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# Chatham-Kent Natural Heritage Implementation Strategy

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*A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.*

- Aldo Leopold  
A Sand County Almanac

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## Purpose

The purpose of this Implementation Strategy is to identify how the Municipality of Chatham-Kent will work with all sectors of the community to maintain and enhance the natural heritage system within the municipality and, manage collectively, the greater ecological goods and services that are a benefit to all members of society. The Implementation Strategy will also identify how Chatham-Kent will implement many of the recommendations in the Conservation Action Plans that were recently prepared by Carolinian Canada Coalition in cooperation with numerous stakeholders in Chatham-Kent.

A natural heritage system is a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems<sup>1</sup>. Natural heritage features include wetlands, fish habitat, woodlands, valleylands, habitat of endangered species and threatened species, wildlife habitat, and geologic features and landforms, which are important for their environmental and social values as a legacy of the natural landscapes of an area. These are features that are recognized as being important to identify and protect to ensure our long-term prosperity, environmental health and social well-being.

The term “ecological goods and services” is a term used to describe the benefits that people obtain from ecosystems. These include *provisioning services* such as food, water, timber, and fibre; *regulating services* that affect climate, floods, disease, wastes, and water quality; *cultural services* that provide recreational, aesthetic, and spiritual benefits; and *supporting services* such as soil formation, photosynthesis, and nutrient cycling<sup>2</sup>. The purpose of using this term is to recognize that there are numerous benefits to society of a healthy ecosystem and that negative impacts to these ecosystems can result in significant negative impacts to all of us who rely on those ecosystems for the various services that they provide.

The Implementation Strategy involves continued, enhanced and/or new partnerships with community stakeholders including, but not limited to: the Lower Thames Valley and St. Clair Region Conservation Authorities; School Boards and local schools; non-government environmental groups such as Carolinian Canada Coalition (CCC) and REALM (Regenerative Agriculture Land-Use Management Group); the University of Guelph Ridgetown Campus; First Nations communities; local citizens interested in protecting the natural environment; and, Chatham-Kent farm associations including the Kent Federation of Agriculture, Christian Farmers Association, Chatham-Kent Chapter Christian Farmers Federation of Ontario, National Farm Union and the Chatham-Kent United Farm Voice. These partnerships enable all sectors of Chatham-Kent’s community to participate in the protection of the ecological goods and services that are a benefit to everyone in Chatham-Kent.

The Implementation Strategy identifies the need for Chatham-Kent to take on a continued and stronger leadership role in the maintenance and enhancement of the natural heritage resources

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<sup>1</sup> Provincial Policy Statement 2014, Definitions, page 45

<sup>2</sup> Ecosystems and Human Well Being Synthesis Report, Millennium Ecosystem Assessment Board, Walter V. Reid et al., p. v,

within the municipality to ensure long-term sustainability, prosperity, environmental health and social well-being in the community.

## **Background**

Chatham-Kent's Community Strategic Plan provides an overall strategy for the future of the municipality. According to the Plan, the Municipality of Chatham-Kent values the natural heritage features and the functions they provide within the community and recognizes that it is important to strike a balance between the needs of all sectors of society in order to ensure a healthy, attractive and sustainable community. Chatham-Kent has shown leadership in the effort to maintain and enhance woodlands, wetlands and grasslands for over a decade. In 2003, the Forest Management Strategy was produced which identified strategic directions for new Official Plan policies intended to protect woodlands and to work with landowners in natural heritage conservation efforts. In 2006, the Greening Partnership was created with the Lower Thames Valley Conservation Authority to provide additional resources and funding opportunities for stewardship efforts on private lands. In 2013, Council adopted revisions to the Official Plan that include new policies aimed at maintaining and enhancing natural heritage. In addition, the municipality recently participated with Carolinian Canada Coalition in the creation of three Conservation Action Plans (CAPs) to identify actions that are necessary to improve the natural environment in Chatham-Kent. Council endorsed two of the CAPs in October 2013 (Erie-Rondeau Coast and Lake St. Clair Coastal), and in doing so, committed to participate in the actions necessary to implement the Plans. The third CAP covers the Sydenham River watershed and is scheduled for completion in early 2014.

## **Conservation Policy**

At the October 2013 Council meeting staff took a report to Council that included a recommendation that the municipality not consider a tree cutting by-law but rather that Council consider the creation of a Conservation Policy as the next step in the municipality's commitment to natural heritage conservation. Specifically, the recommendation stated that a Conservation Policy be prepared using the policy framework model developed by staff of Chatham-Kent, the Public Health Unit and Carolinian Canada (see Figure 1). Jennifer Lawrence and Associates Inc. were retained by Chatham-Kent to work with municipal staff to create the Conservation Policy. During the preparation of the policy, it was determined that a more accurate description of staff's intent was an Implementation Strategy to identify how strategic actions identified in the CAPs, as well as other initiatives, would be implemented by Chatham-Kent to address natural heritage conservation. As a result, this Implementation Strategy is in place of the Conservation Policy referred to in the October 2013 staff report. In-keeping with the recent CAP recommendations, this Strategy recognizes that the municipality must undertake natural heritage conservation holistically rather than focussing on only one component of natural heritage. This means that, in addition to woodlands, this Strategy considers the maintenance and enhancement of all natural heritage features and functions to be of equal importance if Chatham-Kent is to create a resilient sustainable natural heritage system. This approach is consistent with provincial direction and will assist in moving the municipality towards a systems based approach, rather than features-based approach, to natural heritage conservation.

## State of the Environment

The state of Chatham-Kent's natural heritage features and functions have been documented in recent reports such as the CAPs prepared by Carolinian Canada as well as the Literature Review, *Chatham-Kent Trees, Forests and Woodlots*, co-authored by the Chatham-Kent Public Health Unit and the University of Guelph. The municipality is concerned with the current state of the natural environment in Chatham-Kent and is committed to working with their partner agencies, non-government groups and the citizens of Chatham-Kent to initiate positive change. Given the amount of background information available, this paper will not repeat the details from these reports but rather, accept the findings, build upon them and put in place an Implementation Strategy whereby the natural heritage features and functions in Chatham-Kent are maintained and enhanced to provide for a healthier and more resilient natural environment.

Viable natural heritage systems help to attract and retain new residents and businesses due to the ecological goods and services that are attributed to such systems. Benefits include cleaner air and water, outdoor recreational opportunities, an aesthetically pleasing community and intrinsic social and cultural values associated with nature. Unfortunately, too often, these benefits are overlooked for short-term economic gain. In other words, the natural environment is looked at as an impediment to attracting new development and to economic growth because it is seen as a constraint on the landscape that de-values the land. As a result, natural heritage features and functions are damaged or destroyed for short-term economic gains but the long-term impacts on the community may not be immediately noticeable. Over the last few years, the residents of Chatham-Kent have begun to voice their concern about the changes that they are witnessing to the natural environment in their community and they are looking to the municipality to take a leadership role in protecting this valuable resource for current and future generations.

With less than 6% natural cover (4% forest cover in woodlands greater than 2ha; 2% forest cover in smaller woodlands and other habitats such as wetlands or grasslands), as a municipality Chatham-Kent has the least remaining natural cover of any upper tier municipality in Ontario. There are currently a number of strategies and plans in place that are intended to maintain and enhance the natural heritage features and functions within Chatham-Kent including: Official Plan policies; the Greening Partnership with the Lower Thames Valley Conservation Authority; St. Clair Region Conservation Authority stewardship program; Chatham-Kent Forest Management Strategy; the Ministry of Agriculture's Environmental Farm Plan program; and, three CAPs. The concern is that, even with all of these existing policies and programs, natural heritage features continue to be removed from the landscape. Agriculture is the primary pressure on the natural heritage features within Chatham-Kent<sup>3</sup> so it is evident that any efforts to maintain and enhance natural heritage will need to be in cooperation with the agricultural community. The intention of this Strategy is to identify a path that Chatham-Kent can follow to reverse the trend of natural heritage loss and also to identify the tools and resources needed to make this Strategy successful such that existing natural heritage features and functions are maintained and enhanced.

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<sup>3</sup> Official Plan Amendment XX, Municipality of Chatham-Kent, p. 68

## Planning Context

In order to identify and assess options, it is necessary to understand the planning policies that affect natural heritage, health, climate change and air quality. Below is a brief summary of policies within the Provincial Policy Statement (PPS) and the Chatham-Kent Official Plan (OP) that pertain to these topics. There are numerous other federal and provincial policies and programs in place that address these issues however, for the purpose of brevity, this paper only provides a summary of the PPS and OP.

### Planning Act and Provincial Policy Statement

In Ontario, planning decisions are guided by the *Planning Act* and the Provincial Policy Statement (PPS) that is issued under Section 3 of the Act. Section 3(5) requires that decisions affecting planning matters “shall be consistent with” policy statements issued under the Act<sup>4</sup>. As a decision-making authority, the Municipality of Chatham-Kent is therefore, responsible for ensuring that their planning policies and decisions are consistent with the PPS.

The PPS provides direction on matters of provincial interest related to land use planning and development including: land use; employment areas; housing; public spaces/parks/open space; infrastructure/public services; economic prosperity; energy; air quality; natural resources; and, health and safety. On February 24, 2014, the Ministry of Municipal Affairs released the 2014 Provincial Policy Statement. This policy statement will become effective on April 30, 2014. As a result, below are several policies from the 2014 PPS that are applicable to the natural heritage conservation discussion that is taking place in Chatham-Kent. It is important to note that the PPS is to be read in its entirety when interpreting the policies and that the following excerpts have been selected as they are most applicable to the topic of this paper.

### Building Strong Communities

The preamble to Part V, Section 1.0 of the PPS (Building Strong Communities) reflects on the fact that long-term prosperity in Ontario, environmental health and social well-being rely on the wise management of change and the promotion of efficient land use and development patterns. Of relevance to this Strategy, Policy 1.1.1 (b) and (c) state:

#### *1.1.1 Healthy, liveable and safe communities are sustained by:*

- (b) accommodating an appropriate range and mix of residential (including second units, affordable housing and housing for older persons), employment (including industrial and commercial and), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;*
- (c) avoiding development and land use patterns which may cause environmental or public health and safety concerns;*

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<sup>4</sup> Planning Act, [http://www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90p13\\_e.htm#BK6](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90p13_e.htm#BK6)

*(h) promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate.*

The 2014 PPS has introduced the need to consider development and land use patterns that conserve biodiversity and impacts of a changing climate. It is necessary to find a balance between competing land uses in order to ensure a healthy, safe and liveable community in Chatham-Kent. Finding such a balance can often be very difficult especially given the economic realities that many municipalities face across Ontario. However, it is important to think strategically and sustainably in order to protect the long-term health of the current and future residents of Chatham-Kent as well as the long-term health of the natural heritage systems within the municipality; the two go hand-in-hand and will be an important part of creating a municipality where people will want to live, work and play.

Further, Policy 1.1.3.2 states:

*1.1.3.2 Land use patterns within settlement areas **shall** be based on: (emphasis added)*

*(a) densities and a mix of land uses which:*

*3. minimize negative impacts to air quality and climate change, and promote energy efficiency.*

This policy directs decision-makers to ensure that development is planned for and designed to minimize negative environmental impacts including air quality and climate change.

### **Rural Areas in Municipalities**

This section of the PPS recognizes the important role that rural areas have in the economic success of the Province. A new subsection was added to Policy 1.1.4.1 in the 2014 PPS to recognize that healthy and sustainable rural areas are supported by a number of elements including biodiversity.

*1.1.4.1 Healthy, integrated and viable rural areas should be supported by:*

*(h) conserving biodiversity and considering the ecological benefits provided by nature.*

The addition of this policy is significant because it recognizes that a healthy and viable rural area co-exists with the natural area. This is due the many benefits that a healthy and diverse ecosystem provides including improved drinking water quality, stormwater infiltration, irrigation needs, minimized erosion and soil loss and temperature and wind mitigation.

### **Coordination**

Policy 1.2 speaks to the importance of coordination when dealing with complex planning matters. Specifically, Policy 1.2.1 states:

*1.2.1 A coordinated, integrated and comprehensive approach should be used when dealing with planning matters within municipalities, across lower, single and/or upper-tier municipal boundaries, and with other orders of government, agencies and boards including:*

- a) *managing and/or promoting growth and development;*
- b) *economic development strategies;*
- c) *managing natural heritage, water, agricultural, mineral, and cultural heritage and archaeological resources;*
- d) *infrastructure, electricity generation facilities and transmission and distribution systems, multimodal transportation systems, public service facilities and waste management systems;*
- e) *ecosystem, shoreline, watershed, and Great Lakes related issues;*
- f) *natural and human-made hazards;*
- g) *population, housing and employment projections, based on regional market areas; and,*
- h) *addressing housing needs in accordance with provincial policy statements such as the Ontario Housing Policy Statement.*

The intent of Policy 1.2.1 is to identify the complicated and inter-connected nature of decision-making across all sectors and that municipalities must not only take their own interests into consideration, but also those of other agencies.. An issue that is looked at in isolation of other factors can have long-term negative impacts that may have been foreseen if an integrated approach had been taken in the decision-making process.

## **Public Spaces, Recreation, Parks, Trails and Open Space**

Policy 1.5.1 addresses the importance of public spaces, parks and open space in a community. Specifically, it states:

*1.5.1 Healthy, active communities should be promoted by:*

- (b) planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources;*
- (c) providing opportunities for public access to shorelines; and*
- (d) recognizing provincial parks, conservation reserves, and other protected areas, and minimizing negative impacts on these areas.*

Healthy, active citizens require a municipal government that is committed to a balance of land uses. The protection of, and public access to, natural spaces is a component to creating a healthy community.

## **Infrastructure and Public Services Facilities**

The 2014 PPS introduces the term “green infrastructure”. This is a term that has been used for many years to essentially describe the ecological goods and services that natural features provide that have not historically been considered as part of the municipality’s hard infrastructure. Reference to green infrastructure can be found in Policy 1.6.2 which states:

*1.6.2 Planning authorities should promote green infrastructure to complement infrastructure.*

The 2014 PPS defines green infrastructure as including natural and human-made elements that provide ecological and hydrological functions and processes including natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces, and green roofs.

## **Energy Conservation, Air Quality and Climate Change**

Air quality and climate change are becoming increasingly important in planning decisions across Ontario. Policy 1.8.1 of the PPS addresses air quality and climate change as follows:

*1.8.1 Planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and climate change adaptation through land use and development patterns which:*

*(f) promote design and orientation which:*

- 1. maximizes energy efficiency and conservation, and considers the mitigating effects of vegetation; and*
- 2. maximizes opportunities for the use of renewable energy systems and alternative energy systems; and*

*(g) maximize vegetation within settlement areas, where feasible.*

As noted under Policy 1.1.3.2, it is no longer enough just to demonstrate no negative impacts on air quality, the Province expects that planning authorities will champion improved air quality. This policy also recognizes the important role that vegetation plays in mitigating the negative impacts of poor air quality and the importance of maximizing vegetation within settlement areas. Trees are important for filtering air pollutants and, in doing so, can help to reduce preventable diseases including cancer, cardiovascular and respiratory diseases<sup>5</sup>. Compared to neighbouring municipalities, Chatham-Kent had the highest rate of preventable deaths from cardiovascular disease in 2009 (Public Health Ontario, 2013) and the second highest rate of deaths due to respiratory diseases in 2005/2007 (Statistics Canada, 2013)<sup>6</sup>. Given the minimal remaining tree cover in Chatham-Kent and the statistics related to cardiovascular and respiratory disease rates, it is critical that planning decisions in the municipality require that the proponent identify how, through the implementation of their proposal, they will not only minimize negative impacts to air quality but also how their proposal can assist in making a positive impact on air quality.

## **Wise Use and Management of Resources**

Key to the protection and enhancement of Ontario's natural resources are the policies found within Section 2.0 of the PPS. This section recognizes the link between long-term prosperity, environmental and social health and the protection of natural heritage, water, agriculture, mineral and cultural heritage resources. The following policies have been selected from Section 2.0 for their relevance to the issues that Chatham-Kent is currently facing:

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<sup>5</sup> Chatham-Kent Trees, Forests and Woodlots, A Review of the Literature, July 2013, Chatham-Kent Public Health Unit and University of Guelph

<sup>6</sup> Chatham-Kent Trees, Forests and Woodlots, A Review of the Literature, July 2013, Chatham-Kent Public Health Unit and University of Guelph

## **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.*
- 2.1.3 *Natural heritage systems shall be identified in Ecoregions 6E and 7E, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.*
- 2.1.4 *Development and site alteration shall not be permitted in:*
- a) *significant wetlands in Ecoregions 5E, 6E and 7E; and*
  - b) *significant coastal wetlands*
- 2.1.5 *Development and site alteration shall not be permitted in:*
- b) *significant woodlands in Ecoregions 6E and 7E;*
  - c) *significant valleylands in Ecoregions 6E and 7E;*
  - d) *significant wildlife habitat;*
  - e) *significant areas of natural and scientific interest; and*
  - f) *coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b).*
- unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.*
- 2.1.6 *Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.*
- 2.1.7 *Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.*
- 2.1.8 *Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies, 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.*
- 2.1.9 *Nothing in policy 2.1 is intended to limit the ability of agricultural uses to continue.*

## **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 integrated and long-term planning, which can be a foundation for considering cumulative impacts of development;*
- b) minimizing potential negative impacts, including cross-jurisdictional and cross-watershed impacts;*
- c) identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed;*
- d) maintaining linkages and related functions among ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas;*
- e) 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;**
- f) planning for efficient and sustainable use of water resources, through practices for water conservation and sustaining water quality;*
- g) ensuring consideration of environmental lake capacity, where applicable; and*
- h) ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.*

### **2.2.2** *Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored.*

*Mitigative measures and/or alternative development approaches may be required in order to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions.*

The Natural Heritage and Water policies reflect the inter-connected nature of natural heritage features, surface water and ground water. The Province has recognized that, in the past, municipalities and the development industry generally ignored the importance of natural heritage features and that this has left many communities struggling with the costly effects of flooding, erosion, poor air quality and lack of outdoor recreation space. The purpose of the PPS policies is to bring to the forefront the importance of the long-term health of the natural environment. These are resources that every citizen of Ontario benefit from and must be protected from decisions that will only provide short-term gains. The addition of Policy 2.1.3 is important to Chatham-Kent as it requires municipalities to identify a natural heritage system.

As outlined throughout the above policies, it is the Province's expectation that natural heritage and water features will be evaluated **prior to** development and site alteration. The intention being that, if the natural heritage features and/or functions are found to be significant, the municipality can require that they remain on the landscape and be protected from the impacts of development and site alteration. The challenge that Chatham-Kent is facing is that the PPS policies, as well as the Official Plan policies, are only applicable if a *Planning Act* application is required and if the features are found to be significant. The majority of tree removal that has taken place, and continues to take place, in Chatham-Kent does not trigger a *Planning Act* application and, as such, there is currently no ability for the municipality to apply these policies or to have any binding input into the tree removal.

## Chatham-Kent Official Plan

As noted above, decisions made by planning authorities are required to be consistent with the Provincial Policy Statement. In fact, Policy 4.5 of the PPS states that the Official Plan is the most important vehicle for the implementation of the PPS.

Chatham-Kent's current Official Plan was adopted by Council prior to the adoption of the 2005 PPS however, the natural heritage policies are generally consistent with the PPS. Chatham-Kent recently completed a five year review of their Official Plan. One of the purposes of the review was to ensure the policies are consistent with the PPS. The review involved public consultation and discussion surrounding the various policy directions within the Plan. The final Plan was adopted by Council on November 25, 2013 and submitted to the Ministry of Municipal Affairs and Housing where it awaits approval by the Province. Given that the 2013 version has been adopted by Council, this paper will refer to this more recent version of the Official Plan however, it is recognized that the existing Official Plan remains in effect until MMAH approval is received.

The 2013 Official Plan introduces the over-arching theme of "Sustainable Chatham-Kent" as the foundation on which the Plan is based. The term 'sustainability', in this theme, relates to health, economic, environmental and cultural sustainability. The municipality recognizes that long-term sustainability can only be achieved through the integration and consideration of all four sustainability components.

