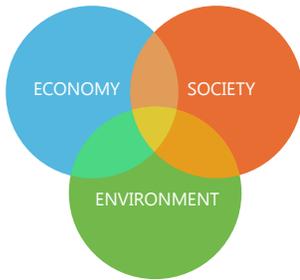




Environmental Sustainability Action Plan

M I D - P R O C E S S R E V I E W
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MAYOR'S TASK FORCE ON THE ENVIRONMENT



Integrated Model
of Sustainability

Section 1: Background

AN EVOLVING APPROACH

In 2011 the City adopted a ten year Municipal Development Plan *Your Bright Future*. This plan provides a community-sustainability based vision and policy framework to guide future growth and change in Spruce Grove. With this overarching framework in place, the Mayor's Task Force on the Environment (MTFE) was initiated to provide focus to the environmental sustainability component. It was through the MTFE that the Environmental Sustainability Action Plan (ESAP) was developed.

The ESAP serves as a ten year guiding document for the Sustainability Department and environmental initiatives City wide. As the ESAP grows and evolves over the years a Mid-Process Review was identified as a crucial step in seeing that the ESAP is successful for the full 10 year period. This document serves as an update and progress report for the 2011 ESAP.

The ESAP identified priority areas, goals and strategies to direct the City's environmental sustainability approach from 2011 to 2021 with the overarching goal of reducing greenhouse gas emissions.

The priority areas identified are:

- Land use and natural areas;
- Transportation;
- Waste;
- Water, and;
- Energy.

The 2011 ESAP identified short-term and other (long-term or ongoing) strategies. The short-term strategies were to be completed within three to five years of the implementation of the ESAP (2011 - 2016). Many of these strategies were focused on developing policy and/or strategic planning documents for a particular priority area (e.g. water conservation plan, transportation master plan). The outcomes of these documents then form the basis of the work for the second half of the ESAP's time frame (2017 to 2021).

In addition a number of 'Other Strategies' were identified during the MTFE process and incorporated in the 2011 ESAP. These strategies are loosely grouped together and include more general on-going and long-term approaches. These approaches in conjunction with the results of the individual priority area's strategic plans become the focus for the second half of the Action Plan.



ABOUT THE TASK FORCE

In 2010 the MTFE took a critical look at the history and future direction of the City's environmental sustainability approach.

The Task Force had two deliverables:

1. The City of Spruce Grove Environmental Sustainability Action Plan, and;
2. A detailed project report.

The Task Force was chaired by the Mayor and had three public members, two youth members and one alderman. All public members were volunteers. Meetings were held on a regular basis as project milestones were achieved (seven total).

More than 750 people were engaged in the Task Force process through a variety of initiatives including surveys, open houses, school projects and the Task Force website. Also part of this process was a review of past programs.

Section 2: Progress and the Way Forward

APPROACH

The mid-process review focuses on an evaluation of the community sustainability strategies set out as the ESAP was implemented in 2011. It is the identification of the successes and progress in the initiatives identified in the ESAP that will provide the information and guidance for the second half of the ESAP's time frame. Not only does the mid-process review provide a detailed snapshot of the City's environmental programs as guided by the ESAP, it also provides further direction for the Sustainability Department through a new priority area.

The mid-process review is laid out so that each priority area is highlighted with the original goals from 2011 identified by a green box. Following each goal from the 2011 ESAP will be a Mid-Process Review Update, which will outline the progress made in each priority area.





PRIORITY AREA #1 – LAND USE AND NATURAL AREAS

The way land is used, including what lands are set aside for natural areas, is determined through the land use planning process. This process involves community members articulating a vision for the community and making decisions about how to respond to growth, development and change. The City has considerable powers and ability to incorporate environmental sustainability into its land use planning processes.

Development Patterns

GOAL 1 (2011)

Identifying specific goals related to development patterns is outside the scope of the Task Force. A number of relevant goals in this area are articulated in *Your Bright Future*. The short-term strategies and other strategies identified for this section are also incorporated in principle in *Your Bright Future*.

Short-term strategies

- As part of a review of the Land Use Bylaw and Engineering Standards, create a regulatory framework that supports and encourages innovations in:
 - ~ neighbourhood design;
 - ~ green building practices and infrastructure, and;
 - ~ alternative modes of transportation.

