)</td>
<td></td>
</tr>
<tr>
<td><strong>Property Purchase</strong></td>
<td>Purchase of full title and rights to a property, these are typically situations with a willing buyer and a willing seller. Below are some different scenarios using this approach.</td>
</tr>
<tr>
<td>An Option to Purchase</td>
<td>It is a written contract by the landowner to sell the property and not to withdraw this offer during the stipulated period of time. The Partner pays a fee for this option. This mechanism is often used by a conservation group as a means of “buying time” in its attempts to acquire a specific piece of land and is the perfect time to fundraise for the purchase cost.</td>
</tr>
<tr>
<td>Right of First Refusal</td>
<td>It sets out the conditions of sale and is registered on title to the property. It is an interim measure, allowing the Partner to acquire a key property some time in the future. It can be a good tool to use if negotiations have been halted (e.g. unacceptable appraised value). Or it can be registered on title, to allow the Partner to buy a property that already has a conservation easement agreement in cases where the Partner decides they would rather own title than be the easement holder. Right of First Refusal is also a means by which to discourage other potential buyers as they will know they have competition and the holder of the first rights has priority. There is a fee associated with Right of First Refusal.</td>
</tr>
<tr>
<td><strong>Type and Method of Description</strong></td>
<td><strong>Additional Comments</strong></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>Life Interest Agreement/Lease Back Arrangements</strong></td>
<td>In either case, the land can be donated, purchased or split-receipted. The value of the retained interest would be determined by a qualified appraiser. The agreement would specify a set term or would continue as long as the vendor resides on the subject property.</td>
</tr>
<tr>
<td><strong>Project Requirements</strong></td>
<td>Where the project is mutually beneficial (e.g. erosion work on all or part of which in on private land, landowners may be required to deed property rights to the Partner for a nominal amount to ensure access for future maintenance.</td>
</tr>
<tr>
<td><strong>Municipal Lands</strong></td>
<td>Examples of these types of municipally owned lands include unopened road allowances, riparian areas and floodplain lands.</td>
</tr>
<tr>
<td><strong>Exchanges</strong></td>
<td>These arrangements may bring funds to the Hamilton Partner which can be used to acquire additional conservation lands. While these transactions traditionally consist of any combination of property interests. Note that land exchanges are not necessarily acre for acre. Any exchange would be based on appraised value as valley lands would not be valued the same as developable tableland.</td>
</tr>
</tbody>
</table>

When the vendor/donor wishes to retain an interest in the property they can enter into either a life interest agreement or a lease back arrangement.

When lands become part of an approved Hamilton Partner project, they may be purchased outright or a limited interest obtained directly from the owner at Market value.

A conservation authority may acquire property interested in municipal lands, at a nominal cost, when they are located within the boundaries of approved Conservation Authority acquisition projects.

Landowners who own property within a valley system, flood plain or environmentally sensitive feature may exchange their parcels for surplus tableland owned by a Hamilton Partner.
It is important to understand the different acquisition tools currently used when securing natural heritage system lands. In order to determine which tool is the best option for the proposed acquisition, a comparison of securement tools is necessary. Table 2 provides this analysis and is important to use when reviewing any proposed natural area acquisitions.

**Table 2 - Benefits and Considerations to the Various Greenland Securement Methods**

<table>
<thead>
<tr>
<th>Land Securement Method</th>
<th>Main Benefit</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee-Simple Transactions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fee-Simple Donation</td>
<td>• Partner gets donated title to lands.</td>
<td>• Partner has full management responsibility unless another group is chosen to steward the property.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partner has full property liability.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partner has to pay property taxes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If donation was an Ecogift – property is subject to provisions of the Canada Income Tax Act.</td>
</tr>
<tr>
<td>Fee-Simple Donation</td>
<td>• Same as above but in addition, the Landowner has the benefit of a retained interest for a defined term.</td>
<td>• Same as above.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fee-Simple Donation</td>
<td>• Same as Fee-Simple Donation but donated title occurs at a later date.</td>
<td>• Same as above but additional disadvantage is that the bequest can be changed at any time – with or without notice to the conservation organization.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Securement Method</td>
<td>Main Benefit</td>
<td>Additional Considerations</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Fee-Simple Purchase</strong></td>
<td>• Partner gets title to lands.</td>
<td>• Money must be raised for purchase.</td>
</tr>
<tr>
<td></td>
<td>• Can choose to do an option to purchase.</td>
<td>• Partner has full management responsibility unless another group is chosen to steward the property.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partner has full property liability.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partner has to pay property taxes.</td>
</tr>
<tr>
<td><strong>Exchanges</strong></td>
<td>• Exchange developable land for an equal value of conservation land.</td>
<td>• Need to determine difference in acreage between developable and conservation land values</td>
</tr>
<tr>
<td><strong>Trade Lands</strong></td>
<td>• Money used from sale can be used to purchase other ecologically significant lands.</td>
<td>• Partner is subject to perception issues from public and must obey wishes of landowner if it was a donation.</td>
</tr>
</tbody>
</table>

**Conservation Agreement Transactions**

<table>
<thead>
<tr>
<th>Conservation Easement Agreement - Purchase</th>
<th>Main Benefit</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Partner purchases rights via negative covenants.</td>
<td>• Partner has very significant responsibilities of monitoring and enforcing the conservation easement agreement.</td>
</tr>
<tr>
<td></td>
<td>• Agreement is registered on title for perpetuity.</td>
<td>• Partner does not have to pay property taxes, the Landowner does.</td>
</tr>
<tr>
<td></td>
<td>• The Property could be purchased at a later date by the conservation organization and the agreement dissolved.</td>
<td></td>
</tr>
<tr>
<td>Land Securement Method</td>
<td>Main Benefit</td>
<td>Additional Considerations</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>• Could incorporate Right of First Refusal into Agreement.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Amendments or Releases are subject to consent by MNR.</td>
<td></td>
</tr>
<tr>
<td><strong>Conservation Easement Agreement - Donation</strong></td>
<td>• Partner gets donation rights via negative covenants.</td>
<td>• Partner has very significant responsibilities of monitoring and enforcing the conservation easement agreement.</td>
</tr>
<tr>
<td></td>
<td>• Agreement is registered on title for perpetuity.</td>
<td>• Partner does not have to pay property taxes, the Landowner does.</td>
</tr>
<tr>
<td></td>
<td>• The Property could be purchased at a later date by the conservation organization and the agreement dissolve.</td>
<td>• If donation was an Ecogift – property is subject to provisions of the Canada Income Tax Act.</td>
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<td></td>
<td>• Amendments or Releases are subject to consent of MNR.</td>
<td></td>
</tr>
</tbody>
</table>

**Land Protection Tools**

<table>
<thead>
<tr>
<th>The Planning Process</th>
<th>• An economical way to protect large areas of ecologically</th>
<th>• Zoning is subject to periodic review and amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• May not be permanent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Planning decisions can be</td>
</tr>
</tbody>
</table>
### Land Securement Method

<table>
<thead>
<tr>
<th>Method</th>
<th>Main Benefit</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitive lands</td>
<td></td>
<td>Appealed</td>
</tr>
</tbody>
</table>

#### 3.1.2 Stewardship Agreements

These are normally handshake agreements whereby a landowner agrees to be a steward of their land in order to protect any existing natural heritage features. The conservation body will be a source of information on the numerous stewardship options available. Currently within the City of Hamilton there are approximately 270 stewardship agreements covering approximately 2,700 ha of natural area (Hamilton-Halton Stewardship Program data).

A goal of the Natural Areas Acquisition Fund Strategy is to encourage land stewardship through education and information. The City of Hamilton could organize workshops for landowners within target acquisition areas to present the wide array of acquisition/securement options available and encourage stewardship of the Natural Heritage System lands on their property.

Some examples of stewardship agreements could involve: planting a riparian buffer adjacent to a watercourse, renaturalizing a buffer area adjacent to an identified key natural heritage feature or local natural area, performing prescribed burns to maintain a specific habitat, maintaining and/or improving habitat for an identified Species at Risk, strategies to discourage encroachment into adjacent conservation lands, invasive species control and ecological restoration opportunities.
While stewardship does not involve any legally binding contracts it is an inexpensive way to promote the preservation of Natural Heritage System lands on privately owned property.

While this Strategy is simply focusing on providing monies for land acquisition, land stewardship is always something that can be promoted through information brochures.

Information brochures and/or pamphlets could be created which promotes land stewardship. While monies will not be directed to specific stewardship projects, monies could be used to promote education and stewardship opportunities for public landowners and conservation organizations.

3.1.3 Stewardship and Property Tax Incentive Programs

Both the Federal and Provincial Governments have created tax incentive programs for landowners who own natural heritage features on their property. It allows property owners to receive tax breaks when they agree to either donate or protect the natural heritage features located on their property.

The Ecological Gifts Program

The Federal Government has implemented the Ecological Gifts Program for Canadians with ecologically sensitive land to protect nature and leave a legacy for future generations. The program is administered by Environment Canada and as part of the Ecogifts Program, with the terms of the Income Tax Act, favourable income-tax treatment to donors, for gifts of ecologically sensitive land and partial interest in land. This includes the provision of a non-refundable tax credit or deduction to donors, and a reduction in the taxable capital gain realized on the disposition of the property. The donor transfers ownership to a qualified recipient, the donation must be voluntary and no benefit is provided to the donor or a person selected by the donor. Eligible lands are areas or sites that currently or could, at some point in the future, contribute significantly to the conservation of Canada’s biodiversity and environmental heritage.

The Managed Forest Tax Incentive Program (MFTIP)

The Managed Forest Tax Incentive Program (MFTIP) is a voluntary program for landowners with Managed Forest areas larger than 4 hectares (9.88 acres) which can include up to 10% forest openings or abandoned farm fields. Landowners need to submit a Managed Forest Plan to apply for eligibility status. The forest plan period is 10 years with a 5 year progress report requirement.
Eligible lands are taxed at 25% of the municipal tax rate set for residential properties. The program is administered by the Ontario Woodlot Association (OWA) and the Ontario Forestry Association (OFA).

**The Conservation Lands Tax Incentive Program (CLTIP)**

The Conservation Land Tax Incentive Program (CLTIP) is currently run by the Ministry of Natural Resources and usually involves landowner solicitation based on mapping of eligible lands (>0.5 acres). Eligible lands include PSW’s, Provincial ANSI’s, and habitat of endangered species, lands designated as Escarpment Natural Area (NEP) and community conservation lands.

Landowners need to apply every year and agree to not carry out activities which would degrade, destroy or result in the loss of natural values of the site. Lands placed under CLTIP are 100% tax exempt.

The Federal and Provincial Governments have had great success in implementing their respective tax incentive programs. The Natural Areas Acquisition Fund, through Planning Acts with existing conservation organizations, will promote these programs to landowners within the City of Hamilton who have natural heritage features on their property.

In addition to tax incentive programs, Municipalities will often include planning policies within their Official Plans and Zoning By-laws that recognize natural heritage features and provide direction to landowners on how the municipality is protecting these features.

### 3.1.4 Planning Policy

As part of a conservation authority’s or municipality’s involvement in the planning process under the *Planning Act* environmentally significant areas may be identified through supporting studies and where appropriate designated open space, environmental protection or other designation that would restrict future development. The opportunity to acquire some of these lands may arise from time to time.

The majority of natural heritage lands are often contained on a portion of the property which could require severing off the natural heritage lands while the land owner retains the tableland portion. There are a number of issues that conservation bodies often experience when going through the acquisition and severance process.
The first issue that consistently arises through the land securement process is in appropriate official plan, zoning and Planning Act requirements that often do not apply to conservation severance lands. For example, the Planning Act does not account for the creation of conservation lots (i.e. lots that do not need access or frontage). In addition, because the City of Hamilton’s Official Plans do not recognize the creation of conservation lots as supported by the Niagara Escarpment Development and Planning Act, (Section 18.(1) For the purposes of developing any feature of the Niagara Escarpment Plan, the Minister may, for and in the name of Her Majesty, acquire by purchase, lease or otherwise, or, subject to the Expropriations Act, without the consent of the owner, enter upon, take and expropriate and hold any land or interest therein within the Niagara Escarpment Planning Area and sell, lease or otherwise dispose of any such land or interest therein), conservation bodies are often required to amend the Official Plan in order to support conservation severances. Often the landlocked parcels created are only temporary as future acquisitions of adjacent lands create a continuous conservation corridor, often with road and/or access points. As these lands will never be developed, access and frontage is not necessarily required.

