# COUNTY OF LAMBTON Integrated Community Sustainability Plan



*Caring* ♦ *Growing* ♦ *Innovative* 

## **Acknowledgements**

The authors of the Integrated Community Sustainability Plan (ICSP) for the County of Lambton wish to thank the following for their continuing encouragement, comments and assistance in developing the ICSP document.

Trio Environmental Services

Ron Van Horne, CAO

Jim Kutyba, P. Eng., General Manager, Infrastructure & Development Services Division

Robert Tremain, General Manager, Cultural Services Division

David Cribbs, General Manager, Corporate Services Division

Chris Doyle, General Manager, Long-Term Care Division

John Innes, General Manager, Financial Services Division

Andrew Taylor, General Manager, Public Health Services Division

Margaret Roushorne, General Manager, Social Services Division

David Posliff, Manager, Planning and Development Services Department

Marlene Wood, General Manager, Tourism Sarnia-Lambton

Maike Luiken, Dean of Applied Research and Sustainability, Lambton College

Jenna Simpson, School Outreach Program, Final Report, UWO, Ivey School Sustainability Assignment, Case Studies

## **Attributions**

#### **Photos**

- Lambton County Archives, Library Headquarters, Wyoming
- Tourism Sarnia-Lambton archives

© 2013, The Corporation of the County of Lambton. All Rights Reserved. The preparation of this sustainable community plan was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

#### **Contents**

Acknowledgements	2
Attributions	2
Executive Summary	4
Community Background	9
Introduction	13
The Lambton Community	13
First Nations Communities	14
The Role of the Federation of Canadian Municipalities (FCM)	15
Collaborative Efforts	16
Definition of Sustainability	17
Principles of Sustainability	19
County of Lambton - Strategic Direction	21
CSP Objectives, Goals, Targets	22
1. Integration of the ICSP	23
2. Linking the ICSP with Existing Plans	23
3. Community Consultation and Partnership Process	24
4. Measurement of Progress	25
5. Stakeholder Engagement	25
6. Communication and Reporting	26
7. Future Funding Opportunities	26
8. Schedule for Review of ICSP	26
Recommendations	27
Bibliography	28
References	30
APPENDICES	31
APPENDIX 1: Public Consultation and Stakeholder Input	32
APPENDIX 2: Questionnaire	36
APPENDIX 3: ICSP PowerPoint Presentation	38
APPENDIX 4: Culture as the Fourth Pillar of Sustainability	39
APPENDIX 5: "Think, then Act, then Measure" Adaptive Management Approach - Sustainability Toolkit of the Association of Municipalities of Ontario (AMO)	41
APPENDIX 6: The Natural Step Concept of "Backcasting" and Public Participation	42
APPENDIX 7: FCM Sectors Applied to Lambton County	45
APPENDIX 8: ICSP Implementation: Modeling Examples by Sector	51
APPENDIX 9: BSI Sustainability Initiatives - Survey Results	58

## **Executive Summary**

The County of Lambton and the Lambton Community have a strong record of ongoing sustainable development. Examples can be found in a number of initiatives that fall under the six principles of sustainability identified in this document. A few examples under each principle give a flavor of the local sustainable community:

- 1. Quality of Life Supports:
  - a. Cultural Strategic Plan
  - b. Class 'A' Art Gallery (Judith & Norman Alix Art Gallery)
  - c. Oil Museum of Canada; Oil Heritage Conservation District
  - d. First Fridays
  - e. Art Walk
  - f. Community Fall Fairs
- 2. Enhance Economic Growth:
  - a. Sarnia-Lambton Economic Partnership
  - b. UWO Research Park
  - c. Tourism Sarnia-Lambton
- 3. Foster Social Supports:
  - a. Circles
  - b. Inn of the Good Shepherd
  - c. Goodwill Sarnia-Lambton
  - d. Affordable Housing Plan for the Communities of Lambton County
  - e. Community Homelessness Initiatives Network
  - f. Poverty Reduction Network
- 4. Environmental Assessment:
  - a. SLEA (Sarnia-Lambton Environmental Association)
  - b. Bluewater Sustainability Initiative
  - c. Suncor Sustainability Centre
  - d. Ontario NativeScape

#### 5. Disaster Resilience:

- a. CAER (Community Awareness Emergency Response)
- b. Municipal Disaster Plans
- c. Annual Municipal Readiness Exercises

#### 6. Participating Process:

- a. Community Roundtable
- b. Environmental Action Plan

Development of an Integrated Community Sustainability Plan (ICSP) for the County of Lambton had its genesis in the federal gas tax funding agreement (2007) between the Association of Municipalities (AMO), which represents municipalities in Ontario, and the Federal Government. Partial funding for the preparation of the ICSP was provided by the Federation of Canadian Municipalities (FCM) through the Green Municipal Fund (GMF).

Over the life of the Federal Gas Tax funding agreement municipalities are required to develop Integrated Community Sustainability Plans (ICSP) unless they have a current Official Plan in place. The agreement defines an ICSP as:

A plan developed through public consultation that identifies a vision and includes environmental, social and economic goals and targets for the community. The plan also describes short, medium, and long-term strategies for reaching its goals and targets, and integrates all areas of municipal concern, such as energy use, neighbourhood and transportation planning and waste and water management.

An ICSP is intended to accelerate the shift in local planning and decision making toward a more long-term, coherent and participatory approach. With an ICSP in place, municipalities are able to leverage funding (grants and below-market loans) under the Green Municipal Fund for plan development, feasibility studies/field tests and projects in five sectors of municipal activity: brownfields, energy, transportation, waste and water.

As the ICSP development progressed, it was evident that there are a number of initiatives (Strategic Plan, Cultural Plan, Natural Heritage Study, Official Plan, etc.) that would logically fall under the larger "umbrella" of an ICSP. As a result, the ICSP, rather than including a number of specific metrics, developed into a document that ties together and attempts to break down the silos that naturally develop within a large organization by getting the corporation to think as a whole.

The two-tier structure of the Lambton community is unique in many ways and presents an excellent opportunity to demonstrate the advantages of developing complementary community sustainability initiatives. The required value of collaboration is well established in the community.

Integrated Community Sustainability Plans are not prescriptive plans but are project reference documents meant to be utilized by those initiating projects to ensure that the philosophy, targets and goals of a sustainable community are achieved. Techniques available to achieve these outcomes are explained and discussed within the ICSP document.

## Sustainability

There are many different definitions and interpretations of "sustainability" or "sustainable development". The definitive statement is "development that meets the needs of the present generation without compromising the ability of future generations to meet their own need" – *United Nations Brundtland Commission*, 1987.

A more succinct definition was presented by an African delegate to the Johannesburg (Rio + 10) conference: "Enough for all forever".

In this context, sustainable communities are "communities that use their resources to meet current needs while ensuring that adequate resources are available for future generations. They seek a better quality of life for their residents while maintaining nature's ability to function over time. This involves a reconciliation of ecological, social and economic imperatives." – David Bell and Michelle Grinstein, "Sustainable Urban Communities in Canada: From Rio to Johannesburg", 2001.

Sustainability is primarily an economic imperative: "business-as-usual" is becoming economically unsustainable and irreconcilable with ecological and social imperatives.

The definitions of sustainability from various sources were reviewed. Initially, the FCM definition was accepted as the definition of record for the development of the Lambton ICSP. The three pillars of sustainability defined by the FCM are the environmental, economic and the social impacts/outcomes of projects undertaken in the community.

With the development of a Cultural Strategic Plan for the County of Lambton, culture was recognized as an essential fourth pillar of integrated community sustainability. The addition of culture to the ICSP parallels recent international recommendations and was the preferred definition for the Lambton ICSP.

The County of Lambton believes creativity, culture and quality of place are fundamental to building a sustainable, prosperous and diversified economy and providing a superior quality of life for our residents.

The United Cities and Local Governments 3<sup>rd</sup> World Congress held in Mexico City, November 2010) called upon the United Nations, development agencies and the international community to:

"Explicitly integrate culture into programs on sustainable development."

The County utilized a "four pillar" version of the FCM definition of sustainability in the development of its Integrated Community Sustainability Plan.

The Lambton ICSP is not a "Point in Time" document but rather a reference guide to assist those responsible for future projects in the identified sectors to work towards the establishment of a truly integrated sustainable community.

An ICSP is an over-arching framework or approach that evaluates community initiatives through the four lenses of sustainability, with a long-term perspective. There are several key benefits to an ICSP:

- Drives integration of separate but common initiatives
- Facilitates the sharing of knowledge and solutions within and among communities
- Attracts, energizes and focuses community participation
- Prepares the community for future opportunities and adaptive change

An ICSP also covers the key sustainability requirements of the Federal Gas Tax (FGT) Municipal Funding Agreement (2005):

Municipalities shall "... demonstrate through its existing planning instruments and processes, or through the creation of new planning documents, that the municipality has:

- A coordinated approach to community sustainability (e.g. linkages of various plans, planning and financial tools that contribute to sustainability objectives);
- Reflected and integrated social, cultural, environmental and economic sustainability [the "four pillars"] objectives in community planning;
- Collaborated with other municipalities where appropriate to achieve sustainability objectives;
- Engaged residents in determining a long-term vision for the municipality.

## **Community Background**

In "municipal" terms, Lambton County was created on May 30, 1849. Although initially known as the United Counties of Kent, Lambton, and Essex, that union was dissolved four years later. In 1853, the first meeting of Lambton County Council was held in Port Sarnia, and since September 30, 1853, the County has enjoyed the full status of a County Council.

Although First Nations settlements existed across the County, European settlers were slow to arrive due to the density of the local forests and the presence of large swamps, heavy clay, and the scourge of malaria. Settlement was therefore sparse and generally limited to the banks of principal watercourses in the region. Settlement greatly accelerated, however, with the discovery of oil, used first by local natives, then by European settlers, in the 1850's.

Lambton County is the site of North America's first commercial oil field, established at Oil Springs in 1858. The resulting petrochemical industry, established during World War II, is the most important single sector of Lambton County's economy. Located along the St. Clair River from Sarnia and into St. Clair Township, the "Sarnia-Lambton Petrochemical Complex" is home to a number of major petrochemical industries that process oil from Alberta.

Dawn-Euphemia Township in southeast Lambton County is host to North America's largest natural gas storage facility, serving 1.3 million residential, commercial and industrial customers in more than 400 communities across Ontario.

Sarnia, the largest urban area of Lambton County, is located at the mouth of the St. Clair River. Provincial Highway 402 leads to the two-span Blue Water Bridge that crosses the St. Clair River at Point Edward, and forms an international connection to Port Huron, Michigan and, further to I-94 and the I-65 NAFTA gateway through the U.S. to Mexico. The Blue Water Bridge crossing is currently the second busiest Ontario International crossing for commercial vehicles (trucks) and fourth busiest for total vehicles.

The St. Clair River is also traversed by two passenger/car/truck ferries further south at Sombra and Walpole Island. A rail tunnel capable of moving double-stack trains along the vital Montreal to Chicago rail corridor is located at Sarnia and runs underneath the St. Clair River.

Four First Nation communities are within Lambton County: Aamjiwnaang, Kettle Point, Stony Point and Walpole Island.

Tourism is an important industry in Lambton County, especially along the Lake Huron and St. Clair River shorelines. Lambton Shores depends almost entirely upon the seasonal industries of tourism and agriculture for its well-being. Grand Bend, Port

Franks, Ipperwash and the Pinery Provincial Park, located in Lambton Shores are especially popular tourist destinations attracting thousands of people each weekend throughout the summer to long, uninterrupted beaches. Rock Glen Conservation area near Arkona in Lambton Shores is situated along the Ausauble River and is internationally known for its Devonian Era fossils. There are also popular conservation areas and parks operated by the Township of St. Clair, the City of Sarnia and the St. Clair Region Conservation Authority along the St. Clair River.

Agriculture sustains many small communities in rural Lambton County. The three most common crops are grain corn, wheat, and soybeans, although hay and sugar beets are also planted. Many farmers raise cattle for beef or dairy along with hogs and chickens in addition to growing crops, including the recent introduction of purpose-grown energy crops such as switchgrass and miscanthus.

Quality of Life is considered by the community to be Lambton County's greatest strength. The Lambton County Strategic Plan promotes the improvement of quality of life in the County, the fostering of strong healthy communities and the creation of environments that support independence and personal development.

There are strong links amongst urban, suburban, rural and First Nations communities, the natural heritage and cultural systems, the economy and other elements leading to a better quality of life for all citizens. The County Cultural Plan is an excellent example of efforts underway to promote and protect Lambton's cultural and heritage elements.

The County Official Plan promotes patterns of new development that minimize disruption and protect the identity of established communities. Local municipal Official Plans respect and build upon the more general policies contained in the County Official Plan. Growth is directed to maximize accessibility to, and make efficient use of, existing and future educational, recreational, health care and social facilities and services. New growth should be located contiguous to viable communities to allow a desirable level of social interaction for new and existing residents.

The County of Lambton is comprised of diverse areas, including rural areas, rural settlements, urban settlements, urban centres and First Nations communities. The protection of existing investments in infrastructure by maximizing their use is desirable. Accordingly, a development strategy has been prepared to manage growth throughout the County that will complement the proposed Integrated Community Sustainability Plan.

To build on the local agricultural and petrochemical base as well as further the goal of sustainability, the community is focused on moving towards a bio-hybrid economy. Ethanol production is an example of a strategy that continues to expand through the efforts of the local campus of the University of Western Ontario Research Park.

Telecommunications infrastructure continues to underpin the development of a County-wide "smart communities" initiative in the Lambton Community.

Demographics: (Census (2006) and Statistics Canada (2007))

- Lambton County is home to 128,204 residents.
- Lambton has a greater percentage of adults aged 50 years and older than the rest of Ontario.
- Over the last three census periods, there has been a consistent loss of young adults aged 20-29 in all municipalities.
- Lambton has a lower proportion of recent immigrants compared to the province; visible minorities represent only 2.7% of the population.
- Lambton County's Aboriginal population accounts for 4.6% of the total population, compared to a provincial average of 2.0%.
- 2.4% of the population reports that their mother tongue is French or French and English.
- While Lambton has a lower proportion of university graduates compared to Ontario, it has a higher proportion with college or apprenticeship credentials.
- 6.5% of individuals in Lambton County are classified as having low-income status in 2005, including 7.8% of children and youth under 17.