Other strategies

- Promote compact growth and increased density by implementing *Your Bright Future*

Mid-Process Review Update

Both the [Land Use Bylaw](#) and [Engineering Standards](#) underwent a review and now reflect the policy direction of [Your Bright Future](#). The continued implementation of these standards and regulations through the land use planning and approval processes supports the priorities articulated in the ESAP.

Increased residential density, which will promote compact growth patterns, is mandated by the Capital Region Growth Plan and echoed in Your Bright Future. Stating a requirement for 25 to 30 units per net residential hectare with 30% of those units being medium to high density. The resulting neighbourhoods are more compact, aesthetically attractive, with varied streetscapes, increased connectivity and walkability, and decreased car dependency.



Natural Areas

GOAL 2 (2011)

Protect sustainable natural areas.

Short-term strategies

- Develop a policy that defines natural and/or ecological values, the benefits of protecting sustainable natural areas, and the City's role and commitment to protecting and affirming the status of these areas. Include the scope of protection and the range of tools that should be utilized.
- Conduct a natural areas assessment that includes, but is not limited to:
 - ~ forest stands and water features;
 - ~ biodiversity;
 - ~ habitat;
 - ~ soil conditions, and;
 - ~ current management practices.

Other strategies

- Develop policies around:
 - ~ managing visitors and educating the public about considerate use and ways to reduce undesirable impacts, and;
 - ~ applying low impact maintenance practices in areas where protecting the natural ecological value is the primary goal.

Mid-Process Review Update

The City in 2017 will be conducting a natural areas assessment that will review and assess forest stands, water features, biodiversity, habitat, soil conditions and current management practices of the City's natural areas. The City will work with a focus group to develop a definition of natural areas for the City. This focus group will move the City towards developing a policy that defines natural and/or ecological values, the benefits of protecting sustainable natural areas, and the City's role and commitment to protecting and affirming the status of these areas. Once this policy is in place the City will move towards developing the goals outlined in the "other strategies" section.



GOAL 3 (2011)

Provide residents access to green space.

Short-term strategies

- Conduct a survey to determine current barriers/perceived barriers to accessing open space.
- Develop policy and related management tools to encourage people to access green space. Include:
 - ~ a plan for the relationship between parks and people;
 - ~ support for appropriate public gatherings, and;
 - ~ actions to better enhance the user experience and reduce the abuse of parks.
- Develop an implementation plan for strategies contained in the Leisure Services Study that relate to park and open space programming.

Other strategies

- Promote the development of an integrated open space network through the implementation of *Your Bright Future* and the Parks and Open Space Master Plan.
- Develop a strategy to monitor demographics and build flexibility into operating practices to adapt to the changing nature of the community.
- Promote green spaces to non-users in a way that builds on the findings of the 'barriers to access' survey.

Mid-Process Review Update

In 2013 Recreation proposed two parks related new initiatives to the corporate plan specifically a Parks and Trails Accessibility Audit and Risk Audit for Recreation and Parks Activities. It was and still is Recreation's belief that a level of independent study and analysis is required to ensure that the City is "meeting the mark" in terms of design, construction and subsequent operation of park infrastructure.

The City in 2015 conducted several public workshops to bring awareness to residents on the importance of engaging with nature, park maintenance practices and how residents can live and work within natural areas in a productive and mutually beneficial way.

In 2016 the position of Open Space Coordinator was approved. The primary role of the position involves developing & executing the outdoor recreation program for the City as well as serving as a liaison for the community in enhancing spontaneous recreation opportunities & outdoor programming needs. Key responsibilities include the Summer-In-The-City Program, Special Events and Jubilee Park Spray Park.



Included in the Summer-In-The-City adventure camp element are two theme weeks; 'Down the Garden Path' and 'Wild Child' both of which are intended expose and/or reintroduce children to outdoor experiences. Opportunities for citizens to partake in informal spontaneous outdoor activity are highlighted in City Pulse.

In 2017 the Natural Areas Management Plan will further explore residents' interactions with nature, through the use of surveys and open houses. From this research a more detailed and targeted campaign to connect residents with green spaces will take place.



PRIORITY AREA #2 – TRANSPORTATION

Part of the role of municipalities is to provide transportation options to their residents. While North American lifestyle and development patterns traditionally favoured the use of personal automobiles, increasingly, community members are demanding more options. Part of the demand relates to the process of Spruce Grove 'growing up' as a community, while another part relates to an increased awareness about the environmental and health benefits of other forms of transportation. The City can make an impact in this area through its development patterns, level of transit service, and promotion of biking/walking.