A second issue that often arises is with existing zoning by-laws. Often natural heritage lands may be included within an agricultural zone and require an amendment to recognize the severed portion as conservation lands. Appropriate direction should be provided which allows the municipality to recognize these types of acquisitions and change the zoning through housekeeping amendments and not a formal application process.

Another roadblock often experienced by the conservation organization is the requirement for paying development charges and parkland dedication fees. Since the conservation lands create open space and parklands and no money is being made from the creation of the conservation lots consideration could be given to waiving or potentially reducing the parkland dedication fee and severance fees

Finally, it should be noted that some of the conservation organizations securing these lands are not considered public bodies under the Planning Act and find it difficult to secure lands. This Strategy should recognize that these types of conservation bodies do exist (e.g. Head-of-the-Lake Land Trust) and they should have the ability to create conservation lots through the municipal consent process.

The Planning Process is reactionary as it only occurs once a landowner makes an application. In order to receive approvals, the proponent must convey land or an easement for conservation or parkland. The result is
not always an ideal amount or configuration of protected land, but a compromise. Despite this, this method is still a worthwhile conservation practise to continue.

The statutory authority for municipalities to acquire land to meet the objectives of a Greenlands Plan come from the *Planning Act*, R.S.O. 1990, c. P.13, s. 25 (1); 1994, c. 23, s. 17; 1996, c. 4, s. 15. In addition, any local municipality may contribute towards the cost of acquiring land under section R.S.O. 1990, c. P.13, s. 25 (2). For conservation authorities, the statutory authority to acquire land comes from the *Conservation Authorities Act* R.S.O. 1990, CHAPTER C.27. The Act also provides conservation authorities with the ability to perform direct conveyances or partial takings of land for conservation purposes. Thus giving flexibility to how the securement of a property can occur.

With the full suite of land securement tools available through either donation or conservation easement, or fee-simple purchase of land; the numerous federal and provincial tax incentive programs; stewardship agreements; and municipal planning policies, the importance of recognizing and preserving natural heritage features is prevalent. The Natural Areas Acquisition Fund Strategy provides direction to the City of Hamilton and relevant Stakeholders in identifying natural heritage lands that are deemed to be of ecological significance to the overall social, economic and ecological well-being of the municipality.

Objective 1 described the full suite of securement tools currently available for the acquisition of natural heritage lands. Objective 2 provides direction to Stakeholders as to which lands within the City of Hamilton are deemed to be of ecological importance to the overall social, economic and ecological well-being of the municipality.

3.2 **Objective 2:** To identify and develop eligibility criteria for securement or acquisition activities that prioritize Municipal interests and will complement related municipal initiatives and programs (e.g. Vision 2020, Corporate Strategic Plan).

The City of Hamilton has defined the Natural Heritage System as an inter-related system of natural areas and features of varying ecological significance within the City of Hamilton. Areas or features included in the system may be designated or regulated by Provincial or Regional Policy. Within this Strategy, the criteria used to determine which lands are most important for acquisition is based on those lands that have been identified within the Natural Heritage System including: Core Areas (Key Natural Heritage Features, Key Hydrologic Features and Local Natural Areas) and Linkage Areas within the Council adopted City of Hamilton Rural and Urban Official Plans.
Those lands identified within the Natural Heritage are considered Primary Criteria when determining suitable lands for acquisition. These are the lands that would be targeted for acquisition and contribute the most ecological benefit to the City of Hamilton Natural Heritage System.

Secondary Criteria are not necessarily those lands identified within the Natural Heritage System but they provide an ecological function to the Natural Heritage System lands. While these lands would not be the focus of acquisition, should there be no Primary Criteria lands available for acquisition then the Secondary Criteria lands are a viable option.

3.2.1 **Primary Criteria:**

1. **Core Areas**

Core Areas are the most significant areas within the Natural Heritage System in terms of biodiversity, productivity and hydrological functions. They are given priority in terms of conservation policy and management. They include key natural heritage features, key hydrologic features and local natural areas.

*Key Natural Heritage Features (KNHF) includes:*

- Significant habitat of endangered, threatened, and special concern species;
- Fish habitat;
- Wetlands;
- Life Science Areas of Natural and Scientific Interest (ANSIs);
- Significant valleylands;
- Significant woodlands;
- Significant wildlife habitat;
- Sand barrens, savannahs, and Tallgrass prairies; and,
- Alvars.

*Key Hydrologic Features (KHF) includes:*

- Permanent and intermittent streams;
- Lakes (and their littoral zones);
- Seepage areas and springs; and,
- Wetlands.
**Local Natural Areas**

Local Natural Areas include: Environmentally Significant Areas (ESAs) as identified by the City of Hamilton (see the criteria listed below), unevaluated wetlands and Earth Science Areas of Natural and Scientific Interest (ANSI).

- **Environmentally Significant Area**

In order to determine whether natural lands should be designated as an Environmentally Significant Areas (ESAs) the land must meet any one of the following criteria:

  a) The area is a good representative of a biotic community characteristic of the natural landscapes of the City and not adequately represented in existing protected areas or the area is a good representative of pre-settlement biotic community;
  
  b) There are biotic communities that are rare in the City, Province, or Canada;
  
  c) The area is a large natural area (20 hectares or more in size); it may be sufficiently large to provide habitat for species requiring large habitat areas;
  
  d) There is habitat for species considered significant in the City, Province or Canada;
  
  e) The site fulfills a significant hydrological function (groundwater recharge or discharge, ground or surface water quality, or flood attenuation);
  
  f) The site contains a significant earth science feature (distinctive and unusual landform);
  
  g) There is a high diversity of native species or biotic communities;
  
  h) The area provides *essential* habitat for the continuation of species; for example, significant areas of species concentration, areas *essential* for certain stage of the life cycle, source areas for species;
  
  i) There are significant seasonal concentrations of wildlife;
j) The area acts as a link between natural areas or functions as a corridor for wildlife;

k) The area is in good natural condition, with few non-native species, particularly invasive non-natives; or,

l) The area contains significant fish habitat.

2. Linkages

Linkages mean landscape areas that connect natural areas. Linkages are also important natural features, either in their own right or through restoration activities. They are avenues along which plants and animals can propagate, genetic interchange can occur, populations can move in response to environmental changes and life cycle requirements, and species can be replenished from other natural areas. Conserving linkages also protects and enhances Core Areas.

Also important to consider are those lands: designated as Niagara Escarpment Plan “Escarpe ment Natural Area”; designated as Greenbelt Plan “Natural Heritage System”; and identified as a priority within a strategy by a conservation authority or other partner agency.

Aside from these Primary Criteria, a set of Secondary Criteria should also be considered which could include those lands not identified within the Natural Heritage System of the City of Hamilton but are important ecologically.

3.2.2 Secondary Criteria:

Secondary Criteria includes those lands that do not form a part of the Primary Criteria (Core Areas, Local Natural Areas or Linkage Areas) but are still important ecologically to the City of Hamilton. They perform a function in supporting the natural heritage system and should be considered for acquisition should they become available and no suitable primary criteria lands are available. The Secondary Criteria include the following:

- Lands contiguous to Conservation Areas, Municipal lands adjacent to eligible Primary Criteria lands, or other public and/or protected lands;

- Lands identified as Niagara Escarpment Plan “Escarpe ment Protection Area”;

- Lands identified as Greenbelt Plan “Protected Countryside”;
• Priority Areas for protection and/or restoration (e.g. as identified within a Watershed, Subwatershed or ESA Study and agricultural lands);

• Significant water resources (e.g. floodplain, streams, headwater area, source water area, non-evaluated wetland, estuaries);

• Trail corridor/linkage (e.g. Bruce Trail);

• Significant wildlife habitat;

• Regionally rare communities;

• Agricultural lands offered for:
  ▪ Donation
  ▪ Significantly leveraged by funding partners; or,
  ▪ Agricultural easements;

• Lands which provide opportunity/potential for enhanced connectivity between any of the above features;

• Unopened road allowances (e.g. for conservation, trail purpose);

• Rehabilitated aggregate pits and quarries offered for donation; and,

• Designated Wellhead Protection Area.

It is hoped that other Conservation Organizations will have targeted similar natural heritage system lands for acquisition. The City of Hamilton Natural Areas Acquisition Fund Strategy is intended to work in conjunction with other existing acquisition strategies. Figure 1 identifies those lands within the City of Hamilton that have been identified as “Core Areas” and “Linkage Areas” within the Council adopted Rural and Urban Official Plans.

Once the Natural Heritage System lands have been identified, the Strategy must determine which Conservation Organizations (“Stakeholders”) currently have an interest in natural heritage land acquisitions within the City of Hamilton. Currently The City of Hamilton will work with these stakeholders to ensure the Natural Areas Acquisition Fund will complement partner agency contributions and/or grants. Objective 3 identifies the current Stakeholders within the City of Hamilton and how the funds will be leveraged with existing partner agency contributions and/or grants.
3.3 **Objective 3:** To operate on a multi-agency and multi-stakeholder basis and provide a source of leveraged funds that will complement partner agency contributions and/or grants.

There are currently a number of Conservation Organizations that have an interest in natural heritage system lands within the City of Hamilton. The Natural Areas Acquisition Fund Strategy will complement the existing securement programs and provide leveraging opportunities.
Figure 1: *Natural Heritage System*

*Insert Figure 1 (colour copy - 11 x 17”)*
The following list includes those stakeholders that currently have an interest in natural heritage system land securement within the City of Hamilton. This list is not static and may change as the strategy develops in the future.

**Land Securement Partners**

- Bruce Trail Conservancy
- Carolinian Canada
- Grand River Conservation Authority
- Halton Conservation Authority
- Hamilton-Halton Stewardship Program
- Hamilton Naturalists Club/Head-of-the-Lake Land Trust
- Hamilton Region Conservation Authority
- Niagara Escarpment Commission
- Niagara Peninsula Conservation Authority
- Royal Botanical Gardens

**Funding Partners**

- Ducks Unlimited
- Escarpment Biosphere Conservancy
- Greenbelt Foundation
- Hamilton-Wentworth Stewardship Council
- Ministry of Natural Resources
- Ontario Farmland Trust
- Ontario Heritage Trust
- Trillium Foundation

**Education Partners**

- Bay Area Restoration Council
- Environment Hamilton

Some of the above noted Stakeholders currently have land holdings within the City of Hamilton. Table 3 provides an approximate calculation of the amount of lands and number of Stakeholders currently holding natural heritage system lands within public ownership. The hectare of land holdings represents the entire parcel which could include both Natural Heritage System lands and those located outside of the identified natural system.

The table identifies that approximately 12,602 hectares of land within the City of Hamilton is within public ownership. The numbers include the entire parcel and are not just those lands identified within the Natural Heritage System (Core Areas, or Linkage Areas). Current information identifies that approximately 4,559 hectares (11,265 acres) or 36% of the 12,602 hectares of publicly owned lands, are located within the Natural Heritage System. In addition the HHSP (Hamilton-
Halton Stewardship Program) currently has 207 stewardship agreements totally about 2,700 hectares of land within the City of Hamilton.

Table 3 - Secured Lands within the City of Hamilton

<table>
<thead>
<tr>
<th>NAME OF ORGANIZATION</th>
<th>AREA OF LAND (HA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Hamilton</td>
<td>1,672</td>
</tr>
<tr>
<td>Hamilton Conservation Authority</td>
<td>8,652</td>
</tr>
<tr>
<td>Grand River Conservation Authority</td>
<td>78</td>
</tr>
<tr>
<td>Halton Conservation Authority</td>
<td>57</td>
</tr>
<tr>
<td>Niagara Peninsula CA</td>
<td>378</td>
</tr>
<tr>
<td>Head-of-the-Lake Land Trust</td>
<td>4</td>
</tr>
<tr>
<td>Bruce Trail Conservancy/Association</td>
<td>445</td>
</tr>
<tr>
<td>Royal Botanical Gardens</td>
<td>716</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12,602</strong></td>
</tr>
</tbody>
</table>

*NOTE: 12,602 ha refers to the entire land holdings, not just the Natural Heritage System lands.

Conservation lands in public ownership provide an opportunity for residents of Hamilton to use these lands for recreation, education, environmental conservation, and protection. Publicly owned lands also provide important habitat for many diverse ecosystems. In some cases the habitat protects federally recognized species of conservation concern.

Figure 2 identifies those lands within the City of Hamilton that are currently under public ownership. Some of the identified lands include existing City of Hamilton parks, the airport lands, and hydro corridors. While these lands may not be recognized within the Natural Heritage System they could provide an opportunity for restoration adjacent to existing Natural Heritage System lands.

