

## 4...Sustainability and Growth Management

### Introduction

Traditionally, Strathcona County has assumed growth and development with limited consideration for the long-term negative social, environmental or economic impacts on the community. Our present form of development, as well as our lifestyle choices means that Strathcona County residents, along with the rest of the world, are consuming resources at a faster rate than the planet can replenish them. This is causing world wide issues such as disappearing forests, declining fisheries and climate change. In fact, if everyone in the world lived as we do in Strathcona County, we would require four planets to support us, as depicted in Figure 11. The challenge that faces us all is how can we continue to enjoy the current quality of life and standard of living we presently have, within the carrying capacity of one planet?



Figure 11: Four Planet Living

To live a sustainable lifestyle within the carrying capacity of one planet we must first define sustainability:

***Sustainability for Strathcona County, means developing in a manner that meets the needs of the present without compromising the ability of future generations to meet their own needs, while striking a balance between economic prosperity, social responsibility and environmental stewardship.***

To achieve a sustainable community, Strathcona County has adopted a process defined by four science-based sustainability principles adapted from the Natural Step Framework. These Sustainability principles are:

1. Move towards, and ultimately achieve, solutions and activities that preserve, enhance and regenerate nature and life-sustaining ecosystems;
2. Move towards, and ultimately achieve, solutions and activities that free us from our dependence on substances that are extracted from the earth's crust and accumulate in nature;
3. Move towards, and ultimately achieve, cradle-to-cradle solutions and activities in design, manufacturing and consumption such that substances produced by society do not accumulate in nature; and
4. Move towards, and ultimately achieve, social solutions and activities that allow every person to meet basic human needs and achieve their potential in life, now and in the future.

Basic types of practices that can be used to address or work towards achieving the four principles include:

1. Redevelop existing sites and buildings before constructing new ones; integrate ecological features to serve as green infrastructure elements; create a well-defined "edge" of natural space and agricultural lands; reduce water use and recycle waste water; biological sewage treatment; etc;

2. Develop pedestrian & bicycle oriented communities; development heated and powered by renewable energy; intensification; mixed-use development; public transit; alternatively fuelled fleets; incentives for organic agriculture that minimizes phosphorus and petrochemical fertilizers and herbicides etc;
3. Incorporate healthy building design and construction techniques that reduce or eliminate the use of toxic building materials; landscape design and maintenance that use alternatives to chemical pesticides and herbicides; adopting purchasing guidelines that encourage low or non-chemical product use; utilizing waste as a resource etc.; and
4. Creating a diversity of housing types; develop affordable housing for a diversity of residents; support locally based business and food production; encouraging eco-industrial development, participatory community planning and decision making; celebrating cultural heritage; design buildings and amenities to promote social interaction, etc.

Neighbourhoods form the basis for our understanding of community within the municipality we live in. As the County continues to grow, sustainable neighbourhood development becomes the key incremental step towards achieving a sustainable Strathcona County. The “lens” by which new neighbourhood developments will be reviewed is illustrated in Figure 12. The four sustainability principles will be evaluated against twelve theme topics. Each theme topic will establish targets and measure outcomes.

The Municipal Development Plan reflects the land use and settlement pattern decisions from our past and projects the desires of the community and decision makers as we move into the future.

Historically Strathcona County has been an agricultural community, incorporating a number of smaller urban communities to address the commercial, social, cultural and recreational needs for the rural area. The establishment of Sherwood Park in 1956, as the major urban community in the County has forever changed the traditional character of the typical rural municipality. Today, Strathcona County residents value the unique character and quality of life associated with having both rural and urban areas.

The Municipal Development Plan continues to recognize that the majority of growth in population, employment, services and housing will continue to be accommodated within the Urban Service Area of Sherwood Park. Here, services are readily available and the infrastructure is already planned. Within the Urban Service Area boundary, higher density growth is targeted to occur in three residential urban villages and to be directed to various commercial nodes along major collector and arterial roads, identified in area structure plans. Based on 2005 population growth projections, the community of Sherwood Park will reach the limits of the existing planned Urban Service Area by the year 2014. The referenced boundary cannot be expanded due to the desire of the community to limit outward sprawl beyond the existing boundary; the nature of the surrounding development; and the servicing capacities of the existing infrastructure. This Bylaw acknowledges that once the build out of Sherwood Park is completed, as defined under existing planning documents, planning will be initiated to redevelop older neighbourhoods to be sustainable communities as defined in this Bylaw.