Alternative Transportation

GOAL 4 (2011)

Increase the appeal, awareness and availability of alternative transportation.

Short-term strategies

- Develop strategies for increasing alternative transportation opportunities as part of the Transportation Master Plan review. Consider opportunities for and linkages between:
 - ~ biking and walking;
 - ~ carpooling, and;
 - ~ transit.
- Explore ideas to facilitate ride sharing including:
 - ~ park and ride lots;
 - ~ education/awareness, and;
 - ~ carpooling.



Other strategies

- Promote active transportation (e.g. biking, walking) by:
 - ~ raising awareness about active transportation opportunities (opposed to focus on recreation);
 - ~ considering dedicated bike lanes where appropriate;
 - ~ creating an effective network to move safely and efficiently from one area of the community to another;
 - ~ considering trail connections with Stony Plain, and;
 - ~ working with local schools/school boards and employers.

Mid-Process Review Update

Through the implementation of Your Bright Future, the City continues to pursue opportunities to increase linkages and connectivity between neighbourhoods and amenities like parks, schools and commercial and industrial areas. The City also promotes linkages between different forms of transportation, including active transportation and public transit. An important component in enhancing connectivity is the development and reinforcement of neighbourhood and community level nodes like Jubilee Park, the TransAlta Trileisure Centre and the Westwind area. These areas act as formal and informal gathering places, transit hubs and local commercial and recreation centres.

The [Transportation Master Plan](#) was developed and implemented in 2012. The MDP will be updated in 2016 to incorporate several transportation aspects outlined in the Transportation Master Plan.

Public Transit

GOAL 5 (2011)

Increase public transit ridership and service levels.

Short-term strategies

Develop a long-term business plan for transit service.

As part of the business plan consider:

- service levels;
- U-Pass participation and options for student service;
- management/operations structure, and;
- partnership and grant opportunities.



Other strategies

- Expand transit service and increase ridership by:
 - ~ providing better service levels overall including outside peak-hour commuter service;
 - ~ adding more buses during peak times;
 - ~ exploring options for additional stops in Edmonton and a route to Stony Plain;
 - ~ increasing awareness about the service, and;
 - ~ increasing accessibility and affordability of transit.
- Work with other municipalities in the capital region to provide transit service that meets user needs

Mid-Process Review Update

The City has completed several initiatives in 2015 and 2016 to promote the public transit system. Rider appreciation days and ride for free days were intended to increase ridership and move residents from their single occupancy vehicles.

The City, in 2015, received [GreenTrip](#) funding which has allowed for the purchase of six buses for service into Edmonton. The purchase of the buses will allow Spruce Grove Transit to expand and offer service to West Edmonton and South Campus during peak services hours (Route 562). The GreenTrip funding also includes the purchase of four local buses in 2019/2020.

In spring 2016 the City and Parkland County partnered to offer transit service to Acheson on the backhaul route for Route 560. Similar service is offered with the new route (Route 562).

The City also currently operates one Park n' Ride station at the Agrena. Throughout fall/winter 2016 the City conducted a study to determine the best location for a second station within the City to meet growing demand.

The City, in partnership with Edmonton Transit, St. Albert Transit, Strathcona County Transit and the major post-secondary institutions in the region, signed on to the UPASS in January 2017. This will allow students who have a UPASS to travel on Spruce Grove transit at no additional cost.

The City has also begun discussion with Stony Plain and Parkland County to have a transit service study completed to examine the potential for a future Tri-Municipal Regional Transit program, this will compliment Capital Region transit initiatives.

The City will be increasing transit hours to offer daytime, evening and weekend service starting in 2018.





PRIORITY AREA #3 – WASTE

Waste management is another area where the City can have a significant impact. This is particularly true with respect to residential waste, as waste management programs received high levels of support in the public input sessions, as it is highly visible and valued by the community.

Residential Waste

GOAL 6 (2011)

Reduce amount of residential waste going to landfill.

Short-term strategies

- Revise the City's Waste Management Strategy in advance of the next waste contract. This process should:
 - ~ include an audit of the waste stream and program participation;
 - ~ consider a range of strategies and service levels;
 - ~ explore service options for multi-family and commercial buildings, and;
 - ~ implement a 'take-it-or-leave-it' initiative in advance of the large item pick-up.