The advantage to having the City of Hamilton’s Natural Areas Acquisition Fund Strategy recognize other Stakeholders currently involved in natural heritage land acquisitions is that it provides an opportunity to pool all available resources to achieve a common goal. Municipalities are often not eligible to receive funding for land acquisition from certain organizations; however, other conservation organizations are eligible and often do receive funding. By pooling all the resources together makes it more effective in securing suitable Natural Heritage System lands.

All interested stakeholders would have an opportunity to apply for funding from the Natural Areas Acquisition Fund, either for direct fee-simple purchase of the land or any initial site maintenance costs (e.g. signage, fencing or trail construction) that promotes public access. The long-term maintenance costs would be incurred by the Stakeholder taking title to the lands. The Conservation
Figure 2: Public Owned Conservation Lands

Insert Figure 2 here
Organization and landowner would have to have an agreement in place prior to the application being submitted for review.

By working in cooperation with existing land securement programs and existing Conservation Organizations, the City will have an opportunity to potentially secure larger areas of Natural Heritage System Lands that would otherwise remain in private ownership.

Once the full suite of securement tools have been determined (Objective 1), the lands suitable for acquisition (Objective 2) and the current Conservation Organizations (Stakeholders) have been determined (Objective 3) it is important to determine where the available monies should be directed. The existing Stakeholders often have existing relationships with landowners who may have an interest in donating their natural heritage system lands. In addition, the majority of these organizations have specific criteria to determine which lands they would be most interested in acquiring. Objective 4 allows all interested stakeholders and the City of Hamilton to discuss which properties and/or areas of the Natural Heritage system should be targeted for acquisition.

3.4 **Objective 4:** Any land securement or acquisition will be undertaken in full consultation with all interested stakeholders, including relevant Municipal Citizen Advisory Committees (e.g. ESAIEG) and will be administered on a consistent and equitable basis.

With the vast array of Natural Heritage Features located within the City of Hamilton, it is important to determine which of these lands can be protected through policy/planning and stewardship, and which land should be secured by public agencies or land trusts. With existing funding levels and the ability to locate willing parties, only the most suitable lands may be considered by the City of Hamilton for securement.

When assessing the suitability of land for securement, consideration will be given to the cost of acquiring the property as well as the ongoing long term associated land care costs such as taxes and annual maintenance. Arrangements with Conservation Authorities or other NGO’s for the management of these lands are to be made in advance with an agreement in principle in place at the time of the property closing.

In order to coordinate efforts and avoid duplication, a Stakeholder Working Group ("SWG") will be formed, comprising of staff from the City and Conservation Partners involved in land securement. The SWG will meet a minimum of two times per year to identify and recommend to the Portfolio Management Committee those lands that are the Priority Acquisition Areas for securement for the upcoming budgetary year. The SWG may include staff or members from any of the Conservation organizations listed under Objective 3. In addition, staff from relevant internal City Departments including: Planning, Real Estate, Legal,
Corporate Services, Finance & Administration, Public Works, Legislative Approvals, or any other area that may have an interest in natural heritage lands will provide technical support and recommendations.

The Natural Areas Acquisition Fund Strategy is important to not only allow for the securement of natural heritage lands in perpetuity but is also provides an opportunity to improve relations with relevant stakeholder groups. By working with relevant partners to achieve the objectives of the Municipality the strategy is implemented on a consistent and relevant basis.

The final step in the Natural Areas Acquisition Fund Strategy is to understand the existing land securement activities currently operating within the City of Hamilton. There are numerous securement activities currently available from the Federal and Provincial Governments and existing Stakeholders. These would often be additional sources of leveraged funding that could benefit any of the high priority acquisition areas identified by the Stakeholder Working Group. Objective 5 provides an explanation of the land securement activities currently operation within the City of Hamilton.

3.5 Objective 5: To complement existing land securement activities by partner agencies including conservation authorities, and non-government organizations operating in the City of Hamilton.

Currently the City of Hamilton has identified approximately 32,894 hectares (81,283 acres) of lands within the Natural Heritage System. With the securement of approximately 4,559 hectares (11,265 acres) of natural heritage system lands, the remaining 28,355 hectares of natural heritage system lands are within private ownership and could be available for acquisition.

It is common to have several land securement parties (Stakeholders) involved in the securement of a particular property. Additional Stakeholders are often needed for funding purposes or for expertise (e.g. negotiating leverage) needed to assist in the securement of a property. In some instances the Stakeholder may be a better suited recipient to take title or an interest in the title for a particular property or the Stakeholder may be a better suited recipient of the land for property tax purposes, funding requirements, or a landowner requests that there be involvement from a specific group. All of these circumstances depend on the characteristics of the property, the type of securement method involved at the request of the landowner.

In order to determine the option best suited for the land acquisition, an understanding of existing land securement programs is important. The following sections provide a summary of existing programs and potential Partners for land securement within the City of Hamilton.
3.5.1 Federal Government

Historically the Federal Government has focused on those lands deemed to be ecologically important to Canada. They did partner with the Nature Conservancy of Canada (NCC) to initiate the Canada Millennium Planning Act Program. Part of this program was a country wide land and conservation easement donation program called Natural Legacy 2000. Soon after the turn of the century this program ended.

Currently the Federal Government has focused their efforts on acquiring lands of National Significance that would contribute to a National Park. While this may mean the Federal Government has little or no direct involvement in the land holding aspect of lands acquired through this Strategy, they support securement through the tax incentive programs offered by the Ecological Gifts Program.

The Ecological Gifts Program was launched in 1995 as part of the federal government's efforts to protect Canada's biodiversity and environmental heritage, the Ecological Gifts Program is administered by Environment Canada in cooperation with federal, provincial, and municipal governments, and non-governmental partners.

Since 1995, Environment Canada's Ecological Gifts Program has enabled individual and corporate landowners to protect their cherished pieces of nature forever by donating ecologically sensitive lands to environmental charities or government bodies.

An "ecogift" can be a donation of land or a partial interest in land.

The Program is made possible by the terms of the Income Tax Act. Amendments to the Act in the 1995, 1997, 2000, 2002 and 2006 federal budgets significantly enhanced the tax assistance for donations of ecologically sensitive land, easements, covenants and servitudes. This favourable treatment includes the provision of a tax credit or deduction to donors and a reduction in the taxable capital gain realized on the disposition of the property. Corporate donors may deduct the amount of their gift directly from their taxable income, while the value of an individual's gift is converted to a non-refundable tax credit. Any unused portion of the credit or deduction may be carried forward for up to five years, and 0 percent of the capital gain is taxed instead of the usual 50 per cent.
To date, over 740 ecogifts valued at over $494 million have been donated across Canada, protecting 126,211 hectares of wildlife habitat. More than one-third of these ecogifts contain areas designated as being of national or provincial significance, and many are home to some of Canada's species at risk.

3.5.2 Provincial Government

The Ministry of Natural Resources (MNR), Ontario Heritage Trust (OHT), Management Board Secretariat (MBS), Ontario Realty Corporation (ORC) and Ontario Parks (OP) all have the mandate to hold conservation lands.

While they would only be interested in acquiring land of Provincial Interest the MNR has transferred monies to both OHT and NCC in order to set up land securement funding programs. The OHT is currently operating a land securement funding program in Ontario entitled Natural Spaces Land Acquisition and Partnership Program.

3.5.3 Conservation Authorities

There are four Conservation Authorities that have jurisdiction within the City of Hamilton. These include the Hamilton Conservation Authority (HCA), Grand River Conservation Authority (GRCA), Niagara Peninsula Conservation Authority (NPCA) and Conservation Halton (CH). The Hamilton Conservation Authority covers the majority of the watersheds within the City of Hamilton. Each of the Conservation Authorities is involved in land securement projects within the City of Hamilton; Appendix 1 provides background information about these Conservation Authorities and their individual securement programs.

3.5.4 Land Trusts and Non-Government Organizations

There are a number of Land Trusts and Non-Government Organizations that are currently working within the City of Hamilton to secure natural heritage lands and to protect significant ecological features. These include the Bruce Trail Conservancy, Head-of-the-Lake Land Trust, Ontario Nature, and Ducks Unlimited. These different groups each have different mandates for land securement within the City of Hamilton. It is important that each group’s efforts are well communicated and coordinated when dealing with landowner contact. A component of the Natural Areas Acquisition Fund Strategy is to organize stakeholder meetings and strategies to develop and expand on Partnerships with these and other organizations involved in holding title to or providing funding for the acquisition of ecologically sensitive and significant lands.
In working with the existing land securement activities, a number of leveraging opportunities become available. Many of the Conservation Authorities and Non-Government organizations within the City of Hamilton have access to funding sources that the Municipality would not be eligible for. By recognizing this, the Natural Areas Acquisition Fund Strategy provides an opportunity to work in partnership with these Stakeholders to hopefully achieve greater success in securing natural heritage lands.

3.6 Summary

The five objectives discussed throughout this report allow the municipality and interested Stakeholders the opportunity to understand the full suite of securement tools currently available, the lands within the City of Hamilton that have been included within the Natural Heritage System, the numerous Stakeholders currently involved or interested in the acquisition of natural heritage system lands, the importance of working with Stakeholders to determine high priority acquisition areas, and the current complimentary programs within the City of Hamilton.

The next step is to provide a brief overview of how to successfully implement the Natural Areas Acquisition Fund Strategy. Successful implementation involves providing leveraging opportunities with existing Stakeholders to achieve the greatest amount of success. By discussing general cost projections, program implementation, how to promote successes and measure success along with acquisition targets and total cost projections the Natural Areas Acquisition Fund Strategy could be successfully implemented. Detailed Implementation Guidelines will be completed at a later date and should be read in conjunction with this Strategy to achieve success in the acquisition of natural heritage system lands.
4.0 PROPOSED IMPLEMENTATION STRATEGY

With the vast array of Natural Heritage System lands identified on Figure 1, it is important to identify which of these lands can be protected through policy/planning and stewardship, and which should be secured by public agencies or land trusts.

When assessing which lands are most suitable for securement, consideration will be given to the cost of acquiring the property and the long term maintenance costs (e.g. will there be a trail system, do the lands require ongoing maintenance in order to maintain the feature such as prescribed burns, are there any other infrastructure requirements such as fencing, signage, parking or interpretive centres). Arrangements are to be made in advance to have an agreement in principle in place at the time of the property closing.

Hiring dedicated staff to establish and administer the land securement program is essential for implementing the Strategy. The staff person would be responsible for the entire land securement process from start to finish. The Stakeholders would be responsible for securing funds through various securement programs to cover costs associated with legal, appraisal, survey, environmental site assessment, demolition, clean up, G.S.T., land transfer tax, interest charges, fencing, administration, and other related costs.

4.1 Proposed Program Funding

The full array of securement methods (outlined under Objective 1) will be used for lands acquired under this Strategy. Program funds will be provided through the Natural Areas Acquisition Reserve Fund. The funds are meant to support leveraged funding from other available sources, aided by building a strong relationship with others undertaking securement projects within the City of Hamilton. Costs will vary from year to year and property to property with the possibility of several levels of government and Partners being involved. It is anticipated that leveraged funding will come from Federal and Provincial government programs, Foundations (e.g. Conservation Authority Foundations), Land Trust and Non-Government Organizations and private and corporate donations.

4.1.1 General Cost Projections

It is difficult to determine the exact cost associated with implementation of this Strategy. Not only do different securement tools have different costs, purchase price for a property will vary depending on the location with the City of Hamilton as well as features of the property. Lands with existing development or potential for development tend to have a greater cost than a vacant property with no development potential. Even a donation, which does not have a purchase price, incurs ancillary costs associated with the
securement. The acquisition costs associated with small or large areas of land are relatively the same so the determination should be based on the natural heritage features associated with the land.

One fee-simple land donation of a conservation easement could potentially incur the following approximate ancillary securement costs:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>$3,000-$6,000</td>
</tr>
<tr>
<td>Legal</td>
<td>$1,500-$2,500</td>
</tr>
<tr>
<td>Survey</td>
<td>$2,500-$7,000</td>
</tr>
<tr>
<td>Phase 1 Environmental Site Assessment</td>
<td>$5,000-$7,000</td>
</tr>
<tr>
<td>Baseline Documentation Report</td>
<td>$5,000-$10,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$17,000-$32,500</strong></td>
</tr>
</tbody>
</table>

It is anticipated that some of the above costs can be recovered through available funding programs.