From an air quality and energy consumption perspective, the municipality has committed to the creation of a Municipal Energy Plan that will seek to evaluate and measure energy consumption and greenhouse gas emissions in an effort to improve energy efficiency and to reduce emissions.

The Environment section contains updated policies to ensure consistency with the PPS as well as to address local emerging issues. The general direction of the Environment policies is that of (1) protection from incompatible development; (2) enhancement; and, (3) the need for more detailed study. The policies are designed to improve the sustainability and long-term health of Chatham-Kent's ecosystems by protecting and preserving valuable aquatic and terrestrial resources and their biological requirements. New policies have been added to address significant woodlands in an effort to provide as many options as possible for the protection of these features. The OP recognizes that the protection and enhancement of the natural environment is a necessity in order to achieve long-term sustainability.

Finally, the Implementation Section of the Official Plan introduces the creation of a Sustainability Review Team that will be responsible for monitoring, tracking and measuring the success of policy implementation and for ensuring consistency amongst policies, programs and strategies. In order

to assist with this monitoring, the Official Plan also recognizes the need for an information system, to be maintained by the municipality, to track this process. The Sustainability Review Team will be very influential in terms of creating a consistent approach to sustainability throughout all departments and this Strategy identifies several opportunities for this Team to assist in the implementation of natural heritage conservation.

## **Summary of Existing Programs and Plans**

There are a number of existing programs and plans in Chatham-Kent that are aimed at maintaining and enhancing natural cover in the municipality. Many of these programs and plans are administered by the Municipality of Chatham-Kent and/or the Conservation Authorities however, some are offered by non-profit organizations. Below is a brief description of the existing programs and plans.

### **Greening Partnership**

In an effort to address the limited natural heritage resources and to assist landowners with stewardship and restoration on their lands, Chatham-Kent created the Greening Partnership with the Lower Thames Valley Conservation Authority (LTVCA) in 2006. Funding for this program is in the form of a special levy that is specifically for the purpose of hiring two staff members to work towards greening Chatham-Kent. The LTVCA have two staff members, an Environmental Project Coordinator and an Environmental Technical Assistant, that deliver this program on behalf of Chatham-Kent. These two staff members have secured \$2.3 million in grants in the last seven years. This money has been used to plant approximately 470,000 trees<sup>7</sup>, create 4.1 ha (10 acres) of prairie habitat, 30.4 ha (75 acres) of wetland and has provided countless opportunities for education and volunteering in the community. On an annual basis, this translates into approximately 32.4 ha (80 acres) of land that is restored to a natural state in Chatham-Kent.

In response to the recent tree cutting that has taken place in the rural area, the Greening Partnership applied for funding from the Ministry of Agriculture to hire a staff member to liaise with the agricultural community. Funding was recently received from the Ministry of Agriculture to enable the Greening Partnership to hire an Agricultural Specialist and student assistant for the next 3 years. These staff members will be focused on stewardship and education with the agricultural community including: liaising with the agricultural farm associations; attending agricultural events; hosting outreach and educational events that promote buffer strips, tree planting, livestock fencing and nutrient management; assisting farmers with Best Management Practices; and, writing grants to fund stewardship activities. Given the fact that agriculture is the primary pressure on natural heritage features, these new positions will provide additional resources to address the significant loss of wooded areas on agricultural lands.

### **Landowner Stewardship**

The staff of the Greening Partnership works with willing landowners who are interested in maintaining and/or enhancing the natural heritage features on their property. This can involve the planting of windbreaks and buffers as well as wetland and grassland habitat creation and restoration. The CA staff that deliver the program are responsible for all aspects of implementation including writing the grants to secure funding, contacting landowners, designing

<sup>7</sup> Greening Partnership Post Season Report, July 2013

and implementing restoration projects and coordinating volunteers. In addition, they also participate in large scale visioning exercises such as the Conservation Action Plans. The work that they undertake provides opportunities to educate and engage all members of the Chatham-Kent community ranging from children in the school tree planting programs to adults who are interested in getting involved and giving back to their community through volunteer tree planting and restoration programs.

### **Community Initiatives**

In addition to working with private landowners, the Greening Partnership is also responsible for the Community Trees Initiative. This program partners with the Chatham Horticultural greenhouses and provides 10,000 native trees to school and community planting projects annually. A coordinator works with local high schools to fully involve the students in all aspects of tree cultivation. The trees are then used for school and community tree planting programs on publicly-owned lands.

In 2013, over 600 volunteers participated in more than 160 events that included introductory lectures, presentations, seed collections, and planting on restoration sites. These volunteer efforts added up to almost 3000 hours of community involvement in the greening of Chatham-Kent. Providing opportunities for the community to volunteer is essential to ensuring continued interest in, and commitment to, the conservation of the natural heritage system. This creates a feeling of goodwill within the community and a sense of pride in participating in a project that will have a lasting effect on the health of Chatham-Kent.

The Greening Partnership, in cooperation with the Chatham-Kent Public Health Unit, also administers the 'Tomorrow's Greener Schools Today' program. In 2013, this initiative involved 13 schools and resulted in the planting of 90 trees. The program will eventually result in additional shade, canopy cover and temperature mitigation once the trees mature. Probably even more valuable than the trees that are planted is the opportunity to engage Chatham-Kent's youth in conservation and enhancement. It also provides an excellent opportunity to teach school children about the benefits of trees and has been coordinated with the school curriculum for maximum benefit.

### **Landowner Recognition**

The Greening Partnership has a semi-annual award (Greening Partnership Environmental Award) that is awarded to landowners who have undertaken exceptional stewardship on their property. The award is a hand-carved wooden sign that is returned by each recipient after six months and re-assigned to the next award winner. In 2014, the Greening Strategy plans to add new recognition categories including Landowners, Educators and Industry Leader in order to broaden the recognition within the community.

### **Summary**

The Greening Partnership has been, and will continue to be, an extremely important initiative in Chatham-Kent to assist in the restoration and stewardship of natural heritage features on the landscape. The return on Chatham-Kent's investment to date is incredible. The Greening Partnership staff, of just two people, has almost tripled Chatham-Kent's investment of \$860,000 over the last 7 years through the infusion of \$2.3 million into the greening effort in Chatham-Kent.

## **Chatham-Kent Forestry Services**

It is estimated that, over a period of just under two years, approximately 1500 acres (607 ha) of wooded area was removed in Chatham-Kent. This amount of tree removal is completely unsustainable and short-sighted given the reliance of the agricultural community on the ecological goods and services that these wooded areas provide for their livelihood. In 2013, Chatham-Kent retained a Registered Professional Forester on contract in an effort to reduce the amount of tree removal taking place. This person is responsible for liaising with rural landowners to provide advice and assistance related to good forestry management practices, the economic benefits of maintaining a healthy, productive woodlot and the Managed Tax Forest Incentive Program (MFTIP). This service is provided at no cost to the landowner and the only requirement that Chatham-Kent has is that the municipality receive a copy of any documentation that the forester prepares on the landowner's behalf. In 2013 and early 2014, the forester worked with 10 landowners and assisted in the preparation of 8 woodlot assessments.

## **St. Clair Region Conservation Authority Stewardship Program**

A portion of Chatham-Kent is within the St. Clair Region Conservation Authority's (SCRCA) watershed. The SCRCA operates their own Stewardship Program which has also had success in working with landowners to restore and enhance the natural heritage features in their watershed. Programs include: a seedling program that offers free tree planting and maintenance; program that offers large stock trees; Forests for the Future program where CA staff can design and plant riparian buffers strips, provide tree planting and woodlot services; and, woodlot management services including woodlot marking, silvaculture prescriptions, preparation and approval of Forest Management Plans for the Managed Forest Tax Incentive Program.

The SCRCA 2013 Watershed Report Card notes that reforestation efforts are needed to increase the extent and size of woodlands and that riparian buffers are needed on all watercourses especially municipal drains. The CA undertook 128 stewardship projects between 2006-2010 including wetland restoration, stream bank stabilization and riparian buffer planting. Between 2006 - 2010, 221,000 trees and shrubs were planted by SCRCA in 293 projects and 275,000 trees were planted for the Memorial Forest Program (1988-2012). The SCRCA watershed extends beyond Chatham-Kent and, as such, only a portion of these projects took place in Chatham-Kent.

## **Carolinian Canada Coalition**

Carolinian Canada Coalition (CCC) was formed in 1984 and is a registered charity. CCC is an ecoregional group that extends from Toronto to Windsor in a region known as the Carolinian Life Zone. This ecoregion is a diverse but fragile ecosystem. Consider some of the area's statistics:

- 25% of Canada's population on 0.25% of its area
- More endangered and rare species than any other life zone in Canada
- A great diversity of wildlife of all kinds, including many species not found elsewhere in Canada
- Less than 2% of the landscape is in public ownership
- 73% of the landscape is in highly productive agriculture
- Forest cover has been reduced from 80% to 11.3%
- Forest interior has been reduced to just 2%

- Wetlands have been reduced from 28.3% to 5.1%<sup>8</sup>

To address the challenges that the ecosystems in this region face, CCC has worked with more than 100 different organizations to develop Conservation Action Plans (CAPs) to identify strategies and actions to enhance biodiversity and increase resilience in stressed ecosystems in 11 of the highest priority areas in Ontario.

Two CAPs were recently completed in Chatham-Kent: the Rondeau-Erie Coast CAP and the Lake St. Clair Coastal CAP. The vision, as articulated by a number of local agencies and citizen groups, of both the Rondeau – Erie Coast CAP and the Lake St. Clair Coastal CAP is:

*To enhance biodiversity, resilience, and adaptation to climate change, ecosystem services, productive soils and agriculture, and tourism and recreation opportunities. This will result in more prosperous communities, healthier citizens and quality of life in Chatham-Kent. The vision will be achieved through maintaining, enhancing and protecting the natural systems of the CAP area through engaged citizens working together toward a common, mutually-beneficial cause: a healthier environment for all.*

Both of these CAPs, as well as a third being completed for the Sydenham River watershed in early 2014, identify objectives and strategic actions that will require funding and coordinated efforts to implement in order to improve the natural heritage features and functions within the CAP areas. The documents also outline the potential lead agencies and collaborators for each strategic action. The Municipality of Chatham-Kent is identified as either the lead agency or a collaborator on most of the action items. As a result, a component of this Implementation Strategy is to identify how Chatham-Kent will begin to implement many of the strategic actions within the CAPs.

It is important to note that there are portions of the municipality that are not covered by the CAP study areas (see Figure 1). The intention of this Implementation Strategy is to take the objectives and strategic actions from the CAPs and provide direction as to how these will be implemented not just within the CAP study areas but within all of Chatham-Kent, to the extent possible. Many of the strategic actions are not site-specific and can easily be applied to areas outside the CAP boundaries.

CCC has obtained funding from Environment Canada (Habitat Stewardship Program for Species at Risk) to support the implementation of the CAP strategic actions. As a result, there will be funding for staff resources at least until the end of 2016. In addition, given their status as a registered charity, CCC can also apply for grants that are not available to government agencies such as the South Kent Wind Community Fund.

Carolinian Canada has already begun the implementation of its “Landowner Leaders” program in Chatham-Kent to meet one of the CAP recommendations. The program includes linking participating landowners to expertise and information required to do habitat enhancement, restoration and stewardship on their lands. The program also helps landowners acquire financial resources to undertake such work. Successful projects are identified with signage, landowners are given certificates and tours are given of the projects. A number of rural landowners are already participating or have expressed interest. Carolinian Canada currently has one staff member, working out of the LTVCA office part-time, on this program.

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<sup>8</sup> Carolinian Canada Coalition website, <https://caroliniancanada.ca/about>

## Goal

The goal of this Implementation Strategy is to demonstrate that, through continued and enhanced proactive municipal and community engagement, Chatham-Kent will maintain and increase the natural heritage features and the functions they provide in the municipality to enhance biodiversity, resilience and adaptation to climate change.

## Objectives

1. Continue to work with the agricultural community to integrate agriculture, conservation goals and ecosystem services to increase natural heritage features and functions within the rural areas of Chatham-Kent;
2. Collaborate with agencies and non-profit organizations currently involved in natural heritage conservation in Chatham-Kent to ensure the most efficient use of limited resources to realize efficiencies through joint initiatives and sharing of information and expertise;
3. Foster a culture of natural heritage conservation throughout Chatham-Kent;
4. Increase the amount of canopy cover within the Urban Areas through the use of development standards/guidelines and stewardship efforts;
5. Enhance landowner recognition by acknowledging and celebrating the important work of existing stewards and creating interest for future stewards to participate in the program; and,
6. Demonstrate how the recommended implementation actions will assist in achieving the strategic actions/steps identified in the Rondeau-Erie Coast and Lake St. Clair Coastal Conservation Action Plans.

## Implementation Strategy

The Implementation Strategy takes each Objective and identifies how the municipality will work with its existing partners, and how new partnerships will be created, to allocate resources in order to maintain and enhance the amount of natural heritage within the municipality. To the extent possible, the recommended implementation actions can be fulfilled within the existing municipal budget allocation. However, if the municipality wants to minimize the amount of tree removal and increase the amount of natural heritage features and functions on the landscape, additional funding is going to be required to support the programs necessary to affect this change. Where the Strategy identifies the need for additional funding, the recommended or potential funding sources have been identified.

### **1. Continue to work with the agricultural community to integrate agriculture, conservation goals and ecosystem services to increase natural cover within the rural areas of Chatham-Kent.**

The municipality has a thriving agricultural community that represents 91% (226,186 ha) of the land base. Chatham-Kent values the social and economic contributions that the agricultural community makes to the municipality and recognizes there is a link between long-term sustainable agriculture and a healthy ecosystem. Natural heritage features on urban and rural lands, such as woodlots, wetlands and grasslands provide numerous valuable resources and services to society including carbon sequestration, water filtering, erosion protection, wildlife habitat, food and wood products and natural flood control.

The importance of maintaining these services are generally well understood and accepted at a societal level however, when it comes to an individual landowner, there is often a feeling that they are being asked to protect natural heritage features for the good of society while receiving no personal benefit. In fact, they may perceive the protection of natural heritage features as having a negative financial impact if they feel that those lands could be used for an alternate land use such as agriculture or urban development. Whatever strategy the municipality decides upon, it must consider the needs and motivations of those landowners that have the greatest ability to have a positive influence on the extent of natural heritage features. In Chatham-Kent, the landowners with the greatest ability to have a positive influence are the farmers given that they are the owners of the majority of the land base. As such, the majority of funding should focus on efforts to engage the agricultural community in stewardship and conservation. The Kent Federation of Agriculture (KFA) and the Christian Farmers Federation of Ontario (CFFO) have both offered their support of a policy-based approach to natural heritage conservation. The participation of their members will be key to the success of this strategy.

Even with the success of the Greening Partnership, the SCRCA Stewardship Program and the efforts of non-government environmental organizations, natural heritage features continue to be removed from the landscape. The status quo will not suffice if Chatham-Kent is to have a measurable impact on this problem. There will need to be a fundamental shift in the value that is placed on natural heritage in Chatham-Kent in order to elevate its importance in the decision-making process. As a result, additional tools and investment are needed in order to reverse this trend to the point where the loss of existing natural heritage features is minimized and natural heritage cover steadily increases in Chatham-Kent.

While stewardship and restoration efforts are extremely important, replanting to compensate for the loss of existing forest cover does not address the significant losses that are realized when mature woodlands are removed. It will take decades for restoration areas to mature and these areas cannot immediately compensate for the loss of existing mature natural heritage features and functions. The removal of mature natural heritage features from the landscape removes decades, and sometimes centuries, of ecological functioning and complex biotic and abiotic interactions. These complex functions cannot be replaced by simply planting seedlings. In addition to the outstanding restoration efforts that have been taking place, action is needed now to slow, and eventually stop, the removal of these mature features in order to preserve what is left of Chatham-Kent's natural heritage legacy.

The Chatham-Kent Forest Management Plan (2003) recommended a forest cover target of 10% by 2024. The Rondeau-Erie Coast CAP has set a target of increasing the extent of healthy forest in the East section of the Rondeau CAP area and the Rondeau Watershed section of the CAP to 12% each by 2033. Specific percentage targets were not included in the Lake St. Clair Coastal CAP. Chatham-Kent Council endorsed the Forest Management Strategy in 2003 and both CAPs in October 2013 and, as such, have indicated their willing partnership in achieving these goals. In order to achieve the targets in the Forest Management Strategy and the more recent Rondeau-Erie Coast CAP, the municipality will need to approach natural heritage management and protection in a fundamentally different way in order to reverse the trend of vegetation loss. In the absence of a tree cutting by-law, other than encouraging and supporting additional education, a policy/implementation strategy such as this cannot stop the removal of natural heritage features that is currently taking place on the landscape. While some components of this Strategy are directed at the creation of guidelines to maintain the existing natural heritage features, the majority of the Strategy is aimed at education, stewardship and restoration. The following outlines several options, as an alternative to a tree cutting by-law, that could be considered alone, or in combination, to maintain and enhance natural heritage features within the **rural areas** of Chatham-Kent.

#### Options:

- a. Additional Funding for the Greening Partnership
- b. Carbon Offsetting Program
- c. Financial Incentive-Based Program
- d. Maintain Services of Registered Professional Forester

#### **a. Additional Funding for the Greening Partnership**

Chatham-Kent currently provides \$150,000 per year under a special levy to fund the Greening Partnership. The Greening Partnership has a proven track record of inputting roughly 3 dollars into restoration for every 1 dollar spent by Chatham-Kent. This is an excellent return on investment that could be enhanced with additional funding. Over the last seven years, the staff of the Greening Partnership has built relationships with the rural community that have fostered trust and cooperation. Increased funding would allow for additional staff to administer the program, apply for grants and to provide education, advice and assistance to more landowners.

The fact that the program is funded through a special levy suggests that the long-term commitment to the greening of Chatham-Kent could potentially be in jeopardy in the future. Increased funding, if provided, should be done on a sustainable and consistent basis in

order to enable the partners to establish long-term programs with consistent staffing and resources.

At the request of Jennifer Lawrence and Associates Inc., the LTVCA prepared a Business Plan to identify the funding that would be required to enhance the existing Greening Partnership in order to enable the Conservation Authority to have an even greater impact on natural heritage conservation and restoration in Chatham-Kent. Given the current success of this program, it is a natural progression to consider whether additional funding would allow for even greater success on the landscape. Based on the LTVCA's Business Plan, an additional \$160,000/year will enable them to hire two new positions; a Land Stewardship Assistant and a GIS Technician. The Land Stewardship Assistant would be responsible for assisting with grant writing, working with landowners, farmers and industry to further the greening of Chatham-Kent. The GIS Technician would be responsible for compiling all data related to natural heritage inventories, woodlots and land stewardship projects. The proposed salary for each new position, including benefits and administration costs, is \$52,000/year. Additional costs would include vehicle, training, office equipment, start-up costs and program delivery expenditures. As noted in the Business Plan, it is anticipated that the hiring of a Land Stewardship Assistant could result in at least an additional \$126,000/year in grants that would be used to enhance natural heritage conservation in Chatham-Kent.

The LTVCA does not currently have a full-time staff person dedicated to GIS. The use of GIS has become an increasingly important tool in understanding the existing state of the environment and in identifying future conservation directions. The addition of a GIS Technician will enable the LTVCA to track and document landowner contacts, areas of restoration, monitoring locations and natural heritage inventory data to support their conservation initiatives as well as those of the municipality. The GIS Technician will also ensure that the deliverables are measured and reported in order to assess the success of the program. Additional information with respect to the GIS requirements is outlined in Objective 2.

If staff members are added to the Greening Partnership team, this will require the existing Project Coordinator to take on additional managerial responsibilities. These additional responsibilities are reflected in the cost estimate. The Business Plan has been attached as Appendix 1.

#### (i) University of Guelph Ridgetown Campus Integration

As outlined earlier in this report, the Greening Partnership recently received funding from the Ministry of Agriculture to support the hiring of an Agricultural Specialist for three years. The addition of this contract staff position may open up an opportunity to work with the University of Guelph Ridgetown Campus to create some synergies between the broader community and the students.