Other strategies

- Collaborate with schools and community groups on initiatives.
- Install more combined garbage/recycling bins in public areas (e.g. parks, trails, streets).

Mid-Process Review Update

A residential waste audit was completed in 2013. The audit results formed the basis for the Reduce Your WasteLine Curbside Program Blueprint 2013 - 2018. This report conducted a complete review of the curbside waste system and a comparison with neighbouring municipalities. The plan set a diversion goal of 50% by 2016. The City in 2016 has completed a second residential waste audit to determine the exact extent of diversion as well as roll out future goals and education material. Currently the City has a diversion rate of 43%, below the target set out in 2013.

To increase diversion in 2014 the City began to offer residents a 120L black waste cart and kitchen catcher for organics. Residents were given the option to switch their cart



from 240L to 120L and save \$3.25 on their monthly utility bills. The kitchen catchers were offered as an incentive to have residents switch to the smaller cart. In the fall of 2014 the City also began to offer winter organics collection. Winter collection occurs monthly from December to April.

In summer 2015 the City switched to weekly collection of the recyclables. Residents now place their blue recycling bags out every week with their regular garbage collection.

In fall 2015 the City purchased enough kitchen catchers for each household in Spruce Grove. Throughout 2016 the City worked on various strategies to distribute them to residents. Strategies such as coupons in the City Pulse magazine and the use of Community Based Social Marketing (CBSM) at local retail outlet.

Each year the City offers residents several opportunities to divert and recycle their waste. Successful events such as Free Cycle, Large Item Pick-up, Shred-it For Free and e-cycle will continue to run into the future.

In 2016 the City introduced an organics pilot program in two schools in Spruce Grove. The pilot ran for the entire year, with audits in 2015 and 2016 to determine the effectiveness of the pilot. Both schools have indicated they will continue to divert their organics into 2017.

The City has also partnered with the University of Alberta to contract a Sustainability Scholar part time for the summer of 2017. The Sustainability Scholar will use CBSM in a door to door campaign to encourage residents to divert their food waste to the green organics cart. The student will do this as a pilot and provide a written report indicating the effectiveness of the program.

Non-residential Waste

GOAL 7 (2011)

Reduce the amount of non-residential waste going to landfill.

Short-term strategies

- Continue to work with other municipalities in the capital region.
- Explore options to get reliable data for the non-residential sector.

Other strategies

- Collaborate with schools, businesses and community groups.



Mid-Process Review Update

The City continues to work with regional partners on waste reduction as a member of the Capital Region Waste Minimization Advisory Committee and the Capital Region Municipal Sustainability Group.

The City plans to look at expanding the three streams of waste diversion into the industrial, commercial and institutional (ICI) sectors over the next several years. The pilot program in the schools should serve as an effective template for the implementation of ICI waste diversion.



PRIORITY AREA #4 - WATER

Municipalities play an important role in protecting water resources. Areas that Spruce Grove can have a major impact is managing surface water within the community and promoting water conservation. The City has increasingly focused on managing water resources over the past decade. As climate change is anticipated to impact water resources in the region, this area will continue to be top of mind for policy makers in the years ahead. Appropriately managing water resources will be a central component of the City's approach to adaptation.

Watershed Management

GOAL 8 (2011)

Maintain quality of the local watershed.

Short-term strategies

- Continue to implement an erosion and sediment control program.
- Continue to participate in regional watershed management initiatives.

Other strategies

- Increase awareness about stormwater and related facilities. Include what the City does and what residents can do to protect water quality.
- Integrate watershed planning best practices into land use and engineering standards where appropriate.



Mid-Process Review Update

The major natural water features travelling through Spruce Grove are Atim Creek and Dog Creek, which are part of the Big Lake Watershed sub-basin. Through the daily operations of the Road and Drainage crew within Public Works, steps are taken to ensure minimal sediment is traveling through the stormwater system and into the Big Lake Watershed. Each year Roads and Drainage complete their annual catch basin inspection to maintain the operation and function of the stormwater system. Up to 1558 catch basins are inspected and maintained annually. Annual maintenance can include catch basin rebuilds, ditch bottom and bank stabilization, cleaning of stormpond forebays and outfall and culvert repairs. These everyday erosion and sediment control programs ensure that the City is compliant with both provincial and federal regulations with regards to water discharge into major water bodies. These efforts also ensure flood mitigation infrastructure is fully prepared for future storm events.