Rural and low intensity use properties such as those to be secured under this Strategy require annual inspection, fence repairs, clean-up, signage, resource management, taxes, insurance and general care. The cost of land care over time for new properties will vary over time and will depend on location and proposed use. With this in mind monies should also be detailed in and budgeted for initial stewardship costs such as fencing and signage (approximately $10,000-$15,000). While the fund is not to be used for direct maintenance costs (e.g. taxes, insurance, fence repairs), funding could be available for a one-time initial stewardship maintenance cost (e.g. prescribed burns, signage, trails, and information literature).

In order to fully implement the Natural Areas Acquisition Fund Strategy some direction as to how the funds would be distributed is necessary. Should an opportunity arise for securement of identified Natural Heritage System lands become available a staff person must be available to review and approve any potential distribution of monies.

An annual report would be completed, outlining the distribution of funding, the types of Natural Heritage System Lands secured, the hectares of Natural Heritage System lands secured, and the public conservation body taking title to those lands would be provided.

**4.2 Proposed Program Implementation**

Most landowners only have knowledge of two options for their land when considering estate planning:

1) Sell it; or,
2) Leave it to their children.
A primary goal of the Natural Areas Acquisition Strategy is to educate landowners with significant landholdings (e.g., >10 acres or 4 hectares) about various long-term conservation methods. Deciding to protect one’s property for the long-term is a big decision that can take a landowner several years to make. While a landowner may not be interested in land conservation at this time, they have the knowledge about conservation options should they change their mind in the future. Building relationships is the key.

Many of the Hamilton Partners have already forged relationships with landowners and created a landowner contact list based on securement criteria and preparing landowner packages and property mapping. The City of Hamilton would supplement these contacts and focus on the target acquisition areas. The contact program will include:

a. Developing a land owner contact list based on Priority Areas and priority properties;

b. Mailing landowners packages with information regarding available options and programs;

c. Telephone solicitation to answer any questions and set up a site visit;

d. Drop-in on properties for sale or properties that are ecologically significant to engage the landowner in securement options;

e. Scheduled site visits to have further discussion on items included in the landowner package, and to walk the property and acquire more information about the landowner’s interests;

f. Landowner leads will become available from time to time and will require follow up and possible hand off to the appropriate Hamilton Partner; and

g. Organize free landowner workshops sponsored by the City of Hamilton to engage and educate residents who own environmentally significant land on land conservation and stewardship options.

With the Natural Areas Acquisition Fund Strategy focusing on providing monies to Hamilton Partners currently interested in securing natural areas, landowner contact may not be required as part of the initial implementation. A number of Conservation Organizations currently have target acquisition areas and have a substantial landowner contact list. The first few years of this program would most likely focus on the existing landowner contact lists and target those properties currently identified within the City of Hamilton Natural Heritage System.
Updating the City of Hamilton website to include information on donation options for conservation lands is another effective means of communicating to landowners. This will allow the landowners to review donation information on the site, and contact the Hamilton Partners proactively if interested.

Some landowners that are considering long-term options for the protection of their property can be skeptical of whether or not they will have a guarantee that the land they donate would never be sold or used for development in the future. The City of Hamilton must be diligent in communicating key messaging and policies relating to long-term protection and securement in order to alleviate any concerns landowners may have.

The City of Hamilton could consider housekeeping amendments to zone all secured conservation lands within the appropriate designation to ensure the long-term preservation of these lands. The City should also recognize that some of these lands may be landlocked with no road frontage or access making them un-developable and thus ensuring their preservation in perpetuity.

4.3 **Natural Areas Securement Success and Promotion**

Once there has been a ‘success’ of securing a property within the target acquisition area, the City of Hamilton should give close consideration to the messaging and leveraging of this success to breed even more success. Whether the property was purchased or donated, a single success can be used to generate local, regional or even provincial attention which could lead to increased funding, and an increase in interested landowners. All successes are important and should be appropriately recognized.

4.3.1 **Recommendations for a successful Community Natural Areas Acquisition Celebration**

1) Ensure all partners involved in securement of a property are given proper recognition.

2) Invite local, regional and provincial politicians to the event (federal if Ecogifts donation).

3) Ensure that the event or success is covered by all forms of local and regional media (e.g. newspaper, television, radio).

4) Ensure that the event is communicated through internal media like newsletters, websites, email, etc.

5) Use media articles, newsletters, signage or other internal communications to send to interested partners, neighbouring landowners, etc.
4.3.2 **Indicators and Measures of Success**

Once there are land acquisition successes as a result of the Strategy, it will be important to start tracking useful indicators and measures of success. This will allow for qualitative analysis on an annual basis for use by Municipal staff, councillors and the public. Examples of these types of measure could include the following:

1) Acreage of Land Secured (grouped by securement method);
2) Acreage of Land Secured (grouped by type of natural feature);
3) Acreage of Land Secured (grouped by Priority Area);
4) Total Funding Required by the Municipality;
5) Total Funding Matched by Partners; and,
6) Number of Landowners Contacted for Outreach and Education.

4.3.3 **Land Acquisition Targets**

The most difficult question to answer is “how much habitat is enough”? There have been numerous scientific studies that have produced a variety of suggestions for the amount of habitat that is required in order to sustain a healthy ecological system.

Environment Canada (2004) presented a minimum target of 30% for forest cover, and a minimum of 10% cover for wetlands; however, others have set targets higher (50% by Noss (1991) and Odum & Odum (1972)) or set targets based on habitat representation as the most accurate determination of minimum habitat requirements (the Ministry of Natural Resources’ Big Picture and Nature Conservancy of Canada’s Ecoregional Planning).

The World Commission on the Environment and Development (1987) recommended tripling the amount of protected areas around the world putting the number at about 12%. Canada instituted the Protected Areas Strategy (PAS) based on this 12% land area target. The goal is to protect critical wildlife habitat, as well as a part of each of Canada’s ecosystems, which will add up to about 12%.
The City of Hamilton has set targets for forest cover as stated in Focus Area 6 of the Corporate Strategic Plan. It states that the City should “maintain or increase the cumulative amount of tree cover in the City with the objective of moving towards the Environment Canada guideline of 30%”.

With this 30% target in mind Gartner Lee prepared a report (1998) which analyzed forest cover in the former Hamilton-Wentworth Region and compared it to the Environment Canada report. The Gartner-Lee report indicated that average forest cover across the City of Hamilton is 17.7%, with 4.2% encompassing Interior Forest Cover (100m inside from edge) and 1.4% Interior Forest Cover (200m inside from edge). In addition, only about 35% of watercourses have a riparian buffer greater than 30 metres wide with 75% being the target. Furthermore, 10% wetland cover is recommended whereby the City currently has about 8.3%. Table 4 outlines the habitat restoration targets as identified within Chapter F, Section 3.4.4.7 of the Council adopted Rural and Urban Official Plans.

<table>
<thead>
<tr>
<th>Natural Cover Type</th>
<th>Existing Percentage Cover</th>
<th>Target Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Cover</td>
<td>17.7%</td>
<td>30%</td>
</tr>
<tr>
<td>Interior Forest Cover (100 metres inside from edge)</td>
<td>4.2%</td>
<td>10%</td>
</tr>
<tr>
<td>Interior Forest Cover (200 metres inside from edge)</td>
<td>1.4%</td>
<td>5%</td>
</tr>
<tr>
<td>Riparian Vegetation greater than 30 metres wide</td>
<td>34.7%</td>
<td>75% of stream length should be naturally vegetated</td>
</tr>
<tr>
<td>Wetland cover</td>
<td>8.3%</td>
<td>10%</td>
</tr>
</tbody>
</table>

The City of Hamilton covers almost 112,790 hectares of land (276,068 acres) and is home to 518,181 residents (OMBI Final Chart 2007) and almost 250,000 residential units (2006 Census). The City of Hamilton has included approximately 32,894 hectares (or 29%) of land within the Natural Heritage System (NHS).

Of this land, approximately 13,642 hectares (41%) are protected by Official Plan policies, or zoning. The remaining 19,252 hectares are currently not protected by Official Plan policies, zoning or public ownership. These lands would be eligible for acquisition under the Natural Areas Acquisition Fund Strategy. While it is not realistic to assume that all of the remaining Natural Heritage System lands would be acquired as part of this strategy, some specific targets should be used to determine which lands are most appropriate.
Graph 1 provides a visual comparison of the Environment Canada habitat guidelines and the Gartner Lee Report. It demonstrates that wetland cover is close to the Environment Canada guidelines; however forest cover and vegetated stream lengths still need improvement.

**Graph 1: Comparison of Environment Canada Guidelines and City of Hamilton Current Conditions**

For the purposes of this Strategy, Table 4 will provide the minimum percentage target for acquisition within the City of Hamilton.

With this in mind the following calculations will be used: The City of Hamilton covers a total of 112,790 ha, with a projected 30% forest cover across the City approximately 33,831 hectares should be forest cover (112,790 x 30%).

In 1998 Gartner Lee projected 18% forest cover (20,302 ha) across the City. Today there is approximately 12,000 ha (11%) forest cover across the City of Hamilton. This decrease in forest cover could be attributed to a number of factors including: lack of policies to protect the natural heritage features, increased development pressures, or previously approved developments within newly protected areas.

In order to achieve a 30% target, an additional 21,831 ha of land would need to be in forest cover. The average size of lands currently owned by public bodies/agencies is approximately 40 hectares. Using this as a target acquisition size, this would equate to a total of 545 acquisitions. When projecting this over a 10 year time frame (a 10-year time frame has been used since this coincides with many of the Official Plan review and approval timelines, coincides with Vision 2020 timeline targets and allows any new Federal or Provincial Policies to be incorporated in a timely manner), this would calculate to 55 acquisitions per year.
It is noted that the number of acquisitions per year will be dependant upon the available funding and willingness of landowners. Accordingly, this 10 year projection should be re-evaluated every 5 years with adjustments as needed.

4.4 Total Acquisition Cost Projections

The full array of securement methods will be used for lands acquired under this Strategy. Program funds would have to be provided through the Capital Budget and will be renewed, and adjusted when necessary, on an annual basis. The funds are meant to support leveraged funding from other available sources, aided by building a strong relationship with others undertaking securement projects within the City of Hamilton.

Costs will vary from year to year and property to property with the possibility of several levels of government and Partners being involved. It is anticipated that leveraged funding will come from Federal and Provincial government programs, Foundations (e.g. Conservation Authority Foundations), Land Trust and Non-Government Organizations and private and corporate donations.

Through consultation with Hamilton Partners the cost per hectare for Natural Heritage System lands varies depending on location of the property and if the lands hold any development potential. Natural Heritage lands within the GTA tend to range from $4,000-$6,000 per hectare ($10,000-$15,000 per acre); however, land prices within Hamilton tend to be a bit lower and costs for similar lands can range from $800-$2,500 per hectare ($2,000-$6,000 per acre). This would mean for an average acquisition of 40 hectares the cost could run as high as $100,000 ($2,500 x 40) for an outright fee-simple purchase. With the City of Hamilton providing leveraged funding (up to 50% of the acquisition cost) then each acquisition could require a contribution of $50,000 for a total of $300,000 ($50,000 x 6 properties) annually. It should be noted that not every acquisition involves outright fee-simple purchase as there are a full suite of securement tools available that could be more beneficial.

Based on the above noted target rates, the Stakeholder Working Group would determine the top 6 priority acquisition properties and/or areas annually. The Stakeholder interested in purchasing the natural heritage lands would be responsible for obtaining the necessary background documentation information and a signed agreement with the landowner that the acquisition is approved. Once all of this information has been obtained, the stakeholder would need to complete an application form (to be included within the Implementation Guidelines) to request funding through the Natural Areas Acquisition Fund.
4.5 **Summary**

By looking at how to successfully implement the Natural Areas Acquisition Fund Strategy through: the promotion of the program and celebrations of any successes combined with land acquisition targets and total acquisition cost projections, the City of Hamilton can aim to improve the overall social, economic and ecological health of the city.

While it would be difficult to quantify the importance of Natural Heritage lands to the overall health of a municipality, some attempt has been made by The Friends of the Greenbelt Foundation in partnership with the David Suzuki Foundation to quantify the range and goods and services provided by the Greenbelt’s Ecosystem.
5.0 CONCLUSION

With a population projection of 700,000 and an additional 100,000 (40,000 within the current urban boundary) households by the year 2031 within the City of Hamilton, protection of the remaining Natural Heritage System Lands is crucial. A report by The Friends of the Greenbelt Foundation, in partnership with the David Suzuki Foundation, produced a study quantifying the range of ecological goods and services provided by the Greenbelt's Ecosystem. The essential ecosystem services are those that sustain air and water quality, local food production, and quality of life for the region. The report quantifies the value of the ecosystem services provided by the Greenbelt's natural capital.

