2013 REPORT ON THE ENVIRONMENT

The 2013 Report on the Environment is our way of sharing progress and achievements on the eight goals and targets of the City of St. Albert's Environmental Master Plan (EMP).

To read the EMP, visit **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 goals to staff and the community
- continuous improvement of its environmental performance

In 2013, the City initiated the five-year review of the Environmental Master Plan. This update was completed with input from the public and the City's Environmental Advisory Committee and will be presented to Council for approval in May 2014. Future annual reports will focus on the goals and targets updated in the 2014 Environmental Master Plan.

City of St. Albert **Environment and Sustainability**
Green by nature

AIR

GOAL: **MAINTAIN AIR QUALITY**

Where are we now?

The City of St. Albert has worked with Alberta Environment and Sustainable Resource Development (AESRD) and Alberta Capital Region Airshed (ACA) (**capitalairshed.ca**) to secure a permanent air quality monitoring station for St. Albert. A working group, including representatives from the Environmental Advisory Committee and air quality monitoring experts from the community, identified a number of potential sites for the new station.

Where do we want to be?

The air quality monitoring station will help to provide a better understanding of the air quality in St. Albert by gathering data to establish a baseline of information. The City will be working with stakeholders and other municipalities in the region so we have the clearest picture of the health of our airshed to date. The data will also be used to help reduce greenhouse gas emissions and other air pollution prevention initiatives in the region.

How are we reaching our target?

- The air quality monitoring station site to be built and operating by the end of 2014.
- Once the air quality monitoring station is operating, the next steps will include:
  - establish a baseline of air quality data for the next three to five years;
  - develop targets to help maintain air quality in St. Albert;
  - work with ACA and regional partners to develop and promote air quality initiatives such as Clean Air Day, Carpool Month and Idle Free Bylaw.

GOAL: **REDUCE NON-RENEWABLE ENERGY CONSUMPTION AND GREENHOUSE GAS (GHG) EMISSIONS**

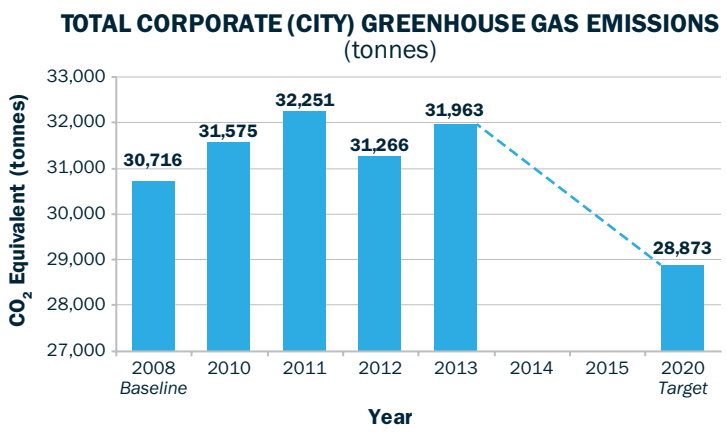
Where are we now?

Baseline information (2008) was calculated in 2010 in the Greenhouse Gas Emissions Inventory. Based on recommendations from this report, community emissions are calculated every three to five years and corporate (City) emissions are calculated every year.

In 2013 the City's GHG emissions increased 2.2% from 2012 emissions for a total increase of 3.9% over 2008 levels. In 2013 the community's GHG emissions increased 2.6% over 2008 levels from 711,303 to 730,004 tonnes of CO_2 equivalent.

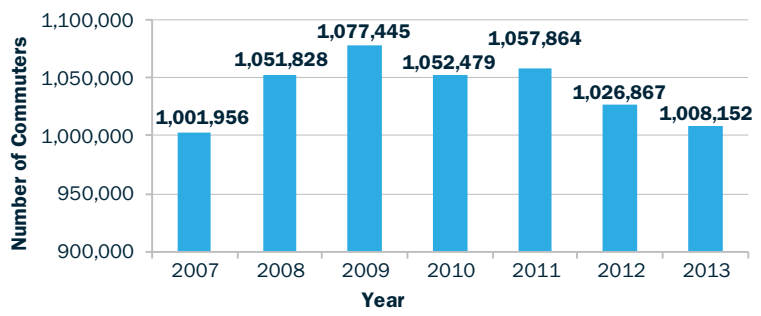
Where do we want to be?