The Ridgetown Campus offers several degrees that may benefit from their students participating in a co-op or post graduate program with the Greening Partnership. For example, it would be ideal if a team could be created that consisted of at least one student from each of the Bio-Resource Management Degree, the Associate Diploma in Agriculture, the Associate Diploma in Environmental Management and the Associate Diploma in Horticulture programs. This would expose students to the different aspects of

agriculture, natural heritage and horticulture while offering real-world training and experience. The Greening Partnership would seemingly be a perfect fit to engage the students in a co-op effort with the municipality and/or CA. It would provide an opportunity for the university to give back to the community, to provide training and experience for students and young graduates and provide a forum for the farming community, Conservation Authority and Municipality to share their knowledge and expertise.

The integration of the Ridgeway Campus into the Greening Partnership program would also assist the municipality with the implementation of Section 7.1.4.1.2.3 of Chatham-Kent's Shoreline Secondary Plan. This policy seeks to develop partnerships for research and innovation in agriculture by pursuing opportunities with educational institutions (i.e., University of Guelph) to promote agri-tourism and sustainable farming operations.

## **b. Carbon Offsetting**

A carbon offset is a credit for greenhouse gas reductions achieved by one party that can be purchased and used to compensate (offset) the emissions of another party. Carbon offsets are typically measured in tonnes of CO<sub>2</sub>-equivalents and are bought and sold through a number of international brokers, online retailers and trading platforms.<sup>9</sup> Carbon offsetting in Ontario is voluntary as there are no legislative requirements for companies or individuals to purchase carbon offsets.

A carbon offset program provides a service whereby companies or individuals who want to decrease or eliminate their carbon footprint can invest in projects that mitigate or reduce greenhouse gas emissions such as reforestation or green energy. The money invested is used by non-profit organizations to implement projects and programs that are directed at displacing the use of fossil fuels through carbon-sequestration, alternate energy forms and greenhouse gas capture.

Given the fact that carbon offsets are voluntary, the delivery of such a program requires a marketing campaign as well as an educational component. Target investors are often local businesses that have identified environmental responsibility as one of their strategic goals. For larger companies, the need to demonstrate environmental responsibility may be an annual reporting requirement and carbon offsetting can assist them in demonstrating to their shareholders that they have met their ecological commitments.

In February 2014, the Ausable Bayfield Conservation Authority (ABCA) launched their 'Carbon Footprints to Forests' carbon offset campaign ([www.footprintstoforests.com](http://www.footprintstoforests.com)). With an initial investment of \$5000 from the County of Huron, the ABCA created the project principles, website and online carbon footprint calculator that enables donors to determine their carbon footprint and purchase carbon credits to offset these impacts. Donors can range from individuals to corporations seeking to voluntarily reduce their carbon footprint. The donations received are used to plant trees on lands owned by the ABCA to guarantee permanence. The message behind this program is fairly simple; be aware of the impacts that your daily decisions are having on the environment and through local action you can create local improvement. The ABCA have indicated that they will allow other organizations to link to their carbon calculator, at no cost, provided they agree to the

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<sup>9</sup> David Suzuki Foundation, <http://www.davidsuzuki.org/issues/climate-change/science/climate-change-basics/carbon-offsets/>

principles behind the program. This would provide for some time and cost savings to those agencies that wish to create their own carbon offset program.

In speaking with staff of the ABCA, a carbon offset program is one tool in the toolbox of programs to address reforestation efforts. Due to the fact that it is voluntary, the donation amounts will likely not be sufficient to address all stewardship and conservation efforts that would be necessary in a municipality such as Chatham-Kent. It is recognized that a carbon offset program, such as the one initiated by the ABCA, is important as an educational tool to make people and businesses aware of their daily decisions and the impact that these decisions have on greenhouse gas emissions and ultimately climate change.

### **c. Financial Incentive-Based Programs**

During the preparation of the 2003 Forest Management Strategy and Chatham-Kent Strategic Plan, stakeholders involved in the process identified the need for an aggressive incentives-based strategy in order to preserve and increase tree cover. Through discussions with Chatham-Kent staff at the initiation of this Implementation Strategy, an incentive-based approach was identified as an option to investigate in terms of engaging landowners in conservation. Incentives can come in many forms: direct payments for ecological goods and services; financial assistance with stewardship programs; and, landowner recognition. Different people are motivated by different incentives so no one program will address the needs of all landowners. The key is to determine whether there is an incentive program that is financially sustainable and viable for the municipality as well as attractive to the majority of landowners who will need to participate in the program.

#### **(i) ALUS**

Staff of Chatham-Kent, LTVCA and SCRCA as well as representatives from CCC and REALM met with representatives of the Ontario Alternative Land Use Services (ALUS) Program in January 2014 to explore the benefits of this program and its applicability in Chatham-Kent. ALUS is an incentive-based program that started in Alberta and has spread across Canada into Saskatchewan, Ontario and Prince Edward Island. ALUS's vision is "to create a healthy landscape that sustains agriculture, wildlife and natural spaces for all Canadians". This vision is achieved through a farmer driven program whereby financial incentives are offered to farmers to enhance and maintain natural heritage features on their property.

In Ontario, ALUS was introduced in Norfolk County in 2008 and has become a showcase in Ontario demonstrating both the benefits of the ALUS program as well as the agricultural community's willingness to participate in such a program. Interest for the program has increased every year to the point where there will likely be a waiting list this coming season in Norfolk. Ontario ALUS has since spread to Grey and Bruce Counties, the Municipality of Bayham (Elgin County), Town of Caledon and the United Counties of Stormont/Dundas/Glengarry (Eastern Ontario).

The concept is fairly simple; farmers are the stewards of millions of hectares of land in Canada. Within this land base there exists, or there is a potential for, a mosaic of natural features including woodlands, wetlands and grassland habitat. Given the

amount of land in agricultural production, any attempt to maintain and enhance natural cover needs to be in cooperation with these landowners for it to be successful.

An ALUS program is guided by a Partnership Advisory Committee (PAC). The PAC includes representation from the local municipality, local CA(s), non-profit environmental organizations and the agricultural community. Since this is a farmer-driven program, the majority of the committee members are farmers. Farmers apply to participate in the program; the PAC reviews the applications and votes on which projects will receive funding. Chatham-Kent staff has spoken with members of the Kent Federation of Agriculture and they have expressed an interest in learning more about the applicability of ALUS in Chatham-Kent. Obviously there are other farm federations/associations in Chatham-Kent including the National Farm Union, the Chatham-Kent Chapter Christian Farmers Federation of Ontario (CK-CFFO) and the Chatham-Kent United Farm Voice (CKUFV) that would need to be involved in the implementation of this type of program.

### *Incentives*

The financial incentives are generally based on agricultural land rental rates. In Norfolk, for example, the participating farmers are paid \$150/acre/year, for the first three years, for every acre of habitat that they create on their land. The payments will only continue after the first three years if funding is available at that time. There is also an option for farmers to create working habitat for a reduced incentive payment. In other words, farmers could plant grassland habitat and harvest it after breeding bird season in order to qualify for 50% of the payment (\$75/acre).

The \$150/acre land rental rate is based on the land rental rate that existed in 2008 when ALUS began in Norfolk and has not been increased since that time. It is the PAC's responsibility to determine the appropriate incentive amount based on the unique characteristics of their own agricultural community and the amount of funding available to support the incentives offered. This would likely mean that the incentive rates in Chatham-Kent would be much higher than what is offered in Norfolk due to the higher land rental rates in Chatham-Kent. This is obviously a factor that would need to be considered if Chatham-Kent were to consider the ALUS program.

In addition to the incentives, another factor that would need to be considered is whether there is sufficient marginal land in Chatham-Kent for this type of program to be successful. Given the topography of Norfolk, there are more areas of marginal land available for such a program than what exists in Chatham-Kent.

### *Funding*

Funding and support for the Ontario ALUS program is provided by partners such as the W. Garfield Weston Foundation, Delta Waterfowl, Ontario Nature and Wildlife Habitat Canada. The next available funding through the ALUS program will be in 2015. Ontario ALUS anticipates that the next round of grant money will be similar to the amount received in previous years. Any participating municipality will be required to match the grant money in order to qualify for the program. This would require that Chatham-Kent provide a total of \$100,000 in funding to cover the first three years of the program. Although not currently in place, one of Ontario ALUS' goals is to have self-sustaining funding through the selling of ecological credits to companies looking

to reduce their carbon footprint through investment in local conservation efforts (see Carbon Offsetting Program above).

#### (ii) Stewardship Programs – Financial Assistance

The Greening Partnership, SCRCA and Carolinian Canada, through the grant money that they obtain, are able to offer incentives to landowners to undertake stewardship and restoration projects on their land. This differs somewhat from the ALUS program incentives in that the ALUS program pays for both the restoration works as well as the monetary compensation to the landowner. Stewardship programs offered through the Greening Partnership, SCRCA and Carolinian Canada are different in that the cost of the restoration project may be wholly or partially funded but additional money is not provided to the landowner for undertaking the restoration. Many landowners are willing to take on some of the cost of implementing stewardship projects because they recognize that they will experience personal benefits from the works on their land. The fact that some, or all, of the costs can be covered through grants is sufficient incentive for these landowners to participate.

#### (iii) Landowner Recognition

As mentioned earlier, the Greening Partnership and Carolinian Canada each have an environmental award to recognize landowners who undertake stewardship on their lands. The Greening Partnership is enhancing their Environmental Award this year to also recognize a local business and a community group. This type of public recognition can be an incentive to those people or businesses who want to make a difference in their community. For some, this type of recognition is all the incentive they need to participate in the program.

Currently, the awards are given to landowners that have participated in a restoration project. Given the importance of maintaining existing woodlands in Chatham-Kent, both the Greening Partnership and Carolinian Canada should consider the creation of an award that honours a landowner that has perhaps not undertaken any restoration but rather, has maintained a woodland on their property. Ideally, this would be given to a landowner that has maintained a woodlot of greater than 2 ha and/or a woodland that has interior forest habitat. This would enable the organizations to honour those landowners that are already good stewards and those landowners that are maintaining some of the most critical remaining woodland habitat in Chatham-Kent.

### **d. Maintain Services of Registered Professional Forester**

The Registered Professional Forester (RPF) that is currently on contract with Chatham-Kent is providing a free service to rural landowners while also providing the municipality with detailed information related to existing forest cover through the preparation of woodlot assessments for the Managed Forest Tax Incentive Program. This is information that the municipality would normally not have direct access to and will assist in developing the Natural Heritage Inventory and database necessary for the completion of the Natural Heritage Master Plan. The RPF has met with 10 landowners and prepared (or is in the

process of finalizing) 8 assessments. Council has approved a total of \$70,000 for this program to date (\$50,000 in support of the RPF's salary and \$20,000 for promotion and education). If this program were to be considered a base budget program it will need to go back to Council for approval.

In order to maintain existing tree cover, it is important that landowners have access to professionals such as the RPF and the staff of the Greening Partnership so that they can make informed decisions related to the wooded areas on their property. As such, this contract position should continue to be funded by Chatham-Kent and opportunities to merge this contract position into the Greening Partnership portfolio should be explored by Chatham-Kent and the LTVCA in order to realize efficiencies and to assist with succession planning.

## Summary

The Greening Partnership has a proven track record of being able to almost triple the municipality's investment in natural heritage. Additional funds to hire two new staff members will not only enable the Greening Partnership to increase the amount of time and money invested in natural heritage restoration, education and landowner contact but it will also enable the LTVCA to participate more fully in the GIS program that will be necessary to further the conservation initiative in Chatham-Kent. While the ALUS program comes with its own excellent track record in other parts of Ontario and Canada, the lack of guaranteed funding after three years and the fact that the Greening Partnership is already well established in this field has led to the conclusion that, at this time, the ALUS program should not be pursued. If the ALUS Ontario coordinators are able to secure guaranteed annual funding, through mandatory carbon offset payments in the future, Chatham-Kent may wish to pursue this program at that time.

With the addition of a contract Agricultural Specialist and student assistant, the Greening Partnership may have the time available to work with the University of Guelph Ridgetown Campus to initiate discussions around the creation of a co-op team from four of the University's programs to assist with the Greening Partnership's efforts and to provide students with first-hand experience in the field.

A carbon offset program, while likely not able to generate significant funds towards restoration, is an excellent opportunity to engage and educate the public on the impacts of their daily decisions on greenhouse gas emissions and climate change. Given that the Ausable Bayfield Conservation Authority are willing to share their online calculator with other agencies, the cost implications of creating a similar program in Chatham-Kent are greatly reduced. This opportunity should be explored by the Greening Partnership and Chatham-Kent.

The existing landowner recognition programs have been successful in highlighting the achievements of individuals. The creation of new award categories for a local business and a community group will further assist in the promotion of the Greening Partnership. It is recommended that one additional category be created by either the Greening Partnership, Carolinian Canada or both, that acknowledges the efforts of a landowner that has maintained an existing woodland, greater than 2 ha, on their property to emphasize the importance of maintaining these larger woodlands on the landscape.

**Recommended Implementation Action –** in the 2015 budget, the Municipality increase the Greening Partnership funding by an additional \$160,000/year to enable the Conservation Authority to hire two additional staff members responsible for land stewardship and GIS. This investment will enable the Greening Partnership to access additional funding opportunities, work with more landowners to educate them on the benefits of existing natural heritage features on their property as well as the benefits of, and opportunities for, enhancing those natural heritage features.

**Recommended Implementation Action –** by the end of 2014, the Municipality and the Greening Partnership will approach the University of Guelph Ridgetown Campus to initiate discussions to provide opportunities for 3<sup>rd</sup> or 4<sup>th</sup> year students, or recent graduates, to participate in the implementation of the Greening Partnership program either through a co-op placement or other option agreeable to the University, Lower Thames Valley Conservation Authority and Municipality.

**Recommended Implementation Action –** by the end of 2015, the Greening Partnership and Chatham-Kent investigate opportunities to create a Carbon Offset program to enhance funding and educational opportunities. Collaboration with the Ausable Bayfield Conservation Authority may result in cost savings that should be pursued.

**Recommended Implementation Action –** in 2015, the Greening Partnership create an additional landowner recognition award category that acknowledges a landowner that has maintained a woodland on their property that is greater than 2 ha to emphasize the importance of maintaining these larger features on the landscape.

**Recommended Implementation Action –** the Municipality continue to fund the contract position for the Registered Professional Forester to provide advice and assistance to rural landowners with respect to good forestry management practices and woodlot assessments. The Municipality and LTVCA should also explore opportunities for merging the forester into the Greening Partnership portfolio in order to have all woodland and stewardship related efforts under the same management.



Photo credit – P. Allen Woodliffe

## **2. Collaborate with agencies and non-profit organizations currently involved in natural heritage conservation in Chatham-Kent to realize efficiencies through joint initiatives and sharing of information and expertise**

Given that there are several agencies and organizations involved in natural heritage conservation in Chatham-Kent, it is important that they have a platform from which to communicate effectively and efficiently. It is also important for these partners to have access to the same information related to natural heritage cover, priority areas for restoration, past and current restoration/stewardship efforts and grant opportunities. Bringing these groups together would serve multiple purposes:

- allow the various agencies and organizations to pool their resources in order to make the most effective use of limited staff time and budgets;
- enable more effective or larger grants to be obtained;
- avoid duplication of efforts between organizations and assist with knowledge sharing; and,
- enable agencies and organizations to be strategic with their resources by identifying priority areas for stewardship and restoration.

The following outlines several options, as an alternative to a tree cutting by-law, that could be considered alone, or in combination, to enhance collaboration and realize efficiencies through joint initiatives, sharing of information and expertise:

### Options:

- a. Sustainability Committee
- b. Natural Heritage Database
- c. Natural Heritage Master Plan
- d. Social Media

#### **a. Natural Heritage Sustainability Committee**

In response to the tree cutting that took place over the last couple of years, the Manager of Parks, Horticulture and Cemeteries established a Natural Heritage Sustainability Committee (different from the Sustainability Review Team identified in the Official Plan). The Committee was created as an alternative to establishing a numeric threshold to evaluate the success or failure of a Conservation Policy. To date, the Committee consists of the Manager Parks, Cemeteries and Horticulture, Director, Planning Services, Director, Financial Services/Treasurer, Program Manager, Chronic Disease and Injury Prevention, the General Managers of the Lower Thames Valley Conservation Authority and the St. Clair Region Conservation Authority, Executive Director, Carolinian Canada and a representative from REALM. The intention is to also include two members at large.

To date, the role of the Committee has been to receive complaints from landowners, request the Greening Strategy staff to investigate, review reports from the Greening Strategy staff related to tree removal and report on these to Council. Information is provided related to the location of the tree cutting, landowner name and amount of tree removal. This information is being incorporated into the City's database in order to track the loss of wooded areas. The intention is that this Committee monitors the rate and

amount of tree removal, reports to Council and determines whether additional measures (i.e. tree cutting by-law) need to be recommended for consideration if the Implementation Strategy is not successful in mitigating tree removal.

The Natural Heritage Sustainability Committee has not articulated their specific mandate and this needs to be done so that their role is clear to all members. It is recommended that one of their roles should include providing input to the Sustainability Review Team to keep them apprised of the changes on the landscape. This will enable the Review Team to make appropriate decisions related to policy and municipal programs in response to those changes. Given the representation on the Committee, it would be beneficial for them to go beyond simply monitoring and reporting on the amount of tree removal to also identifying annual priorities for natural heritage conservation/stewardship efforts, coordinating funding campaigns and grant proposals to achieve maximum benefit amongst the agencies and to avoid duplication.

In addition, it would be useful to utilize the Committee members' knowledge and skills to direct the creation of a database that could be shared by all partners and a web page that could be used to share knowledge and resources related to conservation with the residents of Chatham-Kent.

#### **b. Natural Heritage Database**

Within the new Official Plan, Policy 6.5.2.7 states that, *to assist with monitoring and plan review, an information system will be maintained by the Municipality so that appropriate analysis of the changes in health, economic, environmental and cultural conditions in which this Official Plan is founded can be conducted.* In order for the agencies and organizations to work together effectively it would be beneficial to create a central database where they can all share information. This would include data such as vegetation layers (woodland, wetland, etc.); land use layers (agricultural, urban, etc.); land ownership including publicly owned properties; previous and current stewardship projects; Conservation Authority monitoring locations and data collected; locations of vegetation removal; priority stewardship/restoration locations; and, landowner contact information.

Ideally, the database should also include data collected through planning applications. For example, Environmental Impact Studies (EIS) submitted in support of a planning application often have detailed information related to wetland and woodlot limits, watercourses, fish habitat, species type and location. All of this data is collected by the environmental consultant and input into their report however, the specific digital layers/data is often not provided to the review agencies. If an Environmental Impact Study is submitted, the municipality should require the submission of digital data sheets in order to update their database with the findings of the study. The submission of the digital data sheets would be a condition of approval on planning applications to ensure the data is provided to the municipality. Applicants would need to be advised of this requirement at the pre-consultation meeting to ensure data is collected and recorded in the appropriate format. This will require collaboration internally at Chatham-Kent between the Planning and GIS Departments to ensure data is provided in the appropriate/compatible format and that the Planning Department forwards the information to the GIS Department upon receipt.

The agricultural Federations may also be able to work with their members to create an annual voluntary database of natural heritage features on agricultural lands. This could include working with those staff responsible for undertaking the Natural Heritage Inventory and/or it could be a more landowner-led approach.

It is recommended that the Municipality's GIS Department undertake the maintenance of this database. Many of the layers either exist on the current database or are available from the partner agencies/organizations. Obtaining the data for the purposes of amalgamation and sharing may necessitate the preparation of a data sharing agreement between the parties. From a natural heritage perspective, key to the success of this database will be the partner agencies and stakeholders sharing their data in order to provide the most holistic data set possible related to natural heritage. As outlined under Objective 1, the addition of a GIS Technician to the Greening Partnership staff will enable the LTVCA to dedicate someone full-time to the assembly and compilation of data sets related to natural heritage. This additional staff member is critical to ensuring that the LTVCA is able to keep the municipality up to date in terms of all efforts undertaken on behalf of the Greening Partnership and to participate in big picture planning related to target setting/achievement, prioritizing efforts and monitoring results.