In 2016 Engineering began to include stormwater facility maintenance into the annual Municipal Development Engineering Standards. The maintenance standards require a two year stormwater facility maintenance period post construction and highlights the need for each Developer to provide the City with a Stormwater Operations and Maintenance Manual. The new maintenance manual for the first two years following construction focuses on vegetation growth, sediment control, management of nuisance or invasive species and water quality. Reporting is required every six months during this period to ensure vegetation distribution and preservation of design depth.

The City ensures that all stormwater operations are in compliance with the 2004 Big Lake Basin Stormwater Management Plan. The City is also a member of the Sturgeon River Watershed Alliance, which works to protect all waterways within the Sturgeon River Watershed.

In 2015 the City updated the 1999 Spruce Grove's Stormwater Master Plan. The purpose of the update was to ensure that the City's storm drainage system provides an adequate level of service for the conditions of the time, meets the current regulatory and environmental requirements, and provides guidance for future growth and development. The 2015 Spruce Grove Stormwater Master Plan, used computer modelling tools to account for development and system expansion. The analysis involved modelling the existing storm sewers (minor drainage system) and streets (major drainage system) to determine flows, water levels and flood risk. From this report several recommendations were made to move the City towards having adequate flood and drainage control measures in place. The report prioritized the upgrades to take place over the next several years.



Water Conservation

GOAL 9 (2011)

Reduce water consumption.

Short-term strategies

- Develop a water conservation strategy linked to aggressive water conservation targets and an integrated water conservation program. As part of this process consider:
 - ~ pricing tools;
 - ~ incentives programs;
 - ~ partnership opportunities;
 - ~ education;
 - ~ infrastructure management, and;
 - ~ low impact development (LID) best practices;
- Encourage efficient appliances and fixtures through education, legislation and incentives.

Other strategies

- Work with the Province and appropriate partners (e.g. AUMA) to:
 - ~ meet conservation objectives through plumbing code revisions, and;
 - ~ consider gray water use.
- Minimize leaks and unmetered water loss.

Mid-Process Review Update

In 2012 the Community Water Conservation Program: Blueprint for Success 2012 - 2015 was developed to guide water conservation in the City. This was a three year plan that highlighted the need decrease per-capita demand on water from 295 liters per capita per day (LCD) to 250 LCD by 2015. It also set targets for peak day demand at less than 12,700 cubic metres and non-revenue water loss at less than 7%. It organized the strategy for achieving these targets into four categories:

- *Regulatory Tools*
- *Utility Management*



- Education and Outreach
- Economic Tools

Some examples of measures that were implemented under each of these categories include volume based pricing for water, meter up grading, regular reporting and monitoring, rain barrel and rebate programs. These efforts have been extremely effective at putting water conservation in the minds of residents.

In 2014 the City discontinued the water rebate program for low flow toilets and energy efficient washing machines due to the closure of the third party organization that administered the rebate program. It was also believed that direct rebates for these products were no longer effective as plumbing codes improved and the market moved towards primarily low-flow or energy efficient appliances.

In 2015 the City moved away from selling rain barrels from the Eco-Centre and partnered with the Town of Stony Plain, Parkland County and RONA for an annual one day sale event. The move to partner and have a one day sale has increased the number of rain barrel sales from 5 - 25 year prior to 2015 to 175 rain barrels in 2015 and 250 rain barrels in 2016.

In 2015 the City also partnered with Econics to provide a four year update to the 2012 water conservation program. The update showed that the City surpassed the 2012 targets of 250 LCD by 2015, showing consumption for 2014 at 230 LCD with residential consumption at 177 LCD. The City also achieved a decrease in the peak day demand, seeing the highest consumption day falling to 10,957 cubic meters in 2014, well below the 2015 target. The City's non-revenue water also came in well below the 2015 target at 5%. Although the City has had great success achieving the targets set out in 2012, there is still room to improve and increase conservation. The [2015 Community Water Conservation Program](#) set a residential consumption target of 170 LCD by 2020 and 165 LCD by 2025, well below the AUMA 2020 target of 195 and down from the City's 2014 residential consumption of 177 LCD. The 2015 water conservation program provided measures and strategies to implement by 2020 in order to achieve these goals. The measures are divided into four priority areas:

- Efficient Outdoor Water Use
- Targeted Measures for Key Sectors
- Enhanced Education and Communication
- Continued Municipal Leadership





PRIORITY AREA #5 – ENERGY

Although the City is not the utility provider for electricity and natural gas (unlike water), it still has a role in reducing energy use in the community. A number of opportunities exist in this area with options ranging from basic education, incentives to changes in land use and building patterns. For community members, reducing energy use not only has environmental benefits, but it can result in significant cost savings on utility bills.