The ecosystem valuation benefits include:

- **Carbon Values**: The forests, wetlands and soils across the entire Greenbelt store over 102 million tonnes of carbon worth $366 million per year based on the average damage cost of carbon emissions, with the annual carbon uptake estimated at 167,364 tonnes, worth $11 million per year.

- **Air quality protection Values**: Trees produce oxygen for our air and remove gaseous air pollution through leaf absorption and intercept airborne particles on their leaves. Each year approximately 60 kilograms of pollutants per hectare are removed by the Greenbelts tree canopy which is estimated at $69 million per year.

- **Watershed Values**: Source protection is one of the most effective and efficient means of protecting the safety of drinking water. The Greenbelt watersheds value is approximately $409 million per year including water filtration services provided by forests and wetlands worth an estimated $189 million per year in terms of avoided costs for drinking water treatment. The value of flood control by wetlands is worth an estimated $379 million annually.

- **Pollination Values**: 30% of the world’s food is from crops that rely on pollinators like bees, bats, insects and birds. Using 30% as a baseline, the annual value of pollination services is estimated at $360 million with the value of pollination services directed towards idle agricultural lands, grazing lands, hedgerows, forest lands and grasslands with an annual average of $1,109 per hectare.

- **Biodiversity Value**: Seed dispersal by birds, mammals and wind is an essential service for the natural regeneration of trees. Based on replacement costs this service is an estimated $537 per hectare per year - $98 for the Greenbelt.
• **Recreation Value:** Nature based recreation is worth $6.4 billion in 2005 dollars. Estimated value for the Greenbelt's forests, wetlands, and water is $95 million per year ($61 million for forests, $31.5 million for wetlands, and $2.6 million for bodies of water).

• **Agricultural Lands:** Non-market value of ecosystem services has been estimated at $329 million including cropland, idle land, hedgerows and orchards. Pollination services on idle lands are estimated at $87.5 million, grazing lands is $61.8 million and $7.8 million on hedgerows.

The study projected that of the 112,589 hectares of Contributing Ecosystem Area within the City of Hamilton; approximately 69.7% (78,478.5ha) was located within the Greenbelt and contributed approximately $251.137 M/yr to the City of Hamilton in ecosystem valuation benefits.

Contributing factors included: **Forest** ($46.759 M/yr), **Grasslands** ($0.000 M/yr), **Wetlands** (Open Water $1.195 M/yr, Bog $0.002 M/yr, Marsh $19.048 M/yr, Swamps $143.632 M/yr, and Fen $0.142 M/yr), **Water** (Lakes/Rivers $0.142 M/yr, Sand Barren $0.0 M/yr) and **Agricultural Use** (Cropland $22.180 M/yr, Idle Land $16.426 M/yr, Hedgerows $1.452 M/yr, Orchards $0.294 M/yr).

While this study focused on the Greenbelt lands, it provides a good indication of how Natural Heritage System lands can contribute to the overall health of an ecosystem. The average value, projected across the entire Greenbelt area, was calculated at approximately $3,487 per hectare.

The City of Hamilton has identified within the Corporate Strategic Plan, Official Plan policies and Vision 2020 the importance of maintaining and increasing the amount of natural areas within the City of Hamilton in order to improve the overall economic, social and environmental well being of not only the environment but of its citizens as well.

The Natural Areas Acquisition Fund Strategy is the next step in implementing the natural environment vision and policies within the City of Hamilton. It will provide a secure source of funding for the acquisition (using the full suite of securement tools available) of Natural Heritage System lands, as identified by the City of Hamilton for use by Conservation Organizations who currently acquire lands within the City of Hamilton.

The five Objectives used to develop the Natural Areas Acquisition Fund Strategy have provided the appropriate governance, business, and financial models in order to implement this Strategy.
The Implementation Guidelines (currently under development) provide direction as to which lands are suitable for acquisition and are deemed to be of ecological importance to the City of Hamilton. In addition, it outlines financial requirements, current conservation organizations involved in the securement of natural areas, and landowner requirements.

The Natural Areas Acquisition Fund Strategy has demonstrated, through existing policies and programs, the importance of securing natural heritage system lands within the City of Hamilton. There are a number of securement options that are available to assist in the acquisition of natural heritage system lands. Through coordination with existing conservation organizations and providing leveraged funding to these organizations the City can fulfill the mandates of the Corporate Strategic Plan, Vision 2020, GRIDS and both the Urban and Rural Official Plans.
Figure 2
Publicly Owned Conservation Lands
APPENDIX 1: Policy and Strategy Documents

PROVINCIAL POLICIES

Provincial Policy Statement

The Provincial Policy Statement provides policy direction on matters of provincial interest related to land use planning and development. The Provincial Policy Statement (PPS) provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. The PPS is complemented by provincial plans or by locally generated policies regarding matters of municipal interest.

Ontario’s long-term prosperity, environmental health, and social well-being depend on protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits.

Section 2.0 of the Provincial Policy Statement provides policy direction for Natural Heritage, water, agricultural, mineral and cultural heritage and archaeological resources. Section 2.1 provides specific policies at it relates to natural heritage resources.

2.1 Natural Heritage

2.1.1 Natural features and areas shall be protected for the long term.

2.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features, and ground water features.

2.2 Water

2.2.1 Planning authorities shall protect, improve or restore the quality and quantity of water by:

a) Using the watershed as the ecologically meaningful scale for planning;

b) Minimizing potential negative impacts, including cross-jurisdictional and cross-watershed impacts;
c) Identifying surface water features, ground water features, hydrologic functions, and natural heritage features and areas which are necessary for the ecological and hydrological integrity of the watershed;

d) Implementing necessary restrictions on development and site alteration to:

1. Protect all municipal drinking water supplies and designated vulnerable areas; and,

2. Protect, improve, or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions;

e) Maintaining linkages and related functions among surface water features, ground water features, hydrologic functions and natural heritage features and areas;

f) Promoting efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality; and,

g) Ensuring storm water management practices minimize storm water volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.”

With continued development pressure within the urban area of the City of Hamilton, having regard to the Provincial Policy Statement is extremely important when dealing with the existing natural heritage features. Identifying and protecting natural heritage resources is important for the future healthy sustainability of the City of Hamilton. A Natural Areas Acquisition Fund would provide an opportunity for the municipality or other interested organizations (Conservation Authority, Non-government organization) to protect natural heritage resources in perpetuity through securement.

The Natural Areas Acquisition Strategy has regard for the policies of the Provincial Policy Statement in that Section 2.1.1 states that “natural features and areas shall be protected for the long term”; and Section 2.1.2 states that “the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of Natural Heritage Systems, should be maintained, restored or, where possible, improved, recognizing linkages between
and among natural heritage features and areas, surface water features and ground water features."

**Places to Grow**

The *Places to Grow Act (2005)* gives the Lieutenant Governor in Council the authority to establish any area of land in the Province as a growth plan area and requires that the Minister of Public Infrastructure Renewal prepare a growth plan for all or part of that area. The Greater Golden Horseshoe (GGH) is the first Growth Plan Area to be prepared under the *Places to Grow Act*.

The Greater Golden Horseshoe is one of the fastest growing regions in North America. It is expected to reach a population of 11.5 million (80% of Ontario's population growth) by the year 2031. The Growth Plan for the Greater Golden Horseshoe is a framework for implementing the Government of Ontario’s vision for building stronger, prosperous communities by better managing growth in this region to 2031. This Plan will guide decisions on a wide range of issues - transportation, infrastructure planning, land-use planning, urban form, housing, natural heritage and resource protection - in the interest of promoting economic prosperity.

One goal of the Growth Plan is to provide: abundant natural heritage features and areas, and prime agricultural areas, and the government’s commitment to protecting them, as demonstrated through initiatives such as the Greenbelt Plan, which make our communities more attractive and healthier places to live and work.

The main goal is to mitigate sprawl through the enhancement of infrastructure, integrating and improving transit systems, protecting valuable natural resources and strengthening local government as part of the implementation of this Plan.

One major component of this plan is to direct, by the year 2015 and for each year thereafter; a minimum of 40 percent of all residential development occurring annually within each municipality to be within the existing built-up area.

Section 4 identifies the unique natural heritage features and areas, irreplaceable cultural heritage sites and valuable renewable and non-renewable resources that are essential for the long-term economic prosperity, quality of life, and environmental health of the region.

Section 4.2.1 outlines specific policies as they relate to the Natural Systems found within the Greater Golden Horseshoe Growth Plan Area. It states that the Minister of Public Infrastructure Renewal and other Ministers of the Crown, in consultation with municipalities and other stakeholders will identify natural systems for the GGH; lands within the Greenbelt Area, all policies regarding natural systems continue to apply; planning authorities are encouraged to identify
natural heritage features and areas that complement, link, or enhance natural systems; Municipalities, conservation authorities, non-governmental organizations, and other interested parties are encouraged to develop a system of publicly accessible parkland, open space and trails, including shoreline areas; and Municipalities are encouraged to establish an urban open space system within built-up areas, which may include rooftop gardens, communal courtyards and public parks.

**Endangered Species Act**

The original Endangered Species Act was written in 1971, with no major changes in the document since that time. In 2007 a new Endangered Species Act was written to incorporate changes in land use planning and increasing threats to our native species.

The new Endangered Species Act (2007) provides:

- Broader protection for species at risk and their habitats;
- Greater support for volunteer stewardship efforts of private landowners, resource users, and conservation organizations;
- A stronger commitment to recovery of species;
- Greater flexibility;
- Increased fines;
- More effective enforcement; and,
- Greater accountability, including government reporting requirements.

The Committee on the Status of Species at Risk in Ontario (COSSARO) is an independent body that provides scientific review to determine if a species would be considered at risk.

An identified species at risk would fall into one of four categories which include: Extirpated (a native species that no longer exists in the wild in Ontario, but still exists elsewhere); Endangered (a native species facing imminent extinction or extirpation; Threatened (a native species at risk of becoming endangered in Ontario); and Special Concern (a native species that may become endangered or threatened because of a combination of biological characteristics and identified threats).

The Endangered Species Act provides direct protection for endangered, threatened or extirpated species and their habitats. In addition, recovery strategies are required for endangered and threatened species with management plans provided for Special Concern species. The Province also encourages Stewardship under the new Endangered Species Act, with some flexibility provided to enter into agreements, issue permits, or make regulations for works that would have previously not been permitted under the Act.
The City of Hamilton is located within the Guelph District of the Ministry of Natural Resources. Of the 183 Total Species currently on the Endangered Species list, approximately half are found within the Guelph District alone. This provides a strong rationale for the City of Hamilton to protect, through public ownership, any areas of land that currently support an endangered species and/or its habitat. The Natural Areas Acquisition Fund Strategy would provide a more detailed assessment of those natural heritage lands to be secured in perpetuity.

**The Greenbelt Plan**

The Greenbelt Plan identifies where urbanization should not occur in order to provide permanent protection to the agricultural land base and the ecological features and functions occurring on this landscape. The land identified as Protected Countryside is intended to enhance the spatial extent of agriculturally and environmentally protected lands (under the Niagara Escarpment Plan and Oak Ridges Moraine Conservation Plan) while improving linkages between these areas and the surrounding major lake systems and watersheds. The Protected Countryside includes both the Agricultural System and the Natural System (those lands that support both natural heritage and hydrological features and functions).

Section 1.2.2 of the Greenbelt Plan outlines the Goals to enhance our urban and rural areas and overall quality of life by promoting:

1.2.2 **Environmental Protection**

   a) Protection, maintenance and enhancement of natural heritage, hydrologic and landform features and functions, including protection of habitat for flora and fauna and particularly species at risk;

   b) Protection and restoration of natural and open space connections between the Oak Ridges Moraine, the Niagara Escarpment, Lake Ontario, Lake Simcoe and the major river valley lands, while also maintaining connections to the broader natural systems of southern Ontario beyond the Golden Horseshoe such as the Great Lakes Coast, the Carolinian Zone, the Lake Erie Basin, the Kawartha Highlands, and the Algonquin to Adirondacks Corridor;

   c) Protection, improvement or restoration of the quality and quantity of ground and surface water and the hydrological integrity of watersheds; and,
d) Provision of long-term guidance for the management of natural heritage and water resources when contemplating such matters as development, infrastructure, open space planning and management, aggregate rehabilitation, and private or public stewardship programs.