The database will need to expand beyond simply inputting of existing information. The creation and maintenance of an information system that tracks decisions, implications of decisions on the landscape and impacts of these decisions is critical in monitoring the success of any strategy that the municipality utilizes. Without this system, it is difficult to determine whether: (1) strategies are being properly implemented; (2) Council is supporting staff in the implementation of these strategies through their decision-making functions; and, (3) the strategy is having a positive impact on the features/functions that it is trying to influence. While the Sustainability Committee has a role to play in the creation of that portion of the database related to natural heritage, the Sustainability Review Team will be responsible for ensuring that the entire database is designed to track the effectiveness of the strategies.

### **c. Natural Heritage Master Plan**

Policy 4.4.2.2.15 in Chatham-Kent's Official Plan states that *the Municipality shall consider the need for a more detailed Natural Heritage System Study in order to further identify natural heritage systems within Chatham-Kent and to develop more detailed recommendations and strategies for the long-term protection and restoration of the natural heritage systems.* As outlined in the 'Planning Context' portion of this paper, the PPS directs municipalities to maintain and, where possible, enhance natural heritage systems. Policy 4.4.2.2.15, if fulfilled, would achieve this requirement.

The policy also fits nicely with the CAP recommendations to update the natural heritage inventory/features (Schedule C) of the Official Plan by 2014. Carolinian Canada has advised that they could assist in coordinating a community-based natural heritage inventory similar to that which is being undertaken in Elgin County (<https://caroliniancanada.ca/elgin-natural-heritage-inventory>). The Sustainability Committee should identify funding sources as well as delegate roles and responsibilities for the preparation of the natural heritage inventory. All data collected would be input into the natural heritage database in order to utilize this information to identify significant natural heritage features and functions as well as a linked natural heritage system.

All of this information can then be used to create a Natural Heritage Master Plan. The Master Plan will identify the goals, objectives, processes and Key Performance Indicators towards the conservation of natural heritage features and functions in Chatham-Kent. The Plan will identify significant natural heritage features and functions as well as a linked natural heritage system. The Master Plan will need to be in conformity with the PPS and, as such, direction will need to be taken from the Ministry of Natural Resources' Natural Heritage Reference Manual (2010) when identifying significant features, functions and systems. Ideally, the Master Plan should be complete in advance of the next Official Plan Review in order to enable the municipality to incorporate the recommendations of the Plan into the OP Review.

#### **d. Social Media**

##### ***(i) Website***

A municipality's website is the first stop for many residents and businesses when looking for information related to municipal services. Links to other social media sites such as Facebook, YouTube and Twitter are also available on the City's website. A review of Chatham-Kent's website reveals that it does not provide easy access to information related to the natural environment. The drop-down menus do not include any topics related to the natural environment, stewardship or environmental education opportunities. That is not to say that the website does not contain some of this information; it is just not easy to find.

In order to share information with the public, the municipality should build and maintain a page on their website dedicated to natural heritage conservation. This page could be called "Chatham-Kent Conservation Collaboration" in recognition of the collaborative efforts that are required to maintain and enhance natural heritage. The page could contain information related to, at a minimum, the Greening Partnership, CA Stewardship Programs, Carolinian Canada Coalition and links to educational material. Ideally, the partner agencies/organizations would include a link to this page on their websites to maximize exposure. The webpage must be user-friendly and must be accessible from the drop-down menu on the municipality's website in order to assist the public in selecting the program or agency that is aligned with their objectives and resources. The website could also provide access to aerial photography, data layers such as vegetation, property boundaries, Conservation Authority regulated areas and priority restoration areas as identified by the CAPs. The exact content of the website would need to be determined by the Sustainability Committee in consultation with Chatham-Kent's Communication's Specialist. Links to social media should also be provided in order to reach as many people as possible.

The webpage should be created by Chatham-Kent's GIS Department within the existing budget allocated to website creation and maintenance. Each department within Chatham-Kent is responsible for maintaining and updating the content of those pages on the website that are dedicated to their departmental responsibilities. Chatham-Kent and Greening Partnership staff would need to discuss who has the resources to keep the page up to date. If it were decided that the Greening Strategy staff would be the best people to update this webpage, an agreement would be required between Chatham-Kent and the LTVCA to enable these updates by an outside agency.

The municipality's YouTube page should be updated to include a few short videos highlighting conservation success stories. The Greening Partnership and Carolinian Canada could approach previous stewards for permission to use their conservation effort in one of these videos. This provides a number of benefits including: (1) the landowner receives additional public recognition for their contribution to the greening of Chatham-Kent; (2) it helps to generate interest and to provide information to those people who may not otherwise be aware of the program; and, (3) demonstrates that Chatham-Kent is interested in promoting and recognizing the excellent work of local stewards.

The Twitter and Facebook sites should also have regular updates on conservation events and efforts around the community to keep people informed and to generate additional participation.

### *(ii) E-Newsletter*

It is evident, based on the public engagement associated with the tree cutting by-law, that the public is interested in being kept informed of projects and plans related to natural heritage in their community. One relatively easy and inexpensive method for keeping people informed is through the creation of an e-newsletter. Many organizations have their own e-newsletter that allows them to inform their subscribers on the status of on-going projects as well as upcoming events or programs. Those interested in natural heritage can receive regular updates without having to constantly check the webpage.

The municipality already offers an email subscription service for issues related to emergencies, jobs, heat/cold alerts, events calendar and bids. The addition of a natural heritage e-newsletter is a natural progression given the public interest in the topic. Information in the e-newsletter would need to be populated by a Chatham-Kent or LTVCA Greening Partnership staff member however, this should be relatively simple as the information would already be available from other sources.

Subscribing to the e-newsletter would be voluntary and could be done through the new webpage. This additional direct contact with interested members of the public would increase exposure of natural heritage issues and likely result in additional interest in educational, stewardship and volunteer activities. Given the relatively low cost, and the ability to reach those who have already identified an interest in natural heritage, it is recommended that the municipality include a natural heritage e-newsletter as a service that they offer.

## Summary

In order to obtain the most holistic understanding of natural heritage issues and opportunities in Chatham-Kent, the municipality should create and maintain an information database that contains information from their partners and is accessible by those partners. The creation of a central database would enable efficiencies through information sharing and would enable those involved to better manage natural heritage conservation. Environmental information that is obtained through the development review process should also be input into this database to take advantage of the information gathered through Environmental Impact Studies and Environmental Assessments. Ultimately, the information gathered through this process, as well as an updated Natural Heritage Inventory, will enable the municipality to create a Natural Heritage Master Plan that will identify significant features, functions and a natural heritage system.

In addition to the sharing information with municipal partners, it is also important to share information with the public. An enhanced municipal website, with a page dedicated to natural heritage conservation, will further that effort. The webpage must be easy to find from the home page and should contain links to social media sites that highlight local conservation efforts as well as regular updates to keep the public informed of events and programs in their community related to natural heritage conservation. The creation of an e-newsletter will also allow the community to stay informed about events and programs without having to regularly check the website.

**Recommended Implementation Action –** Council approve the creation of the Natural Heritage Sustainability Committee and that the Committee report to Council at least once per year. The Natural Heritage Sustainability Committee will elect a Chair who will be responsible for preparing the annual report to Council and who will also be a member of the Sustainability Review Team which will be established pursuant to Policy 6.5.2.4 of the Official Plan.

**Recommended Implementation Action –** by Spring 2015, the Municipality will create a natural heritage database that will incorporate municipal data as well as data layers from their partner agencies and those non-profit organizations, such as Carolinian Canada, that would like to participate. The purpose of the database, from a natural heritage perspective, is to create the most up-to-date picture of the natural heritage landscape in Chatham-Kent and to identify priority sites for restoration and stewardship initiatives. The Natural Heritage Sustainability Committee will be responsible for overseeing the creation of the natural heritage component of the database, any associated data sharing agreements and reporting to Council upon its completion.

**Recommended Implementation Action –** the Municipality add a standard condition of approval to all planning applications that involved an Environmental Impact Study requiring the proponent to submit digital data sheets for incorporation into the natural heritage database and that applicants be advised of this requirement at the pre-consultation meeting.

**Recommended Implementation Action –** prior to the next Official Plan Review, Chatham-Kent will work with their local partners, including LVTCA, SCRCA and Carolinian Canada Coalition as well as the community to identify and protect a natural heritage system through the creation of a shared natural heritage database, an update to the Natural Heritage Inventory and the creation of a Natural Heritage Master Plan. The Master Plan will be incorporated into the next Official Plan Review and will include an update to Schedule C. The Natural Heritage Sustainability Committee will be responsible for identifying roles and responsibilities associated with this process and will provide updates to the Sustainability Review Team on a regular basis.

**Recommended Implementation Action –** by the end of 2014, the Municipality will create a page on their website dedicated to natural heritage, conservation and stewardship efforts. The web page will provide information on funding opportunities, education, available programs, events and volunteer opportunities. The page will also highlight and celebrate the success of local stewards. The Municipality will encourage their partners to provide a link to the webpage on their individual websites. The Natural Heritage Sustainability Committee will be responsible for overseeing the creation of this webpage and reporting to Council upon its completion.

**Recommended Implementation Action –** by Spring 2015, the Municipality, in cooperation with the Greening Partnership and Carolinian Canada, will prepare at least one short video highlighting a successful restoration project in Chatham-Kent and post this video to the City's YouTube page. A link

to this video should be made available on the City's website Home Page banner for maximum exposure.

**Recommended Implementation Action –** by Winter 2014, the Municipality will create an e-newsletter dedicated to natural heritage, conservation and stewardship programs, events and volunteer opportunities. The option to subscribe to this e-newsletter will be included on the "Subscription Details" webpage on the City's website. Through the Natural Heritage Sustainability Committee, it will be determined which agency, or agencies, are responsible for inputting the information into the newsletter. The e-newsletter will automatically be sent to Council and all Chatham-Kent staff.



Photo credit – Erin Carroll

### **3. Foster a culture of natural heritage conservation throughout Chatham-Kent**

As previously noted, Chatham-Kent's Official Plan provides direction with respect to natural heritage conservation however, the public are demanding greater accountability from their Council and City staff in terms of demonstrating that these policies are being upheld. In order for any municipality to ask its residents to address an issue, the municipality must first be seen to be addressing the issue within their own operations and decision-making responsibilities. Often, if the municipality demonstrates leadership and accountability in natural heritage conservation, it will foster that behaviour in the community.

The following outlines several options, as an alternative to a tree cutting by-law, that could be considered alone, or in combination, to foster a culture of natural heritage conservation in Chatham-Kent:

#### Options:

- a. Increased Council Involvement
- b. Municipal Projects and Properties
- c. Evaluate Existing Programs, Operations and Practices

#### **a. Increased Council Involvement**

Many members of the public in Chatham-Kent have made it clear that they would like Council to take a greater interest in, and a stronger position on, natural heritage conservation within their community. Council should be pleased with this because a community that is engaged and interested in the health of their city is a community that is committed to the long-term success and betterment of their city. This energy and passion for their community and the natural environment should be embraced and interested citizens should be encouraged to participate in all efforts to maintain and enhance natural heritage in their community.

The recent discussions surrounding the proposed tree cutting by-law are a perfect example of the community's desire for more input into those decisions that affect natural heritage. In order for Council to make informed decisions related to natural heritage, it is important that they receive regular updates from their staff and watershed partners. They must also take an active interest in natural heritage and be committed to a fundamental shift in the value system that has led Chatham-Kent to its current environmental state.

The following is a summary of actions that would assist in keeping Council up to date on environmental matters:

#### ***(i) Watershed Report Cards***

The LTVCA and SCRCA each produce a Watershed Report Card every five years that assesses the state of the natural environment within their respective watersheds. Conservation Ontario's expectations are that Conservation Authorities produce these report cards on an annual basis however, to date, neither Conservation Authority in Chatham-Kent has had the resources available to produce these documents on an annual basis. The production of these documents requires consistent and often

comprehensive monitoring and reporting programs, staff resources and funding to support. The reports contain details related to forest conditions, surface water quality and groundwater quality<sup>10</sup> and the purpose is to monitor existing conditions, identify areas of concern, opportunities for improvement and to track progress over time. Communicating the findings of these report cards, both at a local level and a Provincial level, is essential to help the community and decision-makers understand the state of the natural environment and to enable them to participate in actions to improve the quality and quantity of natural heritage both locally and Provincially.

At a minimum, the LTVCA and SCRCA should appear before Chatham-Kent Council once per year to provide a presentation on the state of the environment and to provide insight into one or two of the key projects that they have undertaken to maintain and enhance the natural environment within Chatham-Kent. Ideally, the Conservation Authorities will be in a position to prepare annual Watershed Report Cards however, until that time, the report card will be presented every five years with the intervening years being used to provide an overview of the educational opportunities, stewardship and restoration efforts that have taken place that year. In addition, the CAs should each identify one or two hot spots or important natural heritage topics within the municipality that require attention in the coming year. On those years when a Watershed Report Card is produced, the presentation should coincide with the release of the Watershed Report Cards.

In 2012, Council created Committee of the Whole meetings as well as CK Community Development Forums. The Development Forums take place one hour prior to regularly scheduled Council meetings and are intended to be an educational session to help achieve Chatham-Kent's community vision and Council's directions by providing an open forum to share information on community development issues. These sessions provide a perfect opportunity for agencies like the Conservation Authority to provide updates on their current initiatives and future directions to both Council as well as the public.

## *(ii) Greening Partnership*

The Greening Partnership prepares an annual Post Season Report on the stewardship efforts that have taken place over the past year. A summary of this report is then given to Council. Similar to the CA Watershed Report Cards, this summary could be provided in the form of a presentation at a Community Development Forum to provide Council and the public with a better understanding of the initiatives that have taken place over the past year.

It is also recommended that the Greening Partnership Environmental Award be awarded at a Community Development Forum meeting so that the landowner can receive recognition from Council and their peers in the community. This presentation could be combined with the above mentioned Greening Partnership update and would include a brief presentation, given by a staff member from the Greening Partnership, as to the stewardship efforts of the award recipient(s). This will enable Council to stay informed of the efforts that local citizens and businesses are making to restore and

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<sup>10</sup> Conservation Ontario

enhance the natural heritage system and also provide Council an opportunity to express their appreciation to those individuals and companies.

### ***(iii) Conservation Action Plans***

Chatham-Kent Council have endorsed two of the Conservation Action Plans with a third anticipated in early 2014. Carolinian Canada is working with local agencies and partners to implement the recommendations within these CAPs. Given that Council has endorsed the first two CAPs, it is important that they be kept informed of the progress that CCC and their partners are making towards implementation. At a minimum, Carolinian Canada should also appear before Council at least once per year to provide an overview of the work that has been completed and to report on the status of the various strategic actions within the CAPs. This will provide Carolinian Canada an opportunity to showcase some of the successful projects that have been undertaken and to perhaps highlight a few areas within the municipality where additional attention is needed in order to bring some strategic actions to fruition.

### ***(iv) Bus Tours***

There are a number of bus tours offered in the Chatham-Kent area that provide the public an opportunity to become engaged and informed about restoration and conservation activities that have taken place in their community. Chatham-Kent's contract forester currently offers a bus tour to demonstration sites where landowners are undertaking exemplary stewardship and ecological restoration. This bus tour takes place on an annual basis through the Lambton Woodlot Association in collaboration with the SCRCA and LTVCA. The LTVCA also provides a bus tour every second year to stewardship sites in Chatham-Kent and they just recently received funding from the Ontario Ministry of Agriculture to provide bus tours over the next three years. Finally, Carolinian Canada is working with the Christian Farmers Association and other groups to secure funding to provide bus tours to their restoration sites. So, at a minimum, 2-3 natural heritage themed bus tours are offered annually in Chatham-Kent.

Such tours are an excellent opportunity for members of the public, Chatham-Kent staff and Council to go out to sites that they may not normally have an opportunity to see and to learn about various stewardship and agricultural efforts that have taken place in their community. There are generally no, or low, costs associated with attending these tours making it a cost-effective opportunity for Council to become more engaged.

### ***(v) Habitat Creation Events***

In 2013, the Greening Partnership hosted over 160 events, many of which involved the creation of woodland, wetland or grassland habitat. In order to demonstrate leadership and a commitment to natural heritage conservation, Council members should attend and participate in some of these events. Their participation will allow them to gain an appreciation of the effort that goes into these events and to meet some of the volunteers that are giving their time to better the community for everyone's benefit. The presence of Council at these events will highlight the importance of natural heritage in Chatham-Kent and will demonstrate to the public that Council is committed to helping in the

creation of new habitat in the community. Council's attendance at these events should be publicized through articles in the local newspaper, municipal webpage, e-newsletter and social media.

In order for Council to attend these events it is important that they be kept informed. Upcoming events could be included on each Council agenda or, alternatively, within the e-newsletter mentioned above. The e-newsletter could automatically be sent to all Council members and Chatham-Kent staff.

## **b. Municipal Projects and Properties**

The Municipality must be a leader in natural heritage maintenance and enhancement and must demonstrate, throughout all departments and Council, that the natural environment is a key consideration when making decisions and allocating resources. Many of the following recommendations are fairly easy to implement as the municipality already owns the land and often has access to funding and expertise to undertake the projects.

### ***(i) Habitat Creation on Municipal Properties***

This is one of the easiest ways for the municipality to be a visible presence in the enhancement of forest cover and habitat creation. Planting can take place as public events that involve groups, schools or individual members of the public volunteering to assist with the planting efforts. Signage can be erected to explain the significance of the habitat creation and to explain that it is one of many steps that the City is taking to improve the quality of air, water and wildlife habitat in the community.

The Forest Management Strategy (Chatham-Kent, 2003) included a recommendation that the municipality develop and institute a reforestation program for public lands including an inventory of publicly owned and surplus lands suitable for reforestation. Although tree planting has taken place on municipally owned property since 2003, an inventory of publicly owned and surplus lands suitable for restoration has not been finalized. This is an important step as it would be beneficial to overlay this inventory with the priority restoration areas identified in the CAPs to determine whether there are immediate opportunities for the municipality to implement the CAP strategic actions related to reforestation in priority areas.

Both CAPs identified strategic actions related to the creation of prairie habitat on municipally owned property. Specifically, the creation of such habitat in one cemetery, a landfill (Ridge Landfill is mentioned) and along the CASO Trail were identified in the Rondeau-Erie Coast CAP.

### ***(ii) Cemeteries***

Chatham-Kent has been involved in two previous cemetery restoration/naturalization projects including the Maple Leaf and Dresden Cemeteries which included the planting of native trees, shrubs and tall grass prairie habitat. The passive nature of cemeteries, the fact that some of them are in municipal ownership and that they are often situated near natural features makes them an excellent opportunity for restoration projects.

Both CAPs recommend that a minimum 1 ha of prairie habitat be created within two existing cemeteries. The enhanced database should assist in identifying whether there are any existing cemeteries within the CAP priority restoration areas that would be suitable for prairie habitat restoration. If there are not any cemeteries within the priority restoration areas, the database can still be utilized to identify whether any cemeteries are currently adjacent to other habitat that may benefit from the creation or enhancement of neighbouring prairie habitat.

### ***(iii) Trail Development***

There are several trails being developed/enhanced within Chatham-Kent. The Rondeau-Erie Coast CAP identifies the target of planting ten contiguous hectares of prairie (greater than 10 metres wide) along the CASO Trail, on municipally-owned lands (and/or adjacent lands) within the next 5 years (with a goal of planting 0.5 ha in first year). The enhanced database should assist in identifying the location of any additional municipally-owned adjacent properties in proximity to the CASO Trail as well as other restoration efforts that may have taken place on private lands in the vicinity. Carolinian Canada is providing expertise, seed collecting and developing the restoration plans with funding from Environment Canada and the Ministry of Natural Resources, in partnership with Western University. Carolinian Canada will also be working closely with LTVCA, Ontario Nativescape and other partners in the creation of this prairie habitat. Chatham-Kent will be providing equipment, staff resources, materials and supplies through their trail development funds. The database can also be used to track the size and location of restoration efforts in order to assist in reporting to Council on the implementation of this target. In order to facilitate the creation of 0.5ha of prairie in the first year, the Greening Partnership will work with CCC and municipal staff to secure the planting resources and organize a volunteer event in the fall of 2014.