- Reduce total corporate (City) emissions to 20% below 2008 levels by 2020.
- Reduce total community GHG emissions to 6% below 2008 levels by 2020.



How are we reaching our targets?

- The City has completed three of the five milestones for the Partners for Climate Protection program which includes the completion of the Local Action Plan for Energy Conservation and Reducing Greenhouse Gas Emissions in 2013. The City is currently working on completing milestone four which includes implementing the Local Action Plan.
- City administration continues to work with the City of Edmonton and the Province to plan for construction of the Campbell Road Transit Centre/Park and Ride. In 2013, the City received confirmation that the project is eligible to receive grant funding through the province's Green Transit Incentives Program.
- The City and regional partners initiated the Light Rail Transit (LRT) Functional Alignment Study which will identify and evaluate possible LRT routes in St. Albert.



- Commuter ridership continues to decrease in 2013, likely due to fare increases and the loss of park and ride stalls at the Village Transit Station.

- In partnership with a local business, City staff installed the first public Electric Car Charging Station in downtown St. Albert.

The Electric Car Charging Station is located behind the St. Albert Business Center at 29 Sir Winston Churchill Ave. It is accessible to all models of electric vehicles and is available seven days a week, 7 a.m. to 8 p.m.



The City of St. Albert is part of the **Partners for Climate Protection (PCP)**. The City has completed milestones 1 to 3, and are currently working to complete milestone 4; implementing the Local and Community GHG Action Plan.

To view the inventory and forecast report and the Local Action Plan document, visit **stalbert.ca/greenhouse-gas-emissions**.

Milestone 1 - *Completed*
Creating a greenhouse gas emissions inventory and forecast

Milestone 2 - *Completed*
Setting an emissions reductions target

Milestone 3 - *Completed*
Developing a local action plan

Milestone 4 - *In Progress*
Implementing the local action plan or a set of activities

Milestone 5
Monitoring progress and reporting results

WATER

GOAL: **PROTECTING AND MAINTAINING THE STURGEON RIVER WATERSHED**

Where are we now?

The City regularly tests water quality at five locations along the Sturgeon River and four locations along Carrot Creek. Based on the 2013 testing results:

- Pesticides were detected in lower numbers and concentrations along the Sturgeon River in 2013, which may be attributed to the provincial ban on Weed and Feed products in 2010.
- The levels of nitrogen and phosphorus continue to be well above guidelines for protecting the health of the river. Nitrogen and phosphorus, the main ingredients in fertilizers, were detected at high concentrations along Carrot Creek but slightly lower levels through St. Albert.
- Although within acceptable levels for protection of aquatic life, bacteria levels continue to be high through the city. High bacteria levels from stormwater outfalls are likely related to animal waste.
- Through the 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?

- Maintain Sturgeon River quality as the water moves through St. Albert.
- Capture 90% of municipal winter road sanding material by 2020.

How are we reaching our targets?

- Council appointed a representative to the Sturgeon River Watershed Alliance. The primary objective of the group is to build on the findings of the Sturgeon River State of the Watershed Report by developing a management plan for the Sturgeon River Watershed and work collaboratively on an ongoing basis to implement its recommendations. To view the Sturgeon River State of the Watershed Report, visit **stalbert.ca/sturgeon-river-watershed**.
- The Sedimentation and Erosion Control project continued at three high priority locations along the Sturgeon River. Grit interceptor structures were completed at two outfalls in 2013 – Mission Avenue at Perron Street Bridge and Riel Drive near the BMX Park. Erosion control work was completed in Grandin Ravine with the installation of over 20 “live” check dams made of rock, timber and willow cuttings.



“Live” check dams

- In 2013, the City collected 316 m^3 of grit and sand from its catch basin and grit interceptors to protect the Sturgeon River.

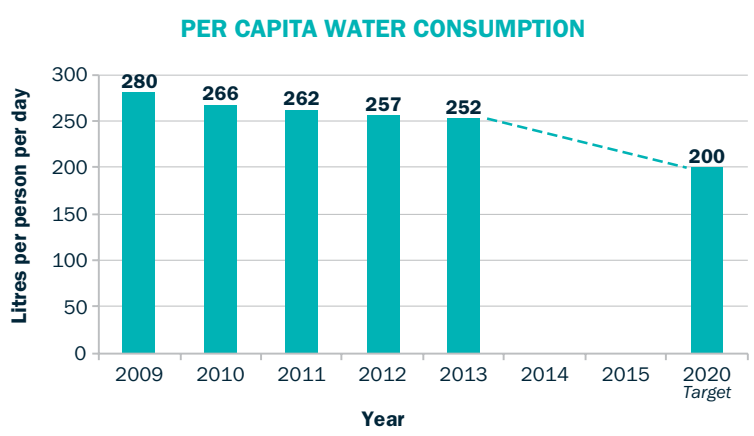


As part of improvements to Mission Avenue Outfall, a functional art safety fence and outfall grate were installed.