Further detail on the above demographics can be found at the link to the Demographic Profile Report noted in the References.

## **The Planning Process**

#### **Work Plan and Methodology**

The County ICSP is a comprehensive, integrated, sustainability approach that encompasses the whole of Lambton County. This allows local municipalities in Lambton County to leverage the completed County ICSP to assist them in the preparation of their own local Integrated Community Sustainability Plans as required. For example, the City of Sarnia has undertaken the development of an ICSP which complements the County Plan in the key sectors of transportation, waste, energy, water and brownfields.

#### The Association of Municipalities of Ontario ICSP Toolkit

The AMO Toolkit provides thirteen distinct "tools" recognizing that there is no single "right" approach to increasing sustainability since all municipalities are unique. The most applicable tool for Lambton's ICSP is Tool #8 (An Option to ICSPs: Adopting An Adaptive Management/Learn-By-Doing Approach). Tool #8 builds on an alternative approach for the implementation of the ICSPs and is based on the concept of "Think, then Act, then Measure".

#### Methodology

Integrated Community Sustainability Plans (ICSPs) are not intended to be prescriptive documents. There are specific, defined metrics to be applied to community sustainability projects. The best methods and means for measuring progress towards achieving stated goals and objectives will be developed by those directly responsible for the specific projects having regard for the Principles of Sustainability. Utilizing this "grass roots" approach to developing metrics will make for a stronger, integrated focus on sustainability where it counts and has the greatest impact.

#### **Existing Community Initiatives**

The ICSP is intended to complement existing initiatives, plans and projects that include the objective of creating a sustainable community. In Lambton, there are a number of existing initiatives that fall into this category:

- County Official Plan
- County Strategic Plan
- County Cultural Plan
- Lambton County Active Transportation Plan as well as initiatives from other sectors such as:
- Bluewater Sustainability Initiative Community Benchmarking Project
- Sarnia-Lambton Economic Partnership
- Sarnia-Lambton Environmental Association
- Lambton College Department of Sustainability
- Tourism Sarnia-Lambton

#### Introduction

## **The Lambton Community**

Lambton is a two-tier Ontario community with a strong sense of cooperation and collaboration, evident in the many initiatives that have occurred over the history of the area. Many of these community initiatives incorporate and reference the principles of sustainability in their vision and mandate:

- The Bluewater Sustainability Initiative (BSI)
- The Sarnia-Lambton Economic Partnership (SLEP)
- County of Lambton Community Development Corporation (Research Park)
- Bluewater Power Inc.
- Tourism Sarnia-Lambton
- Sarnia-Lambton Chamber of Commerce

The County and its local municipalities have a long-standing history of land use planning through Official Plans. In addition, the Strategic Plan of the County of Lambton includes significant sustainable community initiatives. The Lambton County Integrated Community Sustainability Plan (ICSP) will not replace these existing initiatives. Rather, it will complement them in a manner that brings them together with a focus on sustainability that will apply to future community undertakings, helping to achieve a sustainable community.

The complementary ICSPs being prepared locally focus on, and benefit from, the similarities and differences of Lambton's eleven local municipalities which include a mix of urban, suburban and rural settlements. In addition, the Lambton community includes three First Nations. The two-tier Lambton community is an exciting mix of rural, urban and suburban settlements with a local heritage shared with the First Nations.



FINAL Integrated Community Sustainability Plan (ICSP) February 2013

### **First Nations Communities**

"In First Nation traditions there is an ancient wisdom that says that what we do today affects the lives of our descendants.....for the next seven generations"

The Aamjiwnaang (Chippewas of Sarnia First Nation), the Chippewas of Kettle Point and Stony Point First Nations are all members of the Anishinabek territory. These groups embrace the tradition of "Walking with Seven Generations", a philosophy that incorporates many of the same principles as our Integrated Community Sustainability Plans and in particular recognizes Culture as an essential part of community sustainability – for seven future generations. First Nations value culture and heritage as principal pillars of their communities.

Walpole Island (Bkejwanong - "where the waters divide") First Nation is one of the first aboriginal communities to take leadership in the field of environment and sustainable development.

Canada's First Nations are taking a leading national and international position in developing green, sustainable community practices in housing and infrastructure and sharing their ideas with international aboriginal communities in the U.S., Australia and New Zealand.



## The Role of the Federation of Canadian Municipalities (FCM)

The Federation of Canadian Municipalities contributed funding from the Green Municipal Fund (GMF) to support this project. GMF will also contribute towards feasibility studies that lead to the development of community projects that have regard for the principles and values of sustainability. The currently available FCM funding includes support for the development of Integrated Community Sustainability Plans (ICSPs), feasibility studies and the implementation of applicable projects.

The 'four pillar' sustainability definition assumed increased profile and importance in 2007 when the Association of Municipalities of Ontario (AMO) signed an agreement with the Federal government related to the Transfer of Federal Gas Tax Revenues as part of The New Deal for Cities. Over the life of the agreement municipalities are required to develop Integrated Community Sustainability Plans (ICSP). The Agreement defined an ICSP as:

A plan developed through public consultation that identifies a vision and includes environmental, social and economic goals and targets for the community. The plan also describes short, medium, and long-term strategies for reaching its goals and targets, and integrates all areas of municipal concern, such as energy use, neighbourhood and transportation planning and waste and water management.

Ontario has demonstrated its leadership in sustainability planning through its wellestablished land-use planning and initiatives to protect the environment and provide safe drinking water in Ontario.

Municipal governments, through their Official Plans, under the Ontario Planning Act, strive to reflect environmental objectives which are implemented through their municipal planning decisions, municipal capital plans, strategic plans and sustainability plans. As such, municipalities have demonstrated their commitment to sustainability.

The purpose of the integrated community sustainability plan is to enhance or build upon existing planning instruments and processes.

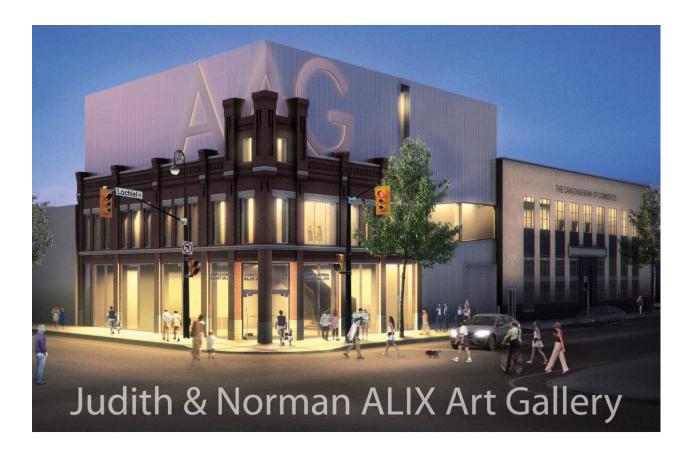
Over the life of the agreement, municipalities will be required to demonstrate through its existing planning instruments and processes or through the creation of new planning document that the municipality has:

- a coordinated approach to community sustainability (e.g., linkages of various plans, planning and financial tools that contribute to sustainability objectives)
- reflected and integrated social, cultural, environmental and economic sustainability objectives in community planning
- collaborated with other municipalities where appropriate to achieve sustainability objectives
- engaged residents in determining a long-term vision for the municipality.

#### **Collaborative Efforts**

The citizens and various stakeholders of the Lambton community will continue to work together to achieve the identified sustainability goals, targets and objectives.

Stakeholders have a number of integrated activities underway that will be broadened to ensure optimal collaboration and synergy in their sustainability initiatives, projects and activities. ICSPs, whether prepared by the County or its local municipalities, will not compete with, or replace, existing initiatives but will complement them.



## **Definition of Sustainability**

There are many different definitions and interpretations of "sustainability" or "sustainable development". The definitive statement is "development that meets the needs of the present generation without compromising the ability of future generations to meet their own need" – United Nations Brundtland Commission, 1987.

A more succinct definition was presented by an African delegate to the Johannesburg (Rio + 10) conference: "**Enough for all forever**". The County agrees that this simple definition of sustainability also sums up its approach.

#### The County of Lambton

The County ICSP utilizes a "four pillar" version of the FCM definition of sustainability in the development of its Integrated Community Sustainability Plan. The four pillars are comprised of environmental, economic, social and cultural elements. In addition, underpinning the four pillars are six principles of sustainability that help ensure the four pillars are well integrated and will endure.

#### The Four Pillars of Sustainability

#### 1. The Environmental Pillar

Determine and quantify what the environmental impact of the proposed project will be and develop a metric that can be used to evaluate the environmental impacts as the project proceeds.

#### 2. The Economic Pillar

Determine and quantify what the near-term, mid-term and long-term financial outcome will be and develop a financial assessment metric that can assess the financial/economic outcomes of the proposed project.

#### 3. The Social Pillar

Determine and quantify what the social impact of the proposed project will be on the members and sectors of the community and develop a metric that can be used to evaluate the social impacts as the project proceeds.

#### 4. The Cultural Pillar

Determine and quantify the anticipated Cultural impact of the proposed project on quality of life in the community, and develop a metric to measure Cultural impacts as the project proceeds. While the economic, environmental and social pillars have been well defined and documented in community sustainability planning, inclusion of the cultural pillar is a relatively new phenomenon in sustainable development. Lambton has included the cultural pillar because of the important role that culture plays in defining our attitudes, values, and behaviours. This four-pillar approach to sustainable development recognizes that a community's vitality and quality of life are closely related to the vitality and quality of its cultural engagement, expression, dialogue, and celebration. More and more, governments, business, and organizations are using the arts as a tool to foster social inclusion, cultural diversity, rural revitalization, public housing, health, ecological preservation, and sustainable development. Sustainable development increasingly involves creating cultural frameworks that operate at the same level as do economic, social and environmental models.

## **Community Sustainability**

"Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs."

United Nations Brundtland Commission, 1987

## Project/Initiatives

# **Environmental** Responsibility

- ecological balance
- health & well being
- land use planning & built environment
- protection of natural resources
- creating healthy supportive environments

## Economic Health

- material prosperity
- self sustaining
- good return on investment
- diversified
- ecologically sound
- supported by the community

#### **Social Equity**

- justice
- full participation & engagement
- social inclusion
- social capital
- public awareness
- self-sufficiency

#### **Cultural Vitality**

- identity
- creativity & innovation
- diversity & inclusion
- pride of past
- scope of place

## 6 Principles of Sustainability

Enhance Quality of Life
Enhance Economic Vitality

Promote Social & Intergenerational Equity

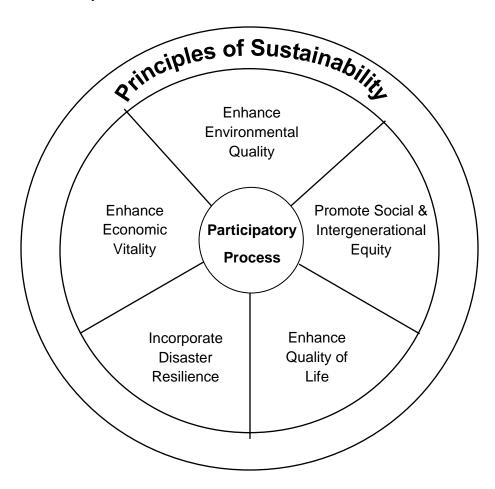
Maintain Environmental Quality Incorporate Disaster Resilience Participatory Process

## **Principles of Sustainability**

There are six principles of sustainability that can help a community ensure that its social, economic, environmental and cultural systems are well integrated and will endure. It should be remembered that, although the list of principles is useful, each of them has the potential to overlap and inter-relate with some, or all, of the others. A community, or society, that wants to pursue sustainability will try to:

- 1. Maintain and, if possible, enhance, its residents' quality of life. Quality of life or "livability" differs from community to community. It has many components: income, education, health care, housing, employment, legal rights on the one hand; exposure to crime, pollution, disease, disaster, and other risks on the other. One town may be proud of its safe streets, high quality schools, and rural atmosphere, while another thinks that job opportunities and its historical heritage are what make it an attractive place to live. Each locality must define and plan for the quality of life it wants and believes it can achieve, for now and for future generations.
- 2. Enhance local economic vitality. A viable local economy is essential to sustainability. This includes job opportunities, sufficient tax base and revenue to support government and the provision of infrastructure and services, and a suitable business climate. A sustainable economy is also diversified, so that it is not easily disrupted by internal, or external, events or disasters, and such an economy does not simply shift the costs of maintaining its good health onto other regions or onto local water bodies or the atmosphere. Nor is a sustainable local economy reliant on unlimited population growth, high consumption, or non-renewable resources.
- 3. Promote social and intergenerational equity. A sustainable community's resources and opportunities are available to everyone, regardless of ethnicity, income level, age, gender, cultural background, religion, or other characteristics. Further, a sustainable community does not deplete its resources, destroy natural systems, or pass along unnecessary hazards to its great-great-grandchildren.
- 4. Maintain and, if possible, enhance, the quality of the environment. A sustainable community sees itself as existing within a physical environment and natural ecosystem. It does its part by avoiding unnecessary degradation of the air, oceans, fresh water, and other natural systems. It tries to replace detrimental practices with those that allow ecosystems to continuously renew themselves. In some cases, this means simply protecting what is already there by finding ways to redirect human activities and development into less sensitive areas. But a community may need to take action to reclaim, restore, or rehabilitate an already-damaged ecosystem such as a nearby wetland.