The CASO Trail will be developed as an EcoTrail. In addition, an EcoTrail is proposed for the O'Neill Nature Preserve. EcoTrails provide a multi-faceted opportunity that combines natural heritage education, conservation and outdoor recreation. Opportunities to expand this program should be assessed as opportunities arise.

## **c. Evaluate Existing Programs, Operations and Practices**

### ***(i) Sustainability Review Team***

Within the new Official Plan, Policy 6.5.2.4 identifies that the Municipality will establish a Sustainability Review Team, made up of key staff members across various municipal departments to, among other items:

- a) Undertake the development of key performance indicators (KPI's) to monitor, track and measure the success of the implementation of the policies contained in this Plan and to ensure alignment with the other numerous studies, plans and strategies that have been prepared across the organization. Consideration in the development of KPI's would include, but not necessarily limited to, the following:
  - x) The removal and creation of natural vegetation along with other environmental trends.

The municipality is in the process of establishing the Sustainability Review Team and members will include all senior management staff. The lead staff member on the Natural Heritage Sustainability Committee (outlined in Objective 2 above) should also be a member of the Sustainability Review Team to enable information flow between the two groups.

In addition to the monitoring role identified in the Official Plan, the Sustainability Review Team should go beyond monitoring and tracking KPIs and engage their teams to identify areas within their operations that could be used and/or revised to assist with the municipality's efforts to maintain and enhance natural heritage. This could include: assessing municipally owned infrastructure sites such as water treatment plants, libraries, parks, cemeteries and works yards for tree planting opportunities; reviewing operations and practices related to drain maintenance and boulevard tree planting; and, urban design guidelines.

The Sustainability Review Team should report to Council on an annual basis to advise on the KPIs and to identify where, within the various departments, changes have been made to increase the municipality's visual presence as a leader in natural heritage maintenance and enhancement.

## ***(ii) Drain Maintenance***

Many of Chatham-Kent's historical watercourses have been altered into municipal drains. These drains are designed to quickly and efficiently move water off the landscape and their on-going maintenance is the responsibility of the municipality. In most cases, drains are dredged to remove sediment and vegetation growth on a somewhat regular basis. Such practices, while effective in improving the flow of water, result in significant amounts of sediment being washed downstream during the dredging activity and/or bare soils being left exposed until vegetation re-establishes resulting in soil erosion. Sediments washed downstream impact fish and fish habitat and can impact water quality. Many of the drains in Chatham-Kent have limited vegetation and the majority are actively farmed to their edges. The lack of riparian vegetation results in less shading for the watercourses (resulting in increased temperatures), increased soil erosion and increased nutrient inputs (such as phosphorus) into the watercourse.

Both CAPs identified the need to create Best Management Practices (BMPs) for drain maintenance in order to establish ecologically appropriate integrated vegetation management of drains, improve riparian cover and to minimize impacts to wildlife. The CAPs and SCRCA's Watershed Report Card also identified the need to increase the amount of riparian plantings along drains. Improved management practices and increased riparian plantings could result in reduced sediment transport into watercourses resulting in reduced nutrient inputs to Rondeau Bay and improved fish habitat. This would also have the added benefit of reducing the cost and frequency of drain maintenance.

The need for reptile-friendly vegetation mats and taking turtle habitat into consideration during drain maintenance were also identified in both CAPs. The creation of BMPs will necessitate that the Chatham-Kent Roads Department and Drainage Superintendent

work cooperatively with the Greening Partnership and CCC to develop the BMPs that will still allow the drainage maintenance to be undertaken but with a critical assessment of current practices to identify what revisions can be made to assist the municipality in achieving the targets set by the CAPs.

## Summary

The public is asking that Council direct additional attention to critical issues surrounding the loss of natural heritage within their community. There are some simple steps that Council can take to become more informed and engaged in natural heritage conservation including presentation opportunities at Community Development Forums, bus tours and heritage creation events. In addition, Council can also support staff in the creation of habitat on municipal properties and participate in the creation of these features.

The municipality must also evaluate existing programs, policies and practices to ensure that actions and decisions of staff and Council are consistent with best management practices that place the natural environment at the forefront.

**Recommended Implementation Action** – in 2014, Council will invite the LTVCA and the SCRCA to attend at least one Community Development Forum to present their Watershed Report Cards and/or to provide an update on the Greening Partnership initiatives and other CA programs that each CA has undertaken in the past year and to highlight areas where attention is needed in order to initiate continued positive change on the landscape. This will be an annual standing invitation to the CAs.

**Recommended Implementation Action** – in 2014, the Greening Partnership will present their annual report and the Greening Partnership Environmental Awards at a Community Development Forum meeting in conjunction with the annual watershed update. This will become an annual event.

**Recommended Implementation Action** – in 2014, Carolinian Canada will be invited to give a presentation at a Community Development Forum to provide an overview of the Conservation Action Plans, the work that has been completed to date and to highlight areas where attention is needed in order to initiate continued positive change on the landscape. This will become an annual event.

**Recommended Implementation Action** – in 2014, Council will show their support for, and interest in, natural heritage conservation and restoration efforts by participating in an annual bus tour of stewardship sites. This will become an annual event and could be combined with a Community Development Forum meeting date in order to maximize efficiencies and to ensure availability.

**Recommended Implementation Action** – in 2014, each Council member should participate in at least one habitat creation event hosted by the Greening Partnership and/or Carolinian Canada. Staff will provide Council with regular updates on scheduled events such that Council is aware of the date, time and location of each event. The municipality will publicize Council's attendance at these events on the Chatham-Kent Conservation Collaboration webpage.

**Recommended Implementation Action** – prior to the end of 2014, the GIS Department will prepare a property information layer that identifies all municipally and publicly owned properties in Chatham-Kent. This layer will be utilized to identify publicly owned lands that would be suitable for tree planting. This information will be made available on the shared database and used to prioritize tree planting efforts.

**Recommended Implementation Action** – prior to Spring 2015, the Manager, Parks, Cemeteries and Horticulture will, through the use of the enhanced database, identify one cemetery, preferably within an Erie-Rondeau Coast CAP priority restoration area, that has the capacity to accommodate a minimum 1ha tall grass prairie habitat creation. The Manager will work with the Greening Partnership and CCC to identify funding partners and potential volunteers that could participate in the creation of the habitat. The Manager, Parks, Cemeteries and Horticulture will report to Council in Winter 2015 to provide an update on the status of the site selection and funding acquisition.

**Recommended Implementation Action** – staff of the Parks, Cemeteries and Horticulture Department will work with the Greening Partnership staff and CCC to identify the location of the first 0.5ha of prairie habitat to be planted along the CASO Trail in the fall of 2014. The prairie habitat will be at least 10m wide. The site selection must take into account the ultimate goal of ten contiguous hectares of prairie habitat.

**Recommended Implementation Action** – at the end of 2014, and every year thereafter, the Sustainability Review Team will prepare a report to Council outlining the KPI monitoring results.

**Recommended Implementation Strategy** – in 2014 the Sustainability Review Team will meet with their respective divisions/departments and prepare a summary report, to be presented to Council that identifies specific actions, programs or policies within their operation that could be used and/or revised to assist the municipality's efforts to enhance natural heritage cover. The summary report will be presented to Council in Spring 2015.

**Recommended Implementation Strategy** – in 2014 the Manager Roads Department, Drainage Superintendent, Manager Parks, Cemeteries and Horticulture, Greening Partnership, the Conservation Authorities and CCC will cooperatively develop a Best Management Practices Guide for drain maintenance with the goal of improving riparian habitat and minimizing impacts to reptile and turtle habitat while still maintaining the necessary drainage requirements. The LTVCA and SCRCA will lead the creation of the Best Management Practices Guide to be completed by Spring 2015. Training sessions will be provided to all staff responsible for design, review and implementation of drain maintenance by Summer 2015.



Photo credit – P. Allen Woodliffe

#### **4. Increase the amount of canopy cover within the existing Urban Areas through the use of development standards/guidelines and stewardship efforts**

If a tree cutting by-law was in place that required landowners to maintain the woodlands on their property until such time as a proper study was submitted, staff would be in a much better position to implement guidelines for enhanced tree cover and for the maintenance and protection of existing tree cover. That is because the protection of the feature would already be in place through the by-law and staff could focus on working with the landowner to enhance the existing feature through the development review process. However, in the absence of a tree cutting by-law, it would still be beneficial to have standard guidelines for staff to utilize when reviewing *Planning Act* applications to provide for a consistent approach to review and implementation.

Although the focus of stewardship efforts will be in the rural area where the pressures on the natural heritage system are greatest, there are many stewardship opportunities within the urban area that should continue to be pursued. The Greening Partnership already work with urban landowners and schools to increase canopy cover through school and street tree planting programs. Additional programs, or enhancements to existing programs, could be considered to further increase the tree cover within the urban areas.

Some of the options outlined below are related to development applications whereas others are stewardship initiatives aimed at the urban areas.

##### Options:

- a. Landscape Guidelines
- b. Tree Protection Guidelines
- c. School Tree Planting Programs
- d. Street Tree Planting Program

##### **a. Landscape Guidelines**

Many communities across Ontario have developed landscaping guidelines to be used as part of the development review process. In addition, these landscaping guidelines are also used on municipal projects, such as Environmental Assessments, to ensure that municipalities are holding themselves to the same standards that they are holding the development community. Guidelines give developers confidence that there is a consistent approach to each development application and they provide staff with a Council approved document that they can refer to when establishing baseline requirements during plan review. The creation and use of landscape guidelines would assist in achieving many of the CAP strategic actions as outlined in Tables 1 and 2.

Some examples of landscaping guidelines can be found at:

- City of Kitchener - Urban Forest Tree Planting and Establishment (2012)
- City of Woodstock, Landscape Plan Requirements and Guidelines (2008)

- City of Mississauga, Site Plan Application Process Guidelines (2013)  
<http://www6.mississauga.ca/onlinemaps/planbldg/Manuals/ExternalGuidelines-SitePlan-2013August.pdf>
- City of Cambridge, Tree Management Guidelines and Policies for New Developments (2002) -
- Town of Markham, Trees for Tomorrow (2009) -
- TRCA – Post-Construction Restoration Guidelines -  
<http://trca.on.ca/dotAsset/40027.pdf>
- TRCA – Stormwater Management Pond Planting Guidelines  
<http://trca.on.ca/dotAsset/40023.pdf>
- Conservation Halton - Landscaping and Tree Preservation Guidelines (2010)  
<http://conservationhalton.ca/planning-services>

Requiring developers to plant native trees and shrubs as part of their development application is consistent with Provincial and municipal policies related to improved air quality. The vegetation will not only assist with air quality but it will also help to mitigate climate change while also adding habitat for wildlife.

## **b. Tree Protection Guidelines**

While it is important to establish standards for the planting of new vegetation (i.e., landscaping guidelines) it is just as important to have standards to protect existing vegetation during the construction phase. Without proper tree protection, vegetation that was identified for protection in the planning phase can easily be damaged or destroyed during construction due to a lack of on-site controls and education.

As with landscaping guidelines, many communities across Ontario have adopted tree protection guidelines to be used as part of the development review process. The guidelines would also be used for any municipal project to ensure the municipalities are holding themselves to the same standards that they are holding the development community. The following are a sample of tree protection guidelines in Ontario:

- Conservation Halton - Landscaping and Tree Preservation Guidelines (2010)  
<http://conservationhalton.ca/planning-services>
- City of Hamilton – Tree Protection Guidelines (October 2010)
- City of Ottawa – Protecting Trees
- Town of Newmarket – Tree Preservation, Protection, Replacement and Enhancement Policy (2005)

- City of London – Tree Protection and Tree Planting (2012)

Key to the successful uptake of these guidelines will be a thorough public consultation process as well as training workshops offered to Chatham-Kent staff as well as professionals in the field of landscape architecture, planning, engineering, construction site design and site monitoring.

The Conservation Authorities may also be able to utilize these guideline when reviewing applications pursuant to their regulation thereby extending its applicability into the rural area also.

### **c. School Tree Planting Programs**

In order to foster a culture that values natural heritage it is extremely important to continue to engage the youth of Chatham-Kent in natural heritage planning and management. The existing School Tree Planting Programs provided by the Greening Strategy (Tomorrow's Greener Schools Today and the Community Trees Initiative) are successful initiatives that engage youth in the larger discussion about the importance of trees and natural heritage within their community. The Carolinian Canada Youth Program also engages young people through seed collection for prairie restoration, field trips and day camps. The School Tree Planting programs should continue and be expanded to engage as many youth as possible. The provision of funding for additional Greening Partnership staff will enable the School Tree Planting Programs to continue and expand.

### **d. Street Tree Planting Program**

Some municipalities in Ontario have implemented Street Tree Planting Programs to help bolster the urban canopy cover. The Cities of Hamilton and Toronto, for example, offer free new or replacement street trees on the City owned portion of residential properties (i.e., within the road allowance).

Chatham-Kent, until recently, also had a street tree giveaway program however, this program was eliminated in the 2013 budget. The Greening Partnership has been planting approximately 1,000 large stock trees per year along streets through grants such as the TD Greenstreets Program. Coordination and cooperation between the Greening Strategy and Chatham-Kent's Roads Department will be critical to the success of any street tree planting program. Tree planting policies of the City should be examined as part of the Sustainability Review Team's departmental assessments to ensure that there are no

impediments to street tree planting within existing policies or practices. It is recommended that Chatham-Kent investigate the feasibility of once again implementing a Street Tree Planting Program that would primarily target the urban area. The program could offer one tree per property and could begin by focusing on those properties that currently have little or no tree cover.

Funding for this program could be sourced from the money received from the Canadian Food Inspection Agency for the Emerald Ash-Borer Replacement Program and/or the Trees Ontario and Ministry of Natural Resources' 50 Million Tree Program (50MTP). In addition to these funding sources, the Manager of the Roads Department, Manager of Parks, Cemeteries and Horticulture, Greening Partnership Coordinator and Director of Planning should approach the University of Guelph Ridgetown Campus to see if there would be an ability to combine a Street Tree Planting Program with the horticulture programs offered at the post-secondary institution to further increase the interaction between the municipality, Greening Strategy and University students.

## Summary

The creation of landscaping and tree preservation guidelines will assist in enhancing the canopy cover mainly within the urban area. If the Conservation Authorities choose to adopt the guidelines for permit reviews pursuant to their regulation the impact of the guidelines could also extend into the rural area. Increasing canopy cover in the urban area will provide many more benefits beyond canopy cover including temperature and air quality mitigation, wildlife habitat and aesthetic benefits associated with nature.

**Recommended Implementation Action –** Chatham-Kent Planning Services, in cooperation with the LTVCA and the SCRCA, will lead the development of landscaping and tree protection guidelines to be used in evaluating development applications as well as in municipal projects to encourage an increase in canopy cover within urban environments and to minimize damage during the construction phase. The draft guidelines would be prepared by Summer 2016 with a final guideline available in Winter 2016. Upon approval of the guidelines, a training session will be hosted by the Municipality to update the development industry and their consultants on the requirements of the guidelines. In addition, these guidelines will be added to the municipality's list of complete application requirements.

**Recommended Implementation Action –** continue to support the School Tree Planting Programs through enhanced funding of the Greening Partnership.

**Recommended Implementation Action –** in 2015, the Natural Heritage Sustainability Committee, in cooperation with the Roads, Parks, Cemeteries and Horticulture and Planning Departments, will investigate the feasibility of implementing a Street Tree Planting Program that provides one tree per household, at no cost to the landowner, within the municipal right-of-way. Funding requirements will be determined and funding sources identified by this team with the expectation that funding will rely on existing or future grants and will not rely on the tax base. Assistance from the Greening Partnership will be requested in terms of sourcing funds if necessary.

**Recommended Implementation Action –**  
*in 2015, the Natural Heritage Sustainability Committee, in cooperation with the Managers of the Roads, Parks, Cemeteries and Horticulture and Planning Departments and the Greening Partnership, will collectively approach the University of Guelph Ridgetown Campus to determine if there would be opportunities to combine a Street Tree Planting Program with the horticulture programs offered at the University.*

**Recommended Implementation Action –**  
*prior to December 2015, the Natural Heritage Sustainability Committee, in cooperation with the Managers of Roads, Parks, Cemeteries and Horticulture and Planning Departments, will report to Council with respect to the feasibility, cost, funding sources and partnership potential for a Street Tree Planting Program.*

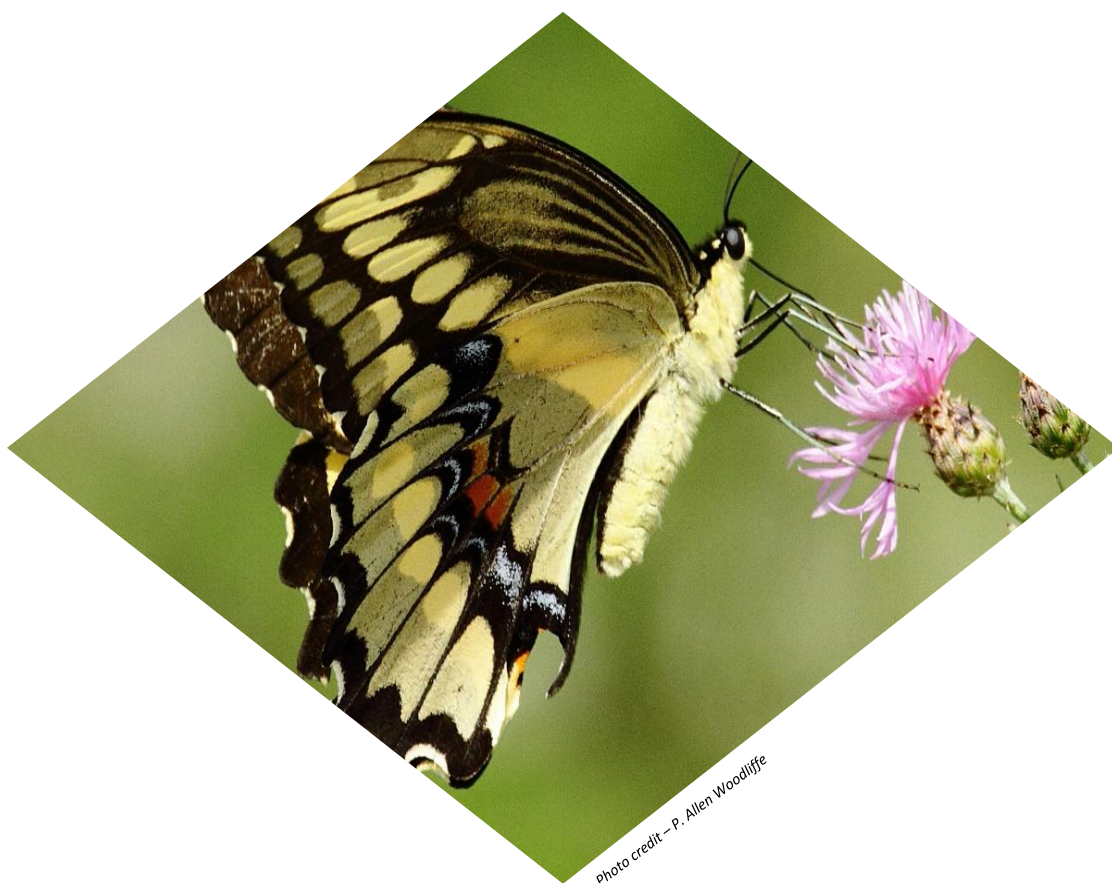


Photo credit – P. Allen Woodliffe

## 5. Enhance landowner recognition by acknowledging and celebrating the important work of existing stewards and creating interest for future stewards to participate in the program.

As mentioned in the 'Background' component of this paper, the Greening Partnership currently has a landowner recognition program whereby one landowner each year is selected to receive the Greening Partnership Environmental Award. The award consists of a carved wooden plaque that the landowner keeps for a year and then returns so it can be given to the next recipient. Some landowners who participated in stewardship initiatives have been provided with a sign that can be placed on their property to identify them as an environmental steward. Signage is not always provided with site location and funding availability often dictating whether signs are given to landowners.