GOAL: **REDUCE WATER CONSUMPTION**

Where are we now?

Water consumption continues to decrease, moving from a per capita rate of 257 litres in 2012 to 252 litres in 2013.



Where do we want to be?

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

How are we reaching our target?

- As a recommendation from the Water Conservation, Efficiency and Productivity Plan, City Council directed administration to develop a Water Conservation Bylaw that will require any new residential or commercial development or major renovation to install low-flow water fixtures. The proposed bylaw will be presented to City Council in July 2014. To view the Water Conservation, Efficiency and Productivity Plan document visit **stalbert.ca/water-conservation-plan**.
- Continuing with the success of the rain barrel program over the past five years, the City sold 270 barrels at a reduced cost in 2013. Residents have purchased over 3,700 rain barrels since the program started in 2006.

LAND

GOAL: **PROMOTE SUSTAINABLE URBAN DEVELOPMENT**

Where are we now?

The Municipal Development Plan (MDP) was updated in 2012 to align with the density targets for new neighbourhoods set out by the Capital Region Board. New neighbourhood densities are determined when an Area Structure Plan (ASP) or Area Redevelopment Plan (ARP) is submitted. Each year, densities for new residential neighbourhoods will be reported for each ASP/ARP approved by Council. In 2013, the City did not approve any ASPs or ARPs.

Where do we want to be?

- Achieve minimum density of 30–45 dwelling units per net residential hectare for new neighbourhoods.
- Achieve minimum of 30% for medium- or high-density residential units for new neighbourhoods.

How are we reaching our targets?

- Designation of 617 acres of industrial land (employment lands) was made official in 2013 with amendments to the MDP and Intermunicipal Development Plan.
- Council approved the Affordable Housing Policy which will encourage the development of affordable and entry-level housing in St. Albert. This policy also supports the Capital Region Board Growth Plan targets.
- The City continues to encourage downtown development by identifying factors like facilitating pedestrian, cycling and transit connectivity and appropriate urban design for key downtown entrances.

GOAL: **PRESERVE AND MANAGE TREES, PARKS AND NATURAL AREAS**

Where are we now?

The City manages more than 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?

- Complete a review of the current standards for parks and natural areas as part of the Parks and Open Spaces Management Plan (POSMP) and Municipal Development Plan update review process.
- Protect 100% of proposed prioritized important natural areas.

How are we reaching our targets?

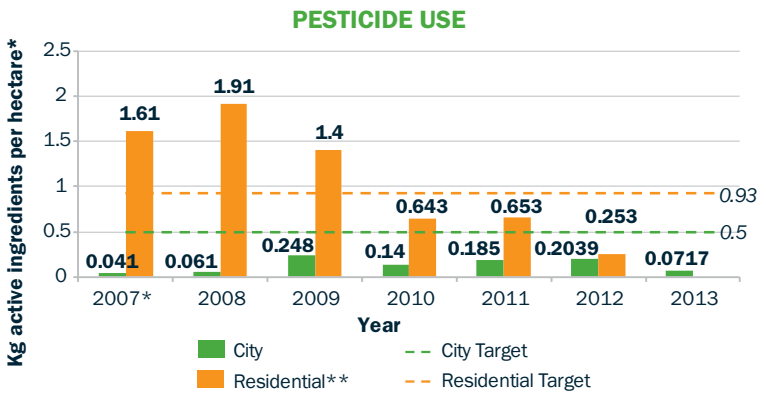
- The City signed an agreement with the Big Lake Environment Support Society (BLESS) and Arts and Heritage Foundation to develop a tree nursery that will provide native plants for naturalization projects in the community.
- City staff and an advisory committee is developing the draft Grey Nuns White Spruce Park Management Plan for approval in 2014.
- Since starting the River Edge Enhancement Project in 2006, residents have volunteered to plant over 2,900 trees and shrubs along the Sturgeon River.