- 5. Incorporate disaster resilience and mitigation into its decisions and actions. A community is resilient in the face of inevitable natural disasters like tornadoes, hurricanes, earthquakes, floods, and drought if it takes steps to ensure that such events cause as little damage as possible, that productivity is only minimally interrupted, and that quality of life remains at (or quickly returns to) high levels. A disaster-resilient community further takes responsibility for the risks it faces and, to the extent possible, is self-reliant. That is, it does not anticipate that outside entities (such as federal or provincial government) can or will mitigate its hazards or pay for its disasters.
- 6. Central to these principles a consensus-building, participatory process will be utilized when making decisions. Participatory processes are vital to community sustainability. Such a process engages all the people who have a stake in the outcome of the decision being contemplated. It encourages the identification of concerns and issues, promotes the wide generation of ideas for dealing with those concerns, and helps those involved find a way to reach agreement about solutions. It results in the production and dissemination of important, relevant information, fosters a sense of community, produces ideas that may not have been considered otherwise, and engenders a sense of ownership on the part of the community for the final decision.



## **County of Lambton - Strategic Direction**

The Integrated Community Sustainable Plan (ICSP) is the first step in providing a coordinated go-forward direction for the many sustainability initiatives underway in the County. It is recognized that becoming/being a sustainable community is a continuing process that cannot be defined by a single project/initiative. The proposed Association of Municipalities of Ontario (AMO) Adaptive Management, "Learn by Doing" method for implementing the ICSP will help Lambton County achieve sustainable outcomes in each of the municipal sectors identified by the Federation of Canadian Municipalities (FCM) and included in the ICSP document.

The responsibility for success going forward rests with the general public, County, municipal management, the public and private organizations within the community. The collaboration of all parties involved will ensure success and the achievement of the objectives of the plan - a successful, sustainable community.

Some examples of useful metrics for planning include:

- Bluewater Sustainability Initiative
  - 2011 Sustainable Communities Conference Report
  - 2011 Sustainable Small Cities Report prepared by Corporate Knights
- Municipal Cultural Planning, Indicators and Performance Measures, Guidebook, 2011
- Association of Municipalities of Ontario Toolkit
- Ministry of Municipal Affairs and Housing, Planning by Design: A Healthy Communities Handbook

The result of the successful implementation of the Lambton ICSP will be a caring, growing, innovative and sustainable community that produces "Enough for all forever".

## **ICSP Objectives, Goals, Targets**

#### **Objectives**

The objectives of the Lambton ICSP are to ensure that the community is and will continue to be sustainable for all of its communities and citizens.

The objectives established for individual projects will be those that ensure that the projects contribute positively to the achievement of the overall ICSP objectives. Identifying those impacts that are essential for a sustainable future will become part of the measurement and benchmarking protocols as the ICSP is implemented.

#### Goals

The goals established for the ICSP will be determined by those responsible for its implementation with input from the public so as to create effective, achievable and quantifiable goals. The metrics to be established and adopted to measure progress towards achieving these goals will be both project specific and in compliance with the ICSP itself.

#### **Targets**

Targets will be established for the implementation of the ICSP and projects within its implementation process to ensure that specific actions are focused on identified and achievable progress accomplishments in achieving this progress will be an incentive to those responsible and the general public.



FINAL Integrated Community Sustainability Plan (ICSP) February 2013

## Implementation of the Lambton ICSP

Implementation includes a number of steps:

- 1. Integration of the ICSP
- 2. Linking the ICSP with Existing Plans
- 3. Community Consultation and Partnership Process
- 4. Measurement of Progress
- 5. Stakeholder Engagement
- 6. Communication and Reporting
- 7. Future Funding Opportunities
- 8. Schedule for Review of ICSP

## 1. Integration of the ICSP

Instilling the principles and values of sustainability in the County's day-to-day operations and processes will be a major strategy in the near and medium term. Integration of the ICSP across all departments and municipal service areas will be accomplished through the cooperation and collaboration of County operational and administrative departments. Senior staff contributed towards the ICSP development process.

Local municipalities within the County will be encouraged to implement the ICSP for those areas for which they have delegated responsibilities:

- Water treatment and distribution
- Wastewater collection and treatment
- Solid waste collection
- Waste reduction activities
- Brownfield redevelopment

Current policies, procedures, implementation processes, action plans, budgeting and procurement practices will be reviewed and adjusted to include the principles and values in the ICSP.

## 2. Linking the ICSP with Existing Plans

The County ICSP is the "umbrella" or "high-level" strategy under which a number of existing and future County and Community plans/strategies will operate. The County Official Plan encourages sustainable development and supports urban densification and a more dense development that will impact transit, pedestrian traffic, vehicular and bicycle usage and traffic. These factors must be accommodated within the guidelines of the sustainability plan and must achieve "smart growth" while meeting the directions of the Provincial Policy Statement. In addition, other County-based strategies such as

the Strategic Plan and Cultural Plan will have regard for the ICSP in their policies and action items.

Local municipalities will be able to build on the principles and values of sustainability contained in the County ICSP to assist in the development of their own community-specific ICSP should they choose to do so.

In the broader community, the following groups amongst others will utilize the principles and values of sustainability contained in the County ICSP:

- Bluewater Sustainability Initiative Community Benchmarking Project
- Sarnia-Lambton Economic Partnership
- Sarnia-Lambton Environmental Association
- Lambton College Department of Sustainable Development
- Tourism Sarnia-Lambton

## 3. Community Consultation and Partnership Process

The County of Lambton has developed an ICSP within its corporate operating and management structure including all corporate county departments. Local government in Lambton County is a two-tier system. Services are provided by either one level exclusively (i.e. County: social services, long term care, public health; Local Municipality: parks, water, wastewater) or shared by both levels (i.e. roads, libraries, building inspection, land use planning).

Collaboration will include, and be assisted and fortified by, but not limited to, the following organizations:

- Local Municipalities
- First Nations
- Bluewater Sustainability Initiative (BSI)
- Sarnia-Lambton Economic Partnership (SLEP)
- Sarnia-Lambton Environmental Association (SLEA)
- The Community Roundtable
- Suncor Sustainability Centre
- Sarnia-Lambton Chamber of Commerce
- Lambton College
- County of Lambton Community Development Corporation (Research Park)
- The Lambton County Active Transportation Committee
- Other Public Forums

## 4. Measurement of Progress

To achieve measurable improvements, sectoral and overall metrics will be developed and implemented through the preparation of implementation plans on a project-by-project basis. Consultation with local municipalities and departments will be undertaken for sectors that fall within overlapping jurisdictions.

#### Metrics include:

- Analysis of data obtained from Input Questionnaire
- Blueprint for the ICSP in the FCM-identified sectors: transportation, water, waste.
   Energy and brownfields
- Establish milestones

For example, a benchmarking initiative is underway by a committee of the Bluewater Sustainability Initiative (BSI). Collaboration exists in the public and private sectors within the County as noted above to develop community sustainability protocols/mechanisms to monitor and assess progress towards identified targets.

Additionally, in terms of measurement of progress, health impact assessments may be considered as part of the evaluation process when considering environmental/social impacts. As an example, when considering transportation, the health impacts of increasing/decreasing the ability to walk/cycle, or access to essential services, can impact the health of residents.

With the AMO-recommended "Think, then Act, then Measure" Adaptive Management Approach, measurement of progress shall remain the basis of sustainability.

## 5. Stakeholder Engagement

Stakeholder engagement within the County has been, and will continue to be, achieved through meetings with the public and other stakeholders as well as through workshops, municipal publications and the County's website. Dialogue with local municipal Councils and staff, county staff and organizations such as those noted above will ensure the integration and acceptance of the Integrated Community Sustainability Plan by all stakeholders.

#### Metrics include:

Periodic public meetings and Open Houses to discuss progress

## 6. Communication and Reporting

There is expected to be collaboration and consistency between County and local municipal Integrated Community Sustainability Plans. It is anticipated that this principle of collaboration will continue through the implementation of the ICSPs.

Communication of ICSP progress will occur on an ongoing basis with all stakeholders. Staff will develop a suitable mechanism (similar to Strategic Plan) in the Committee/Council reporting format that recognizes sustainability principles in the County's day-to-day operations. An annual public status report will be produced and the ICSP will be reviewed once per term of Council to parallel the consideration and updating of the County's Strategic Plan.

## 7. Future Funding Opportunities

Currently, FCM will contribute through the Green Municipal Fund (GMF) for feasibility studies (up to 50% with a cap of \$175K) and up to 80% for the implementation of sustainability projects with a cap of \$10M. FCM funding can be accessed to leverage contributions from other provincial and federal programs. The ICSP is a useful vehicle to leverage funding from these various senior levels of government who want to ensure that their funds are utilized to construct or implement "sustainable" projects.

#### 8. Schedule for Review of ICSP

The County ICSP should be reviewed once per term of Council to parallel the consideration/updating of the County's Strategic Plan.

#### Recommendations

- a) That County Council adopts the County of Lambton Integrated Community Sustainability Plan (ICSP).
- b) That the ICSP be utilized to leverage funding (grants and below-market loans) under the Green Municipal Fund for plan development, feasibility studies/field tests and projects in five sectors of municipal activity: brownfields, energy, transportation, waste and water.
- c) That staff develop a suitable mechanism (similar to the Strategic Plan) in the Committee/Council reporting format that recognizes sustainability principles in the County's day-to-day operations.
- d) That staff report annually to County Council on sustainability initiatives resulting from their application of the principles of sustainability to their business lines.
- e) That the ICSP be reviewed once per term of Council to parallel the consideration/updating of the County's Strategic Plan.

## **Bibliography**

- 1. Association of Municipalities of Ontario: Integrated Sustainable Community Plan Toolkit, "Think, then Act, then Measure" <a href="https://www.amo.on.ca">www.amo.on.ca</a>
- 2. The City of Calgary, "Imagine Calgary" Plan, September 2007 <a href="www.calgary.ca">www.calgary.ca</a>
- 3. Corvalis, Oregon; Community Sustainability Final Action Plan, December 2008: "Focus on the Future, Action in the Present" www.ci.corvalis.or.us
- Sustainability Solutions Group and Royal Roads Canada Research Chair, 11
   March 2011: Sustainable Cities Strategic Review <a href="https://www.sustainabilitysolutions.ca">www.sustainabilitysolutions.ca</a>
- 5. Becoming Sustainable, Lambton College 2009 <a href="https://www.lambton.on.ca">www.lambton.on.ca</a>
- 6. County of Lambton Strategic Plan, 2010 <a href="https://www.lambtononline.ca">www.lambtononline.ca</a>
- 7. City of Sarnia Strategic Plan, 2010 www.sarnia.ca
- 8. Welcome to Anishinabek Territory, 2010 www.anishinabek.ca
- 9. Guide to Lambton County Regional Trails: "Connecting the Communities", October 2010 <a href="https://www.lambtononline.ca">www.lambtononline.ca</a>
- Sarnia & Lambton County 2010 Travel Guide, "Bring your best friend" www.tourismsarnialambton.com
- 11. BSI Project Sheet 2010, Benchmarking Sarnia/Lambton for Sustainability www.bsi.lambton.on.ca
- 12. Village of Oil Springs: Historical Trail <a href="www.oilsprings.ca">www.oilsprings.ca</a>
- 13. City of Kingston, Ontario: Sustainable Kingston Plan 2010: "Designing our Community's Future together" <a href="www.cityof kingston.ca">www.cityof kingston.ca</a>
- Sarnia & Lambton County Road Maps 2011 2012: "Discover Blue Water Country" <u>www.tourismsarnialambton.com</u>
- 15. Ontario's Southwest 2011 Culinary Tourism Guide <u>www.ontariossouthwestculinary.ca</u>
- 16. The Natural Step Canada: Sustainable Communities <a href="www.naturalstep.org">www.naturalstep.org</a>

- 17. Federation of Canadian Municipalities: Sustainable Community Example Communities www.fcm.ca
- 18. County of Lambton Official Plan Review 2011 <a href="www.lambtononline.ca">www.lambtononline.ca</a>
- 19. City of Sarnia Official Plan Review 2011 <a href="https://www.sarnia.ca">www.sarnia.ca</a>
- 20. A Cultural Plan for Lambton County, *Building a Creative Economy*, July 2011 www.lambtononline.ca
- 21. Whistler 2020, Town of Whistler, BC "Moving Toward A Sustainable Future" www.whistler2020.ca
- 22. Sustainable Huron, Huron County <u>www.huroncounty.ca</u>
- 23. Caring for Nature in Lambton, "Landowner Action in Carolinian Canada" <a href="https://www.Carolinian.org">www.Carolinian.org</a>
- 24. Small Towns, Big Ideas, School of Government, University of North Carolina/North Carolina Rural Economic Development <a href="https://www.sog.unc/programs">www.sog.unc/programs</a>
- 25. Water Utility Infrastructure Management, May/June 2011; "On the Road to Sustainability" <a href="https://www.uimonline.com">www.uimonline.com</a>
- 26. Municipal Cultural Planning, A Toolkit for Ontario Municipalities, March, 2012 <a href="https://www.ontariomcp.ca">www.ontariomcp.ca</a>
- 27. Cultural Resource Mapping, A Guide for Municipalities, March, 2012 <a href="https://www.ontariomcp.ca">www.ontariomcp.ca</a>

#### References

- 1. Ajuntament de Barcelona and United Cities and Local Governments. (2004). *Agenda* 21 for culture.
- 2. United Cities and Local Government-Working Group on Culture. <a href="http://agenda21cultura.org/">http://agenda21cultura.org/</a>
- 3. Creative City Network of Canada & Canadian Cultural Observatory. (2005, October). Sustainable communities: Culture, creativity and inclusiveness.
- 4. Ottawa: Culturescope.ca Department of Canadian Heritage.
- 5. Creative City Network of Canada Centre of Expertise on Culture and Communities (2005-06). *Working bibliography on Culture and Sustainability*.
- 6. Hawkes, Jon. (2001). The fourth pillar of sustainability: Culture's essential role in public planning. Melbourne: Cultural Development Network & Common Ground Press. Summary:

  <a href="http://www.culturaldevelopment.net/downloads/FourthPillarSummary.pdf">http://www.culturaldevelopment.net/downloads/FourthPillarSummary.pdf</a>
- 7. Queensland Government. (2005). *The art of renewal: A guide to thinking culturally about strengthening communities*. Brisbane: Arts Queensland Department of Housing.
- 8. CECC Cultural Research Salon SFU, March 31, 2006
- 9. Demographic Profile for Sarnia-Lambton (Report to County Council May 2011). http://www.lambtonhealth.on.ca/
- 10. Health Impact Assessments: National Collaborating Centre For Health Public Policy. <a href="http://www.ncchpp.ca/54/health\_impact\_assessment.ccnpps">http://www.ncchpp.ca/54/health\_impact\_assessment.ccnpps</a>

#### **APPENDICES**

- 1. Public Consultation and Stakeholder Input
- 2. ICSP Questionnaire
- 3. ICSP PowerPoint Presentation
- 4. Culture as the Fourth Pillar of Sustainability
- 5. "Think, then Act, then Measure" Adaptive Management Approach Sustainability Toolkit of the Association of Municipalities of Ontario (AMO)
- 6. The Natural Step concept of Backcasting and Public Participation
- 7. FCM Sectors applied to Lambton County
- 8. ICSP Implementation: Modeling Examples for each Sector
- 9. BSI Sustainability Initiatives Survey Results

## **APPENDIX 1: Public Consultation and Stakeholder Input**

Initially, PowerPoint slide presentations based on an early draft of the Integrated Community Sustainability Plan (ICSP) document were conducted with the Bluewater Sustainability Initiative (BSI) Technical Committee and the BSI Board of Directors at the Suncor Sustainability Centre. Following these presentations, there were open discussions and a review of the ICSP Questionnaire designed to collect input for the evolving ICSP document. The revised Questionnaires were distributed and were returned separately and anonymously to Trio Environmental Consultants (TEC) by those attending the sessions.

