

ENVIRONMENTAL PROGRESS REPORT 2017

Growing a clean, green and healthy Leduc

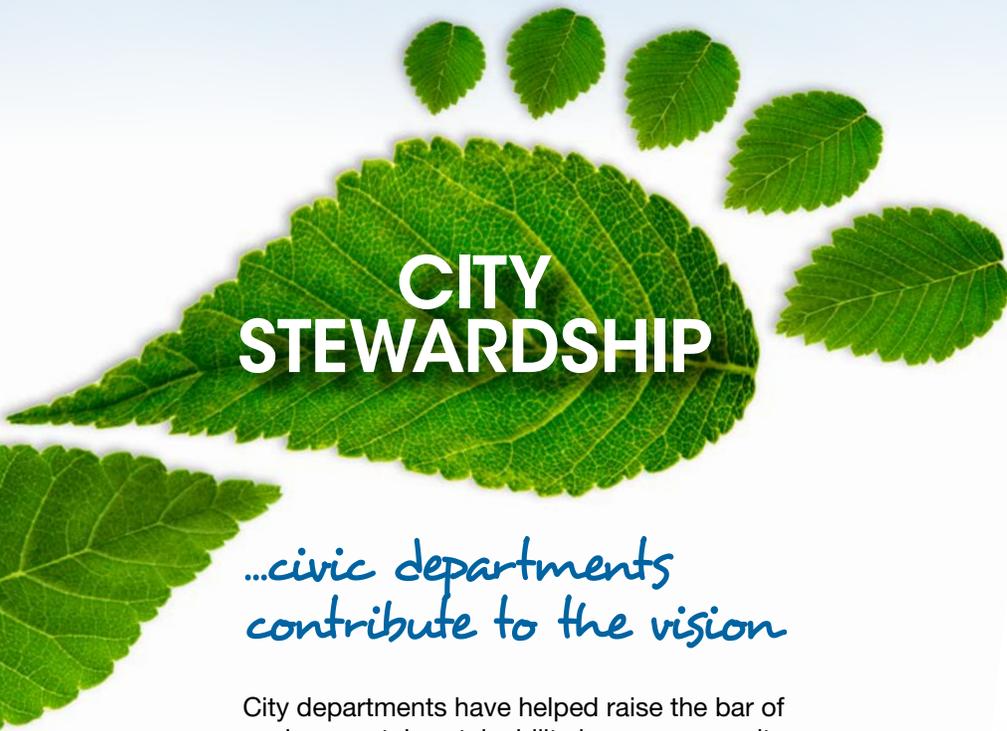


PARTNERING with *nature* 

CITY OF
Leduc 

Leduc's work toward its vision of a healthy, sustainable and resilient environment is approaching a milestone in its evolution.

As a community, we practise many basic actions needed to achieve our vision. Now we can build on that foundation of basic knowledge and action to reach the next level of environmental achievement.



CITY STEWARDSHIP

*...civic departments
contribute to the vision*

City departments have helped raise the bar of environmental sustainability in our community.

From highly visible initiatives such as Leduc's solar project, the Telford Lake amenities and Leduc's many waste diversion initiatives to smaller projects such as the installation of multi-stream waste and recycling bins throughout the city, our community is making effective use of its available resources to strive toward our environmental vision.

2017 civic projects

- The City of Leduc won the 2017 Canadian Sport Tourism Alliance's "Sustainable Sport of the Year" Prestige Award for the 2016 Alberta Summer Games, held in Leduc. City of Leduc Sport Tourism had to demonstrate how the Games supported three dimensions of sustainability: environmental stewardship, social inclusion and responsibility, and economic development.
- Compostable cups, plates, napkins and cutlery are now used for all major civic events to reduce waste.
- Biodegradable, coconut-based foam is used for fun runs such as Foamfest to minimize this event's impact on the water system.
- A new bulk water trailer donated to the city by Jayco for the 2016 Alberta Summer Games continues to be used for major events including Rock the Rails and Party in Alexandra Park to decrease the number of individual water bottles used.