GOAL: **REDUCE CONTAMINATION BY IMPROVING HAZARDOUS WASTE MANAGEMENT**

Where are we now?

The City uses Environmental Management Systems (EMS) to identify and address environmental impacts from its day-to-day operations. Environmental Management Systems programs help identify hazardous materials such as pesticides used on restricted weeds or salt use for ice control on roads and enable the City to minimize their use and ensure their proper storage and disposal.

The amount of pesticide used by the City varies and is dependant on the weather and types of weed and pest infestations addressed year to year.



** Active ingredients (ai) per hectare is a measure of the amount of kilograms of active pesticide substance used over a certain area.*
*** Community pesticide use is based on domestic sales of herbicides therefore data will be reported a year behind.*

Where do we want to be?

- Reduce municipal pesticide use to 0.5 kg of active ingredient (ai) per hectare or lower by 2020.
- Reduce residential herbicide use (2-4D, Mecoprop, Dicamba) by 25% by 2020.
- Complete environmental management plan for the former landfill and the former Public Works yard by 2012.

How are we reaching our targets?

- Both residential and City use of pesticides are below the targets set out in 2009.
- Remediation work on the former landfill at Riel Park was completed in 2013.
- In 2013, the City completed a review of potentially contaminated City sites. The review identified size properties that will be investigated in 2014.



In 2013, the Cultivating Front Yards program rewarded both residents and businesses for beautifying their front yards. Over 200 nominations were received in five categories: best natural front yard, best edible front yard, best front yard overall, best art in the front yard and best business front yard.

cultivatebusiness.ca/Support/CultivatingFrontYards.aspx

Best Edible Front Yard



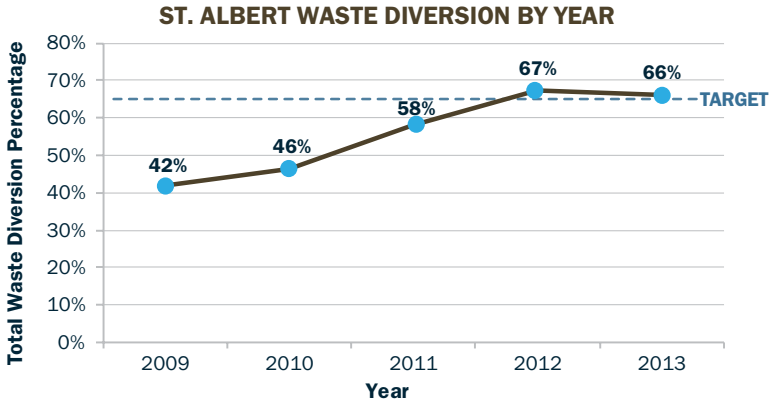
WASTE

GOAL: **REDUCE SOLID WASTE GENERATION**

Where are we now?

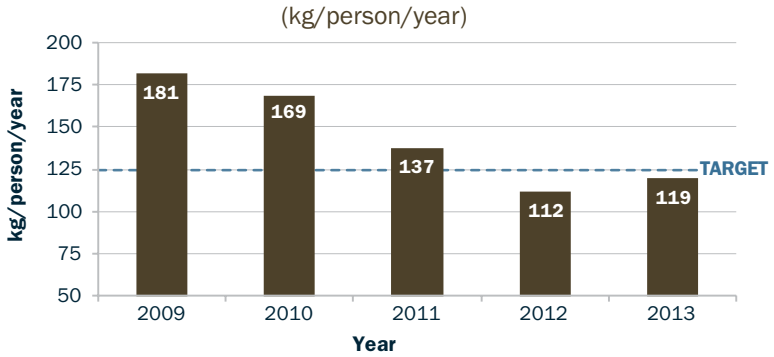
- The City of St. Albert continues to lead the province in high landfill waste diversion (66.2%) and low per capita waste production (119 kg/person/year). Residents of St. Albert should be proud of their landfill waste diversion accomplishments, proving St. Albert is a leader in Canada in these efforts.

ST. ALBERT WASTE DIVERSION BY YEAR



This chart shows the waste diversion totals over the last five years. With 67.4% total diversion for 2012, the City of St. Albert has officially bypassed the Environmental Master Plan's waste diversion target of 65% by the year 2020.

ST. ALBERT RESIDENT PER CAPITA WASTE PRODUCTION
(kg/person/year)



This graph represents the total yearly landfill waste production per person (based on the official recorded population in each year).

Where do we want to be?