A similar joint meeting was held with the senior administrative staff of both the City of Sarnia and the County of Lambton.

Following these meetings and discussions, TEC included a number of one-on-one interviews with selected local stakeholders and officials to gather additional input. Meetings were subsequently held with the following individuals/groups:

- George Mallay, General Manager, Sarnia-Lambton Economic Partnership (SLEP)
- Archie Kerr, Director, Sustainability, LanXess Inc.
- Marlene Wood, General Manager, Tourism Sarnia-Lambton
- Kevin Edwards, Manager of Planning, City of Sarnia
- Dave Posliff, Manager of Planning and Development Services, County of Lambton
- Robert Tremain, General Manager, Cultural Services, County of Lambton
- The Blue-Green Group, Claude Mongrain and Paul Wooley
- Sarnia Environmental Advisory Committee
- Sharilyn Johnston, Environmental Officer, Aamjiwnaang First Nation
- Jared MacBeth and Dr. Dean Jacobs, Walpole Island First Nation (Bkejwanong)
   Heritage Centre
- Suzanne Bressette, Communication Relations Officer, Chippewas of Kettle and Stony Point First Nation
- Patti Richardson, Senior Planner, The Municipality of Lambton Shores

Following the one-on-one meetings, TEC reviewed the returned questionnaires and included many of the comments and suggestions in the developing ICSP documents for the County of Lambton.

# Comments and Suggestions received from Public Consultations, the Questionnaire and One-on-One meetings:

#### **Questionnaire Responses**

#### Lambton's Strengths

- Unique assets for large process and agricultural industries
- Communities working together
- Affordable, modern, asset-rich community
- Good climate
- Good quality of life
- Excellent location and market access to Ontario, Michigan, greater USA
- Oil heritage
- Excellent water access
- Petro-chemical and chemistry industries and support
- Strong natural heritage
- Strong agricultural industry
- Community working well together

#### Lambton's Weaknesses

- Lack of economic diversity
- No university, small college
- Poor inter-city transportation infrastructure
- Poor ethnic diversity
- Stigma of "Chemical Valley"
- Lambton vs. Sarnia
- Lack of County-wide cooperation and communication
- Lack of youth-focused activities
- Limited economic diversity

#### **Future View of Lambton**

- Diverse employment base
- Affordable community
- Rich in arts and culture
- Recognized for environmental excellence
- Balanced population (by age groups)
- Retention of youth
- Improvement of water and natural habitat
- Ethnically diverse population
- More innovative local industries

- Build on existing long term plans re: health, housing and transportation
- Long-term view with long-term objectives
- Sustainability audit and regular review using accepted metrics
- Economically diverse employment base with strong exporting capabilities to many global markets
- Environmentally responsible
- High rate of innovation among local firms

#### **Barriers**

- Lack of time
- Perceived lack of resources
- Lack of uniform vision across the County

#### Comments from One-on-One and Group Public Consultation Meetings

- Essential to engage elected officials, senior staff and the public
- Identify champions
- Designation of responsibilities
- Establish working dialogue with those of common interests
- Align with existing plans
- Engage the public
- Establish priorities
- Coordinate land-use plan, transportation, energy, purchasing and economic development
- Achieve leadership through education and communication
- Determine target audiences and key players
- Purchasing and contracting sustainability guidelines
- Use In-house initiatives to achieve sustainable operational practices
- Lead by example
- Educate the community
- Add to quality of life of the community
- How to introduce sustainability into day-to-day activities?
- How to make sustainability central to decision-making?
- How to learn of best practices of others?
- Best Start, Circles, and Cultural Plan.
- Introduce community forest management practices
- Be a leader
- Progress measuring tools and processes are needed
- Bottom-up and top-down are critical to success in achieving sustainability targets

- Develop Benchmarking tools to suit each sustainability initiative
- Create collaborative partnerships
- ICSP must be an umbrella plan complementing other plans
- A Living Plan with cohesion, vision and clear directions and metrics to measure progress
- Engage elected officials and senior staff
- Identify champions
- Align ICSP with existing plans
- Coordinate land-use planning, transportation, energy, purchasing and economic development
- Achieve leadership in sustainability through education and communication
- Identify target audiences and key players
- Establish sustainability guidelines for purchasing and contracting
- Establish initiatives to achieve sustainable operational practices
- Lead by example
- Public engagement

## **APPENDIX 2: Questionnaire**

• (Planning)

The following questions are to gather information for the Integrated Community SustainabilityPlan (ICSP) for the City of Sarnia and the County of Lambton, based on suggestions of The Natural Step and the guidelines from AMO

su	ggestions of The Natural Step and the guidelines from AMO
Re	espondent resides in City of Sarniaworks in
Re	espondent resides in County of Lambton works in
1.	What are your municipality's greatest strengths?
2.	What are your municipality's greatest weaknesses?
3.	What is your view of the ideal future for your municipality?
4.	What does sustainability mean to you?
5.	What do you think is the greatest opportunity for your community to integrate sustainability into its development?
6.	How do you suggest that we achieve sustainable community collaboration between the City of Sarnia and the County of Lambton?
7.	How do you think that an integrated sustainable community plan (ISCP) can help shape the strategies and investment priorities in our community?
8.	Does sustainability impact on your role in your organization/department? How can you and your organization/department contribute more towards the goals of sustainability in the following sectors?
	Transportation
	• Energy
	Water
	Waste
	Brownfields

9. Are there aspects of sustainability that you want to learn more about? If so, please list them.

- 10. How would you describe your organization's/department's approach to sustainability on the following scale following scale?
  - Doing just what's needed
  - Doing a bit more than requirements or regulations
  - Integrating sustainability at the core in the organizational vision, strategy, operations and culture
  - Taking a leading role in promoting the sustainability agenda?
- 11. Where would you like to see your organization/department on the previous scale in Question 10?
- 12. What do you see as the greatest barriers to taking a stronger leadership role in achieving sustainability in your community?
- 13. Who are the most important people necessary to achieve a commitment to sustainability in your organization/department?
- 14. How should we monitor and measure progress made (*metrics*) in achieving sustainability in your organization/department?

#### **APPENDIX 3: ICSP PowerPoint Presentation**

# City of Sarnia/County of Lambton Integrated Community Sustainability Plans (ICSPs)



(double - click to open PowerPoint presentation)

#### **APPENDIX 4: Culture as the Fourth Pillar of Sustainability**

In Canada, greater attention to culture as the 'fourth pillar' of sustainability is found in the work of the External Advisory Committee on Cities and Communities (the Harcourt Commission) struck in 2005 by the Federal Government to define a vision of Canadian cities and communities in 30 years and to chart a path for realizing that vision.

A core recommendation in the Committee's final report <u>From Restless</u> <u>Communities to Resilient Places</u><sup>1</sup>, released in 2006, was the need for Canadian municipalities to embrace 'Four Pillars' or dimensions of sustainability – economic prosperity, social equity, environmental sustainability and cultural vitality as their overarching planning framework. The Committee went further to say that *culture* was in fact the 'glue' binding together the other three, providing the sense of shared identity and purpose needed to tackle challenges together. Culture helps build social capital and contributes to vitality and resilience in communities.

Additional insights into culture as the fourth dimension of sustainability can be found in Agenda 21 for Culture, a global charter for cities and local governments. Recent work of Agenda 21 for Culture has focused on culture as a dimension of sustainability<sup>6</sup>. The 3<sup>rd</sup> World Congress of United Cities and Local Governments (UCLG) recently issued a directive on the concept of culture as the fourth pillar of sustainability and built on the following principles.

#### It concludes:

- Cultural diversity has become one of the crucial elements of globalization.
   Fostering intercultural dialogue and promoting cultural diversity are two of humankind's greatest challenges.
- Local policies for development cannot solely be based on economic growth, social inclusion and environmental balance. Today, this triangle is not sufficient. Cities need a soul. Culture is the soul of the city.
- Cities that include a cultural dimension in their urban policies are more successful. Heritage, creativity and diversity are crucial elements for a sustainable city.

<sup>&</sup>lt;sup>1</sup> External Advisory Committee on Cities and Communities (2006). *From Restless Communities to Resilient Places*. Infrastructure Canada.

<sup>&</sup>lt;sup>6</sup>Agenda 21 for Culture (2009). Culture and Sustainable Development: Examples of Institutional Innovation and Proposal of a New Cultural Policy Profile.

#### The Relationship between Culture and Sustainability

Sustainable community development is concerned not with just attracting or retaining industries, services, and resources, but also with doing so in an environmentally, economically, and socially beneficial manner. Newer development models increasingly recognize the need to incorporate culture and creativity in sustainable plans and strategies. This is reflected in the proliferation and implementation of "creative city" approaches to policies, development plans, and strategies in cities and communities being successfully applied around the globe.

This preferred and proven model recognizes that a community's quality of life is closely related to the vitality and quality of its cultural engagement, expression, dialogue, and celebration. The four-pillar model recognizes that culture builds lively communities where people choose to live, work, and visit, and makes major contributions to social and economic health.

The overall aims of integrating cultural and community planning include:

- Finding effective ways in which culture can respond to community needs and priorities, helping to bring together corporate and community agendas
- Raising the profile and application of cultural activity in community planning and development and demonstrating the value of its unique contribution and approach
- Maximizing the overlap between the work and outputs of community and cultural planning

The strongest case for integrating cultural and community planning is that it is already "integrated". It is integrated with:

- our personal, community, regional and national identities
- our diverse lifestyles and social environments
- the way we live, work and play
- our capacity for sustainable economic development, and attracting inward investment in a knowledge-based and creative economy
- the ways in which we can make communities and places physically attractive, socially and economically dynamic and diverse
- ultimately, to our whole quality of life

(From: The Ontario Cultural Planning Toolkit for Municipalities, 2011)

# APPENDIX 5: "Think, then Act, then Measure" Adaptive Management Approach - Sustainability Toolkit of the Association of Municipalities of Ontario (AMO)

The Association of Municipalities of Ontario (AMO) has suggested the Think, then Act, then Measure Adaptive Management "Learn by Doing" approach as an alternative to the ICSP and part of their Sustainability Toolkit. It is suggested that it can also be a course of action in the implementation of the ICSP.

The "Measure" process introduces the important aspect of implementation and measuring – monitoring, whether by benchmarks or the use of other appropriate metrics. If the intended goals, targets and objectives are met, continue, if not, re-visit the process, re-Think, then Act and then Measure to improve the project outcome(s).

The Think, then Act, then Measure approach entails the successive implementation of municipal sustainability projects through incremental steps towards achieving sustainability, generally avoiding the need for traditional, often expensive and timeconsuming long-term planning and "visioning" processes.

The suggested "Learn by Doing" approach of Adaptive Management is intended to gradually increase the awareness, involvement and support of community leaders, management, citizens and stakeholders.

# **APPENDIX 6: The Natural Step Concept of "Backcasting" and Public Participation**

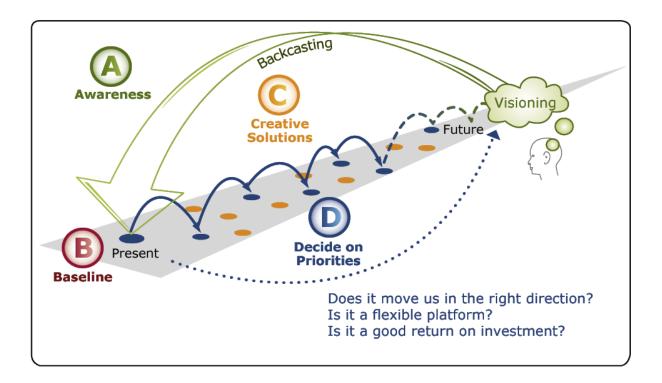
"Backcasting" is the process of assuming the conditions and outcomes to be achieved at a specific time in the future and then identifying the steps necessary to move from the present to the future to ensure the anticipated outcomes.

"Backcasting" will complement the Think, then Act, then Measure, Adaptive Management Approach to achieve sustainability described below.

#### **Backcasting: Applying the ABCD Method**

The A-B-C-D method to applying The Natural Step (TNS) Framework consists of four steps that are repeated as an organization progresses toward sustainability.

This method, as others used by TNS practitioners, is based on backcasting from sustainability principles.