In order to increase awareness of the stewardship program(s) it is recommended that some type of signage be considered for display on each landowner's property and a permanent award/sign be given to those landowners that receive the Environmental Award. This method has been utilized in other jurisdictions and has been met with great success. Landowners generally appreciate the ability to have a small sign placed along the frontage of their property recognizing them as local stewards. At the same time, the signage provides an opportunity for others to gain an awareness of the stewardship program and to begin a conversation with their neighbours or the local stewardship program. The placement of the sign would be voluntary and only with the agreement of the landowner. Below is an example of a sign that has been used by the Greening Partnership in the past:

In order to share resources and reduce costs, it may be possible to work with CCC and other local organizations involved in stewardship and restoration to create a standard sign template that can be used with interchangeable logos depending upon which organization(s) participated in that particular stewardship effort.



**Recommended Implementation Action** – in 2015, the Greening Partnership and CCC implement a landowner recognition program whereby all participating landowners are offered the opportunity to have their actions recognized through the installation of a small sign at the front of their property. Previous participants should be approached to determine whether their restoration efforts remain on the landscape and, if so, be offered an opportunity to participate in the recognition program too. Funding for these signs should be incorporated into future grant proposals.



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## 6. Demonstrate how the recommended implementation actions will assist in achieving the strategic actions/steps identified in the Rondeau-Erie and St. Clair Coastal Conservation Action Plans

Tables 1 and 2 outline how this Implementation Strategy will achieve most of the strategic actions/steps identified in the two CAPs.

**Table 1. Rondeau-Erie Coast CAP Strategic Actions/Steps and Implementation Strategy**

Objective	Strategic Action	Timeline	Implementation Strategy
1. Establish outreach program to communicate the reasons for the Conservation Action Plan, its goals and objectives, and get input from stakeholders and landowners on best approaches.	<p>1. Annual community workshop and bus tour to learn about natural features, land uses, ecological impacts and habitat stewardship demonstration sites.</p> <p>2. Annual report/newsletter on CAP projects available to community.</p>	2013 and beyond	<p>1. Community workshop and bus tour –Forester on contract with CK currently provides bus tour, LTVCA offers semi-annual bus tour and CCC working with Christian Farmers Association to initiate bus tour, to highlight demonstration sites and landowner recognition. Implementation Strategy recommends that a monthly e-newsletter be created to inform Council and residents of these events and that Council members attend at least one bus tour per year.</p> <p>2. CCC is responsible for preparing the annual report/newsletter on CAP projects and, as such, this does not form part of the Implementation Strategy. However, in order to keep Chatham-Kent Council and the public informed, the Implementation Strategy recommends that CCC attend at least one Community Development Forum meeting per year to provide an overview of the CAPs and the status on the implementation of the strategic actions. A link to the annual report/newsletter could also be made available through the webpage and e-newsletter that have been recommended in the Implementation Strategy.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>3. Prepare and make best stewardship practices materials available to landowners via web site and publications.</p> <p>4. Approach steering committee member groups to support project(s)</p> <p>a. Review all potential funding sources.</p> <p>b. Develop funding proposals in partnership with steering committee and implementation partners in order to support 1, 2, &amp; 3.</p>		<p>3. Creation of webpage on Chatham-Kent site dedicated to stewardship/landowner initiatives and programs. Partners will be asked to include link to webpage on their websites to enable information sharing.</p> <p>4. Implementation Strategy recommendations will enhance existing partnerships and create new partnerships to enable additional grants and funding to be made available for stewardship/tree planting/natural cover opportunities.</p>
2. Support the development of natural heritage systems planning in Chatham-Kent.	<p>1. Update natural heritage inventory / features (Schedule C) of Official Plan by 2014.</p> <p>a. Explore opportunities to identify priority corridors and linkages by 2015.</p>	2013-2015	<p>1. Planning Department to work with CAs, CCC and GIS to update natural heritage inventory in advance of next 5 year review (2015). GIS staff member for Greening Partnership will enable the LTVCA to input valuable data into this effort.</p> <p>a. Utilize data collected through CAPs and updated natural heritage inventory to identify a natural heritage system in next OP Review.</p>
3. Retain existing forest cover.	1. Support tax relief, carbon credits, municipal policies, legislation, regulations, guidelines and incentives for private landowners that prevent the loss of existing forest cover.	2013 and beyond	1. CK Official Plan policies already address the Provincial Policy natural heritage requirements from a planning perspective. Overview of existing policies and programs by the Sustainability Review Team will assist in eliminating programs that are road-blocks to natural heritage conservation and enhancement. Landscaping and Tree Preservation Guidelines will assist CK staff in protecting existing tree cover and enhancing tree cover through development proposals. Implementation Strategy includes recommendation that Greening Partnership investigate opportunities for implementing a carbon offset donation program.

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>a. Support conservation by-law that promotes good, sustainable forest management practices.</p> <p>b. Support policy or programs that encourage retention of mature forests and long-term protection of forests (e.g. incentive programs, conservation easements).</p> <p>c. Support effective “ecological goods and services” incentive programs (such as ALUS).</p> <p>d. Support changes in taxation structure (federal and municipal) to reflect ecological services that forest cover provides to society and to reduce economic advantages of clear-cutting woodlots.</p> <p>2. Promote good forest management practices and the social, economic and ecological values of forests through outreach materials, newsletters, letters to the editor, workshops and events.</p>		<p>a. Chatham-Kent has opted for a policy rather than tree cutting by-law.</p> <p>b. Enhanced Greening Partnership will enable LTVCA staff to reach more landowners with education, advice and assistance to protect existing mature forests and to enhance existing features. Tree preservation guidelines will assist in protecting trees from damage/destruction during the construction phase.</p> <p>c. The Implementation Strategy does not recommend an incentive program, such as ALUS, at this time..</p> <p>d. Not addressed in this policy. Other stakeholders, including ALUS Ontario, are lobbying the Province to undertake such changes. While Chatham-Kent can support the efforts of these other stakeholders, it is recommended that Chatham-Kent focus their efforts on the recommended implementation actions within this strategy.</p> <p>2. Maintaining Chatham-Kent's contract forester and enhancing the funding for the Greening Strategy will allow for continued promotion of good forest management practices and values. The e-newsletter can contain information related to good forest management practices and provide information related to forest-focused events.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
4. Increase extent of healthy forest in East section of Rondeau CAP to 12% by 2033.	<p>1. Identify opportunities for forest restoration projects on municipal and private lands. Projects that increase extent of existing forest and make linkages among forest patches should be given priority. Projects should use ecologically appropriate species of native trees and shrubs.</p> <p>a. Approach partners such as the Greening Strategy, 50M Tree Program, Ontario Power Generation and CASO rail trail to secure resources for restoration projects.</p> <p>b. Recruit local landowners through CCC's Landowner Leaders program for forest restoration projects.</p> <p>c. Identify priority sites for restoration based on ecological values (e.g. increasing extent, connectivity) and opportunity.</p>	2033	<p>1. <b>Municipal lands</b> – the database will identify publicly owned land and overlay that information on the CAP priority restoration sites to determine if there are any immediate opportunities to enhance forest cover on municipal lands. Even if no municipal lands are within the priority restoration areas, this information will still be valuable in prioritizing reforestation efforts on municipal property.</p> <p><b>Private lands</b> – the database will assist in identifying private lands that are within the priority restoration areas identified by the CAPs. Within the agricultural community, the Greening Partnership and contract forester can utilize this information when prioritizing landowners to contact. The database will also assist the Greening Partnership in identifying areas where restoration has taken place and where it is needed which will assist in documenting information for grant applications.</p> <p><b>Native trees and shrubs</b> – the Landscaping Guidelines will provide this information.</p> <p>a. CCC can continue to work with these partners to secure resources for restoration projects.</p> <p>b. The Landowner Leaders Program is specific to CCC and, as a result, no implementation actions are recommended.</p> <p>c. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>d. Include signage, demonstration sites and other communication tools as educational component for each restoration project.</p> <p>2. Support “ecological goods and services” incentive programs (modeled on ALUS).</p>		<p>database and CAPs will be used to identify priority sites for restoration.</p> <p>d. Signage recommended as part of the existing Greening Partnership as well as potential collaboration with CCC and other environmental organizations. With the landowner’s permission, a sign is to be placed along their frontage identifying them as a watershed steward.</p> <p>2. The Implementation Strategy does not recommend an incentive program, such as ALUS, at this time.</p>
5. Increase extent of healthy forest in Rondeau Watershed section of CAP to 12% by 2033.	<p>1. Identify opportunities for forest restoration projects on municipal and private lands. Projects that increase extent of existing forest and make linkages among forest patches should be given priority. Projects should use ecologically appropriate species of native trees and shrubs.</p> <p>a. Approach partners such as the Greening Strategy, 50M Tree Program, Ontario Power Generation and CASO rail trail to secure resources for restoration projects.</p> <p>b. Recruit local landowners through CCC’s Landowner Leaders program for forest restoration projects.</p> <p>c. Identify priority sites for restoration based on ecological values (e.g. increasing extent, connectivity) and opportunity.</p> <p>d. Include signage, demonstration sites and other communication tools as educational component for each restoration project.</p> <p>2. Support “ecological goods and services” incentive programs (modeled on ALUS).</p>	2033	See #4 above.
6. Plant strategic forest buffers covering 50 ha at priority	1. Identify opportunities for forest buffer planting projects on municipal and private lands. Projects should use ecologically	2023	See #4 above.

Objective	Strategic Action	Timeline	Implementation Strategy
sites in West section of Rondeau CAP by 2023.	<p>appropriate species of native trees and shrubs.</p> <ol style="list-style-type: none"> <li>Approach partners such as the Greening Strategy, 50M Tree Program, Ontario Power Generation to secure resources forest buffer planting projects.</li> <li>Recruit local landowners through CCC's Landowner Leaders program for forest buffer planting projects.</li> <li>Identify priority sites for restoration based on ecological values (e.g. increasing extent, connectivity) and opportunity.</li> <li>Include signage, demonstration sites and other communication tools as educational component for each project.</li> </ol> <p>2. Support "ecological goods and services" incentive programs (modeled on ALUS)</p>		
7. Ten contiguous hectares of prairie (>10m wide) restored along municipally-owned lands (and/or adjacent lands) within next 5 years (0.5 ha in first year).	1. Implement prairie restoration along CASO rail corridor.	2018	1. The enhanced database will enable staff to identify an appropriate stretch along the CASO rail corridor and track landowner contact and restoration works.
8. One conspicuous demo site of prairie habitat (1 ha minimum) initiated around public utility project site by 2015.	<ol style="list-style-type: none"> <li>Recruit Landowner Leaders through CCC's programs to initiate projects on their lands.</li> <li>Use projects as demonstration sites.</li> </ol>	2015	<ol style="list-style-type: none"> <li>Landowner Leaders is a CCC program and, as such, not included in this implementation strategy.</li> <li>Demonstration sites could be incorporated into one of the three bus tours currently offered in Chatham-Kent.</li> </ol>
9. One demonstration site of prairie habitat (1 ha minimum) created or restored at a cemetery by 2015.	<ol style="list-style-type: none"> <li>Implement prairie restoration project at a C-K municipal cemetery or Pioneer cemetery within CAP. <ol style="list-style-type: none"> <li>Identify suitable sites for prairie creation or restoration.</li> </ol> </li> </ol>	2015	<ol style="list-style-type: none"> <li>Manager of Parks, Cemeteries and Horticulture will work with CCC to identify cemetery with appropriate size and site conditions to</li> </ol>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>b. Develop restoration plan and secure funding for project.</p> <p>c. Include signage and other communication tools as educational component for the project.</p>		<p>accommodate a minimum 1 ha of created or restored prairie. The enhanced database and updated natural heritage inventory will assist in identify the most appropriate cemetery.</p> <p>b. CCC will work with the Greening Partnership to develop the restoration plan and secure funding. Opportunities to partner with volunteer programs and/or schools will offer the benefit of cost savings as well as providing an educational opportunity.</p> <p>c. Signage can be incorporated into the restoration plan and funding requirements. Potential to utilize template sign recommended as part of the enhanced landowner recognition program.</p>
10. One 20 ha block of prairie created or restored by 2015.	<p>1. Identify opportunities for prairie restoration projects on municipal and private lands.</p> <p>a. Approach partners such as the Greening Strategy, Ducks Unlimited, Ontario Power Generation and CASO rail trail to secure resources for restoration projects.</p> <p>b. Recruit local landowners through CCC's Landowner Leaders program for prairie restoration project.</p>	2015	<p>1. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced database and CAPs will be used to identify priority sites for restoration.</p> <p>a. The Greening Strategy will continue to work with their Chatham-Kent partners to secure resources for restoration projects. The provision of additional funding for two new staff positions will enable the Greening Partnership to expand their grant requests and landowner contact.</p> <p>b. Landowner Leaders is a CCC program and, as such, is not included in this implementation strategy.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>c. Approach landfill sites as potential prairie restoration sites (e.g. Ridge Landfill)</p> <p>d. Include signage, demonstration sites and other communication tools as educational component for the restoration project.</p>		<p>c. The Ridge Landfill is not municipally owned. The Greening Partnership could certainly work with CCC to approach the Ridge Landfill to discuss opportunities for prairie restoration on-site.</p> <p>d. Signage recommended as part of the existing Greening Partnership as well as potential collaboration with CCC and other organizations. With the landowner's agreement, a sign is placed along their frontage identifying them as a watershed steward.</p>
11. 2 km of new (native-, multi-species, shrub dominated) hedgerows established in West by 2018.	<p>1. Identify opportunities for hedgerow planting projects on private lands.</p> <p>a. Approach partners such as the Greening Strategy, 50M Trees, and Ontario Power Generation to secure resources for planting projects.</p> <p>b. Recruit local landowners through CCC's Landowner Leaders program for hedgerow planting projects.</p> <p>c. Include signage, demonstration sites and other communication tools as educational</p>	2018	<p>1. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced database and CAPs will be used to identify priority sites for restoration. The contract forester and the Greening Partnership staff will also be of assistance in identifying these locations based on their on-site experiences.</p> <p>a. The Greening Strategy will continue to work with their Chatham-Kent partners to secure resources for restoration projects. The provision of additional funding for two new staff positions will enable the Greening Partnership to expand their grant requests and landowner contact.</p> <p>b. Landowner Leaders is a CCC program and, as such, is not included in this implementation strategy.</p> <p>c. Signage recommended as part of the existing Greening Partnership as well as potential</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>component for the hedgerow planting projects.</p> <p>d. Identify priority sites for projects.</p> <p>2. Develop programs to educate, bring awareness, and outreach regarding values and advantages of hedgerows.</p> <p>a. CCC's Landowner Leaders program.</p> <p>3. Investigate possible criteria for zoned buffer along edges of farm properties.</p> <p>a. Investigate possible use of geophysical barriers to removal of new buffers.</p> <p>b. Support "ecological goods and services" incentive programs (modeled on ALUS) to engage farmers.</p>		<p>collaboration with CCC and other organizations. With the landowner's agreement, a sign is placed along their frontage identifying them as a watershed steward.</p> <p>d. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced database and CAPs will be used to identify priority sites for restoration.</p> <p>2. Greening Partnership, CK contract forester and SCRCA Stewardship Program will continue to provide education with respect to the values and advantages of hedgerows.</p> <p>a. Landowner Leaders is a CCC program and, as such, is not included in this implementation strategy however, Landowner Leaders is collaborative and complementary to existing programs. CC tries to ensure that interested landowners are linked to appropriate experts, local agencies and funding resources.</p> <p>3a. The strategy does not recommend this type of zoning however, the Planning Department could explore the use of such a zone. It may be difficult to implement/enforce.</p> <p>b. The Implementation Strategy does not recommend an incentive program, such as ALUS, at this time.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
12. 5 km of new (native-, multi-species, shrub dominated) hedgerows established East and Rondeau by 2018.	<ol style="list-style-type: none"> <li>1. Identify opportunities for hedgerow planting projects on private lands.               <ol style="list-style-type: none"> <li>a. Approach partners such as the Greening Strategy, 50M Trees, and Ontario Power Generation to secure resources for planting projects.</li> <li>b. Recruit local landowners through CCC's Landowner Leaders program for hedgerow planting projects.</li> <li>c. Include signage, demonstration sites and other communication tools as educational component for the hedgerow planting projects.</li> <li>d. Identify priority sites for projects.</li> </ol> </li> <li>2. Develop programs to educate, bring awareness, and outreach regarding values and advantages of hedgerows.               <ol style="list-style-type: none"> <li>a. CCC's Landowner Leaders program.</li> </ol> </li> <li>3. Investigate possible criteria for zoned buffer along edges of farm properties.               <ol style="list-style-type: none"> <li>a. Investigate possible use of geophysical barriers to removal of new buffers.</li> <li>b. Support "ecological goods and services" incentive programs (modeled on ALUS) to engage farmers.</li> </ol> </li> </ol>	2018	See #11 above.

Objective	Strategic Action	Timeline	Implementation Strategy
13. No new shoreline hardening structures or major alterations taking place along Lake Erie coast or Rondeau Bay by 2018.	<ol style="list-style-type: none"> <li>1. Enforce existing regulations.               <ol style="list-style-type: none"> <li>a. Lobby for adequate support for enforcement.</li> </ol> </li> <li>2. Investigate and support ecologically friendly and landowner-friendly shoreline management approaches.               <ol style="list-style-type: none"> <li>a. Identify ecologically-friendly and landowner-friendly shoreline management by assembling small solution-focused groups to develop economical, community-generated solutions.</li> <li>b. Develop programs to educate, bring awareness, and outreach regarding values and advantages of ecologically-friendly and landowner-friendly shoreline management.</li> <li>c. Develop appropriate business strategy that involves local entrepreneurs.</li> <li>d. Develop recognition program for landowners following good shoreline management (modeled on Lake Huron Coastal Centre for Conservation).</li> <li>e. Recruit landowners with good shoreline management to join the Erie Coastal Stewardship Eco Trail as demonstration sites of coastal stewardship.</li> </ol> </li> </ol>	2018	The focus of the Implementation Strategy is on natural heritage cover and, as such, did not address shoreline issues however, the recognition program that is recommended in (d) could be incorporated into the enhanced landowner steward recognition program. In addition, the demonstration sites referenced in (e) could be included in the bus tours.
14. All faulty and obsolete septic systems on the Rondeau Peninsula and around Rondeau Bay upgraded by 2018.	<ol style="list-style-type: none"> <li>1. Enforce existing regulations.               <ol style="list-style-type: none"> <li>a. Lobby for adequate support for enforcement.</li> </ol> </li> <li>2. Investigate and support ecologically friendly and landowner-friendly upgrades to septic systems.               <ol style="list-style-type: none"> <li>a. Identify ecologically-friendly and landowner-friendly upgrades to septic systems by assembling small solution-focused groups to develop economical, community-generated solutions.</li> </ol> </li> </ol>	2018	The focus of the Implementation Strategy is on natural heritage cover and, as such, did not address septic system issues.