The natural heritage features included within the Protected Countryside are consistent with the Core and Linkage natural heritage features identified within City of Hamilton Natural Heritage System.

MUNICIPAL POLICIES AND REPORTS

New (Council Adopted) City of Hamilton Rural and Urban Official Plans

Chapter C, Section 2 within both the City of Hamilton Rural Official Plan and the City of Hamilton Urban Official Plan are to:

2.1.1 To protect and enhance biodiversity and ecological functions.

2.1.2 To achieve a healthy, functional ecosystem.

2.1.3 To conserve the natural beauty and distinctive character of Hamilton’s landscape.

2.1.4 To maintain and enhance the contribution made by the Natural Heritage System to the quality of life of Hamilton’s residents.

2.1.5 To restore and enhance connections, quality and amount of natural habitat.

2.1.6 To provide opportunities for recreational and tourism uses where they do not impact natural heritage features.

2.1.7 To monitor and periodically assess the condition of Hamilton’s natural environment.

In addition, the Rural and Urban Official Plans promote the use of non-regulatory Natural Heritage System management, as outlined in Chapter C, Section 2.12

2.12 Non-Regulatory Natural Heritage System Management

2.12.1 The City shall support agencies, community organizations, and private landowners in their efforts to protect and enhance natural heritage features through private habitat restoration and stewardship, land trusts, public acquisition,
conservation easements, property tax mechanisms and similar tools.

2.12.2 The City shall continue to work with Conservation Authorities, other levels of government, landowners, and the community to support education, outreach, and landowner stewardship programs.

2.12.3 The City shall prepare a strategy for the use of non-regulatory measures for the management of natural areas which includes: conservation easements, land trusts, public land dedication or acquisition, an environmental reserve fund to support the acquisition and management of natural areas and financial incentives such as tax relief or grants to landowners who manage and maintain significant natural areas on their land in a natural state.

2.12.4 The City shall continue to gather data on natural areas through its Partnerships with local agencies and organizations to conduct periodic natural area inventories. This data shall be used to monitor the condition and health of natural areas and the wildlife and plants that inhabit them.

2.12.5 The City shall produce a “State of the Environment” report periodically, to track the City’s progress towards its natural heritage protection goals.

The intent of the Natural Areas Acquisition Fund is to have a continued and secure source of funding available for the acquisition of key natural heritage lands within the City of Hamilton through a Partnership with existing Conservation organizations. It supports the City of Hamilton Natural Heritage System policies.

**Corporate Strategic Plan**

The Corporate Strategic Plan provides a corporate vision for the future of the City of Hamilton. Focus Area 6 of the Strategic Plan deals with Environmental Stewardship. Desired end results 6.4 and 6.5 read as follows:

6.4 Maintain or increase the quantity and quality of Significant Natural Areas that are protected.

6.5 Maintain or increase the cumulative amount of tree cover in the City with the objective of moving towards the Environment Canada guideline of 30%.
**Vision 2020**

Vision 2020 is a vision shared by all Hamiltonians to create a sustainable community that balances the economic, social and environmental well being of its citizens. Fourteen theme areas were defined with specific goals set within each theme to help guide the City towards integrating the economic, social and environmental well being of the City.

The Natural Areas Acquisition Fund Strategy could satisfy nine of the fourteen theme areas. These include:

- **Agriculture and Rural Economy:** Preserving and maintaining the agricultural lands and rural areas of the City could be achieved through the long-term securement of natural areas within the rural landscape.

- **Natural Areas and Corridors:** High priority natural areas and corridors could be secured with funding through the Natural Areas Acquisition Fund Strategy.

- **Improving the Quality of Water Resources:** Increasing forest cover and wetland habitat will lead to an improvement in water quality within the watershed. The Natural Areas Acquisition Fund Strategy provides the direction to secure high priority areas.

- **Improving Air Quality:** Improving air quality can be achieved with an increase in forest cover.

- **Changing our Mode of Transportation:** Acquiring lands within the City of Hamilton could help establish a more walkable community and encourage people to find alternate modes of transportation.

- **Land Use in Urban Areas:** Encouraging development within the existing urban core allows for existing natural areas to be maintained and secured in perpetuity. This ultimately leads to a healthier community.

- **Personal Health and Well Being:** Personal health and well-being could be improved with the acquisition of additional natural heritage lands within the City of Hamilton. Becoming more active and appreciating the unique environmental opportunities available in the City will encourage more physical activity. Studies have shown that children are suffering from “Nature Deficit Disorder” involving a lack of outdoor play. Allowing access to an abundance of natural areas may encourage youth to enjoy the outdoors.
**Education:** Securing and maintaining natural heritage features within the City of Hamilton provides educational opportunities for residents and visitors alike. Attracting school children and tourists to experience the natural areas around them provides a positive learning environment.

**Community well-being and Capacity Building:** Community well-being and capacity building is important for any City. Through the acquisition of natural heritage features, existing communities have an opportunity to create an area to socialize through community activities and organizations.

The Natural Areas Acquisition Fund Strategy could rationalize high priority acquisition areas on lands that aid in achieving the goals of Vision 2020.

**Growth Related Integrated Development Strategy (GRIDS)**

The Growth Related Integrated Development Strategy, or GRIDS, is a made-in-Hamilton balanced growth strategy. The purpose of GRIDS was to identify the most ideal places for growth and the type of growth based on environmental priorities, social issues, economic opportunities and population studies as well as to identify strategies to fund the servicing of these areas.

Hamilton City Council adopted the Growth Related Integrated Development Strategy (GRIDS) on February 12, 2003. GRIDS is an integrated planning process that uses the model of sustainability to draw together land use planning and infrastructure investment planning (water, Wastewater, Stormwater and transportation) within a framework that considers social/cultural, environmental and economic implications of growth and development decisions. GRIDS brings together into one process, all of the activities related to development. This enables a more coordinated, time efficient and cost efficient investment process for the public and private sectors.

GRIDS recommended a strategy to accommodate a projected population of 660,000 and 80,000 additional households by 2031. GRIDS outlines nine directions to guide development with Direction 8 focusing on “protecting the ecological systems and improving air, land and water quality”.

The City of Hamilton has strived to implement the directions contained within GRIDS. The Natural Areas Acquisition Fund Strategy is an additional step in fulfilling Direction 8 of GRIDS.

These objectives demonstrate the City’s commitment to support the preservation, protection and management of the City's natural heritage features. The Natural Areas Acquisition Fund Strategy would provide an opportunity to fulfill Direction 8 of GRIDS.
OTHER RELATED DOCUMENTS

**Environment Canada Guidelines**

Environment Canada established habitat restoration guidelines for the Great Lakes Areas of Concern (AOC) in 1998 in a report titled “A Framework for Guiding Habitat Rehabilitation Great Lakes Areas of Concern”. The guidelines recommend that:

At least 30% of a watershed should be in forest cover, including 10% Interior Forest Cover (100m inside from edge) and 5% Interior Forest Cover (200m inside from edge). Forest cover within a watershed should be representative of the full diversity of forest types found at that latitude.

Streams should have 75% of their length naturally vegetated with a minimum 30-metre wide naturally vegetated area of land on both sides of the stream (riparian zone) to maintain a healthy ecosystem.

In addition, greater than 10% of each major watershed or greater than 6% of each sub watershed should be in wetland habitat.

Gartner-Lee prepared a report (1998) which analyzed forest cover in the former Hamilton-Wentworth Region and compared it to the Environment Canada Guidelines. The report found that forest cover across the City of Hamilton was 17.7% (12.3% below EC Guideline), with 4.2 % (5.8% below EC Guideline) Interior Forest Cover (100m from the edge) and 1.4 % (3.6% below EC Guideline) Interior Forest Cover (200m from the edge), 34.7 % (40.3% below EC Guideline) of streams lengths are naturally vegetated with the overall wetland coverage being 8.3% (1.7% below EC Guideline).

The Gartner-Lee Report also included a “Draft Priority Restoration Areas” map which identifies potential areas where restoration could occur that would improve the overall natural cover within the City of Hamilton. In addition, the City of Hamilton has produced a map of a Targeted *Natural Heritage System*, which identifies sites where habitat restoration and management can occur to increase the percentage of natural habitat cover to the levels recommended in the Environment Canada habitat restoration guidelines.

The Natural Areas Acquisition Fund Strategy would identify the key natural heritage features that are targeted to be acquired and maintained by a public conservation body in perpetuity.
Remedial Action Plan

In 1985, the International Joint Commission (IJC) officially recognized Hamilton Harbour, an embayment at the western end of Lake Ontario, as one of the most degraded bodies of water in the Great Lakes system. (IJC, 1985) In response, local stakeholders published a Remedial Action Plan (RAP) in 1992 and an update in 2002. This plan utilizes research and monitoring to define remedial actions and increase their effectiveness through a program that tracks trends, promotes adaptive management, allows for interdisciplinary integration, and increases accountability. The goal of restoring environmental health to Hamilton Harbour is considered to be within the community’s reach by the year 2015.

Hamilton Harbour was identified as one of 43 Areas of Concern (AOC) within the Great Lakes Water Quality Agreement (GLWQA). The Remedial Action Plan (RAP) is a plan to “delist” Hamilton Harbour. Three steps are involved: Stage 1, “State of the Harbour”, 1992; Stage 2, “Remedial Action Plan”, 1992 and updated 2002; and Stage 3, “Delisting of AOC”, proposed 2015. The GLWQA is complemented by the Canada-Ontario Agreement (COA) which sets out the interests of the federal and provincial governments in implementing the GLWQA.

The goal of the Remedial Action Plan (RAP) is to bring about sustainable natural ecosystems in Hamilton Harbour and its entire watershed, and to improve the potential for more extensive recreational uses while maintaining the Harbour’s and the watershed’s essential economic function.

People living in the Harbour’s watershed have a vision of Hamilton Harbour as a vibrant centerpiece in their community’s life. They look towards a time when the environment will be balanced, friendly, accessible, clean and humming with diversity. They see the pleasure of recreation mixed with prosperity from use of the Harbour as an essential marine transportation link. They hope that what is a vision for them will be reality for generations to come.

Of the twelve watersheds located within the City of Hamilton, four drain directly into Hamilton Harbour (Bronte Creek, Grindstone Creek, Borer’s Creek and Spencer Creek). These watersheds are mainly agricultural in land use which could have a detrimental effect on the overall water quality of Hamilton Harbour (due to pesticide and nutrient applications and runoff). Borer’s Creek (including Cootes Paradise) is highly urbanized with the existing Water Treatment Plant being the main source of pollutants for Hamilton Harbour. Plans are underway to upgrade the existing Treatment Plant which should provide a marked improvement in overall water quality.

There are five Remedial Actions that were identified within the Hamilton RAP. These include: Water Quality and Bacterial Contamination, Toxic Contamination, Fish & Wildlife, Land Management and Public Access.
An update of the Hamilton Harbour Remedial Action Plan in 2005 indicates that there has been much progress in all categories for improving and ultimately “delisting” Hamilton Harbour.

Through the efforts of the Bay Area Implementation Team (BAIT) and the Bay Area Restoration Council (BARC) levels of nutrients (phosphorous) have been steadily declining (due to water and wastewater treatment facility upgrades); metal contamination has steadily declined due in large part to efforts by the industrial sector to improve the quality of discharges in both their effluent and air emissions; approximately 340ha of habitat has been enhanced at six sites around the Harbour resulting in 170ha of additional aquatic plants returning, 8 additional plant species within Cootes Paradise have returned, increased waterfowl diversity, secure habitat for 670 nesting pairs of Caspian and common Terns, and the return of some amphibians thought to be lost to the Cootes Paradise Marsh; a reduction in sediment loading from upstream sites within Grindstone Creek and Ancaster Creek due to an increase in erosion; and approximately 25% of the shoreline is accessible to the public (up from 5%), and stewardship agreements covering 6,000ha of land.

An additional method to improve water quality, and decrease toxic substances is to promote landowner stewardship and create an acquisition strategy. Stewardship actions could include (but is not limited to): buffer planting, watercourse improvements, decreasing nutrient applications on agricultural lands, allowing for natural regeneration of fallow farmlands, improving or protecting habitat for Species at Risk. An acquisition strategy would provide an alternative option for landowners that wish to protect the natural heritage lands on their property in perpetuity. There are a number of acquisition options that are available including: conservation easements, split receipting, testamentary (will) donation, restrictive covenant, fee simple purchase, leaseback Agreement, and right-of-first-refusal. Outright purchase (fee simple) of lands would be the final option.