The hamlets of Ardrossan, Josephburg, and South Cooking Lake are recognized as minor growth communities that will continue to provide limited population growth, employment, services and housing. The growth and expansion potential of these three hamlets will be determined by the character of the land and infrastructure servicing capacities.

The remaining hamlets of Antler Lake, Collingwood Cove, Half Moon Lake, Hastings Lake and North Cooking Lake are recognized as predominately residential communities with very limited population growth potential and are not identified as employment or service centres.

The country residential development surrounding the community of Sherwood Park, and to a lesser degree Ardrossan, represents a historical residential growth pattern in Strathcona County. Country residential beyond the physical limits identified in this Municipal Development Plan is not supported, as it is no longer considered an efficient, effective or sustainable use of land. Both the residential development

and the servicing capacity are expected to reach full build out within the 20-year time horizon of this Bylaw. Emphasis will be placed on conservation design principles to develop the remaining Country Residential Policy Area. This will focus on conserving habitat, wetlands, treed areas, eco-systems and open space, as well as encouraging sustainable servicing options.

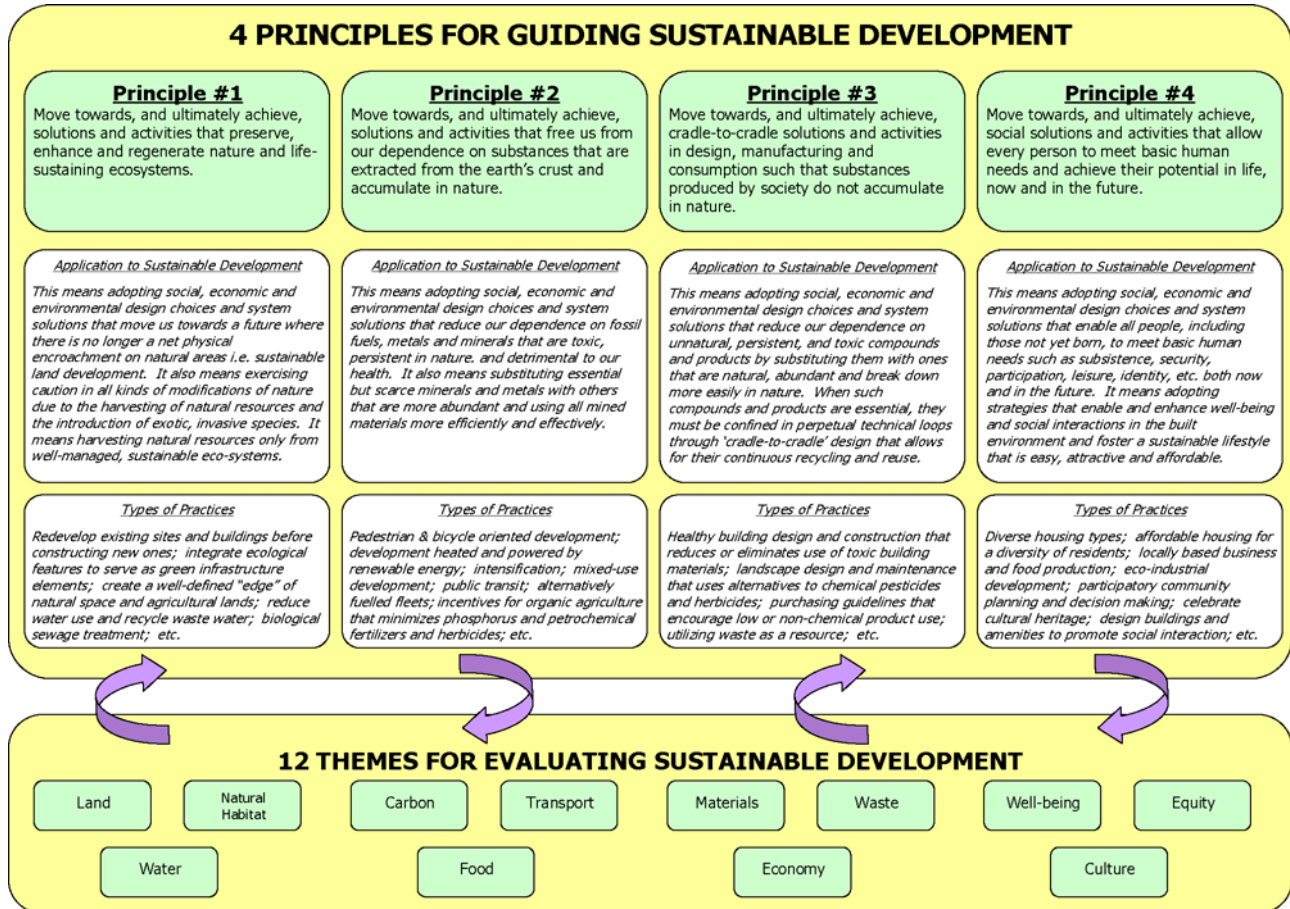


Figure 12: Principles of Sustainable Development

The Municipal Development Plan identifies one major urban area outside of existing Sherwood Park. The Urban Reserve will address the growth needs in the County for up to 100 years. During the time horizon of this Municipal Development Plan, (twenty years), the County will create Growth Management Strategies for both the Urban Reserve and the Rural/Urban Transition Policy Area. The purpose of these strategies will be to evaluate the lands from the perspective of sustainability principles, as illustrated in Figure 13. The Growth Management Strategies will incorporate public processes that will engage the existing communities as well as surrounding municipalities, in order to achieve the overall goal of a higher level of sustainability for Strathcona County's future.

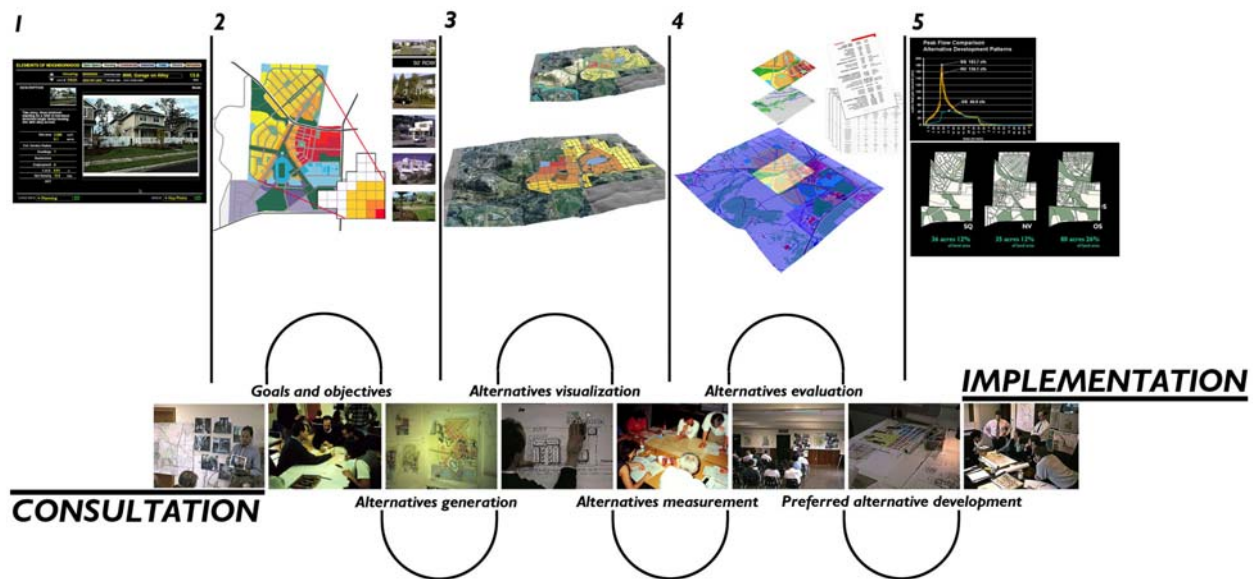


Figure 13: Sustainable Urban Neighbourhood Framework

## Objectives

Strathcona County's sustainability and growth management objectives are to:

- 1) Demonstrate leadership towards applying sustainable practices throughout the community;
- 2) Adopt a framework that ensures future community planning implements and builds sustainable and complete neighbourhoods that create a sense of community within the municipality;
- 3) Partner with other professionals whom can assist the County in achieving sustainability objectives;
- 4) Adopt an approach to achieving sustainability that is forward-looking, responsible, adaptive, innovative and integrated;
- 5) Ensure an adequate and suitable land base exists to accommodate urban growth needs;
- 6) Direct urban growth to Sherwood Park, and to a lesser extent the hamlets of Ardrossan, Josephburg, and South Cooking Lake as identified within the area structure plans;
- 7) Make efficient use of the limited urban land bases in Sherwood Park, Ardrossan, Josephburg, and South Cooking Lake;
- 8) Manage and direct growth as a means to conserve natural areas and in particular, the High and Medium Priority Environment Management Areas contained in the Beaver Hills Moraine;
- 9) Initiate a Growth Management Strategy for both the Urban Reserve and the Rural/Urban Transition Policy Areas;

- 10) In the Growth Management Strategy for the Rural/Urban Transition Policy Area, ensure that the strategy will acknowledge the inclusion of higher density, cluster development that will include mixed use residential components; and
- 11) Direct new residential and commercial growth away from heavy industry.

## Policies

Strathcona County will:

- 4.1 Within the context of the four science-based sustainability principles, utilize the following four elements to define how any new growth node, area concept plan, area structure plan or area redevelopment plan must be developed:
  - a) Holistically planned giving full consideration to local and global impacts on economic growth, social equity, environmental health and cultural vitality;
  - b) Systematically apply science-based sustainability principles to all decision making throughout planning, design and implementation;
  - c) Make sustainable living easy, attractive and affordable by creating opportunities for residents to live within the capacity of one planet; and
  - d) Foster one planet lifestyles, allowing residents to achieve a genuine quality of life without sacrificing a modern and mobile lifestyle.
- 4.2 Demonstrate leadership on sustainability and invest in the community by providing good governance, decision making and taking action to advance sustainability through County led initiatives;
- 4.3 Partner with groups and organizations in a collaborative and coordinated manner to advance the County's sustainability initiatives;
- 4.4 Review business models and adopt a framework that is more adaptable, innovative and incorporates an integrated approach to decision making. The relationship between the environment, land use, infrastructure, social needs, development policies and community planning will be considered;
- 4.5 Require the proponents for any new urban area to select and prioritize strategies, using a systems approach that considers the following:
  - a) **New Urban Form Strategies** incorporating ecologically sensitive land use; compact land use and site design; greenway and public spaces; pedestrian and bicycle orientation; sense of neighbourhood or community; versatile built form; and enhanced livability built form;
  - b) **Aggressive Demand Reduction Strategies** incorporating transportation; fuel and power; solid waste and material use; and water and stormwater;
  - c) **Efficient Resource Use Strategies** incorporating green infrastructure planning; distribution energy systems; water and wastewater; reuse and recycling; greenscaping; and green material management and procurement;
  - d) **Renewable Resource Strategies** incorporating energy, water and materials; and
  - e) **Sustainable Lifestyle Strategies** incorporating community engagement; communication networks; municipally led initiatives; and developer led initiatives.

