City of St. Albert
Cultivate Life

2009 Report on the Environment



City of St. Albert
Office of Environment
Green by nature

The 2009 Report on the Environment is our way of sharing progress and achievements on the eight goals and targets of the City's Environmental Master Plan (EMP). To view the EMP and a more detailed report, please visit *www.stalbert.ca/our-environment*

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

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. 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. The Canadian average is 7.8 hectares per person, while St. Albert's is 50% higher at 11.7 hectares per person.



AIR

Goal: Maintain Air Quality

Where are we now?

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

Where do we want to be?

Target:

- Establish an air quality monitoring station in St. Albert.

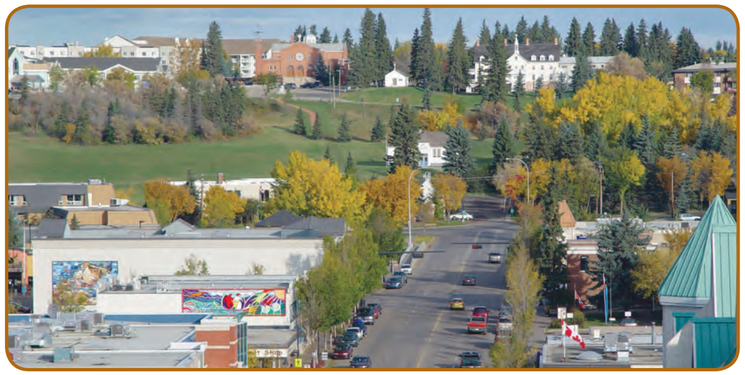
How are we reaching our target?

- As a member, the City continues to work with the Alberta Capital Airshed Alliance on local air quality issues.
- City staff met with Alberta Environment and University of Alberta representatives about establishing an air quality monitoring station in St. Albert.

In the November 2009 issue of AMA's magazine Westworld, the City of St. Albert was mentioned for its continued campaigning against idling.

- The City continues to promote the Idle-Free Bylaw through various activities, including signage at all major City facilities.





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

Where are we now?

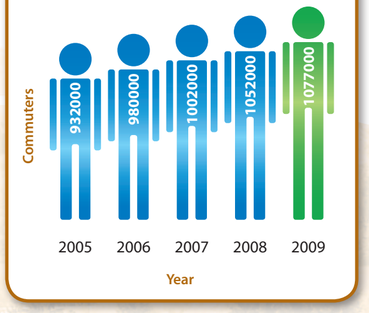
The primary sources of GHG in St. Albert stem from burning fossil fuels, such as coal fired electricity, natural gas for heating homes and fuel consumption of personal vehicles. This means that the greatest reductions will be reached by decreasing energy consumption in homes, in vehicles and at work.

Where do we want to be?

Targets:

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

Total Annual Transit Ridership



How are we reaching our targets?

- The City is completing steps one and two in the Partners for Climate Protection five step program.
- 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.



- Transit commuter ridership rose another 2.4% in 2009, following an increase of 5% in 2008.
- The City is participating in, and contributed $50,000 to the Edmonton Northwest LRT study.
- Free transit service was offered for Rock n' August and the Farmers' Market, as well as Saturdays in August.

In co-operation with GAIA Energies, the City tested solar powered Christmas lights in downtown St. Albert, making the community one of the first in Alberta to test this technology.

2009 Report on the Environment
City of St. Albert Cultivate Life

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.

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?

- Draft Smart Growth regulations were completed in 2009 and are being revised with public input.
- 37 basement suite grants were approved.
- St. Albert Transit added 15 new buses to its fleet, nine of which will replace older, less efficient buses.



Goal: Preserve and Manage Trees, Parks and Natural Areas

Where are we now?

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

Where do we want to be?

Targets:

- Complete a review of the current standard for parks and natural areas.
- Protect 100% of proposed important natural areas.

How are we reaching our targets?

- City staff completed a tree inventory, which included trees and shrubs on boulevards, streets, medians and parks.

In 2009, the City counted a total of 37,856 street trees, 464 street shrubs and 7,722 park trees.



Goal: Reduce Solid Waste Generation

Where are we now?

St. Albert's solid waste generation is 184 kg annually per person, which continues to be much lower than the provincial average of 288 kg annually per person. Since the Pay-As-You-Throw improvements and curbside recycling were introduced in 2009, waste diverted from the landfill has increased from 37% to 41%.