The City of Hamilton Natural Areas Acquisition Fund Strategy could establish additional sources of funding and resources to continue with the improvement of health within Hamilton Harbour.
APPENDIX 2: Glossary

Adjacent Lands: means those lands contiguous to hazard lands, a specific natural heritage feature, or area where it is likely that development or site alteration would have a negative impact on the hazard, feature or area. The extent of the adjacent lands may be recommended by the Province, or based on municipal approaches which achieve the same objectives.

Adverse Effects: as defined in the Environmental Protection Act, means one or more of:

a) Impairment of the quality of the natural environment for any use that can be made of it;
b) Injury or damage to property or plant or animal life;
c) Harm or material discomfort to any person;
d) An adverse effect on the health of any person;
e) Impairment of the safety of any person;
f) Rendering any property or plant or animal life unfit for human use;
g) Loss of enjoyment of normal use of property; and,
h) Interference with normal conduct of business. (PPS, 2005)

Alvars: means naturally open areas of thin or no soil over essentially flat limestone, dolostone, or marble rock, supporting a sparse vegetation cover of mostly shrubs and herbs (Greenbelt Plan, 2005).

Areas of Natural and Scientific Interest (ANSI): means areas of land and water containing natural landscapes or features that have been identified as having life science or earth science values related to protection, scientific study or education.

Coldwater Watercourse: means a watercourse, whether permanent, intermittent, or ephemeral, which supports or contributes to the support of fish habitat or species associated with coldwater, such as salmonids, sculpins, coldwater benthic invertebrates, or acts as a production zone for anadromous species, or has thermal characteristics of a coldwater stream. Coldwater species that are best adapted prefer or usually occur at water temperatures less than 19 degrees Celsius.

Connectivity: means the degree to which Core Areas are connected to one another by links such as plant and animal movement corridors, hydrological and nutrient cycling, genetic transfer, and energy flows from food webs (Greenbelt Plan, 2005)

Core Areas: includes key natural heritage features, key hydrologic features, and local natural areas.
**Critical Habitat**: means those fish habitats which have high productive capacity, are rare, highly sensitive to development, or have a critical role in sustaining fisheries (e.g. spawning or nursery areas for some species and ground water recharge areas). Critical habitat corresponds with the older OMNR classification for Type 1 watercourses.

**Disturbed Area**: means the portion of the site where *site alteration*, grading, or construction activities are occurring.

**Dynamic Beach Hazard**: means areas of inherently unstable accumulations of shoreline sediments along the Great Lakes - St. Lawrence River System and large inland lakes, as identified by provincial standards, as amended from time to time. The dynamic beach hazard limit consists of the *flooding hazard* limit plus a dynamic beach allowance (PPS, 2005).

**Earth Science Area of Natural and Scientific Interest (ANSI)**: means areas selected by the Province as representative of Ontario’s geological diversity. They can include outstanding bedrock exposures, fossil beds, and landforms such as karst and drumlins.

**Ecological Function**: means the natural processes, products, or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes, including hydrologic functions and biological, physical, chemical, and socio-economic interactions (PPS, 2005).

**Ecological Value**: means the value of vegetation in maintaining the health of the *key natural heritage* or *key hydrologic feature* and the related ecological features and *ecological functions*, as measured by factors such as the diversity of species, the diversity of habitats, and the suitability and amount of habitats that are available for rare, threatened and endangered species.

**Environmentally Significant Areas (ESAs)**: means locally significant areas that meet any one of the following criteria:

a) The area is a good representative of a biotic community characteristic of the natural landscapes of the City and not adequately represented in existing protected areas or the area is a good representative of pre-settlement biotic community;

b) There are biotic communities that are rare in the City, Province, or Canada;

c) The area is a large natural area (20 hectares or more in size); it may be sufficiently large to provide habitat for species requiring large habitat areas;
d) There is habitat for species considered significant in the City, Province or Canada;

e) The site fulfills a significant hydrological function (groundwater recharge or discharge, ground or surface water quality, or flood attenuation);

f) The site contains a significant earth science feature (distinctive and unusual landform);

g) There is a high diversity of native species or biotic communities;

h) The area provides essential habitat for the continuation of species; for example, significant areas of species concentration, areas essential for certain stage of the life cycle, source areas for species;

i) There are significant seasonal concentrations of wildlife;

j) The area acts as a link between natural areas or functions as a corridor for wildlife;

k) The area is in good natural condition, with few non-native species, particularly invasive non-natives; or,

l) The area contains significant fish habitat.

**Essential**: means being deemed necessary to the public interest after all alternatives have been considered.

**Evaluated Wetlands**: means a wetland that has been evaluated under the Ministry of Natural Resources Wetland Evaluation System and has been found to be provincially or locally significant.

**Fish Habitat**: means the spawning grounds and nursery, rearing, food supply, and migration areas on which fish depend on directly or indirectly in order to carry out their life processes (PPS, 2005).

**Flooding Hazard**: means the inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water:

a) Along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the one hundred year flood level plus an allowance for wave uprush and other water-related hazards.
b) Along river, stream and small inland lake systems, the *flooding hazard* limit is the greater of:

i) The flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests that the storm event could have potentially occurred over watersheds in the general area;

ii) The one hundred year flood; and,

iii) A flood which is greater than i) or ii) which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Ministry of Natural Resources;

iv) Except where the use of the one hundred year flood or the actually experienced event has been approved by the Minister of Natural Resources as the standard for a specific watershed (where past history of flooding supports the lowering of the standard). (PPS, 2005)

*Flood Fringe*: for river, stream and small inland lake systems, means the outer portion of the *flood plain* between the *floodway* and the *flooding hazard* limit. Depths and velocities of flooding are generally less severe in the *flood fringe* than those experienced in the *floodway* (PPS, 2005).

*Flood Plain*: for river, stream and small inland lake systems, means the area, usually low lands adjoining a watercourse, which has been or may be subject to *flooding hazards* (PPS, 2005).

*Floodway*: for river, stream and small inland lake systems, means the portion of the *floodplain* where the development and site alteration would cause a danger to public health and safety or property damage (PPS, 2005).

*Ground Water Feature*: refers to water related features in the earth’s subsurface, including recharge/discharge areas, water tables, aquifers and unsaturated zones that can be defined by surface and subsurface hydrogeological investigations (PPS, 2005).

*Hazard Lands*: means hazardous lands and hazardous sites.

*Hazardous Lands*: means property or lands that could be unsafe for development due to naturally occurring processes. Along the shorelines of the Great Lakes - St. Lawrence River System, this means the land, including that
covered by water, between the international boundary, where applicable, and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along the shorelines of large inland lakes, this means the land, including that covered by water, between a defined offshore distance or depth and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along river, stream and small inland lake systems, this means the land, including that covered by water, to the furthest landward limit of the flooding hazard or erosion hazard limits (PPS, 2005).

**Hazardous Sites:** means property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [Leda], organic soils) or unstable bedrock (karst topography) (PPS, 2005).

**Hedgerows:** means a narrow, linear band or row of trees or shrubs with a minimum width of 10 metres and length of 200 metres or more. Hedgerows are linear natural or cultural features which may contribute to species dispersal.

**Hydrologic Function:** means the functions of the hydrological cycle that includes the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things (PPS, 2005).

**Important Habitat:** means those fish habitats which are moderately sensitive to development and, although important to the fish population, are not considered critical (e.g. feeding areas, open water habitats of lakes). Important habitat corresponds with the older Ministry of Natural Resources classification for Type 2 watercourses.

**Intermittent Streams:** means stream-related watercourses that contain water or are dry at times of the year and are more or less predictable, generally flowing during wet seasons of the year but not the entire year, and where the water table is above the stream bottom during parts of the year (Greenbelt Plan, 2005).

**Key Hydrologic Features (KHF):** these features include:

a) Permanent and intermittent streams;
b) Lakes (and their littoral zones);
c) Seepage areas and springs; and,
d) Wetlands.

(Greenbelt Plan, 2005)
Key Natural Heritage Features (KNHF): include the following:

a) Significant habitat of endangered, threatened, and special concern species;
b) Fish habitat;
c) Wetlands;
d) Life Science Areas of Natural and Scientific Interest (ANSIs):
e) Significant valleylands;
f) Significant woodlands;
g) Significant wildlife habitat;
h) Sand barrens, savannahs, and Tallgrass prairies; and,
i) Alvars.
(Greenbelt Plan, 2005)

Lake: means any inland body of standing water usually fresh water larger than a pool or pond or a body of water filling a depression in the earth’s surface (Greenbelt Plan, 2005).

Life Science Areas of Natural and Scientific Interest (ANSIs): means lands and waters containing natural landscapes or features that are important for natural heritage protection, appreciation, scientific study, or education. Life Science ANSIs are identified by MNR using evaluation procedures established by that Ministry, as amended from time to time (Greenbelt Plan, 2005).

Linkages: means landscape areas that connect natural areas. Linkages are also important natural features either in their own right or through restoration activities. They are avenues along which plants and animals can propagate, genetic interchange can occur, populations can move in response to environmental changes and life cycle requirements, and species can be replenished from other natural areas. Conserving linkages also protects and enhances Core Areas.

Littoral Zones: means the shallow water areas surrounding the outer boundary of a lake, which is usually a high productive zone.

Local Natural Areas: means Environmentally Significant Areas (ESAs) as identified by the City of Hamilton, unevaluated wetlands and Earth Science Areas of Natural and Scientific Interest (ANSI).

Marginal Habitat: means those fish habitats which have low productive capacity or are highly degraded, and do not currently contribute directly to fish productivity. They often have the potential to be improved significantly (e.g. a portion of a waterbody, such as a channelized stream, that has been highly altered physically). Marginal habitat corresponds with the older Ministry of Natural Resources classification of Type 3 watercourses.
**Nature Deficit Disorder**: a term coined by Richard Louv in his 2005 book “Last Child in the Woods”, refers to the alleged trend that children are spending less time outdoors, resulting in a wide range of behavioral problems. Louv claims that causes for the phenomenon include parental fears, restricted access to natural areas, and the lure of the screen.

**Negative Impacts**: means

- In regard to water, degradation to the quality and quantity of surface or ground water, *key hydrologic features* or vulnerable areas, and their related hydrologic functions, due to single, multiple or successive *development or site alteration* activities;

- In regard to *fish habitat*, the harmful alteration, disruption, or destruction of fish habitat, except where, in conjunction with the appropriate authorities, it has been authorized under the *Fisheries Act*, using the guiding principle of no new loss of productive capacity; and,

- In regard to other natural heritage features and areas, degradation that threatens the health and integrity of the natural features or *ecological functions* for which an area is identified due to single, multiple, or successive *development or site alteration* activities (PPS, 2005).

**Other Natural Vegetation Types**: means any meadow, thicket, or old field at least 0.5 hectares in size that connects *Core Areas* or is situated within 100 metres of a *Core Area*.

**Partners**: there are a number of Conservation Partners within the City of Hamilton that currently acquire natural heritage lands. They include (but may not be limited to):

- *Bay Area Restoration Council*
- *Bruce Trail Conservancy*
- *Carolinian Canada*
- *Conservation Halton*
- *Cootes to Escarpment Conservation and Land Management Strategy*
- *Ducks Unlimited Canada*
- *Environment Hamilton*
- *Escarptment Biosphere Conservancy*
- *Grand River Conservation Authority*
- *Greenbelt Foundation*
- *Hamilton-Halton Stewardship Program*
- *Hamilton Naturalists Club/Head-of-the-Lake Land Trust*
- *Hamilton Region Conservation Authority*
- *Hamilton Remedial Action Plan*
- *Hamilton-Wentworth Stewardship Council*
• Ministry of Natural Resources
• Nature Conservancy of Canada
• Niagara Escarpment Commission
• Niagara Peninsula Conservation Authority
• Ontario Farmland Trust
• Ontario Heritage Trust
• Ontario Land Trust Alliance
• Ontario Nature
• Royal Botanical Gardens
• Trillium Foundation
• Wetland Habitat Canada

**Permanent Stream:** means a stream that continually flows in an average year (Greenbelt Plan, 2005).

**Provincial Policy Statement (PPS):** the Provincial Policy Statement is issued under the authority of Section 3 of the Planning Act. It provides direction on matters of provincial interest related to land use planning and development, and promotes the provincial “policy-led” planning system.

**Quality and Quantity of Water:** is measured by indicators such as minimum base flow, depth to water table, aquifer pressure, oxygen levels, suspended soils, temperature bacteria, nutrients and hazardous contaminants, and hydrological regime (PPS, 2005).