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

How we are reaching our targets?

- Now that we have achieved both our targets, the program will be reviewed and new waste reduction targets will be created through consultation with residents, the Environmental Advisory Committee, Council, and Regional Waste Reduction Advisory Committees in 2014.
- The City will be also reaching out to schools and other community groups to further promote waste diversion methods.



Automated curbside waste collections has reduced Worker Compensation Board claims by 17% between 2010 and 2012.

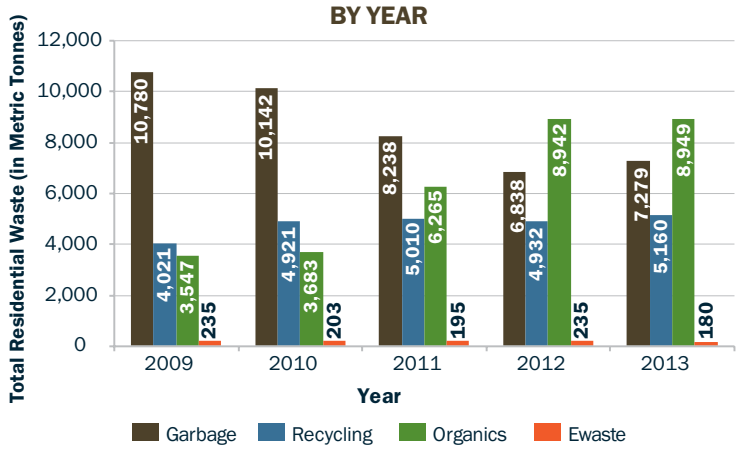


The City teamed up with Habitat for Humanity at the two Large Item Events, held in July and October 2013 to help divert usable household items from the landfill. Both events were able to salvage approximately $10,000 worth of merchandise for sale at Habitat for Humanity's Edmonton Restore outlet. More information about Habitat for Humanity Restore can be found online at **hfh.org**.

2013 ACHIEVEMENTS

- Within the Capital Region, the City of St. Albert enjoys the highest landfill diversion rate amongst all municipalities at over 66%, well above the region's average residential diversion rate of 43%. The next highest comparators in the region are Strathcona County at 61%, followed by the City of Edmonton at 53.3%.
- The Community Environmental Survey rated the City's Waste Program Services with high levels of satisfaction among all collection services, with garbage collection recording 81% satisfaction, curbside recycling at 89% satisfaction and curbside organic collection at 79%.
- The City introduced combined waste and co-mingled (garbage, paper products, recyclables) recycling bins at City-owned facilities for public use. The recycling bins are available at St. Albert Place (eight bins), Fountain Park Recreation Centre (five bins), Akinsdale Arena (seven bins) and Servus Place (15 bins). The large visual design on the bins makes it easier for users to recognize, and therefore, easily and appropriately discard items, such as juice boxes, newsprint and waste.

ST. ALBERT TOTAL RESIDENTIAL WASTE TONNAGE BY YEAR



This chart shows the composition of the City's residential waste over the last 5 years in metric tonnes.

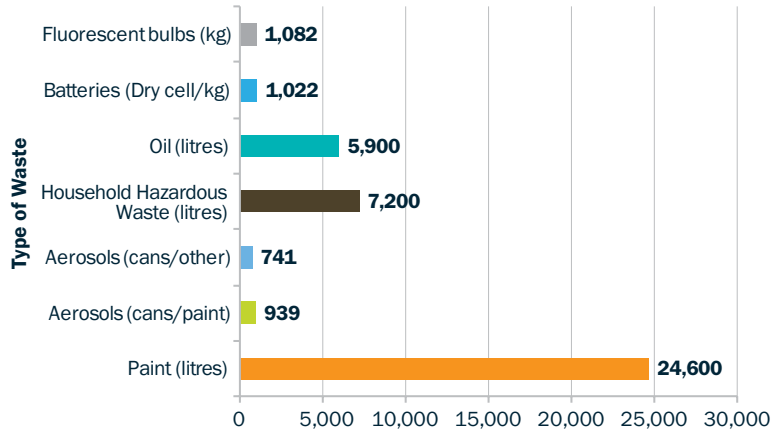
- The City added a tire recycling service to the Recycling Depot to complement the existing hazardous waste disposal services. The service is an agreement with Alberta Environmental Rubber Products (AERP) to accept vehicle and bike tires for recycling at no cost to the City or residents.
- The Recycling Depot was host to a new compost giveaway site which will operate every spring and fall. The new compost giveaway site will allow residents the opportunity to take home buckets of compost. This new service replaces the one day giveaway events, which experienced long lines and sold out of stock quickly.