Where do we want to be?

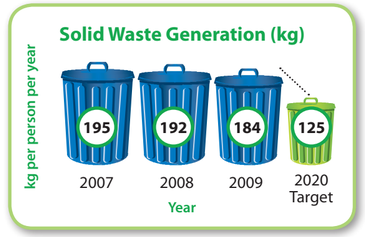
Targets:

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

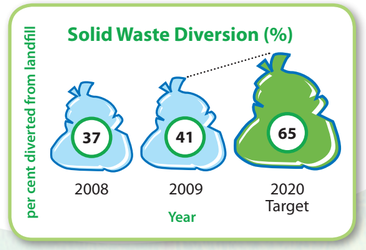
How are we reaching our targets?

- The Pay-As-You-Throw waste program was simplified from six volume levels to three. In addition, residents who have curbside garbage pickup now receive curbside recycling service.

Solid Waste Generation (kg)



Solid Waste Diversion (%)

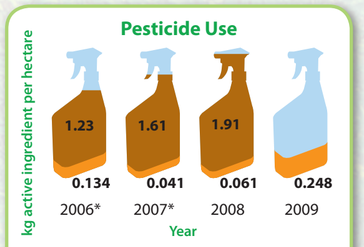


Goal: Reduce Contamination by Improving Hazardous Waste Management

Where are we now?

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

Pesticide Use



* Residential data may be lower than actual use

** Pesticide use is based on domestic sales of herbicides therefore data will be reported a year behind

Where do we want to be?

Targets:

- Reduce municipal pesticide use to 0.5 kg of active ingredient per hectare or lower by 2020.
- Reduce residential turf herbicide use by 25% by 2020.
- Complete environmental management plans for the former landfill site and the former Public Works yard by 2012.



How are we reaching our targets?

- As part of the first Weed Warrior event, four truckloads of invasive weeds were hand pulled from the Grandin Eco Pond.

In 2009, the Household Hazardous Waste Roundup collected 17,974 L of liquid hazardous materials, 924 kg of solid hazardous material, 791 aerosol cans and 668 feet of fluorescent lightbulbs.



2009 Report on the Environment

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 during the summer months and compares them to the following provincial and national water quality standards:

- Dissolved oxygen concentrations in the Sturgeon River throughout St. Albert are above levels required by aquatic life.

Dissolved oxygen is the amount of oxygen available to aquatic plants and animals. Typically, healthy bodies of water have high concentrations of dissolved oxygen.

- Pesticide concentrations increase as water moves through the city but are still at acceptable levels for maintaining a healthy river.
- Nitrogen and phosphorus concentrations are very high throughout St. Albert which is likely related to the use of fertilizers on turf grass.
- Bacteria levels are high and increase as water moves through St. Albert which is likely due to animal wastes being washed into the river from trails and parks.

Most of the pesticides detected in water quality monitoring stem from residential turf herbicides.

Through its annual stormwater catch basin cleaning and spring street sweeping, the City continues to reduce the amount of grit and sand that reaches the river.

Where do we want to be?

Targets:

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

How are we reaching our targets?

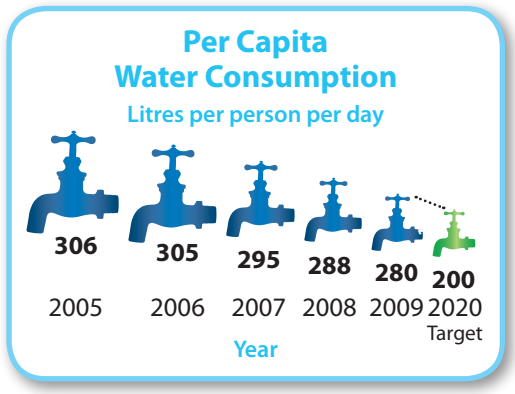
- The City's Environmental Advisory Committee reviewed the Rivers Edge Enhancement Project and, due to the success of its initiatives, recommended continued endorsement of the program.



Goal: Reduce Water Consumption

Where are we now?

The downward trend continues for 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 are we reaching our target?

- Continuing with the success of past rain barrel programs, the City sold 450 barrels in 2009.

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 on this rebate and others, visit www.climatechangecentral.com



We Need Your Input!

For more information or to provide feedback, please contact:

Office of Environment
phone: 780-459-1735
email: environment@st-albert.net