

City of St. Albert 2009 Report on the Environment

Green by Nature

The Environmental Master Plan (EMP) provides guidance for the City on eight key environmental areas. The 2009 Report on the Environment is our way of sharing our progress and achievements related to the EMP's goals and targets. To view the Environmental Master Plan document, please visit www.stalbert.ca/environmental-master-plan

City of St. Albert's Environmental Policy

The City of St. Albert is committed to maintaining a healthy natural environment and ensuring its sustainability for future generations.

The City accomplishes this by adopting the following standards:

- Compliance with all environmental regulations
- Pollution prevention
- Use of Environmental Management Systems
- Communication of its environmental performance to staff and the community
- Continuous improvement of its environmental performance

St. Albert's Ecological Footprint

An ecological footprint measures the impact or demand that people place on the environment, based on natural resource consumption and waste generation. The ecological footprint is measured in hectares per person. The Earth has a finite amount of resources and there are only 1.8 hectares of land and sea resources available to support each person on Earth at this time.

The average world footprint is just over 2.8 hectares per person, which means we are consuming resources faster than the earth can produce them. Canada's average footprint is 7.8 hectares, while St. Albert's footprint is 50% higher at 11.7 hectares per person.

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Focus on Education

Education is central to all the goals and targets articulated in the Environmental Master Plan, which focuses on target groups including City Council, employees, residents and business owners. Good information makes for good decisions and the City, through its community initiatives, must ensure that those living and working in St. Albert are provided with the knowledge, opportunities and encouragement to "do the right thing". In this way, the City can effectively lead the community toward achieving its mission of maintaining a healthy natural environment that is sustainable for our community's future.

Environmental Initiatives Grant Program

In 2009, the City's voluntary Environmental Advisory Committee distributed over \$29,000 to 14 groups, including schools, non-profit groups and community groups to help with environmentally focused projects. For more information on how you can apply and for the 2010 allocation deadline, please visit www.st-albert.ca/environmental-initiatives-grant-program

AIR

Goal: Maintain Air Quality

Where are we now?

While air quality in St. Albert is typically classed as “good” under the Alberta Environment Air Quality Index, Alberta Environment noted that particulate and ozone levels are beginning to approach the exceedance triggers of the National Air Quality Standards.

Where do we want to be?

Targets:

- Complete an Ozone and Particulate Matter Management Plan as part of the Alberta Capital Airshed Alliance in 2009 - *COMPLETE*
- Consult with Alberta Environment about establishing an air quality monitoring station in St. Albert

How are we reaching our targets?

Alberta Capital Airshed Alliance (ACAA)

As a member, the City continues to work with ACAA on local air quality issues including monitoring and management plans.

Air Quality Monitoring

City staff met with Alberta Environment and University of Alberta representatives to discuss the possibility of establishing an air quality monitoring station in St. Albert.

Idle-Free St. Albert

St. Albert’s Idle-Free bylaw has been in effect since March 2008, which prohibits vehicles from idling for more than three minutes in a 30-minute period between the temperatures of 0 degrees Celsius and 30 degrees Celsius. The City continues to offer seasonal reminders and monitor City vehicles to ensure compliance with the bylaw. In addition, the City erected Idle-Free signage at all major City facilities in 2009.

In the November 2009 issue of AMA’s magazine Westworld, the City of St. Albert was referenced as one of several Canadian communities campaigning against idling. Look for the article titled ‘No Idle Thoughts’ in the Westworld archives.

Goal: Reduce Non-Renewable Energy Consumption and Greenhouse Gas Emissions

Where are we now?

The primary sources of greenhouse gases in St. Albert stem from burning of fossil fuels, such as coal fired electricity generation, natural gas from home heating and fuels consumption of personal vehicles. This means that the greatest reductions in greenhouse gas emissions will be reached by reducing energy consumption in homes, in vehicles and at work.

Where do we want to be?

Targets:

- Achieve 20% reduction of total corporate greenhouse gas emissions from 1990 levels by 2020.
- Achieve 6% reduction of total community GHG emissions from 1990 levels by 2020.

How are we reaching our targets?

Partners for Climate Protection (PCP)

The City has obtained contract services to complete steps one and two of the PCP program milestones. The

2009 Report on the Environment

greenhouse gas emissions inventory, forecast and targets report will be complete in 2010. Based on the PCP work, targets for this goal may be refined.

Green Growth Initiatives:

- *Municipal Energy Retrofit Program* – In 2009, all the lighting in St. Albert Place was replaced with more energy efficient compact fluorescent and sodium light fixtures and Fountain Park Pool received an energy efficient heat exchange system.