**Regeneration Area:** means an area identified by the municipality, through a Municipally Initiated Comprehensive Review of employment lands, as an area in transition, which may redevelop for non-employment land uses. A regeneration area retains an employment designation until such time as the municipality initiates further studies to determine the appropriate alternatives for non-employment land uses.

**Savannah:** means land (not including land that is being used for agricultural purposes or no longer exhibits savannah characteristics) that:

a) Has vegetation with a significant component of non-woody plants, including tallgrass prairie species that are maintained by seasonal drought, periodic disturbances including fire, or both;

b) Has from 25 per cent to 60 per cent tree cover;

c) Has mineral soils; and,

d) Has been further identified, by the Ministry of Natural Resources or by any other person according to evaluation procedures established by the
Ministry of Natural Resources, as amended from time to time. (Greenbelt Plan, 2005)

**Seepage Areas and Springs:** means sites of emergence of groundwater where the water table is present at the ground surface (Greenbelt Plan, 2005).

**Sensitive:** in regard to surface water feature and ground water feature, means areas that are particularly susceptible to impacts from activities or events including, but not limited to, water withdrawals, and additions of pollutants (PPS, 2005).

**Significant Habitat of Threatened, Endangered, and Special Concern Species:** means the habitat, as approved by the Ministry of Natural Resources, that is necessary for the maintenance survival and/or recovery of naturally occurring or reintroduced populations of species at risk and where those areas of occurrence are occupied or habitually occupied by the species during all or any part(s) of its life cycle. To identify which species are threatened, endangered, special concern, or provincially rare, the City will refer to species lists that are prepared and updated by the Ministry of Natural Resources (MNR), and Environment Canada’s Committee on the Status of Endangered Wildlife in Canada (COSEWIC). An updated list of locally rare species will be maintained through periodic updates to the Natural Heritage Database, co-owned by the Hamilton Naturalists’ Club and the City of Hamilton (PPS, 2005).

**Significant Wildlife Habitats:** means areas where plants, animals and other organisms live and find adequate amounts of food, water, shelter and space needed to sustain their populations. Wildlife habitat is significant where it is ecologically important in terms of features, functions, representation, or amount and contributes to the quality and diversity of a Natural Heritage System. Significant wildlife habitat areas are defined as consisting of one or more of the following:

a) Critical habitat areas that provide for seasonal concentrations of animals;

b) Wildlife movement corridors;

c) Rare vegetation communities or specialized habitats for wildlife; and/or,

d) Habitats for species of conservation concern including provincially and federally threatened, endangered, special concern species, and locally rare species.

e) MNR identifies criteria, as amended from time to time for the forgoing. (Greenbelt Plan, 2005)
**Significant Woodland**: means an area which is ecologically important in terms of:

a) Features such as species composition, age of trees, stand history;

b) Functionally important due to its contribution to the broader landscape because of its location, size, or due to the amount of forest cover in the planning area; and,

c) Economically important due to site quality, species composition or past management history.

d) MNR identifies criteria, as amended from time to time for the forgoing. (Greenbelt Plan, 2005)

In the City of Hamilton, *significant woodlands* must meet two or more of the following criteria:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>All woodlands that meet the minimum size criteria (below) are significant.</td>
</tr>
<tr>
<td></td>
<td>Forest Cover (by planning unit)</td>
</tr>
<tr>
<td></td>
<td>&lt; 5 %</td>
</tr>
<tr>
<td></td>
<td>5-10 %</td>
</tr>
<tr>
<td></td>
<td>11-15 %</td>
</tr>
<tr>
<td></td>
<td>16-20 %</td>
</tr>
<tr>
<td></td>
<td>21-30 %</td>
</tr>
<tr>
<td>Interior Forest</td>
<td>Any woodland with interior forest habitat (defined as 100 metres from edge) is considered significant.</td>
</tr>
<tr>
<td>Proximity/Connectivity</td>
<td>Woodlands that are located within 50 metres of a significant natural area (defined as <em>wetlands</em> 0.5 hectares or greater in size, <em>ESAs</em>, <em>PSWs</em>, and <em>Life Science ANSIs</em>) are significant.</td>
</tr>
<tr>
<td>Proximity to Water</td>
<td>Woodlands are considered significant if any portion is within 30 metres of any hydrological feature, including all streams, headwater areas, <em>wetlands</em>, and <em>lakes</em>.</td>
</tr>
<tr>
<td>Age</td>
<td>Woodlands with trees of 100 years or more in age are significant. Age will be determined initially using FRI mapping and can be verified during the EIS.</td>
</tr>
<tr>
<td>Rare Species</td>
<td>Any woodland containing threatened, endangered, special concern, provincially or locally rare plant or wildlife species is significant.</td>
</tr>
</tbody>
</table>
**Significant Valleylands**: means a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of the year which is ecologically important in terms of features, functions, representation or amount and contributing to the quality and diversity of an identifiable geographic area or natural heritage system (PPS, 2005, amended).

**Special Policy Area**: with respect to *Hazard Lands*, means an area within a community that has historically existed in the flood plain and where site-specific policies, approved by both the Ministers of Natural Resources and Municipal Affairs and Housing, are intended to provide for the continued viability of existing uses (which are generally on a small scale) and address the significant social and economic hardships to the community that would result from the strict adherence to provincial policies concerning development. The criteria and procedures for approval are established by the Province (PPS, 2005).

**Stable Top of Bank**: means the edge of the channel or bank if there is a sharp change from the steep slope of the channel or bank to the shallower slope of the field area, or the normal full extent of the watercourse when it contains the maximum volume of water without flooding, if the change in slope does not exist (Greenbelt Plan, 2005).

**Successional Habitat**: Communities with tree cover less than or equal to 25% and with shrub cover greater than 25%. Soils are parent mineral material.

**Surface Water Feature**: refers to water-related features on the earth’s surface, including headwaters, rivers, stream channels, inland lakes, seepage areas, recharge/discharge areas, springs, wetlands, and associated riparian lands that can be defined by their soil moisture, soil associated riparian lands that can be defined by their soil moisture, soil type, vegetation or topographic characteristics (PPS, 2005).

**Tallgrass Prairies**: means land (not including land that is being used for agricultural purposes or no longer exhibits tallgrass prairie characteristics) that:

a) Has vegetation dominated by non-woody plants, including tallgrass prairie species that are maintained by seasonal drought, periodic disturbances such as fire, or both;

b) Has less than 25 percent tree cover;

c) Has mineral soils; and,

d) Has been further identified, by the Minister of Natural Resources or by any other person, according to evaluation procedures established by the Ministry of Natural Resources, as amended from time to time. (Greenbelt Plan, 2005)
**Valley Lands**: means a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of the year (PPS, 2005).

**Warmwater Watercourse**: means a watercourse, whether permanent, intermittent, or ephemeral, which supports or contributes to the support of fish habitat or species associated with warmwater such as carp, bass, warmwater benthic invertebrates, or have thermal characteristics of a warmwater stream such as designated by the Ministry of Natural Resources. Warmwater species that are best adapted to prefer or usually occur at water temperatures greater than 25 degrees Celsius.

**Watershed**: means an area that is drained by a river and its tributaries.

**Wetlands**: mean land such as swamp, marsh, bog, or fen (not including land that is being used for agricultural purposes and no longer exhibits wetland characteristics) that:

a) Is seasonally or permanently covered with shallow water or has the water table close to or at the surface;

b) Has hydric soils and vegetation dominated by water-tolerant plants; and,

c) Has been further identified according to evaluation procedures established by the Ministry of Natural Resources, as amended from time to time.

d) This includes provincially and locally significant *wetlands*. (Greenbelt Plan, 2005)

**Woodlands**: means treed areas that provide environmental and economic benefits to both the private landowners and the general public, such as erosion prevention, hydrological and nutrient cycling, provision of clean air and the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities, and the sustainable harvest of a wide range of woodland products. Woodlands include treed areas, woodlots or forested areas (PPS, 2005).

**Woodland Linkages**: means any natural or planted wooded area of any size or composition of 0.5 hectares or more in size that either connects or lies within 100 metres of a Core Area.
### APPENDIX 3: Amount of Natural Areas owned by Conservation Authorities and Non-Government Organizations

<table>
<thead>
<tr>
<th>Location:</th>
<th>Area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILES RD</td>
<td>3.38</td>
</tr>
<tr>
<td>REGIONAL RD 97</td>
<td>4.05</td>
</tr>
<tr>
<td>2ND CONC RD W</td>
<td>1.62</td>
</tr>
<tr>
<td>SAGER RD</td>
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</tr>
<tr>
<td>6TH CONCESSION RD W</td>
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</tr>
<tr>
<td>RD ALL BTW L12 13</td>
<td>4.05</td>
</tr>
<tr>
<td>RD ALL BTW L12 13</td>
<td>4.05</td>
</tr>
<tr>
<td>REGIONAL RD 97</td>
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</tr>
<tr>
<td>200 PARSONAGE RD</td>
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<tr>
<td>PARSONAGE RD</td>
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<tr>
<td>TOLLLGATE DR REAR</td>
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</tr>
<tr>
<td>2719 JERSEYVILLE RD W</td>
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</tr>
<tr>
<td>RD ALL BTW L12 13</td>
<td>2.02</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>79.64</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location:</th>
<th>Area (Ha)</th>
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<tbody>
<tr>
<td>SOVEREIGN AVE</td>
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</tr>
<tr>
<td>REGIONAL RD 97</td>
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<td>BROADWAY AVE</td>
<td>0.13</td>
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<tr>
<td>CON 2 PT LOT 24 FW DUN RP 62</td>
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<tr>
<td>BROADWAY AVE</td>
<td>0.71</td>
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<tr>
<td>355 OLD GUELPH RD</td>
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<tr>
<td>MILLGROVE RD</td>
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<tr>
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<tr>
<td>MINA AVE</td>
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</tr>
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<tr>
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</tr>
<tr>
<td>MINA AVE</td>
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</tr>
<tr>
<td>MINA AVE</td>
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<tr>
<td>MINA AVE</td>
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<tr>
<td>NORTH DR</td>
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</tr>
<tr>
<td>CREEKVIEW CRT REAR</td>
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</tr>
<tr>
<td>BLUEHERON LANE</td>
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<tr>
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<tr>
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<tr>
<td>CENTRE RD</td>
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<tr>
<td>3RD CONCESSION RD E</td>
<td>27.32</td>
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<tr>
<td>PARKSHORE PLACE</td>
<td>2.96</td>
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### Conservation Halton

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<tbody>
<tr>
<td>PARKSHORE PLACE</td>
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<td>CARLISLE RD</td>
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<td>CARLISLE RD</td>
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<tr>
<td>CAMPBELLVILLE RD S/S</td>
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<tr>
<td>MILBUROUGH LINE</td>
<td>189.28</td>
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<tr>
<td>BROADWAY AVE</td>
<td>0.13</td>
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<tr>
<td>2259 MILBUROUGH LINE</td>
<td>117.80</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>656.66</strong></td>
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</table>

### Hamilton Conservation Authority

<table>
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<tr>
<th>Location</th>
<th>Area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOUNTAIN RD</td>
<td>9.03</td>
</tr>
<tr>
<td>1134 GOLF LINKS RD</td>
<td>14.31</td>
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<tr>
<td>SEVENTH RD E</td>
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<tr>
<td>STONE CHURCH RD W</td>
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<tr>
<td>1029 RIDGE RD</td>
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<tr>
<td>174 RIDGE RD</td>
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<td>185 RIDGE RD</td>
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<tr>
<td>MILES RD</td>
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<tr>
<td>YORK RD</td>
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<tr>
<td>AIRPORT RD</td>
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<tr>
<td>COOTES DR</td>
<td>9.73</td>
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<tr>
<td>PLAN 904 LOT 19 REG COMP PLA</td>
<td>1.39</td>
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<tr>
<td>COOTES DR</td>
<td>18.95</td>
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<td>TALLY HO DR</td>
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<tr>
<td>EIGHTH RD E W/S</td>
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<td>0.73</td>
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<td>86 UPPER MOUNT ALBION RD</td>
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<td>MEADOWLANDS BLVD</td>
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<tr>
<td>44 ACKLAND ST</td>
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<tr>
<td>838 MINERAL SPRINGS</td>
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<td>WATSONS LANE</td>
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<td>PARAMOUNT DR</td>
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<td>Hamilton Conservation Authority</td>
<td>Location :</td>
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<td>------------</td>
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<td>ANCHOR RD</td>
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