#### A = Awareness and Visioning

This first step aligns the organization around a common understanding of sustainability and identifies a 'whole-systems' context for that organization; building a common language around sustainability as well as creating a vision of what that organization would look like in a sustainable future.

The Natural Step principles of sustainability, basic science and whole-systems approach are presented to develop strategies for living in balance with nature and our global community. Participants review details of the state of the earth's systems, including the ecological, social and economic trends that are undermining our ability to create and manage healthy and prosperous ecosystems, businesses and communities.

During the visioning process, people are encouraged to set ambitious goals which may require radical changes in how the organization operates. Some goals may take many years to achieve.

This is where businesses often begin to identify the service they provide independent of any one product (for example, providing energy services versus oil). Incorporating this awareness into the visioning process unleashes innovation and releases the company from preconceived limitations.

#### **B** = Baseline Mapping

This step uses the four sustainability principles to conduct a sustainability 'gap analysis' of the major flows and impacts of the organization to see how its activities are running counter to sustainability principles. The analysis includes an evaluation of products and services, energy, capital and human resources from 'cradle to cradle'. The assessment also looks at the social context and organizational culture in order to understand how to positively introduce change. This allows the organization to identify critical sustainability issues, their business implications, any assets they may have and opportunities for change.

#### C = Creative Solutions

In this step, people are asked to brainstorm potential solutions to the issues highlighted in the baseline analysis without any constraints.

Armed with their vision of success and potential actions, organizations look backwards from the vision to develop strategies toward sustainability. This is called backcasting and it prevents people from developing strategies that just solve the problems of today. Instead, they begin with the end in mind, moving towards a shared vision of sustainability, with each action providing a platform for further improvement.

#### D = Decide on Priorities

After identifying the opportunities and potential solutions in the 'C' step, the group prioritizes the measures that move the organization toward sustainability fastest, while optimizing flexibility as well as maximizing social, ecological and economic returns. This step supports effective, step-by-step implementation and action planning. At this stage, organizations can pick the 'low-hanging fruit' - actions that are fairly easy to implement and offer a rapid return on investment in order to build internal support and excitement for the planning process.

Backcasting is used to continually assess decisions and actions to see whether they are moving the organization toward the desired outcome identified in 'A' step (awareness and visioning).

Sustainability principles provide new design parameters that drive product and process innovation throughout the system. This step also incorporates organizational learning and change methods, essential elements to move people into new ways of thinking and working together.

The sustainability principles help people stay on course as they process the myriad of information and decisions involved in long-term planning. What is considered realistic today never determines the direction of change, only its pace. This approach is based on systems thinking, setting ambitious goals, and developing realistic strategies to achieve them.

Organizations are not expected to achieve long-term goals immediately. They are encouraged to move systematically by making investments that will provide benefits in the short-term, while also retaining a long-term perspective. They use The Natural Step Framework to map-out a series of steps that will eventually lead to sustainability.

#### **APPENDIX 7: FCM Sectors Applied to Lambton County**

FCM has identified five sectors that are to be reviewed when preparing an ICSP:

- 1. Transportation
- 2. Waste Management
- 3. Energy
- 4. Brownfields
- Water/Wastewater

#### 1. Transportation

The County of Lambton is in the desirable position of having access to major transportation facilities of every type, including:

- multi-lane controlled-access highways,
- the Blue Water Bridge (a high-volume two-bridge international crossing),
- a major Canadian National Railway rail line and international tunnel,
- an airport offering a range of commercial aviation services including regional scheduled flights and customs services, and
- a commercial harbour near the mouth of the St. Clair River (an important location on the Great Lakes - St. Lawrence Seaway) capable of docking ocean and lake freighters.

The transportation network within the County includes a system of roads, highways and multi-use trails under the jurisdiction of local municipalities, the County and the Province of Ontario. Of the 3,500 kilometres of roads in the County, the County itself maintains a network of arterial roads, with a total length of 650 kilometres, including 190 bridges and culverts that link various parts of the County.

The City of Sarnia maintains the only regularly-scheduled public transit system within the County. Special transit services for the disabled are offered within the County and its local municipalities and, in addition, some rural transportation services are offered for seniors.

Cycling and walking trails offer community benefits in terms of recreation and low-cost transportation alternatives. The Lambton County Regional Trails Committee coordinates the efforts of local municipal trail groups to provide a continuous network of trails. Abandoned rail corridors, natural heritage corridors, utility rights-of-way such as major storm sewer rights-of-way, stormwater management areas and municipal parklands all offer significant opportunities for linking various parts of individual municipalities and the County as a whole.

The Sarnia Chris Hadfield Airport offers scheduled flights to London and Toronto, customs facilities, and private and corporate aviation facilities. The airport is located in Sarnia close to the major population and employment areas of the County, with convenient access to Highway 402 and is an important component of the region's overall transportation infrastructure.

Lambton County has deep-water port facilities along the St. Clair River of importance to local industry and agriculture.

The Canadian National Railway mainline runs east-west across the centre of the County. This is a strategic route for CN that includes the St. Clair Tunnel, commissioned in 1995 to replace the original historic tunnel constructed in 1891. The St. Clair Tunnel provides a direct link to Port Huron, Michigan and is an integral facility for the rail route leading to Chicago. The new tunnel was designed and constructed to handle double-stack rail cars providing flexibility in moving trans-border freight.

CSX Rail operates a freight service that runs from Chatham to Sarnia, and parallels the St. Clair Parkway. CSX assets in Chatham-Kent are being pursued by Chatham-Kent with plans to convert them to a short-line operation. The London-to-Windsor Canadian Pacific Railway line passes through the southeast portion of Euphemia Township. While most of the freight passing through the County originates outside of the County, a number of industries in the County use the railway for transportation of raw materials and finished products.

Railway facilities are of considerable importance to the agricultural sector of the County as they provide shipping of farm products to and from the elevators located at the Sarnia harbour.

Utility corridors throughout the County provide for the transmission of electricity, natural gas, oil and petroleum products, and communications services. In addition to serving local needs these corridors are essential to the County's economy, which is supported by electrical generation, petroleum refining, and natural gas storage, transmission and distribution.



FINAL Integrated Community Sustainability Plan (ICSP) February 2013

#### 2. Waste Management

The County of Lambton is responsible for the provision of suitable waste disposal facilities for receiving and disposing of municipal solid waste (MSW) generated by its local municipalities. The County owns, operates and manages six former local municipal landfill sites in Brooke-Alvinston, Dawn-Euphemia, Lambton Shores, St. Clair (2) and Sarnia. Although most of these landfills are closed, the County-owned Dawn Landfill continues to operate and accept MSW. The County also utilizes the privately-owned Waste Management (WM) Petrolia and Warwick Landfills in order to fulfill its mandate. The County has a long-term agreement with WM to 2035 ensuring the County has disposal capacity for municipal solid waste generated by its local municipalities.

Local municipalities throughout the County are responsible for the collection of municipal solid waste primarily through curbside collection and the transportation of collected waste to the above noted facilities. Waste reduction initiatives (i.e. blue box recycling, leaf/yard waste composting, etc.) are also the responsibility of local municipalities. Local municipalities and the County will continue to struggle with the maximizing of existing, and the implementation of new, waste reduction measures, given the low (\$35.77/t – 2012) landfill tipping fees that the County has been able to negotiate with WM over the longer term (to 2035).

The County of Lambton provides six household hazardous waste (HHW) one-day collection events each year by way of a contract with a local hazardous waste landfill (Clean Harbors) as well as two single-day mobile HHW events at various locations in the County. In order to encourage residents of the County to dispose of their household hazardous waste properly there is no cost for attending the collection events scheduled by the County. Enhancements to the HHW collection program such as additional collection days, different locations, etc. are part of the future considerations for improving the local environment and waste management across the County.

#### 3. Energy

The utility corridors throughout the County provide for the transmission of electricity, natural gas, oil and petroleum products, and communications services. In addition to serving local needs, these corridors are essential to the County's economy, which is supported by electrical generation, petroleum refining, and natural gas storage, transmission and distribution. There is activity within the County to investigate the development of purpose-grown energy crops and to dedicate non-commercial agricultural land to renewable energy technologies, including both wind and photovoltaic farms.

Lambton County is home to two-20MW solar farms in St. Clair Township as well as an 80 MW (the largest in the world at the time of construction) solar farm in the City of Sarnia. These three projects will reduce CO<sub>2</sub> emissions by 58,500 tonnes per year and provide enough clean/green power for 19,200 homes.

In addition, Lambton County is home to Ontario Power Generation's (OPG) Lambton Generating Station that produces 950 MW from its coal-burning generators. The Ontario government has mandated the closure of this and other coal-fired facilities in Ontario by 2014. Three privately operated natural gas-fired plants have been constructed to assist in replacing this lost capacity:

- 1. TransAlta Cogen (Sarnia): 510MW
- 2. Greenfield Energy (St. Clair Township): 1005MW
- 3. St. Clair Energy (St. Clair Township): 570MW

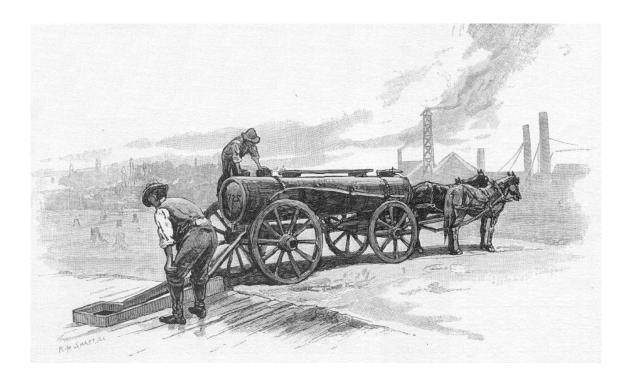
St. Clair Ethanol, located in St. Clair Township, is Canada's largest ethanol plant. It was constructed in 2006 (expanded in 2010 to double its capacity) and is owned and operated by Suncor Energy. The plant has the capacity to produce 400 million litres of corn-based ethanol that is blended into gasoline products. Once the sugars and starches have been extracted from the corn to make ethanol, the residual elements are used to make premium cattle feed.

Lambton County also hosts two wind turbine farms in Lambton Shores: Proof Line Wind Farm operated by Sky Generation and Ravenswood Wind Farm operated by Sprott Power that produce 6.6 and 9.9 MW respectively, from 6 turbines each. Plans are in the works for a number of additional wind farms throughout the County.

Ontario Hydro is proceeding with an upgrade of 70 kilometres of the existing double-circuit 230 kilovolt transmission line between the Lambton and Longwoods transformer stations to increase capacity of the transmission system west of London to carry additional power from renewable, gas and other sources.



FINAL Integrated Community Sustainability Plan (ICSP) February 2013



#### 4. Brownfields

County planners work closely with local municipal staff on brownfield issues. As a result, brownfield initiatives tend to have a commonality and continuity of approach across the County. Examples of successfully re-constituted brownfields in Lambton County:

- 1. Point Edward: A former gas station/garage site now operating as a small plaza including a convenience store, hair salon and specialty retail store.
- 2. Petrolia: A former gas station/garage site now operating as a restaurant.
- Petrolia: A portion of a former rail corridor was redeveloped for affordable housing with the assistance of the federal/provincial affordable housing program administered by the County.
- 4. Petrolia: A portion of the same rail corridor was redeveloped for a municipallyowned farmer's market.
- Corunna: A former industrial dry cleaning site being redeveloped for commercial uses.
- 6. Camlachie area: A former gas station/garage site now used for residential condominiums.
- 7. Point Edward: Re-purposing of the former Prestolite manufacturing facility to a medical-use facility.

#### 5. Water/Wastewater

Potable water supply and wastewater treatment are the responsibility of the County's local municipalities. Potable water is supplied by three systems in Lambton County:

- Lambton Area Water Supply System
- Petrolia Waterworks System
- Lake Huron Primary Water Supply System

These systems provide an abundant, safe and economical source of water for the County.

# **APPENDIX 8: ICSP Implementation: Modeling Examples by Sector**

Those involved in developing community sustainability-related projects are encouraged to use the following examples as guides to how proposed projects can be assessed using the suggested criteria and achieve acceptable, sustainability outcomes in the Think, then Act, then Measure Adaptive Management Approach recommended by the Association of Municipalities of Ontario and in compliance with the suggestions from the Federation of Canadian Municipalities.

#### 1. Transportation

Transportation in the County Community includes three levels of roads: provincial, county, and local municipal. Rail (freight and passenger), water (including the municipal/federal harbor) and the airport are elements of the local transportation profile. All of these transportation services have a role in Lambton's community sustainability future. The County Community will identify targets, goals and objectives that optimize the uses of these facilities and services for the long-term social, environmental and financial benefit of the local and County community. Pedestrian paths, all season trails and bikeways form part of the expanding recreational sustainable program for the County and its local communities.

Proposed transportation projects will be subject to Quadruple Bottom Line (Social, Environmental, Economic and Cultural Impacts) and SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

Possible action areas for ICSP consideration:

- freight rail
- airport: outgoing and incoming traffic, passengers, and commercial goods
- highways, increased traffic impact
- active transportation routes
- interpretive trails: walking, hiking, bicycle and cross-country skiing
- water (canoes, sailboats, motorboats, ships and barges)

#### **Example of Quadruple Bottom Line and SWOT Analysis for Transportation Sector**

#### **Action Area: Interpretive Trails**

#### **Possible Action:**

Increased trails for recreation and active transportation use through improved access, better/safer connections and local promotion.

#### **Backcasting**

Assume the conditions and outcomes to be achieved at a specific time in the future and identify the steps necessary to move from the present to the future to ensure the anticipated outcomes.