Objective	Strategic Action	Timeline	Implementation Strategy
	<ul style="list-style-type: none"> <li>b. Develop programs to educate, bring awareness, and outreach regarding values and advantages of ecologically-friendly and landowner-friendly shoreline management.</li> <li>c. Develop appropriate business strategy that involves local entrepreneurs.</li> </ul>		
15. Beach grooming, landscaping, encroachment, littering and dumping impacts measurably reduced by 2015.	<ul style="list-style-type: none"> <li>1. Develop education and awareness program to promote ecological values of ungroomed beaches. <ul style="list-style-type: none"> <li>a. CCC Landowner Leaders program.</li> <li>b. Develop recognition program for landowners following good beach practices (modeled on Lake Huron Coastal Centre for Conservation).</li> <li>c. Recruit landowners with good beach practices to join the Erie Coastal Stewardship EcoTrail as demonstration sites of coastal stewardship.</li> <li>d. Develop an Adopt-a-beach program.</li> </ul> </li> <li>2. Implement dune restoration projects such as raised boardwalks, rolling boardwalks. <ul style="list-style-type: none"> <li>a. Identify priority sites for projects on municipal and private lands.</li> <li>b. Recruit private landowners for restoration projects through CCC's Landowner Leaders program.</li> <li>c. Approach potential partners.</li> <li>d. Include signage, demonstration sites and other communication tools as educational component for the restoration projects.</li> </ul> </li> <li>3. Clarify beach ownership.</li> </ul>	2015	The focus of the Implementation Strategy is on natural heritage cover and, as such, did not address shoreline issues however, the recognition program that is recommended in 1(b) and 2(d) could be incorporated into the enhanced landowner steward recognition program. In addition, the demonstration sites referenced in (c) could be included in the bus tours.
16. Initiate Phragmites control projects of 50 acres per year at coastal wetland sites in Rondeau Bay and other affected sites.	<ul style="list-style-type: none"> <li>1. Lobby federal government to permit use of safe herbicides to use over water for Phragmites control annually until achieved.</li> <li>2. Identify highest priority wetland biodiversity hotspots by 2015 and prioritize invasive species control activities to take place at those locations.</li> </ul>	2015 and on-going	<ul style="list-style-type: none"> <li>1. Lobbying efforts with respect to the use of safe herbicides will be left to Carolinian Canada.</li> <li>2. The improved database, updated natural heritage inventory and on-site inspections will assist with identifying the highest priority wetland biodiversity hotspots. The Greening</li> </ul>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>3. Provide outreach to, and work with, plant nursery / garden centres to promote the sale of beneficial (ideally native) species (annually, starting in 2014).</p> <p>4. Implement Phragmites control projects at priority sites starting in 2014.</p> <p>5. Investigate new and creative methods of Phragmites control (e.g. biomass plant).</p>		<p>Partnership and Chatham-Kent can assist with this effort.</p> <p>3. Greening Partnership staff can work with Carolinian Canada in this effort. The landscaping guidelines should include a list of native species that can then be used to provide outreach materials for local nursery/garden centres.</p> <p>4. Greening Partnership staff may be able to provide resources, grant money or coordinate volunteers to assist with Phragmites control. If volunteers are required, the enhanced web page and e-newsletter could be used to advertise the event.</p> <p>5. Greening Partnership staff may have expertise or connections to experts in the field related to alternative methods of Phragmites control.</p>
17. Reduce and then maintain lower nutrient inputs to Rondeau Bay to acceptable concentrations.	<p>1. Determine “acceptable” levels by working with partners (e.g. Rondeau Bay Working Group).</p> <p>2. Prioritize projects by level of degradation as determined by water quality testing.</p> <p>3. Establish Landowner Leader demo sites to show good practices regarding run-off and nutrient management (e.g. McLean Property).</p> <p>a. Recruit private landowners through CCC’s Landowner Leaders program.</p> <p>b. Include signage, demonstration sites and other communication tools as educational component for the projects.</p> <p>c. Develop programs to educate, bring awareness, and outreach regarding values and advantages of good nutrient management.</p>	2013 and beyond	<p>The focus of the Implementation Strategy is on natural heritage cover and, as such, did not specifically address nutrient management issues however, the Greening Partnership has been and will continue to be very beneficial in increasing the amount of riparian buffer adjacent to watercourses which will assist in reducing nutrient inputs to Rondeau Bay. In addition, the enhanced landowner recognition program could be used to implement 3(b).</p>

Objective	Strategic Action	Timeline	Implementation Strategy
18. Promote ecologically appropriate integrated vegetation management of drains by 2018.	<ol style="list-style-type: none"> <li>1. Provide outreach to responsible municipal staff and landowners regarding issue by 2015.</li> <li>a. Review, re-emphasize and, if necessary, prepare BMPs on riparian vegetation management.</li> <li>b. Hold drain maintenance “best practices” (e.g., reduced encroachment, grassed buffers, berms, other landscape features, row of shrubs at top, good utilization of sediment – e.g., biofuel) workshops with landowners, contractors and drainage superintendents / staff.</li> <li>c. Establish public/landowner outreach and education campaign by 2015.</li> <li>2. Clarify responsibilities and communicate with responsible agencies re: monitoring and enforcement of violations (by 2015).</li> <li>3. Promote ALUS-type incentives / support for ecological practices along drains.</li> </ol>	2018	<ol style="list-style-type: none"> <li>1. Creation of a Best Management Practices Guide to be prepared in consultation with Manager Roads Department, Drainage Superintendent, Manager Parks, Cemeteries and Horticulture, Greening Partnership and CCC.</li> <li>a. See above.</li> <li>b. Training to be provided to all staff responsible for the design, review and implementation of drain maintenance. These training sessions could be used as a template for workshops with landowners, contractors, etc.</li> <li>c. CCC will likely establish their own independent outreach campaign however, there would be opportunities to coordinate outreach and education with the Greening Partnership.</li> <li>2. The Sustainability Committee should provide clarification as it relates to the mandates of the various members.</li> <li>3. The Implementation Strategy does not recommend an incentive program, such as ALUS, at this time.</li> </ol>
19. Sediment (catchment) basins and 2-stage ditches included in all new engineers’ reports, and in at least 2 drain maintenance bottom clean-up projects annually.	<ol style="list-style-type: none"> <li>1. Present at annual meetings of drainage superintendents.</li> <li>2. Provide BMP “newsletter” annually to drainage superintendents.</li> </ol>	2013 and beyond	<ol style="list-style-type: none"> <li>1. This action is specific to CCC and not addressed in this strategy.</li> <li>2. This action is specific to CCC and not addressed in this strategy.</li> </ol>

Objective	Strategic Action	Timeline	Implementation Strategy
	<ul style="list-style-type: none"> <li>3. Conservation authorities make appropriate recommendations during report review.</li> <li>4. Work with municipality to include recommendations in final drain reports.</li> <li>5. Provide educational materials explaining cost savings and benefits of 2-stage ditches to target landowners.</li> <li>6. Secure funding to initiate projects.</li> </ul>		<ul style="list-style-type: none"> <li>3. This action is specific to Conservation Authority staff not involved in the Greening Partnership and, as such, is not addressed in this strategy.</li> <li>4. The Best Management Practices guideline for drain maintenance can include sediment basins and 2-stage ditches.</li> <li>5. This information can be prepared as part of the BMP Guide and a link to this information can be posted on the Conservation Collaboration webpage.</li> <li>6. The Greening Partnership will continue to work with CCC and others to secure funding to initiate projects.</li> </ul>
20. Reptile-friendly vegetation mats used in all drain maintenance projects and road/bridge upgrades.	<ul style="list-style-type: none"> <li>1. Compile best management practices (BMPs) for reptile-friendly drain maintenance and road/bridge projects.</li> <li>2. C-K roads department and drainage superintendent approached with information materials.</li> </ul>	2013 and beyond	<ul style="list-style-type: none"> <li>1. Strategy includes the creation of a Best Management Practices Guide in cooperation with the Greening Partnership, CCC and Chatham-Kent.</li> <li>2. See above.</li> </ul>
21. Turtle-friendlier drain maintenance practices being applied CAP-wide by 2015.	<ul style="list-style-type: none"> <li>1. Compile best management practices (BMPs) for reptile-friendly drain maintenance practices.</li> <li>2. Provide BMP “newsletter” annually to drainage superintendents.</li> <li>3. Present at annual meetings of drainage superintendents.</li> </ul>	2013 and beyond	<ul style="list-style-type: none"> <li>1. CCC and the Greening Partnership can work together to compile best management practices for reptile-friendly drain maintenance practices for incorporation into the BMP Guide to be used by Chatham-Kent.</li> <li>2. This action is specific to CCC and not addressed in this strategy</li> <li>3. This action is specific to CCC and not addressed in this strategy</li> </ul>

Objective	Strategic Action	Timeline	Implementation Strategy
	4. Conservation authorities make appropriate recommendations during drain maintenance approvals process.		4. This action is specific to Conservation Authority staff not involved in the Greening Partnership and, as such, is not addressed in this strategy.
22. Buffers of native vegetation of 3 m width on each side established along 50 km of open watercourses by 2020, and included in all new engineers reports.	<p>1. Profile progressive practices and disseminate to high priority target audiences.</p> <p>2. Advocate for strengthening of provincial guidelines (BMPs) to facilitate this objective.</p> <p>a. Work with OMAF and Chatham-Kent to lead process.</p> <p>b. Hold webinar or series of webinars to inform community on issue.</p> <p>c. New drainage reports include 3m buffer.</p> <p>3. Advocate for increased support for Environmental Farm Plan program.</p>	2018	<p>1. CCC and the Greening Partnership can continue to work together to amalgamate/create educational materials related to riparian vegetation. This material can be used by all landowner stewardship programs including the Greening Partnership, CAs and CCC and can be posted on the Conservation Collaboration webpage.</p> <p>2. Chatham-Kent supports this advocacy and recommends that their partners, including CCC, continue to pursue the strengthening of provincial guidelines (BMPs).</p> <p>a. Given the length of municipal drains in Chatham-Kent, the participation of CK in this initiative will be crucial to its success. The addition of an Agricultural Specialist to the Greening Partnership (through Ministry of Agriculture funding) will assist in implementing this program.</p> <p>b. Webinars can be publicized on the Conservation Collaboration webpage and included in the e-newsletters.</p> <p>c. The Best Management Practices guideline for drain maintenance can include this recommendation.</p> <p>3. This action is specific to CCC and not addressed in the Implementation Strategy.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<ul style="list-style-type: none"> <li>a. Work with OMAF to facilitate process.</li> <li>4. Hold on-site “best practices” demonstration events hosted by local landowners (one annually, work with local agricultural organizations).</li> <li>a. Tie-in to local OSCIA annual meetings.</li> <li>5. Lobby for implementation of ALUS-type program province-wide.</li> </ul>		<ul style="list-style-type: none"> <li>4. This demonstration event could be coordinated with the bus tours or as a separate event. The Greening Partnership Agricultural Specialist could work with CCC to organize and host this event.</li> <li>5. This action is specific to CCC and not addressed in the Implementation Strategy.</li> </ul>

**Table 2. Lake St. Clair Coastal CAP Strategic Actions/Steps and Implementation Strategy**

Objective	Strategic Action	Timeline	Implementation Strategy
1. Establish outreach program to communicate the reasons for the Conservation Action Plan, its goals and objectives, and get input from stakeholders and landowners on best approaches.	<p>1. Annual community workshop and bus tour to learn about natural features, land uses, ecological impacts and habitat stewardship demonstration sites.</p> <p>2. Annual report/newsletter on CAP projects available to community.</p> <p>3. Prepare and make best stewardship practices materials available to landowners via web site and publications.</p>	2013 and beyond	<p>1. Community workshop and bus tour –Forester on contract with CK currently provides bus tour, LTVCA offers semi-annual bus tour and CCC working with Christian Farmers Association to initiate bus tour, to highlight demonstration sites and landowner recognition. Implementation Strategy recommends that a monthly e-newsletter be created to inform Council and residents of these events and that Council members attend at least one bus tour per year.</p> <p>2. CCC is responsible for preparing the annual report/newsletter on CAP projects and, as such, this does not form part of the Implementation Strategy. However, in order to keep Chatham-Kent Council and the public informed, the Implementation Strategy recommends that CCC attend at least one Community Development Forum meeting per year to provide an overview of the CAPs and the status on the implementation of the strategic actions. A link to the annual report/newsletter could also be made available through the webpage and e-newsletter that have been recommended in the Implementation Strategy.</p> <p>3. Creation of webpage on Chatham-Kent site dedicated to stewardship/landowner initiatives and programs. Partners will be asked to include link to webpage on their websites to enable information sharing.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	4. Approach steering committee member groups to support project(s) a. Review all potential funding sources. b. Develop funding proposals in partnership with steering committee and implementation partners in order to support 1, 2, & 3.		4. Intention of Implementation Strategy is to enhance existing partnerships and create new partnerships to enable additional grants and funding to be made available for stewardship/tree planting/natural cover opportunities.
2. Support the development of natural heritage systems planning in Chatham-Kent.	1. Update natural heritage inventory / features (Schedule C) of Official Plan by 2014.  a. Explore opportunities to identify priority corridors and linkages by 2015.	2014-2015	1. Planning Department to work with CAs, CCC and GIS to update natural heritage inventory in advance of next 5 year review (2015). GIS staff member for Greening Partnership will enable the LTVCA to input valuable data into this effort.  a. Utilize data collected through CAPs and updated natural heritage inventory to identify a natural heritage system in next OP Review.
3. 10 ha of contiguous prairie habitat (>10m wide) restored adjacent to existing wetlands / drains within next 5 years (0.5 ha in first year).2	1. Restore 1 km of prairie along Hwy 40 (2-3 km south of Wallaceburg) for ~1km (east and/or west side). a. Approach MTO roads management to discuss collaboration.  2. Restore prairie between Griffore Prairie and Little Bear Creek drain (Arda dyke). a. Approach landowners (3 private) to discuss level of interest and feasibility.	2018	1.a Greening Strategy staff can work with Carolinian Canada to approach MTO to discuss this collaboration.  2. Greening Strategy staff can work with Carolinian Canada to secure funding and landowner permission to undertake works.
4. One accessible and visible demonstrate site of prairie habitat (1 ha minimum) initiated around public utility project site by 2015.	1. Recruit Landowner Leaders through CCC's programs to initiate projects on their lands.  2. Use projects as demonstration sites.	2015	1. Landowner Leaders is a CCC program and, as such, not included in this implementation strategy.  2. Demonstration sites could be incorporated into one of the three bus tours currently offered in Chatham-Kent.

Objective	Strategic Action	Timeline	Implementation Strategy
5. One demonstration site of prairie habitat (1 ha minimum) created or restored at a pioneer cemetery (e.g., Hansor, Owen, St. Philippe) by 2015.	<p>1. Implement prairie restoration project at a CK municipal cemetery or Pioneer cemetery within CAP.</p> <p>a. Identify suitable sites for prairie creation or restoration.</p> <p>b. Develop restoration plan and secure funding for project.</p> <p>c. Include signage and other communication tools as educational component for the project.</p>	2015	<p>a. Manager of Parks, Cemeteries and Horticulture to work with CCC to identify cemetery with appropriate size and site conditions to accommodate a minimum 1ha of created or restored prairie. The enhanced database and updated natural heritage inventory will assist in identify the most appropriate cemetery.</p> <p>b. CCC will work with the Greening Partnership to develop the restoration plan and secure funding. Opportunities to partner with volunteer programs and/or schools will offer the benefit of cost savings as well as providing an educational opportunity.</p> <p>c. Signage can be incorporated into the restoration plan and funding requirements. Potential to utilize template sign recommended as part of the enhanced landowner recognition program.</p>
6. Two 8 ha blocks of prairie created or restored by 2023.	<p>1. Identify opportunities for prairie restoration projects on municipal and private lands.</p> <p>a. Approach partners such as the Greening Strategy, Ducks Unlimited, and Ontario Power Generation to secure resources for restoration projects.</p>	2023	<p>1. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced database and CAPs will be used to identify priority sites for restoration.</p> <p>a. The Greening Strategy will continue to work with their Chatham-Kent partners to secure resources for restoration projects. The provision of additional funding for two new staff positions will enable the Greening Partnership to expand their grant requests and landowner contact.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<ul style="list-style-type: none"> <li>b. Recruit local landowners through CCC's Landowner Leaders program for prairie restoration project.</li> <li>c. Include signage, demonstration sites and other communication tools as educational component for the restoration project.</li> </ul>		<ul style="list-style-type: none"> <li>b. Landowner Leaders is a CCC program and, as such, is not included in this implementation strategy.</li> <li>c. Signage recommended as part of the existing Greening Partnership as well as potential collaboration with CCC. With the landowner's agreement, a sign is placed along their frontage identifying them as a watershed steward.</li> </ul>
7. Promote ecologically appropriate integrated vegetation management of drains by 2018.	<ul style="list-style-type: none"> <li>1. Provide outreach to responsible municipal staff regarding issue by 2015.</li> <li>a. Review, re-emphasize and, if necessary, prepare BMPs on riparian vegetation management.</li> <li>b. Hold workshop(s).</li> <li>2. Establish public/landowner outreach and education campaign by 2015.</li> <li>3. Clarify responsibilities and communicate with responsible agencies re: monitoring and enforcement of violations (by 2015).</li> </ul>	2018	<ul style="list-style-type: none"> <li>1. Creation of a Best Management Practices Guide to be prepared in consultation with Manager Roads Department, Drainage Superintendent, Manager Parks, Cemeteries and Horticulture, Greening Partnership and CCC.</li> <li>a. See above.</li> <li>b. Training to be provided to all staff responsible for the design, review and implementation of drain maintenance. These training sessions could be used as a template for workshops with landowners, contractors, etc.</li> <li>2. CCC and the Greening Partnership's Agricultural Specialist can work together to establish the outreach and education campaign.</li> <li>3. Although not specifically addressed in the Implementation Strategy, the Sustainability Committee can undertake this clarification as part of their mandate.</li> </ul>

Objective	Strategic Action	Timeline	Implementation Strategy
8. Include sediment basins and two-stage ditches in all new engineers' reports and in at least two drain maintenance bottom clean-up projects annually.	<ol style="list-style-type: none"> <li>1. Investigate the impact of municipal drain maintenance on fish and fish habitat in a municipal drain. Use report as guide for BMPs in maintenance of municipal drains.</li> <li>2. Share information through presentations at annual meetings of drainage superintendents and through a BMP "newsletter" annually to drainage superintendents.</li> <li>3. Conservation authorities make appropriate recommendations during report review.</li> <li>4. Work with municipality to include recommendations in final drain reports.</li> <li>5. Provide educational materials about cost savings and benefits of two-stage ditches to target landowners</li> <li>6. Secure funding to initiate projects.</li> </ol>	2013 and beyond	<ol style="list-style-type: none"> <li>1. This action is specific to CCC and not addressed in this strategy.</li> <li>2. This action is specific to CCC and not addressed in this strategy</li> <li>3. This action is specific to Conservation Authority staff not involved in the Greening Partnership and, as such, is not addressed in this strategy.</li> <li>4. The Implementation Strategy includes the creation of a Best Management Practices Guide in cooperation with the Greening Partnership, Chatham-Kent and CCC. Training workshops are also recommended in order to ensure BMPs are incorporated into drain reports.</li> <li>5. This information can be prepared as part of the BMP Guide.</li> <li>6. The Greening Partnership will continue to work with CCC and others to secure funding to initiate projects.</li> </ol>
9. Reptile-friendly vegetation mats used in all drain maintenance projects and road/bridge upgrades.	<ol style="list-style-type: none"> <li>1. Compile best management practices (BMPs) for reptile-friendly drain maintenance and road/bridge projects.</li> <li>2. C-K roads department and drainage superintendent approached with information materials.</li> </ol>	2013 and beyond	<ol style="list-style-type: none"> <li>1. Strategy includes the creation of a Best Management Practices Guide in cooperation with the Greening Partnership, CCC and Chatham-Kent.</li> <li>2. See above.</li> </ol>