Energy Use

GOAL 10 (2011)

Reduce energy use in the community.

Short-term strategies

- Actively promote participation in major awareness events such as Earth Hour.
- Gain a better understanding of options for street lighting.
- Encourage efficient appliances and fixtures through education, legislation and incentives. Possibilities include:
 - ~ on-demand hot water heaters;
 - ~ light bulb replacements;
 - ~ furnaces;
 - ~ energy conservation improvements/renovations, and;
 - ~ programmable thermostats.

Other strategies

- Work with the local energy provider to increase street lighting efficiency.
- Provide a supportive regulatory framework for community members wanting to generate electricity on-site/feed the electrical grid (e.g. solar panels, small wind turbines).
- Work with the Province and appropriate partners (e.g. AUMA) to meet energy conservation objectives through building code revisions.



Mid- Process Review Update

Over the past several years the City has regularly supported energy events such as Earth Hour by ensuring all non-essential City lighting is turned off during the event. The City does annual web page and social media promotion around this event.

The City in the past has promoted the purchase of energy efficient appliances through the water rebate program, where residents were provided a rebate for the purchase of Energy Star washing machines. This program was discontinued in 2014.

The City encourages residents to install various types of electricity micro-generation, specifically solar installations and wind turbines. Allowances for these types of generating devices is written into the City's Land Use Bylaw. More recently the planning department has created brochures for residents and developers to encourage the use of generating devices.

The Provincial Government more recently has had a strong focus on increasing the Province's energy efficiency. This is evident by the development of the Climate Change Office within Alberta Environment and Parks as well the development of Energy Efficiency Alberta. The City of Spruce Grove took part in several public consultations and municipal workshops with Energy Efficiency Alberta to help guide the strategic goals of the organization. In early 2017, Energy Efficiency Alberta is scheduled to start providing rebates and encouraging residents to move toward micro-generation. As these program roll out, the City will play a supporting role in ensuring the programs reach the residents of Spruce Grove.

In November 2016, the City and Fortis Alberta entered into an agreement to replace all non-LED streetlights within the City limits to LED street lights, with the retrofits beginning as early as December 2016. The LED lights are Dark Sky Friendly at 4000 Kelvins.

The City is also in the process of completing milestone five of the Partners For Climate Change Protection (PCP) program with the Federation of Canadian Municipalities (FCM). During the summer and fall of 2016, the City completed a greenhouse gas (GHG) inventory for both corporate and community activities, comparing 2015 emissions to 2003 and 1996 records. As part of this inventory the City updated the Energy Management Plan first completed in 2003. The updated plan highlights the results from the GHG inventory and includes recommendations for future energy conservation and GHG reduction measures. The report noted that since 1996 community GHG emissions have gone up by 35%, with rapid population growth this has worked out to a per-capita emissions drop of 43% since 1996.

In 2014 Council mandated that all buildings must meet Leadership in Energy and Environmental Design® (LEED) or an equivalent energy performance standard. The Public Works and Planning and Engineering Facilities were both built to be LEED Certified and the Border Paving Athletic Centre was built to Green Globes standards.



PRIORITY AREA #6 – ENVIRONMENTAL MANAGEMENT (NEW)

As the City's Sustainability department has grown over the past five years, the City now has the capability to move towards stronger environmental management not only with its assets but with its operations. This ensures that the City not only promotes environmental sustainability, but lives it in its day to day tasks by making sure all city operations and lands are compliant with applicable environmental regulations.