#### **Quadruple Bottom Line:**

Social benefits: Improved mental and physical health of trail users, low cost

transportation

Environmental benefits: Non-polluting recreation, increased knowledge of natural heritage

Economic benefits: Reduced local health care costs, tourism potential, reduced road

wear

Cultural benefits: Increase in human and natural history knowledge

**SWOT** 

Strengths: Potential of significant health benefits, reduced GHG emissions,

connect communities

Weaknesses: Access to public, including handicapped

Opportunities: Expand existing facilities, link communities to adjacent counties and

the USA

Threats: Challenge from development industry

## Identify or develop suitable metrics with which to assess progress made towards stated ICSP and project outcomes

#### Think, then Act, then Measure:

Following this simple guideline, community projects that can contribute to sustainability will encourage the project planners, staff and management, working cooperatively and collectively to achieve the stated sustainability targets, goals and objectives of the ICSP. Measuring and reviewing progress, revising where necessary, will ensure that the project expectations are met or exceeded.

#### 2. Waste Management

Waste reduction strategies in Lambton County include optimizing Re-use, Reduction and Recycling of solid non-hazardous wastes in both the municipal and IC&I (Industrial, Commercial & Institutional) sectors. Municipal yard waste composting includes both corporate and community initiatives. Communities across the County are increasing their 3R waste reduction programs.

"Front end avoidance is more cost effective than an end-of-pipe clean-up approach".

#### **Example of Quadruple Bottom Line and SWOT Analysis for Waste Management Sector**

Action Area: Increase 3Rs Participation

#### **Possible Action:**

Increase residential waste separation and home composting.

#### Backcasting:

Assume the conditions and outcomes to be achieved at a specific time in the future and identify the steps necessary to move from the present to the future to ensure the anticipated outcomes.

#### **Quadruple Bottom Line:**

Social benefits: Increase in home garden compost

Environmental benefits: Less chemical fertilizer use

Economic benefits: Reduced cost, improved garden yields

Cultural benefits: Appreciation for concept of waste ownership

**SWOT** 

Strengths: Immediate result of "front end actions"

Weaknesses: Lack of direct relation of individual and community actions

Opportunities: Improve community waste management

Threats: Lack of public acceptance

## Identify or develop suitable metrics with which to assess progress made towards stated ICSP and project outcomes

#### Think, then Act, then Measure:

Following this simple guideline all community projects that can contribute to sustainability will encourage the project planners, staff and management, working cooperatively and collectively to achieve the stated sustainability targets, goals and objectives of the ICSP. Measuring and reviewing progress, revising where necessary, will ensure that the project expectations are met or exceeded.

#### 3. Energy

An energy reduction strategy for energy consumed in corporate buildings, LEED standards in new buildings and more efficient energy use in retrofits of existing buildings are underway. Bluewater Power recently formed a subsidiary, Bluewater Power Generation to encourage and support local renewable power generating technologies across the County.

#### **Example of Quadruple Bottom Line and SWOT Analysis for Energy Sector**

**Action Area: Renewable Energy Options** 

#### **Possible Action:**

Use of sewage sludge (bio-solids) as a source of renewable energy

#### **Backcasting:**

Assume the conditions and outcomes to be achieved at a specific time in the future and identify the steps necessary to move from the present to the future to ensure the anticipated outcomes.

#### **Quadruple Bottom Line:**

Social benefits: Safe disposal of contentious waste

Environmental benefits: Protect agricultural land

Economic benefits: Lower cost of energy

Cultural benefits: Public recognizes need to actively manage all waste

**SWOT** 

Strengths: Conversion of waste to value-added product

Weaknesses: Limited supply of source material

Opportunities: Model of community waste disposal

Threats: Lack of public acceptance

# Identify or develop suitable metrics with which to assess progress made towards stated ICSP and project outcomes

#### Think, then Act, then Measure:

Following this simple guideline all community projects that can contribute to sustainability will encourage the project planners, staff and management, working cooperatively and collectively to achieve the stated sustainability targets, goals and objectives of the ICSP. Measuring and reviewing progress, revising where necessary, will ensure that the project expectations are met or exceeded.

#### 4. Brownfields

Potential Benefits of Brownfield Redevelopment

(Taken from Planning and Brownfields, Richard J. Di Francesco, CMHC publication)

Redevelopment of brownfield sites has the potential to stimulate a broad spectrum of social, economic and environmental benefits through the following:

- Revitalization of neighbourhoods, employment areas and traditional urban cores
- Reduce demand for Greenfield sites
- Promote the intensification of established urban areas
- Reduce urban sprawl and associated negative externalities
- Increase the supply of affordable housing within established urban areas that tend to be well serviced by public transportation
- Increase both daytime and night time populations in downtown areas by increasing employment and residential uses in downtowns resulting in a revitalized downtown
- Improve aesthetic quality of urban areas e.g. restoring neighbourhoods blighted by the presence of brownfields
- Make revitalized areas places to live, work and invest
- Improve public waterfront access
- Eliminate of significant environmental hazards
- Increase public safety through removal of environmental contaminants

#### **Example of Quadruple Bottom Line and SWOT Analysis for Brownfields Sector**

Action Area: Add Affordable Housing Units

#### Possible Action:

Redevelop a brownfield and increase supply of affordable housing within an established urban area well serviced by public transportation and infrastructure.

#### **Backcasting:**

Assume the conditions and outcomes to be achieved at a specific time in the future and identify the steps necessary to move from the present to the future to ensure the anticipated outcomes.

#### **Quadruple Bottom Line:**

Social benefits: Improved housing inventory and demonstrated poverty

assistance

Environmental benefits: Elimination of brownfield-related impacts

Economic benefits: Increase in land values

Cultural benefits: Maximization of Community landscape and enhanced pride

of place

#### **SWOT**

Strengths: Potential of new neighbourhood

Weaknesses: Public/community acceptance

Opportunities: Expand existing land use

Threats: Possibility of residual contaminants

Identify or develop suitable metrics with which to assess progress made towards stated ICSP and project outcomes

#### Think, then Act, then Measure:

Following this simple guideline all community projects that can contribute to sustainability will encourage the project planners, staff and management, working cooperatively and collectively to achieve the stated sustainability targets, goals and objectives of the ICSP. Measuring and reviewing progress, revising where necessary, will ensure that the project expectations are met or exceeded.

#### 5. Water/Wastewater

Storm water and watershed management programs and policies are well established in Lambton County and are being continually updated and upgraded to meet the challenges of increasingly severe storms.

Complementary programs will be integral to the new Integrated Community Sustainability Plan and its initiatives and will continue to be incorporated into the evolving community sustainability plan with future projects subjected to a Quadruple Bottom Line and SWOT analysis to ensure that the sustainability principles are being met and implemented across the County. Since application of bio-solids on agricultural land is increasingly restricted the treatment of bio-solids (sewage sludge) and its disposal could be an area of future research where the sustainability criteria would apply.

**Example of Quadruple Bottom Line and SWOT Analysis for Water Sector** 

Action Area: Potable Water

#### **Possible Actions:**

Encourage use of municipal tap water instead of bottled water: Increase number of users of municipal potable water at homes, at work and across the County (public water fountains).

#### **Backcasting**

Assume the conditions and outcomes to be achieved at a specific time in the future and identify the steps necessary to move from the present to the future to ensure the anticipated outcomes.

#### **Quadruple Bottom Line:**

Social benefits: Lower unit costs and consistent water quality to provincial

standards

Environmental benefits: Reduction of plastic container waste

Economic benefits: Reduced costs of water for users

Cultural benefits: Public appreciation for water as a limited resource;

minimized waste of water

**SWOT** 

Strengths: Consistent water quality

Weaknesses: Demand on supply infrastructure

Opportunities: Expand public awareness of water quality

Threats: Possible challenges from commercial suppliers

## Identify or develop suitable metrics with which to assess progress made towards stated ICSP and project outcomes

#### Think, then Act, then Measure:

Following this simple guideline all community projects that can contribute to sustainability will encourage the project planners, staff and management, working cooperatively and collectively to achieve the stated sustainability targets, goals and objectives of the ICSP. Measuring and reviewing progress, revising where necessary, will ensure that the project expectations are met or exceeded.

### **APPENDIX 9: BSI Sustainability Initiatives - Survey Results**

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Sarnia Cement Services  Deborah Duguay  sarniacement@aol.com 519-541-0069	C&D Recycling - http://www.sarniacement.com/building- green/	-reducing the possibilities of extreme run-offs in to our local drains	- use more permeable concrete
Lambton Cultural Services Division  Robert Tremain robert.tremain@county-lambton.on.ca	* cultural mapping project 2007 * Lambton Cultural Plan 2011 * integration of Cultural Plan into the formal planning 'universe' of Lambton County, including OP, Strat Plan, and ICSP  Oil Heritage District Study and Management Plan, 2010: an award- winning inventory of heritage assets in central Lambton's historic oil district. The Plan, which became Ontario's first industrial-archaeology- based Heritage Conservation District, seeks to preserve and sustain the original methods of oil production and storage as preserved by Lambton's oil men and historic oil families.	* Heritage Sarnia-Lambton, a collaborative marketing tool for community museums * Doors Open Ontario	A Lambton County Heritage Workshop for CAOs and Councils, to clarify the contributions to community identity, pride and sense of place that the built environment makes  Community-Led Librarianship is management approach for community libraries that makes them closely attuned to the interests of not only traditional library patrons but also non-user groups; and more closely aligned to the initiatives of the municipality and the community as a whole (such as youth retention, youth engagement, immigrant attraction, breaking down barriers to digital access, and so forth)  In 2012 we received Council's endorsement of this long-term shift in philosophy and are currently considering specific programs and ideas. To date, we have used this approach to adjust Branch Hours of Operation, to change the visitation sites of the Lambton Bookmobile Service, and to introduce the recent award-winning circulation of e-readers project.
The Hayter Group Chad Hayter chad@hayters.net	Over 3200 geothermal systems installed in southwestern Ontario the equivalent to taking 6400 cars off the road have over 100 micro fit solar systems installed on home and businesses in Southwestern Ontario, with the bulk of them installed in Sarnia Lambton.	Hiring more trained employees for technical, design, installation and service of solar, geothermal, hi efficiency heating, and cooling equipment ( we have hired 7 new people since August) we have only installed hi efficient (energy star rated) furnaces and boilers since 2002 and more than half the installations in homes are installed with a heat recovery ventilators.	Ongoing installations of advanced home and business heating, cooling and ventilation equipment developing a larger solar pv and hot water customer base plans to expand the current business outside of our existing locations in Alvinston (main office), Chatham and Cambridge.
Dinyer Mini Storage Richard Dinyer, CIP storage@xcelco.on.ca	- Facility upgrades interior/exterior - Increased advertising - Installation of Microfit Solar System for renewable energy	We've had a serious set-back with Lambton Shores installing an X-Park next door - Potential customers say they don't want to see an X-Park where they store their goods - The clanging noise from the X-Park and the debris are not inviting to customers	-With your help, move the X-Park to a sports & recreation location - Reduced property taxes due to X-Park harm - Cuts in payroll to survive - Cuts in maintenance costs to survive

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Grand Bend & Area Chamber of Commerce Susan Mills info@grandbendtourism .com 519-238-2001	- Support local groups to promote their activities and events (free advertising and listings on our website - GrandBendTourism.com; posting of flyers & info at the Tourist Welcome Centre, listing of events in the annual area visitors guide, listing of community charities, clubs and service groups on our website, store local event records and equipment at the Welcome Centre) - see GrandBendTourism.com - click on Festivals & Events for main events, listing of club events & meetings, click on Services and "Community Services, Associations & Clubs"; click on special event pages such as Winter Carnival, Paint Ontario, Drive 'n Jive, Kettle & Stoney Point PowWow. Provided expertise to provide Grand Bend Studio Tour with website and colour brochure. Provided Canada Day Celebrations Committee with website (CanadaDayGrandBend.ca), marketing & fundraising support Build relationships with local Council members, Municipal staff, BIAs, media outlets etc. for the purpose of strengthening the local economic/business community (efforts include linkages with Forest and Exeter BIAs, formal representation on Tourism Association, working with Council to obtain seasonal lighting displays, monetary support for tourism services in the area) - Host public information workshops to garner public input on key issues affecting area residents and businesses (such as Parking Summit; Beach Usage etc.) - Promote the area to residents, cottagers and tourists through tourist-focused website, visitors guide (30,000 guides published/distributed Ontario-wide annually), maintenance/operation of Welcome Centre, print, radio & cable advertising campaign that spans Ontario-wide Offer Chamber Members with events to foster stronger relationships with local Council (Mayor's Breakfast includes Lambton Shores Mayor, MP Monte McNaughton, MPP Bev Shipley) and Member-to-Member events to foster stronger interbusiness relationships with goal of a stronger local economy via Spring & Fall Members Mixers, Golf Tournament, Gala Dinner & Business Awards Night	Area promotion to residents, cottagers & tourists (Visitors Guide, Website, Advertising Campaigns, Welcome Centre, representing the area on Tourism Samia Lambton and Huron Tourism Association) Member to Member events Community Group Support Business Advocacy Relationship Building with Municipal Councillors & staff Area BIAs Reference Materials: GrandBendTourism.com, Grand Bend & Area Visitors Guide Welcome Centre	Strengthen ties with local area BIAs for the betterment of business community and strengthening of local economy Increase number of business awards to recognize foundational businesses and outstanding citizens who have contributed to our communities Build out our Member-to-Member events to include more opportunity for networking and increased linkages with area business organizations such as BIAs, Business Development Corporations, political representation Increase editorial content of the visitors guide to more fully represent the entirety of Lambton Shores and key surrounding areas