Initiatives from Other St. Albert Corporate Plans

- *Public Transportation* – The number of people travelling by bus between St. Albert and Edmonton (commuter ridership) continues to increase. Commuter ridership rose another 2.4% in 2009, after seeing an increase of 4.98% in 2008.
- *Light Rail Transit* – City staff are participating in the Edmonton Northwest LRT study. The City contributed \$50,000 towards this study.

Community, Educational and Incentive Initiatives:

- *'Back to School' Promotion* – The City promoted St. Albert Transit by offering free transit service on Saturdays during the month of August.

In cooperation with GAIA Energies, Public Works and Tourism Development, solar powered Christmas lights were tested downtown. St. Albert is one of the first communities in Alberta to test this technology.



LAND

Goal: Promote Sustainable Urban Development

Where are we now?

St. Albert's residential development has mainly consisted of low density, single housing units. The City's current residential density is nearly eight dwelling units per gross residential hectare and most existing neighbourhoods have an average of 20% medium density. This density is not sustainable, given that the City's population is expected to expand from the current 58,000 to 105,000 people over the next 20 years.

Where do we want to be?

Targets:

- Achieve a minimum density of 12 dwelling units per gross residential hectare for new neighbourhoods.
- Achieve a minimum of 30% for medium and/or high density residential units for new neighbourhoods.

How are we reaching our targets?

Hybrid Smart Growth

The Smart Growth regulations and primary elements have been completed and are awaiting review and approval of a 'made in St. Albert' form of Smart Growth.

Increase Density of Existing Neighbourhoods

- *Basement Suite Grant Program* – At the end of 2009, a total of 37 basement suite grants were approved in the amount of \$483,387.

Transportation Master Plan

- St. Albert Transit increased their fleet with the delivery of 15 new buses, of which nine will replace older less efficient buses. Transit is also making catching the bus more user-friendly by labelling each bus stop with a number that corresponds with the StAT ride guide.

Goal: Preserve and Manage Trees, Parks and Natural Areas

Where are we now?

Currently the City manages over 900 hectares of treed boulevards, sports fields, parks and natural areas. The extent of these areas represents one of the highest per capita proportions of trees and open spaces for municipalities in Canada.

Where we want to be?

Targets:

- Complete a review of the current standard for parks and natural areas as part of the POSMP and Municipal Development Plan update review process.
- Protect 100% of proposed prioritized important natural areas.

How are we reaching our targets?

Parks and Open Spaces Management Plan (POSMP)

As part of the 11 key recommendations; City staff completed a tree inventory, which includes trees and shrubs on boulevards, streets, medians and parks.

Community, Educational, and Incentive Initiatives

- *Arbor Day* – An Arbor Day celebration on Mission Hill included participation of almost 400 grade one students from seven local schools. The students learned about nature and trees and each child planted a tree to help revitalize the area near the Little White School.

In 2009, a total of 37,856 street trees, 464 street shrubs and 7,722 park trees were inventoried.

Goal: Reduce Solid Waste Generation

Where are we now?

St. Albert’s solid waste generation is 184 kg per person per year, which continues to be much lower than the provincial average of 288 kg per person per year. Also, since the implementation of Pay-As-You-Throw improvements and curbside recycling this year, the waste being diverted from the landfill has increased from 37% to 41%.

Where do we want to be?

Targets:

- Reduce solid waste generation to 125 kg per person per year by 2020.
- Increase solid waste diversion rate to 65% by 2020.



How are we reaching our targets?

Solid Waste Management System Review

From recommendations outlined in the Solid Waste Management Review report, Council approved the implementation of improvements to the City's Pay-As-You-Throw (PAYT) program, as well as the implementation of full curbside recycling. On July 1, 2009, the PAYT program was simplified from six volume levels to three volume levels; 1 bag biweekly, 1 bag per week and 2 bags/1 can per week. In addition, residents who currently have curbside garbage pickup received curbside recycling.

Goal: Reduce Contamination by Improving Hazardous Waste Management

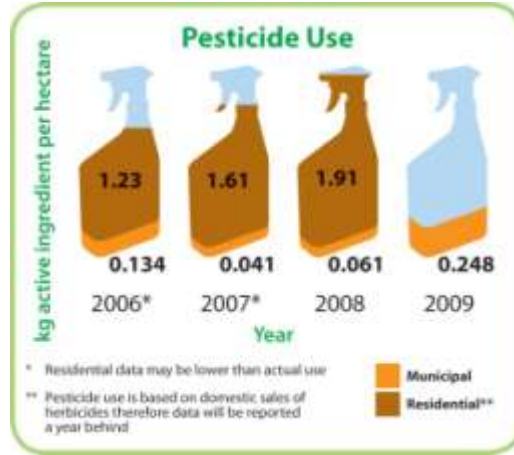
Where are we now?