WASTE

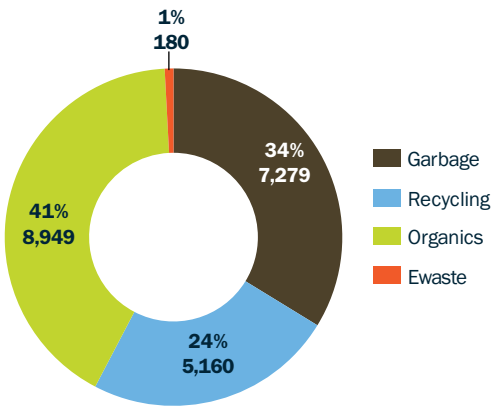
- Residential leaf collection ran from October 15 to November 15, 2013. The bagged leaves were taken to the City of Edmonton's Waste Management Center of Excellence and were debagged and composted. In total, the City of St. Albert was able to divert slightly over 102 metric tonnes of leaf material in 2013.
- Public Works hosted the 20th "Take it or Leave it" event at Servus Place on June 1, 2013. The event was well attended, with approximately 325 vehicles dropping off material and several hundred more people in attendance to claim the used items. Non-profits (St. Albert Food Bank and Scouts) were also in attendance and were pleased with the attendance and donations raised from the event.
- The Christmas Tree Collection program (January 7—18, 2013) recorded 1,652 trees (down from 1,823 trees in 2012). The trees are collected and brought to the City's Compost Depot where they were chipped and taken to the DAPP Energy Plant in Westlock County to be used as a fuel source.

HAZARDOUS WASTE COLLECTED - RECYCLING DEPOT 2013



This chart shows the total amount of hazardous material in various categories collected by the City of St. Albert in the Recycling Depot.

2013 WASTE STREAM COMPOSITION (PERCENTAGE AND TONNAGE)



This chart shows the total waste composition by percentage for 2013 broken down into the waste streams.

WASTE TIPS

- Purchase products with minimal packaging or recyclable/reusable packaging.
- Use reusable shopping bags.
- Use reusable water bottles rather then purchasing single use containers.
- Donate useful items (such as clothing and furniture) rather then sending them to the land fill.
- Use the City's "A-Z" Sorting Guide to ensure you are diverting as much household waste as possible. **stalbert.ca/waste**



HOW YOU CAN GET INVOLVED

Compost Giveaway | Available May
stalbert.ca/recyclingdepot

Rain Barrel Purchasing | May 1–30
stalbert.ca/rain-barrel-program

REEP/Clean & Green Riverfest | May 11
stalbert.ca/river-edge-enhancement-project
stalbert.ca/cleanup

Arbor Day | May 21
stalbert.ca/pweventsprograms

Yellow Fish Road Program
June-September
stalbert.ca/yellow-fish-road

Environment Week | June 1–7
World Environment Day| June 5

Clean Air Day | June 4
stalbert.ca/clean-air-day

Water Quality Awareness Day| June 5
alms.ca/about-awga

Take it or Leave it | June 7
stalbert.ca/tioli

North Saskatchewan Watershed Alliance Annual General Meeting | June 18
nswa.ab.ca

Good Growing Neighbours
Summer and Fall programming
stalbert.ca/good-growing-neighbours

Large Item Drop Off
July 26 & September 27
stalbert.ca/junkevent

City Wide Cleanup | September 20
stalbert.ca/city-wide-clean-up

Carpool Month | October
carpool.ca

Apply for an Environmental Initiatives Grant
October 9 Application Deadline
stalbert.ca/environmental-initiatives-grant-program

Waste Reduction Week | October 20–26
wrwcanada.com



WE NEED YOUR INPUT!

Help Us Write Our Story – *Cultivating Our Future*

We want to ensure a high quality of life for current and future generations by developing a shared vision and values that will help guide and shape our actions and decisions moving forward. Over the next year, the City will be engaging with residents to find out what they want St. Albert to look and feel like in the future.

Find out how you can get involved at **stalbert.ca/stafuture** or contact Environment and Sustainability at:

Phone: 780-459-1748
Email: stafuture@stalbert.ca

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twitter.com/stafuture
instagram.com/stafuture