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
The Inn of the Good Shepherd  Myles Vanni myles@theinnsarnia.ca	- community gardens - working with organizations, businesses we have 7 gardens grown on our behalf, providing fresh vegetables to the food bank - mobile market - through a combination of purchasing and donations from farmers & greenhouses, community gardens and individual gardeners, we receive large volumes of produce which are distributed, farmer's market style, to 9 communities/neighbourhoods throughout Lambton, ensuring access to fresh, healthy produce every week. Resources on how to prepare, cook or preserve various vegetables along with recipes are provided. Local health agencies are involved in providing health promotion activities during the markets as well. An offshoot to the mobile market is the economic benefit to farmers for donating. As much of the donated produce are seconds (still perfectly edible and healthy but some sort of defect (i.e. a pepper with a blemish or cucumber with too much of a curve), it saves the producer disposal costs Participation in the Sarnia Lambton Food Coalition - a founding member of the coalition, it is working to develop a food charter and food sustainability for Lambton County. As part of this, The Inn took the lead in organization the 30-local food challenge. An event promoting people to explore local agriculture and local food, the goal being to help promote local foods to strengthen the economic base of local food production Client recycling program - many of our clients don't have access to proper recycling programs due to their living accommodations. To encourage their participation in recycling, clients are given extra points for use in the food bank to select additional food if they bring in recyclable items which we can reuse in our programs (i.e. plastic bags, reusable bags, plastic containers, egg cartons)	As above plus Regular programs - food bank, soup kitchen, children's programs, shelter & housing programs provide opportunities for social justice Income tax clinics - by preparing tax returns for clients (at no charge) they are able to maintain benefits (GST, return, Child Tax benefit, etc.) so they have less dependability on the food bank or assistance.	No Response
War Veterans & Friends Club Sarnia / Lambton  His Worship Jack Western JP (Rtd)  jwestern1@cogeco.ca	Our sustainability depends on obtaining new members as older members pass on to hopefully new pastures.  Donations collected from members at each meeting go towards the St. Joseph's hospice.	We are open to have anyone interested in our club joining us when we meet for lunch and social activities once a month. We publish a newsletter. We are affiliated with Bomber Command Museum Canada (Nanton Alberta) & The National Council of veterans Associations in Canada i.e. The War Amps and the Dominion Institute Toronto.	Not applicable

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Charles Fisher, Sun Life Financial Charles Fisher charles.fisher@sunlife.com	- small business development - volunteer and fundraise for social causes in Lambton County - Grow my business - improve service to clients - hire employees	No Response	Keep growing my business - more clients, more staff - volunteer and donate more funds to community
Vision '74 Inc. operating Vision Nursing & Rest Home Heather Martin hmartin@vision74.com	Continued operation of existing 110 bed nursing home, 34 bed retirement. Recent addition of Nurse Practitioner Led Clinic facility opened January 2012 on the existing site, Crawford Street access. This business is providing additional services to our residents of the home in addition to community for individuals who do not have a primary health care practitioner.	Current construction of a 68-bed long term care home addition that will replace 32-beds for the original home, plus an additional 36 bed long term care expansion	2013 Board of Directors Strategic planning process will focus on services currently being provided to primarily seniors with a focus on gaps in services.
Alvinston Community Group Helen Lomax Iomax@brktel.on.ca	We want people to move here and to locate their businesses here. We have partnered with other groups and built a skateboard park, created a theme and logo for the town, built a gazebo, toddler swings, games tables, benches and planted gardens in a small downtown park that did not exist before. We partnered with the town to win a provincial wide award for Alvinston as a "Youth Friendly Town" and are the smallest community to ever win it! We sponsor a "Spruce Up" contest every July and randomly pick 4 winners from the entries and each receives \$50 in award money.	We put floats in the fall and Christmas parades to foster community spirit and to have fun. We participate in the fall fair and have sponsored an award for a photo entry showing events in the community.	Working with the local municipality and Hydro One to get permission to clean up an area in town that has large hydro towers running through it. We would like to create a small park on one end overlooking a small pond that has unique turtles and small fish in it. We are on hold until we hear back from hydro. That is in our sights as our spring project. We are also looking at getting banners, a large bee or something to attract attention as people drive through our little town. We want them to stop and realize that there are some things in Alvinston that are worth the stop and to learn about nature and other historical things.
Elecsar Engineering Co. Ltd.  David McGarry  sarnia@elecsar.com 519 337-6580	Engineered 120 MW solar power – 16 Solar Farms  Engineered 5 hydraulic turbine generators  Completed permitting for 20 roof mounted solar farms	Investigated and completed preliminary engineering for hydraulic (water power) generating stations  Arranged financing for projects	Investigated and completed preliminary engineering for C.S.P. (concentrated solar power) combined heat and power for pepper farm
Clouse Photo Hugh hugh@clousephoto.com	Have staff working created history of Petrolia in photos on CD been in business for over 20 yrs.	great staff Co-op students Petrolia residents and from the area	Don't know how long we will be in business at this rate
Duguay Construction Ray Duguay duguayconstruction@ gmail.com 519-541-9795	C&D Recycling	www.sarniacement.com/building- green/	Reduce, reuse, recycle

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Sarnia-Lambton Environmental Association Dean Edwardson deanedwardson@slea.ca	Monitoring of Air and Water Quality since 1952. 2. Web site www.sarniaenvironment.com. 3. Fund sediment quality studies in the St. Clair River. 4. Promote and fund environmental education in association with the St. Clair Region Conservation Authority.	1. Participate in the Source Water Protection Committee for the Sydenham and Region. 2. Member of the Lambton County Health Study Board of Directors. 3. Original supporting Organization of the Blue Water Sustainability Initiative.	Air Quality Cumulative effects study. 2. Continue with all programs mentioned above.
Vidal Street Industrial Park Inc. (VIP) Jon McEachran jon@viprail.com 519-383-7200	Purchased and developed one of Ontario's most successful Brownfield rejuvenation projects. http://www.viprail.com/owners.php - We continue to experience significant economic growth every year and have hired more employees every year -The services we provide industry helps save them time and money and has a positive impact on their ability to compete world wide -We work hard to treat our employees fairly and have created a great working environment based on respect and equalityWe support a number of local charities	-Continue to maintain the Brownfield, monitoring effluent emissions and developing in an environmentally responsible manner -We are currently expanding our rail yard (already one of the largest privately owned in Canada) -This will allow us to offer more railcar storage and transloading services to local industry and will probably lead to increased hiring within the next 12 months	Objectives include continued sustainable growth so that we can continue to hire more employees without losing our culture of safe, environmentally friendly practices -Continue to expand the services we offer to industry so that we can continue to increase our own profits while also helping to grow the bottom line of our customers and contributing to the quality of life of their employees and our community as a whole.
Sarnia Lambton Chamber of Commerce Shauna Carr scarr@sarnialambton chamber.com	Green plan to reduce environmental footprint for our organization and can be used as a template by our member organizations Provided input to city and county on sustainability plans and endorsed such plans	Partner with local cultural initiatives such as Tourism Sarnia Lambton, Celebration of Lights Actively work with community organizations on green transportation such as bike lanes and trails, promoting bike friendly businesses Continue to evolve our organization to allow for its growth and the long term economic viability of our community	Continue to be the communication and distribution source of information and options for business regarding sustainability.
Goodwill Industries – Essex Kent Lambton Inc. scarr@sarnialambton chamber.com dwatson@goodwill ekl.com 519 481-0610	Known as the "Original Recycler" Goodwill has been diverting waste and repurposing materials for over 100 years (in Sarnia for 80 Years)  Collect donations of gently used clothing and household items and resells them in our retail store.  Retail sales profits in turn are used to fuel our employment programs  Our workforce development programs are second to none.  All proceeds from donations are used locally in the communities that we serve  Inaugural recipient of the Suncor Sustainability Award  Have created a Naturalized Gallery at our head offices to showcase the beauty and viability of green space naturalization.	e-waste collections to ensure appropriate "end-of-life" recycling vs. Landfill Computer Refurbishment and redeployment to people and organizations in need Community partnerships and collaborations in sustainability (Lambton College, Return The Landscape, One Tomato, Ontario Electronic Stewardship, SIMS recycling, Other Goodwill's, Etc.) Increased salvage of those items not resalable in our stores Internal "Going Green" Committee established to work on initiatives within the goodwill organization. Working on achieving an "Energy Star" rating on all of our properties. Improving Logistics to minimize the movement and rehandling of materials. Reduced printing of publications and reports (Have created electronic portals where employees and board directors can access needed information) Use of "Green" Janitorial supplies throughout the organization Continue to lobby for improvements to the Social Service sector	Continued and increased focus Community collaborations  Addition of a large community garden and Naturalization Gallery expansion  Working with local entrepreneurs Shawn McKnight and Darren Hakker in the establishment of "ReGen" a concept that diverts products from our waste stream and creates useful resalable products produced utilizing our Jobs Plus program clients.  We are exploring the use of Solar Power to offset our energy costs  Enhanced pre-processing of our recyclables to maximize return  Achieving our zero waste goals by diverting more an varied materials from our waste stream  Use of "Social Enterprise" in niche areas to support sustainability and community

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
The Municipality of Lambton Shores  John Byrne Chief Administrative Officer jbyrne@lambtonshores.ca 519-786-2335	We have replaced the former Forest Arena facility with the new "Shores Recreation Centre" a state of the art energy efficient and water conservation technology that better meets the recreational needs of the Forest area community and which is designed to operate at significant energy and water use savings—low flow toilets and showers, Low E lighting, In floor heating from Ice Making equipment etc.  We have replaced the former Thedford Arena with the new LEED Silver Designated Legacy Recreation Centre, again with state of the art energy and water conservation technology which will reduce operating costs and help the environment  We have revitalized the Grand Bend Beach, by re-introducing the natural dunes and dune grasses that had been removed over 100 years ago, we have introduced energy efficient LED lighting systems, used natural surface parking lots for better storm water management, and reintroduced natural plant and tree regeneration areas that reduce the dispersal of beach sand and restore the natural environment.  We have replaced all the "Traffic Signal" systems in Lambton Shores with energy efficient LED that again reduce operating costs and help the environment  We have retrofitted all libraries, fire halls, and community centers in Lambton Shores with Low E Fluorescent lighting and energy efficient HVAC systems and improved insulation to reduce energy use.  We have retrofitted and improved the energy and water conservation of our sewage treatment facilities in Forest and Arkona to help reduce costs and improve efficiencies in operations.  We have developed a tree nursery to act as a generator of replacement tree stock for municipal roads and parks  We have converted computer workstations to low energy use lap tops and have utilized wireless technology to reduce staff travel and improve communications. We have developed a tambton Shores GIS system to again reduce staff travel and improve efficiencies  We introduced "Vote by Mail" which helps reduce the cost of running municipal elections and eliminate	We have converted our winter snow and ice maintenance protocols to environmentally safe products (beet juice etc.) and converted summer road dust control to environmentally friendly products as well.  We have established and continue to practice a "No Chemical" protocol for weed control in municipal parks and roadsides  We have reduced the amount of paper used for the production of Council agendas by introducing "e-agenda" technology that allows, staff, Council, and public access to Council agenda and other municipal documentation  We educate residents about better management of their storm water to reduce contamination and flooding of their basements etc.  We use environmentally friendly cleaning products in all municipal facilities  We use clean fuel (propane) for fueling our arena Zamboni equipment  And more	We are in the process of developing a new Official Plan that will further protect the naturally sensitive and significant areas of our municipality through such measures as the promotion of compact urban development and protection of wood lots, rivers, streams and lakes etc.  We are in the process of developing a new state of the art sewage treatment facility to meet the future growth needs of the village of Grand Bend and improve the energy and water use technology of the facility by creating a natural wetland, methane gas capture system, green technology and other technologies to improve effluent quality  We are exploring the costs and feasibility of converting the 1100 HPS streetlights in Lambton Shores over to new high efficiency LED streetlight technology thereby maintaining and improving visibility but significantly reducing energy usage and costs  We are exploring the feasibility of retrofitting our municipal marina facilities (pt. Franks and Grand Bend) into more energy efficient and water saving facilities  And more