The amount of pesticide used by the City varies and is dependent on the weather and type of infestations.

Where do we want to be?

Targets:

- Reduce municipal pesticide use to 0.5 kg of active ingredients (ai) per hectare or lower by 2020.
- Reduce residential turf herbicide use (2, 4-D, Mecoprop, and Dicamba) by 25% by 2020.
- Complete environmental management plans for both the former landfill site and public works yard by 2012.



How will we reach our targets?

Hazardous Sites and Material Cleanup

- *Former Public Works Yard* – A draft report on the salt contamination at the former Public Works Yard is complete. Further sampling was approved to fill in data gaps prior to the final report being issued in 2010.

Community, Educational and Incentive Initiatives

- *Weed Warrior Event* – City employees and community volunteers helped pull over four truckloads of invasive weeds from Grandin Eco Pond.
- *Hazardous Waste Roundup* – In October 2009, the City provided residents the opportunity to safely dispose of household hazardous waste at a one-day roundup event.

The Household Hazardous Waste Roundup event collected; 17,974 L of liquid hazardous materials (paint, pesticides, etc.); 924 kg of solid hazardous material (fertilizers, etc.); 791 aerosol cans; and 668 feet of fluorescent light bulbs.

WATER

Goal: Protecting and Maintaining the Sturgeon River Watershed

Where are we now?

The City tests water quality at four locations along the Sturgeon River. Based on the 2009 testing results;

2009 Report on the Environment

- The number of pesticides increased as water moves through the City. The concentrations of pesticides are well below acceptable levels for the protection of the river. Most of the pesticides detected in water quality monitoring are found in residential turf herbicides such as Weed N' Feed and Roundup.
- Although below acceptable levels for protection of aquatic life, bacteria levels show an increasing trend as the water moves through St. Albert. Bacteria are usually related to waste water releases and animal waste.
- Nitrogen and phosphorus levels, the main ingredients in turf fertilizers, generally increase as the water moves through St. Albert, however is variable depending on the location. In all cases the level of nitrogen and phosphorus identified are above the guidelines for protecting the health of the river.
- In contrast, dissolved oxygen detected in the Sturgeon River slightly increases as water moves through the City. The dissolved oxygen levels are well above the minimum concentrations for support of a healthy river.

Dissolved oxygen is the amount of oxygen available to aquatic plants and animals. Like us, water organisms need a certain amount of oxygen to survive. Typically healthy water bodies have high concentrations of dissolved oxygen (above 6 parts per million).

Through its annual stormwater catch basin cleaning program, spring street sweeping and sediment control program, the City continues to reduce the amount of grit and sand that reaches the river. The City captured 86% of the sanding materials put on the roads in 2009.

Where do we want to be?

Targets:

- River water quality is maintained as it moves through St. Albert by 2020.
- Capture 90% of municipal winter road sanding materials by 2020.

How will we reach our targets?

Biodiversity protections and enhancement

- *Rivers Edge Enhancement Project (REEP)* – The City's Environmental Advisory Committee reviewed the activities and reports on REEP and due to the success of its initiatives recommended continued endorsement of the program. The next REEP event is planned for May 16, 2010.

Goal: Reduce Water Consumption

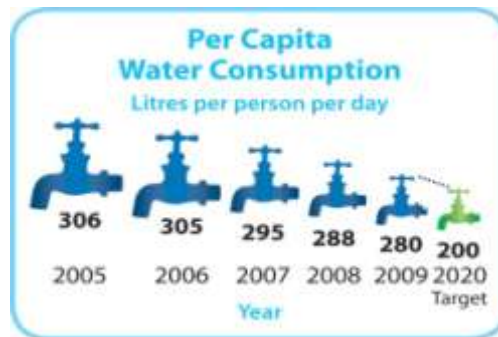
Where are we now?

The downward trend continues for St. Albert's water consumption, moving from a per capita rate of 288 litres in 2008 to 280 litres in 2009.

Where do we want to be?

Target:

- Reduce water consumption to 200 L or less per person per day by 2020.



How will we reach our targets?

Community, educational and incentive initiatives

- *Rain Barrel Program* – Continuing with the success of rain barrel programs over the past three years, the City sold 450 barrels at a subsidized cost in 2009.

We Need Your Input!

Your Opinion Matters

For more information or to provide feedback, please contact:

Office of Environment

phone: 780-459-1735

email: environment@st-albert.net

In 2009, the province initiated a rebate program to offset the costs related to making energy and water efficiency improvements in your home. For more information and a complete list of available rebates visit

www.climatechangecentral.com