Environmental Liabilities

GOAL 11 (2016)

Account for and manage all City owned Environmental Liabilities

Short-term strategies

- Inventory and investigate all City owned properties with the potential for environmental impacts.
- Complete Phase I, Phase II and Phase III Environmental Site Assessments when required on sites that are believed or known to be impacted.
- Ensure the City is compliant with all applicable provincial and federal environmental regulation.
- Develop and implement a City wide policy on proper inventorying and accounting of environmental liabilities in accordance with applicable Public Sector Accounting Standards
- Ensure on-going monitoring of City property and reporting of any environmental releases are reported through the development of an Environmental Release reporting program
- Ensure that any lands that are sold, leased, acquired or contributed are investigated before the transaction occurs to ensure the City is not open to additional unknown environmental liabilities.



Environmental Management Plan

GOAL 12 (2016)

Develop an Environmental Management Plan for the City.

Short-term strategies

- Inventory and quantify all environmental aspects for each department and their operations within the City.
- Ensure the City has a program in place to monitor and maintain all applicable environmental permits and licensing for City operations
- Ensure the City has a program in place to complete annual environmental audits and reviews. Including but not limited to high risk suppliers, hazardous waste and landfill operations
- Develop and implement a City wide initiative to ensure the City through its policies, procedures and various programs are compliant with all applicable environmental regulations.
- Through regular reporting ensure that Senior Management is made aware of any progress or concerns with regards to the environmental management of City operations.



Section 3: Final Recommendations

The Environmental Sustainability Action Plan identified six priority areas and outlined the goals and strategies the City will use to guide environmental sustainability from 2011 to 2021. Each priority area was designed with the overarching goal of reducing greenhouse gas emissions.

This document provides a brief snapshot of the progress made in the five priority areas between 2011 and 2016. The next five years will focus on the “other strategies” highlighted in each priority area, or any of the short-term strategies that have yet to be completed. In addition to the strategies highlighted in the original report and updated in this report, there is a new priority area integrated into this report to work on.

These recommendations have been put forward to help the City achieve the goals and strategies related to the six priority areas.

1. Continue to show leadership in the environmental field for the community.
2. Focus on the 20 per cent of programs that have 80 per cent of the impact.
3. Ensure the completion of the strategies highlighted in this report that are yet to be completed and build upon the programs in place so to achieve the stated goals by 2021.
4. Continue identifying environmental indicators to provide an effective means of measuring progress. This has been successful with the implementation of the Reduce Your WasteLine: Curbside Program Blueprint, the Community Water Conservation Program: Blue Print for Success, the Energy Management Plan, The Transportation Master Plan and the upcoming Natural Areas Management Plan.
5. Continue to provide regular updates on the progress made in each priority area as a part of the annual report in the City Pulse magazine.
6. Continue to develop comprehensive public engagement programs for each of the six priority areas over the next three to five years. As part of this:
 - link these programs with targets;
 - make key messages resonate with the target audience, and;
 - use a range of strategies to engage citizens.



7. As programs are developed and planned begin to incorporate the impact of GHG emissions in the project plan. This will allow the City to more effectively reduce GHG emissions and mitigate the risks associated with climate change.
8. Continue to develop strategic formal and informal partnerships to achieve environmental sustainability goals and develop and implement programs and initiatives. Opportunities exist with citizens, schools, businesses, community groups/non-profits, other communities and other levels of government. Facilitate the creation of local grassroots groups where appropriate and subject to council approval.



Section 4: Related Reports and Documents

PRIORITY AREA #1 UPDATE – LAND USE AND NATURAL AREAS

Development Patterns:

- [City of Spruce Grove Land Use Bylaw](#)
- [City of Spruce Grove Engineering Standards](#)
- [Municipal Development Plan – Your Bright Future](#)

Natural Areas:

- [Urban Forest Management Plan](#)
- [Parks and Open Space Master Plan](#)

PRIORITY AREA #2 – TRANSPORTATION

Alternative Transportation:

- [Transportation Master Plan](#)

Public Transit:

- [GreenTrip Application](#)

PRIORITY AREA #3 – WASTE

Residential Waste:

- Reduce Your WasteLine Curbside Program Blueprint 2013 - 2018

PRIORITY AREA #4 - WATER

Watershed Management:

- Stormwater Master Plan

Water Conservation:

- [Community Water Conservation Program: Blueprint for Success 2016 – 2020](#)

PRIORITY AREA #5 – ENERGY

- [Energy Management Plan and Greenhouse Gas Emissions Reduction Strategy 2004-2006](#)