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Ontario NativeScape			
Cass Stabler	As of December 31, 2011 and since 1998, Ontario NativeScape has	Ontario NativeScape is operated by a volunteer board comprised of	The vision of Ontario NativeScape is to achieve and maintain a healthy and
Cass Stablet	restored 97.62 ha (241 ac) of wetland	landowners from Lambton County.	sustainable environment that will
	habitat, 384.74 ha (951 ac) of tallgrass	These people are all affiliated with	contribute to the viability of agricultural
cstabler.rlsn@gmail.com	prairie, 120.06 ha (297 ac) of trees	various organizations such as	and natural resources in Ontario as well
	and shrubs, and 104.63 km of riparian habitat within the St. Clair River Area	Lambton Wildlife Inc., Sydenham Field Naturalists, Lambton Soil and Crop,	as the social and economic well-being of its residents.
	of Concern. This geographical region	Farmers and Friends, and Lambton	Many areas throughout southern Ontaria
	represents one area of focus for	Woodlot Owners. Technical	Many areas throughout southern Ontario have been altered by human activity and
	Ontario NativeScape. Ontario	representatives are also associated	much of the natural habitat has been
	NativeScape has also completed numerous restoration projects	with the Ministry of Natural Resources, Ontario Ministry of Agriculture, Food,	severely degraded or lost. Organizations
	throughout the rest of Lambton County	and Rural Affairs, and the St. Clair	interested in conservation and
	and southern Ontario.	Region Conservation Authority.	stewardship need to work together to find
	Some notable projects completed in	Since establishment, RLSN and	solutions. Ontario NativeScape staff provides program management services
	Lambton County by Ontario	Ontario NativeScape have been	including: consultations, site assessments,
	NativeScape include:	building capacity for restoration work	project design, fundraising,
	The Highway 40 International Prairie	throughout southern Ontario. The	communications, and technical restoration
	Passage Project. This project is	organization has established 260	expertise to restore and create self-
	associated with prairie passages that	acres of tallgrass prairie seed production sites and a seed cleaning	sustaining habitat for all wildlife species.
	have been established throughout the	facility. This seed is provincially	Ontario NativeScape promotes good land
	prairie region of the USA and	certified, is a product native to	management that includes habitat
	Manitoba. Restored native tallgrass prairie has been established along the	southern Ontario, and can be used in	restoration, invasive species control, prescribed burning, species at risk
	Highway 40 right-of-way. This has	many projects that would traditionally use a non-native seed mix. These	management and mitigation, and the use
	reduced management costs such as	projects include riparian buffer strips	of native plant materials. Native species
	mowing. In the winter, the tallgrass	and grass waterways, natural erosion	are adapted to the climate of Ontario, are
	stems serve as a living snow fence,	control, roadside management	not invasive, and provide food and cover for wildlife.
	reducing winter maintenance costs.  This also provides high quality habitat	projects, management of marginal	for wildlife.
	in a corridor that connects three	lands, upland game habitat, biomass crops, parks and recreational areas,	
	natural areas: Walpole Island, Bickford	and restoration projects.	
	Oak Woods, and Aamjiwnaang First Nations.	Ontario NativoScano providos	
	Nations.	Ontario NativeScape provides services for: tallgrass prairie	
	Tallgrass prairie and wetland	restoration, wetland restoration,	
	restoration projects completed along the St. Clair River include Branton	wildlife habitat management,	
	Cundick Park, Lambton Lagoons, the	provincially-certified native seed	
	C.F. Industries property, and the	production including custom harvesting, cleaning, and seed mixes,	
	Envirofresh property.	invasive species control, prescribed	
	Restoration work has also been	burn assistance, species at risk	
	completed on numerous privately	management and mitigation, and	
	owned properties and public	fundraising, outreach, and support.	
	properties throughout Lambton County bordering the Sydenham River, the	Ontario NativeScape also operates	
	Chanel Ecarte, and the St. Clair River.	several programs with various goals in mind. Current programs are comprised	
	Some of these properties include:	of several of the previously mentioned	
	McKeller Tract, Bickford Oak Woods,	services and include:	
	the King Property Demonstration Farm, Moore Wildlife Management	The Healthy Waterways Initiative –	
	Area, and Hayland Farms.	landowners are encouraged to	
		implement conservation projects and	
	Ontario NativeScape also works outside of Lambton County. Some	best management practices on their	
	significant projects include:	land to protect waterways. Financial support, project management, project	
		design, permitting, implementation,	
	Restoration of 206 ac of tallgrass prairie at Bronte Creek Provincial Park	and support for maintenance and	
	from 2008 – 2011. In 2013, an	monitoring are all aspects of this	
	additional 59 ac will be restored. This	program and vary on a site to site basis.	
	large, continuous track of prairie		
	provides nesting and foraging habitat for many grassland birds, targeting	The Biodiversity in Our Community	
	several species at risk including	Program – landowners are encouraged to restore tallgrass prairie	
	Henslow's Sparrow, Eastern	and actively manage habitat for	
	Meadowlark, Bobolink, Savannah	wildlife. These projects include	
	Sparrow, and Upland Sandpiper. Partners include Ontario Parks,	managing species at risk and	
	Friends of Bronte Creek Provincial	mitigating impact to habitat. Within the	
	Park, and the Halton-Peel Woodlands	projects Ontario NativeScape build	

Business/ Organization Contact Person &	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Information	and Wildlife Stewardship.  Restoration of 70 ac of tallgrass prairie at Rouge Park, with an additional 11 ac to be completed in 2013. This project represents a partnership with the Toronto Region Conservation Authority. In 2011 it was announced that this park will eventually become Canada's first national urban park.	snake hibernacula, bird nesting structures, turtle habitat, and any other structure suitable for the target species. Ontario NativeScape also produces native tallgrass prairie and aquatic species plugs for grassland and wetland restoration projects.  Prescribed Burn Program – landowners are supported in their efforts to maintain tallgrass prairie habitat and restored areas. Ontario NativeScape plans the prescribed burns according to Ministry of Natural Resource standards. The burns are completed safely and efficiently by trained and certified prescribed burns are often used to improve habitat for species at risk and to manage invasive	
		species.  Invasive species management – Ontario NativeScape manages invasive species to improve site conditions, habitat, and biodiversity. Invasive species, such as <i>Phragmites australis</i> have negative impacts on the landscape in southern Ontario and Lambton County. Ontario NativeScape uses the most recent knowledge and Best Management Practices provided by the Ministry of Natural Resources to manage invasive species on project sites. Management techniques include mowing, rolling, spraying, and burning.  Ontario NativeScape represents the Habitat Stewardship Program Coordinator on the Canadian Remedial Action Plan Implementation Committee for the St. Clair River Area of Concern. Technical expertise and advice is contributed to the overall workplans. Restoration work completed by Ontario NativeScape within the Area of Concern contributes to meeting the delisting criteria.	
		In order to accomplish all of this, Ontario NativeScape partners with many organizations including the conservation authorities, Ministry of Natural Resources, Ducks Unlimited Canada, First Nations, local stewardship organizations, local hunting and fishing organizations, naturalist groups, school groups and other youth groups, Ontario Parks, all levels of government including municipalities, provincial government, and federal government. Ontario NativeScape attempts to include every stakeholder in all aspects of project management including planning, implementation, maintenance, and monitoring. This facilitates relationships and partnerships throughout the region	

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Sarnia Environmental Advisory Committee, City of Sarnia Nancy Bourgeois nancy.bourgeois@sarnia.ca	In 2012, the committee discussed a range of topics, including:  SEAC supported the work of the Community Round Table Environment committee to educate the public about the damaging effects of vehicle idling. SEAC reviewed and commented on the draft anti-idling by-law.  SEAC discussed educational ideas for waste reduction and recycling. Backyard composting could be promoted as a method to divert compostable materials out of the municipal waste stream.  SEAC reviewed the Community Sustainability Plan and comments were submitted to the Economic Development and Corporate Planning Division.  SEAC compiled a large list of ideas and opportunities that, if implemented, could contribute to sustainability. Over a span of several meetings, the committee evaluated each of the ideas and prepared an action plan related to policy review, community projects and public education, and research to support the greening of City buildings and sustainability.  Over the summer months, the City was contacted by the Lake Huron Centre for Coastal Conservation, a registered not-for-profit organization based out of Goderich, Ontario, dedicated to the conservation of Lake Huron's natural shoreline environments. Staff from the Coastal Centre visited Sarnia in September 2012, and gave a presentation about 'Keeping the Great Lakes Great' at a First Friday event and as part of Bluewater Sustainability Initiative's (BSI) sustainability seminar series.  SEAC worked with BSI to invite Mary Muter as a guest speaker for the BSI seminar series. Mary spoke about the importance of maintaining Great Lakes water levels.  In July, SEAC learned about the Great Lakes Guardian Community Fund, a program through the Ministry of Environment that offers up to \$25,000 for work related to water quality and the restoration of coastal areas, habitats and species. The Parks and Recreation Department made an application to the Fund for a natural areas educational project in Canatara Park. The outcome of the applications is pending.	Actively promote backyard composting,  Promote the planting of fruit bearing trees and bushes in public spaces  Research and compile a list of methods for the environmental retrofit of older homes  Promote the use of the backyard clothesline  Host a meeting with developers and builders to encourage better standards of construction (green buildings)  Develop an annual green checklist with tips to educate and motivate residents to be more environmentally conscious  Get Sarnia students involved in environmental initiatives.  Promote recycling, waste reduction, proper management of hazardous household wastes  Improve blue box use  Reduce hot water temperature to 50° C in all City buildings  Promote water conservation	

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Sarnia Environmental Advisory Committee, City of Sarnia Cont'd	SEAC worked collaboratively with BSI to invite Nicole Foss to Sarnia as a guest speaker. Nicole is an internationally recognized Canadian speaker with a law degree and expertise in finance, energy and water resources.  SEAC would like to promote the message of 'Keeping your butts of the beaches' to address the problem of cigarette litter. SEAC may assist with a Great Canadian Shorelines clean-up day in 2013.		
Bluewater Sustainability Initiative  Maike Luiken, Managing Director  bsi@lambtoncollege.ca	Held over 70 free sustainability seminars for the general public. Topics ranged from green energy to the natural environment.  18 students recognized with certificates at previous Lambton County Science Fairs. Five Suncor Sustainability Awards, including a certificate and \$5000, issued since 2008. The first Sustainability Educator Award issued in 2012.  Presentations and outreach to local elementary and secondary schools.  Supporting an initiative to establish naturalization gardens at local schools  Raising awareness about sustainability (eg. All Candidates Meeting on Renewable Energy in September 2011).  Established a benchmarking tool to measure the sustainability of Sarnia and Lambton County.  Held a conference and workshop attended by over 80 community leaders and the interested public who identified priorities and specific actions for making the community more sustainable.  Collaborates with other organizations and groups, including local government) on sustainability	Sustainability Seminars offered to the general public twice each month.  Issuing awards: Suncor Sustainability Award, Lambton Science Fair and Sustainability Educator Award.  Awareness-raising on sustainability issues through website and social media.  Bringing together local organizations, government, industry and academia through BSI committees to discuss local sustainability activities and identify new initiatives.  Establishing a youth committee for grade 9 to 12 students from Sarnia Lambton to collaborate on sustainability initiatives.  Collaboration with other organizations (e.g. arranging tours of Lambton College's Sustainable Smart House).  Providing input to the City of Sarnia and County of Lambton's sustainability plans.  Advertising local sustainability events.	Continue to educate and raise awareness through seminars, conferences, awards and community outreach.  To provide the means for local groups, organizations and individuals contributing to sustainability to work together.  To support local organizations, business and municipalities to reduce their GHG emissions.
Lambton College  Mike Nesdoly, Coordinator, Department	initiatives.		
of Applied Research and Sustainability  Michael.nesdoly@lambtoncollege.ca			

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Bluewater Power Corporation  Tim Vanderheide tvanderheide@bluewaterpower.com 519-337-8201 x2251	Bluewater Power's Main Service Center – installed ground source geothermal unit for heating & cooling and using passive solar heating to help heat the garage. Energy films have been installed on windows to conserve energy, as well as LED lights and motion detectors wherever possible  Our Fleet Plan has been a significant part in the conservation culture of Bluewater Power – the company abides by a very strict no idling policy. All vehicles had LED lights installed allowing workers to use their lights without having to have the vehicle on – keeping workers safe while sparing the environment of harmful emissions. Two on-site mechanics monitor vehicle emission levels to ensure they stay within appropriate levels.  Bluewater Power is a member of the Ministry of Environment's quality alert system & on days declared as smog days, all non-critical activities (lawn maintenance) are rescheduled for other days.  In 2011, we teamed up with Lambton College and the Inn of the Good Shepherd to hold an E-Waste drive giving people the opportunity to dispose of electronic waste in an environmentally friendly way.	Bluewater Power believes in finding new ways to generate electricity that will be sustainable in the future. We installed two 10kW ground mount solar systems on our property for 2 reasons – to power homes in Sarnia-Lambton and also act as a site to perform research with Western University on how best to use solar technology.  Bluewater Power has invested in two landfill gas (LFG) projects in Lambton County (Sarnia & Petrolia) which capture landfill gas from landfills and use it to generate electricity while at the same time preventing harmful emissions from being released into the atmosphere.  As a proud supporter of conservation efforts through customer education at home shows, tent events and schools, we encourage people to replace old appliances, furnaces and air conditioning units with higher efficiency products.  Bluewater Power is a partner with the Ontario Power Authority in implementing the following conservation programs in Lambton County: saveONenergy For Home which includes the Fridge and Freezer pickup, saveONenergy Heating & Cooling Incentive, saveONenergy New Home Construction Program, saveONenergy Home Assistance Program and saveONenergy For Business which includes saveONenergy For Business Lighting & A/C Program and the saveONenergy For Business Lighting & A/C Program and the saveONenergy For Business Lighting &	Continued investment in renewable energy projects in our community.  Continued participation in and promotion of OPA driven conservation programs.  Continued supporter of the One Tomato Project which contributes to a reduction in cost and pollution related to packaging, cooling, transportation and preservation and makes urban food production highly efficient.  Environmental impact is an integral part of our planning and operating decisions and this will continue going forward.

Business/ Organization Contact Person & Information	Accomplishments to date	Ongoing initiatives	Goals and objectives for future
Sarnia-Lambton Economic Partnership George Mallay mallay@ sarnialambton.on.ca	Development of strategic economic plan with an emphasis sustainability  Development of a bio-hybrid chemistry cluster strategy and the attraction of new bio-based firms  Played a key role in the establishment of the Research Park and the creation of the Bio-industrial Innovation Center  Increased diversification within the economy through the attraction of automotive, call centers, chemical and service based operations  Led a number of sector based competitiveness studies and played a key role in formation of Sarnia-Lambton Industrial Alliance  Entrepreneurship Center provides handles over 6000 inquiries and works with over 250 entrepreneurs and existing businesses per year  Launched of a demonstration fleet of hydrogen powered appliances and supporting the launch and maintenance of Alternative Energy Technology Program at Lambton College  Development of new resident attraction program, attraction of new residents and settlement programs with community partners	Implementation of community strategic economic plan  Continue to provide support to BSI	Attract new bio-based chemistry and alternative fuels firms and support expansion of existing  Attraction of investment from Alberta  Enhance diversification and job creation  Support development of knowledge-based infrastructure at Lambton College  Attract new residents  Assist local firms to become more globally competitive and export oriented
St. Clair Region Conservation Authority Rick Battson rbattson@scrca.on.ca 519 245-3710 ext. 219	planted 3.4 million trees constructed 100 acres of wetland provided \$2 million in grants to landowners to implement environmental best management practices invested \$52 million in flood and erosion control structures such as shoreline protection, dykes and dams protected 10 km of shoreline from erosion using shoreline habitat friendly designs developed woodlot management plans for Conservation Authority owned lands to ensure sustainability of forests and other natural features accepted 15 land donations to help preserve natural spaces	Each year provide comments on approx 500 planning matters to ensure protection of natural heritage and for safe development in terms of flooding and erosion help educate 10,000 students each year about environmental sustainable behavior each year plant an additional 50,000 trees (approximate) undertake woodlot management plans for private landowners to ensure sustainable forestry practices provide grants, implement education programs, undertake habitat improvement projects to sustain species at risk monitor water quality to report on watershed conditions work with many partners to help delist the St. Clair River as an Area of Concern develop drinking water source protection plan for the region to help sustain high quality municipal drinking water	continue and expand the above programs work toward more fuel efficient vehicles decrease waste generated by our operations