Objective	Strategic Action	Timeline	Implementation Strategy
10. Turtle-friendlier drain maintenance practices being applied CAP-wide by 2015.	<ol style="list-style-type: none"> <li>1. Compile best management practices (BMPs) for reptile-friendly drain maintenance practices.</li> <li>2. Provide BMP “newsletter” annually to drainage superintendents.</li> <li>3. Present at annual meetings of drainage superintendents.</li> <li>4. Conservation authorities make appropriate recommendations during drain maintenance approvals process.</li> </ol>	2015	<ol style="list-style-type: none"> <li>1. CCC and the Greening Partnership can work together to compile best management practices for reptile-friendly drain maintenance practices for incorporation into the BMP Guide to be used by Chatham-Kent.</li> <li>2. This action is specific to CCC and not addressed in this strategy</li> <li>3. This action is specific to CCC and not addressed in this strategy</li> <li>4. This action is specific to Conservation Authority staff not involved in the Greening Partnership and, as such, is not addressed in this strategy.</li> </ol>
11. Buffers of native vegetation of >1 m width on each side established along 50 km of watercourses by 2020, and included in all new engineers reports.	<ol style="list-style-type: none"> <li>1. Profile progressive practices and disseminate to high priority target audiences.</li> <li>2. Advocate for strengthening of provincial guidelines (BMPs) to facilitate this objective. <ol style="list-style-type: none"> <li>a. Work with OMAF and Chatham-Kent to lead process.</li> <li>b. Hold webinar or series of webinars to inform community on issue.</li> </ol> </li> </ol>	2020	<ol style="list-style-type: none"> <li>1. CCC and the Greening Partnership can continue to work together to amalgamate/create educational materials related to riparian vegetation. This material can be used by all landowner stewardship programs including the Greening Partnership, CAs and CCC.</li> <li>2. This action is specific to CCC and not addressed in this strategy. <ol style="list-style-type: none"> <li>a. Given the length of municipal drains in Chatham-Kent, the participation of CK in this initiative will be crucial to its success. The Greening Partnership’s Agricultural Specialist should also be involved.</li> <li>b. Chatham-Kent can promote these webinars on the Conservation Collaboration webpage, e-newsletter and through social media sites.</li> </ol> </li> </ol>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>c. New drainage reports include &gt;1m buffer.</p> <p>3. Advocate for increased support for Environmental Farm Plan program.</p> <p>a. Work with OMAF to facilitate process.</p> <p>4. Hold on-site “best practices” demonstration events hosted by local landowners (one annually, work with local agricultural organizations).</p> <p>a. Tie-in to local OSCIA annual meetings.</p> <p>5. Secure funding with local partners for implementation of plantings.</p> <p>6. Lobby for implementation of ALUS-type program province wide.</p>		<p>c. The Implementation Strategy includes the creation of a Best Management Practices Guide in cooperation with the Greening Partnership, Chatham-Kent and CCC. Training workshops are also recommended in order to ensure BMPs are incorporated into drain reports.</p> <p>3. This action is specific to CCC and not addressed in the Implementation Strategy.</p> <p>4. This demonstration event could be coordinated with the bus tours or as a separate event. The Greening Partnership Agricultural Specialist could work with CCC to organize and host this event</p> <p>5. CCC and the Greening Partnership will continue to work together to secure funding for plantings.</p> <p>6. This action is specific to CCC and not addressed in the Implementation Strategy</p>
12. Phragmites control projects expanded to additional coastal wetland sites at identified wetlands, natural watercourses and drains (and other wetlands) with significant species along Lake St. Clair covering [appropriate quantitative target t.b.d.] ha by 2020.	<p>1. Lobby federal government to permit use of “safe” herbicides (e.g., Rodeo) to use over water for Phragmites control annually until achieved.</p> <p>2. Identify highest priority wetland biodiversity hotspots by 2015 and prioritize invasive species control activities to take place at those locations.</p>	2015 and ongoing	<p>1. Lobbying efforts with respect to the use of safe herbicides will be left to Carolinian Canada.</p> <p>2. The improved database, updated natural heritage inventory and on-site inspections will assist with identifying the highest priority wetland biodiversity hotspots. The Greening Partnership and Chatham-Kent can assist with this effort.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>3. Implement Phragmites control projects at priority sites starting in 2014 using BMPs and latest techniques.</p> <p>4. Provide outreach materials re: Phragmites to wetland owners (e.g., whose interests are for waterfowl hunting).</p>		<p>3. Greening Partnership staff may be able to provide resources, grant money or coordinate volunteers to assist with Phragmites control. If volunteers are required, the enhanced web page and e-newsletter could be used to advertise the event.</p> <p>4. Greening Partnership staff may be able to provide resources or grant money to assist with the creation and dissemination of outreach material. The enhanced web page and e-newsletter could be used to post this material.</p>
13. Two new, interested landowners per year engaged in (native-, multispecies, shrub dominated) hedgerow establishment projects by 2018.	<p>1. Identify opportunities for hedgerow planting projects on private lands.</p> <p>a. Approach partners such as the Greening Strategy, 50M Trees, St. Clair Conservation Tree Planting Program and Ontario Power Generation to secure resources for planting projects.</p> <p>b. Recruit local landowners for hedgerow planting projects through St. Clair Conservation Tree Planting Program and CCC's Landowner Leaders program for hedgerow planting projects.</p>	2018	<p>1. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced database and CAPs will be used to identify priority sites for restoration. The contract forester and the Greening Partnership staff will also be of assistance in identifying these locations based on their on-site experiences.</p> <p>a. The Greening Strategy will continue to work with their Chatham-Kent partners to secure resources for restoration projects. The provision of additional funding for two new staff positions will enable the Greening Partnership to expand their grant requests and landowner contact.</p> <p>b. The two identified programs are not administered by Chatham-Kent and, as such, are not included in this implementation strategy.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>c. Include signage, demonstration sites and other communication tools as educational component for the hedgerow planting projects.</p> <p>d. Identify priority sites for projects.</p> <p>2. Develop programs to educate, bring awareness, and outreach regarding values and advantages of hedgerows.</p> <p>a. CCC's Landowner Leaders program.</p> <p>3. Investigate possible criteria for zoned buffer along edges of farm properties.</p> <p>a. Investigate possible use of geophysical barriers to removal of new buffers.</p> <p>b. Support "ecological goods and services" incentive programs (modeled on ALUS) to engage farmers.</p>		<p>c. Signage recommended as part of the existing Greening Partnership as well as potential collaboration with CCC With the landowner's agreement, a sign is placed along their frontage identifying them as a watershed steward.</p> <p>d. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced database and CAPs will be used to identify priority sites for restoration.</p> <p>2. Greening Partnership, CK contract forester and SCRCA Stewardship Program will continue to provide education with respect to the values and advantages of hedgerows.</p> <p>a. Landowner Leaders is a CCC program and, as such, is not included in this implementation strategy however, Landowner Leaders is collaborative and complementary to existing programs. CCC tries to ensure that interested landowners are linked to appropriate experts, local agencies and funding resources.</p> <p>3a. The strategy does not recommend this type of zoning however, the Planning Department could explore the use of such a zone. It may be difficult to implement/enforce.</p> <p>b. The Implementation Strategy does not recommend an incentive program, such as ALUS, at this time.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
14. Five interested landowners engaged in strategic forest buffer enhancement by 2018.	<p>1. Identify opportunities for forest buffer planting projects on municipal and private lands.</p> <p>a. Approach partners such as the Greening Strategy, 50M Tree Program, Ontario Power Generation to secure resources forest buffer planting projects.</p> <p>b. Recruit local landowners through CCC's Landowner Leaders program for forest buffer planting projects.</p> <p>c. Identify priority sites for forest buffer planting projects based on opportunities based on ecological values.</p>	2018	<p>1. <b>Municipal lands</b> – the database will identify publicly owned land and overlay that information on the CAP priority restoration sites to determine if there are any immediate opportunities to enhance forest cover on municipal lands. Even if no municipal lands are within the priority restoration areas, this information will still be valuable in prioritizing reforestation efforts on municipal property.</p> <p><b>Private lands</b> – the database will assist in identifying private lands that are within the priority restoration areas identified by the CAPs. Within the agricultural community, the Greening Partnership and contract forester can utilize this information when prioritizing landowners to contact. The database will also assist the Greening Partnership in identifying areas where restoration has taken place and where it is needed which will assist in documenting information for grant applications.</p> <p>a. CCC can continue to work with these partners to secure resources for restoration projects.</p> <p>b. The Landowner Leaders Program is specific to CCC and, as a result, no implementation actions are recommended in this strategy.</p> <p>c. The updated natural heritage inventory will assist staff in getting a detailed understanding of the existing features within Chatham-Kent. This information, along with the enhanced database and CAPs will be used to identify priority sites for restoration.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>d. Include signage, demonstration sites and other communication tools as educational component for each project.</p> <p>2. Support “ecological goods and services” incentive programs (modeled on ALUS)</p>		<p>d. Signage recommended as part of the existing Greening Partnership as well as potential collaboration with CCC With the landowner's agreement, a sign is placed along their frontage identifying them as a watershed steward.</p> <p>2. The Implementation Strategy does not recommend a financial based incentive program, such as ALUS, at this time.</p>
15. Retain existing forest cover.	<p>1. Support tax relief, carbon credits, municipal policies, legislation, regulations, guidelines and incentives for private landowners that prevent the loss of existing forest cover.</p> <p>a. Support conservation by-law that promotes good, sustainable forest management practices.</p> <p>b. Support policy or programs that encourage retention of mature forests and long-term protection of forests (e.g. incentive programs, conservation easements).</p>	2013 and beyond	<p>1. CK Official Plan policies already address the Provincial Policy natural heritage requirements from a planning perspective. Overview of existing policies and programs by the Sustainability Review Team will assist in eliminating programs that are road-blocks to natural heritage conservation and enhancement. Landscaping and Tree Preservation Guidelines will assist CK staff in protecting existing tree cover and enhancing tree cover through development proposals. Implementation Strategy includes recommendation that Greening Partnership investigate opportunities for implementing a carbon offset donation program.</p> <p>a. Chatham-Kent has opted for a policy rather than tree cutting by-law.</p> <p>b. Enhanced Greening Partnership will enable LTVCA staff to reach more landowners with education, advice and assistance to protect existing mature forests and to enhance existing features. Tree preservation guidelines will assist in protecting trees from damage/destruction during the construction phase.</p>

Objective	Strategic Action	Timeline	Implementation Strategy
	<p>c. Support effective “ecological goods and services” incentive programs (such as ALUS).</p> <p>d. Support changes in taxation structure (federal and municipal) to reflect ecological services that forest cover provides to society and to reduce economic advantages of clear-cutting woodlots.</p> <p>2. Promote good forest management practices and the social, economic and ecological values of forests through outreach materials, newsletters, letters to the editor, workshops and events.</p>		<p>c. The Implementation Strategy does not recommend a financial based incentive program, such as ALUS, at this time.</p> <p>d. Not addressed in this policy. Other stakeholders, including ALUS Ontario, are lobbying the Province to undertake such changes. While Chatham-Kent can support the efforts of these other stakeholders, it is recommended that Chatham-Kent focus their efforts on the recommended implementation actions within this strategy.</p> <p>2. Maintaining Chatham-Kent's contract forester and enhancing funding for the Greening Strategy will allow for continued promotion of good forest management practices and values. The e-newsletter can contain information related to good forest management practices and provide information related to forest-focused events.</p>

## Summary

The Municipality of Chatham-Kent, through their Community Strategic Plan and Official Plan policies, have identified the connection between a healthy and sustainable natural environment and a healthy and prosperous social and economic environment. The commitment to the natural environment is further evidenced through their Greening Partnership initiative and the efforts of the Lower Thames Valley Conservation Authority to provide funding and resources to those landowners who are interested in natural heritage conservation as well as education and outreach in the community. The municipality has the ability to work with many sectors of the community to enhance the natural heritage system in the rural and urban areas of Chatham-Kent. Action must be taken now to stop the unsustainable removal of natural heritage features from the landscape. At the same time, action is also required to restore natural heritage features and functions that have been previously altered in order to re-establish many of the natural features that have been lost.

The Natural Heritage Implementation Strategy identifies a number of actions that, if taken, will assist in building relationships with key partners, provide resources to those partners who are already positioned to make a significant difference on the landscape and to build a culture of natural heritage conservation in Chatham-Kent. These efforts will benefit all members of society by enabling the municipality to enhance the natural heritage system for current and future generations. The Strategy has identified how the majority of the Conservation Action Plan Strategic Actions can be implemented through continued and new partnerships. The agricultural community has a large role in the maintenance and enhancement of natural heritage systems given that the vast majority of land within Chatham-Kent is in agricultural production. Continued, and enhanced, partnerships with the agricultural community will be the key to the success of the natural heritage system in Chatham-Kent. The benefit to the agricultural community of a healthy and resilient natural heritage system cannot be understated and they will benefit, as will everyone in Chatham-Kent, from a more sustainable approach to natural heritage conservation.

Figure 1

CAROLINIAN LIFE ZONE: Conservation Plans



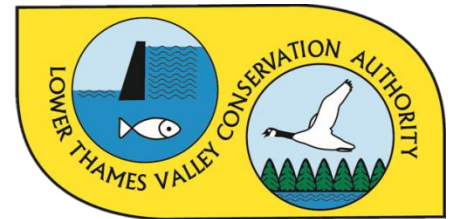
# LOWER THAMES VALLEY CONSERVATION AUTHORITY

Business Plan

FEBRUARY, 2014



Greening Partnership



## **Mandate**

The Lower Thames Valley Conservation Authority (LTVCA) is a watershed-based partner, working with the local community providing services and information to efficiently protect and enhance the environment for present and future generations.

LTVCA has jurisdiction over watershed of the Thames River including all streams draining into it from Delaware to Lake St. Clair; and the watersheds of streams draining directly into Lake Erie, from the Talbot Creek watershed in the east, to the Two Creeks watershed in the west.

## **Capacity**

The LTVCA is one of 36 Conservation Authorities in Ontario. These watershed based organizations have variable capacity, often limited by the ability of the local tax base to support a program that adequately meets the resources management needs of the watershed under their jurisdiction. As a result some regions have large areas to manage with relatively few staff. LTVCA is one such region, having a jurisdiction of some 3,275 km<sup>2</sup> - but only 16 full-time staff to implement the program. By comparison, the Essex Region Conservation Authority's area of jurisdiction is 1600 km<sup>2</sup> however nearly double the number of staff are employed. Organizational capacity is directly related to the numbers and expertise of staff.

## **Performance**

In 2006 the Municipality of Chatham-Kent provided special funding support to the LTVCA, specifically to create 2 new positions that work towards the "greening" of Chatham-Kent. Since its inception, the Greening Partnership, with an annual municipal investment of under \$150,000, has brought more than \$1.8 million additional dollars into Chatham-Kent to support reforestation and other related

stewardship activities. Currently, approximately 80 acres per year are naturally restored through this partnership.

As a result of the deliberations from the Natural Heritage Implementation Strategy committee, a consensus has emerged that council preferred an incentive-based approach rather than a regulatory one, to the issue of forest clearing in the municipality. In order to effectively offer incentives, existing programs must be expanded and additional program support is required.

It is respectfully submitted that the Greening Partnership with the Lower Thames Valley Conservation Authority is the obvious choice to implement this expanded program.

## **Proposal**

To address the continued loss of forest cover in the region, additional staff resources would expand the capacity of the existing Greening Partnership. Two new positions would be created: a Land Stewardship Technician to directly assist landowners in stewardship activities including afforestation, soil conservation or establishing other land uses such as Tall Grass Prairie; and a GIS Technician to support the monitoring of activities, and tracking and reporting of results.

These additional positions will provide the necessary support to successfully implement the Natural Heritage Implementation Strategy. For instance, there are literally hundreds of grant opportunities that are available to non-profit organizations. Additional staff will be utilized to access these grants, work with other partners and interest groups, monitor the past and current landscape conditions, and assist with data collection to properly report back on the program success.

An important component to this Strategy is education. If we are to properly engage the agricultural community, we need to involve them in projects and events. The New staff will develop these relationships by attending farm meetings with groups such as: the Kent Federation of Agriculture and Chatham-Kent Christian Farmers. By creating contacts, new projects and funding

opportunities will serve as a means to educating landowners the importance of a healthy watershed and ultimately protection of our existing natural heritage features.

## **Summary**

Last year LTVCA retained a new General Manager - Don Pearson. This new leadership has brought a fresh new outlook to the organization, and more than thirty years of practical watershed based experience. The organization is going through positive changes, with a new focus on water quality and land stewardship. The Greening Partnership staff is now being supported through professional development, training and program advocacy.

In order to properly manage our region's natural resources, a commitment is needed to the expansion of the current Greening Partnership, providing program staff with the necessary resources to address this preferred policy approach.

It is projected that the addition of staff to this program will significantly increase the amount of grant dollars brought into this region. Potentially, the acreage reforested or otherwise restored could increase to 150 acres annually, nearly doubling the impact of the current program.

# Financial Plan

\$160,000/year is needed to create these two new positions. This amount would enable program staff to be compensated at appropriate rates within the LTVCA pay grid, and would include standard LTVCA benefits.

EXISTING GREENING PARTNERSHIP POSITIONS	2013	2014
1) <i><b>Environmental Project Coordinator</b></i>	\$66,000/year	\$68,000/year
manages direction of program supervises staff, contract positions, co-ops, students and volunteers seeks out grants and fundraising opportunities		
2) <i><b>Environmental Technical Assistant</b></i>	\$50,511/year	\$51,841/year
administers all LTVCA tree orders assists Landowners with projects assists Coordinator with grant applications		
* includes salary and benefit costs		
vehicle, training etc.	\$30,000	\$30,000
Program delivery expenditures	<u>\$146,511</u>	<u>\$149,841</u>
Chatham-Kent Greening Program Support	\$146,511	\$149,841
Project Costs	<u><b>\$348,000</b></u>	<u><b>\$350,000</b></u>
<b>Third Party funding</b>	<b><u>(\$348,000.00)</u></b>	<b><u>(\$350,000)</u></b>
<b>Annual Surplus/Deficit</b>	<b><u>\$0.00</u></b>	<b><u>\$0</u></b>

<b>NEW PROPOSED POSITIONS</b>	<b>2013</b>	<b>2014</b>
1) <b><i>Land stewardship assistant</i></b>		\$52,000/YEAR*
assists Greening Partnership with grant writing work with landowners, farmers, and industry to Green Chatham-Kent		
*includes salary and benefit, admin costs		
2) <b><i>GIS Technician</i></b>		\$52,000/year
compiles all data for CK and LTVCA regarding Natural Heritage Inventories, woodlots, and land stewardship projects		
*includes salary and benefit costs		
vehicle, training, computer equipment		24,000
program start up costs		30,000
program delivery expenditures		128,000
Project Costs		<u>158,000</u>
Additional Chatham-Kent Greening Program Support		\$160,000
ANTICIPATED GRANTS (80+ ACRES)		\$126,000
Annual Surplus/(Deficit)		0
<b><u>TOTAL Third Party Funding</u></b>		<b><u>\$472,763</u></b>

# Supporting Documents

2013 CONTRIBUTORS	AMOUNT
Federal Economic Development	\$ 24,289.00
Essex Stewardship Council	\$ 15,000.00
Ducks Unlimited	\$ 5,000.00
Farm Credit Canada	\$ 8,500.00
Ministry of Natural Resources	\$ 11,000.00
TD Bank	\$ 15,000.00
TREE CANADA	\$ 7,500.00
Elgin Stewardship Council	\$ 5,000.00
TD Bank	\$ 1,000.00
STEWARDSHIP KENT	\$ 12,000.00
SCRIBENDI	\$ 500.00
UNION GAS	\$ 2,000.00
GDF Suez	\$ 5,000.00
TD Bank	\$ 2,500.00
TD Public Health Unit	\$ 5,000.00
Hydro One	\$ 5,000.00
Ducks Unlimited	\$ 2,500.00
Ducks Unlimited	\$ 3,000.00
UNION GAS	\$ 1,000.00
NWTF	\$ 10,000.00
CK Parks	\$ 4,000.00
OMAF	\$ 113,000.00
Ducks Unlimited	\$ 2,500.00
UNION GAS	\$ 1,000.00
CK Trails	\$ 12,000.00
Ducks Unlimited	\$ 3,273.61
ONTARIO POWER GENERATION	\$ 27,000.00
TREES ONTARIO	\$ 45,000.00
<b>TOTAL</b>	<b>\$ 348,562.61</b>

<b>2013 In-kind supporters and Volunteers</b>		
<b>GROUP</b>	<b># OF PERSONS</b>	<b>HOURS/PERSON</b>
Friends of Rowsom	15	6
Chatham Horticultural Society	8	5
Scribendi Inc.	10	4
Reglan Society	5	4
University of Guelph Ridgetown Campus	15	2
Dajcor Aluminum	20	1
Friends of Lighthouse Cove	8	4
TD Tree Days	20	5
New Fairfield Moravians	3	2
Union Gas	15	4
Sydenham Field Naturalists	7	2
Blenheim Brownies	20	2
Chatham Community Living	8	1
<b>SCHOOLS</b>		
Chatham-Kent Secondary School	24	2
Lambton Kent Secondary School	50	2
Merlin Public School	20	1
École Secondaire de Pain Court	25	2
Ursuline College	30	2
Harwich Raleigh Public School	15	1
King George VI	15	1
Queen Elizabeth	15	1
Tecumseh Public School	180	10.5
St. Joseph School, Tilbury	15	2
Ridgetown District High School	16	1.3
Tilbury High School	16	2
John McGregor Secondary School	31	5
<b>TOTAL HOURS</b>	<b>606</b>	<b>2950.8</b>