- 4.6 Ensure the following theme topics are considered when evaluating sustainable development:
- a) Carbon – reduce dependence upon fossil fuels;
  - b) Transport – use of alternative forms of transportation and a reduction in single car usage;
  - c) Land use – introduction of mixed use, higher density developments;
  - d) Materials – use of healthy building design and construction materials;
  - e) Waste – utilizing waste as a resource;
  - f) Economy – supporting locally based and eco-industrial businesses;
  - g) Water – conservation of water through reduced water consumption and retention of natural infrastructure;
  - h) Food – local food production and value added opportunities;
  - i) Natural Habitat – conservation of natural habitat;
  - j) Well-Being – design buildings and amenities to promote inter-generational interaction and cohesion;
  - k) Equity – access to affordable housing, amenities and every day needs for all residents; and
  - l) Culture – celebrate cultural heritage.
- 4.7 Continue to review and assess the long term growth needs of the community in order to provide an adequate and suitable supply of urban land;
- 4.8 Monitor growth, based on the municipality's ability to ensure suitable access and appropriate services are in place, in accordance with its 30 year capital plan and development standards; and based on the County's sustainable development philosophy and models;
- 4.9 Ensure that all new growth pays for itself and will not be a burden on the existing ratepayers, and recognize the desirability of inter-generational equity;
- 4.10 Manage and direct growth in the community through the timely preparation of area structure plans that consider social, economic and environmental elements to form a complete community;
- 4.11 Continue to work with the development industry to explore opportunities within the Emerald Hills, Aspen Trails and Summerwood neighbourhoods of Sherwood Park, to create complete and sustainable neighbourhoods, utilizing the Sustainable Urban Neighbourhood process approach;
- 4.12 Review and update the existing area structure plans for Ardrossan, Josephburg, and South Cooking Lake to encourage the existing urban areas to become more complete communities with unique, vibrant, mixed use neighbourhoods;
- 4.13 Review the existing area structure plans for Antler Lake, Collingwood Cove, Half Moon Lake, Hastings Lake and North Cooking Lake, and where one does not exist, prepare the plan to address the unique character of each hamlet; explore opportunities to enhance the quality of life in those communities; and include more sustainable business practices in the evolution of the community;
- 4.14 Limit new country residential development to the existing Country Residential Policy Area, with emphasis on the County's conservation design based principles for country residential developments;
- 4.15 Complete the Country Residential Area Concept Plan in order to provide specific policy direction for the management of new and existing country residential development;

- 4.16 Manage and direct growth, using conservation design based principles as a means to conserve natural areas; in particular the High and Medium Priority Environment Management Areas contained in the Beaver Hills Moraine;
- 4.17 Direct residential and commercial growth away from heavy industrial areas using the County's adopted risk based management approach and modelling;
- 4.18 Review opportunities in older neighbourhoods of Sherwood Park to redevelop, intensify and create complete and sustainable communities with the support of the local residents;
- 4.19 Continue to work with landowners with the Transition Urban Reserve Policy Area, to complete an area concept plan prior to permitting any development in the area. Until the area concept plan is adopted, apply the policies for Agriculture-Large Holdings within the policy area boundaries;
- 4.20 Ensure that any potential growth area, whether urban or rural, incorporates the following components into their plan:
- a) Consideration of future interchange requirements;
  - b) Appropriate setbacks and transitions from industry and pipeline corridors within the plan area as well as adjacent lands;
  - c) Transportation networks and efficiencies including the impacts on existing communities such as Sherwood Park;
  - d) Efficient water, sewer, stormwater and shallow utility infrastructure;
  - e) Environmental and farmland conservation;
  - f) Transit orientated compact development;
  - g) Timing and sequence of development;
  - h) Diversity of uses where possible, including employment, housing, community services, social needs and open spaces;
  - i) Resource and energy efficiencies of buildings, infrastructure, waste management; and
  - j) Community and urban design.
- 4.21 Initiate a community consultative process to develop a Growth Management Strategy for both the Urban Reserve Area and the Rural/Urban Transition Policy areas, as identified in the Plan, and incorporate analysis on:
- a) Opportunities and constraints;
  - b) Water, sewer, stormwater and other infrastructure costs;
  - c) Transportation networks, including the impacts on existing communities such as Sherwood Park;
  - d) Environmental and farmland conservation;
  - e) Transit, municipal service efficiencies and financial impact;
  - f) Timing and sequence of build out as it relates to servicing, financial and infrastructure impacts;
  - g) Regional context with respect to infrastructure, land use, employment, transportation efficiencies and impacts;
  - h) Scenarios on various options to accommodate a diversity of uses - employment, housing, community services, social needs and open spaces within each area; and
  - i) Access to existing commercial development in Strathcona County in the short term.

- 4.22 Ensure that the Growth Management Strategy for the Urban Reserve addresses the need to provide safe and efficient transitions between the City of Edmonton's heavy industry and residential land uses; and
- 4.23 Ensure that the Growth Management Strategy for the Rural/Urban Transition Policy Area addresses the need to provide appropriate transitioning between urban development in the City of Edmonton and the less densely developed lands and/or environmentally sensitive lands within this policy area.