LEDUC STRATEGIC PLAN *environmental highlights*

LEAD DEPARTMENT KEY ACTIONS & RESULTS

Goal 1 **Community Character**

1.2 Plan and construct Telford Lake amenities	Community Development and Culture	<ul style="list-style-type: none"> Extended the Telford Lake boardwalk to encourage outdoor activities. Started a pollinator garden near the Community Gardens. Installed a new weir on Telford Lake to help maintain lake levels.
1.3 Complete Phase 2 of Leduc's Downtown Master Plan	Planning and Development	Installation of 21 three-stream waste receptacles along 50 Avenue was completed.

Goal 2 **Community Wellness**

2.1 Implement initiatives identified in the Environmental Sustainability Plan	Environmental Services	<ul style="list-style-type: none"> Established a new Area Structure Plan (ASP) guideline that requires a biophysical assessment of new lands. <p><i>Waste diversion:</i></p> <ul style="list-style-type: none"> The 2017 curbside waste diversion rate was 50%. Residents collected record-setting amounts of organics per household. 850 trees planted on Arbour Day with 200 trees planted later at Willow Park School.
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Goal 3 **Transportation**

3.2 Evaluate and optimize Leduc's transit system and service	Public Transportation	Leduc Transit ridership numbers continue to climb, proving its usefulness to residents and keeping cars off the road.
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Goal 4 **Economic Development**

No environmentally related initiatives in 2017

Goal 5 **Regional Partnerships and Governance**

5.1 Strengthen relationship with key stakeholders in the Leduc region, including Leduc County, the Capital region, City of Edmonton, school boards, EIA and other stakeholders	All departments	Environmental services staff continued to represent Leduc at the Alberta Capital Airshed and the Capital Region Municipal Sustainability Group. Councillor Finstad was elected Chair of the Capital Region Waste Minimization Advisory Committee, made up of about 20 regional municipalities, which collaborates on waste diversion initiatives.
5.2 Continue Leduc's pursuit of regional collaboration and governance initiatives		

Goal 6 **Fiscal Sustainability**

6.4 Regular review of select services for efficiency / effectiveness	All departments	The Leduc Recreation Centre and the City Operations Building solar arrays produced 1,604 megawatt hours of energy in 2017, with operational savings of \$101,000.
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**Check out the City of Leduc annual report for more information.*

Huge rave to the City of Leduc for planting fruit/pollinator trees along the path by the community gardens. These are beautiful visual additions as well as practical and environmental. The walking paths are one of my favourite things about Leduc.

– Facebook post



SETTING THE GROUNDWORK

The City of Leduc had an interesting and productive 2017 entrenching and enhancing its environmental program.

On one hand, continuing economic conditions throughout the region and the province resulted in a hold-the-line approach for many civic departments. On the other, the city maintained focus on key environmental initiatives while championing newer initiatives.

Leduc's waste diversion program, the foundation of the city's environmental stewardship, reinforced sorting basics. Public awareness initiatives underlined the benefits of using the Eco Station to business and residents from multi-family units.

Other established programs, several in partnership with the Leduc Environmental Advisory Board (LEAB), attracted enthusiastic participation and resulted in enhanced public areas around the city.

Leduc's solar project, begun in 2016 in conjunction with the 2016 Alberta Summer Games, took hold in 2017 with the first full year of energy production. This initiative offers exciting potential and adds significant depth to our environmental program.

Community outreach & communication highlights:



Business Expo: The city showcased its tools on proper cart placement and sorting.

Environment Week: The city and LEAB again hosted several events around Environment Week, June 5-11: the Green Gold event, launch of the Leduc Pollinator Garden, launch of the enviro-themed Art Wall, the spring bird count, free transit service on Clean Air Day and Peter Puffin school presentations to 372 Grade 4 students.

Art Wall: Leduc artists Shelby Willis and Abby Oliver combined their paintings and photographs for the “Celebrating nature: bold & beautiful” exhibit at the Leduc Public Library in June to celebrate different perspectives of nature.



Alberta Care Recycling Conference: The City of Leduc and Leduc County co-sponsored this multi-day conference that helped showcase Leduc's many environmental initiatives while facilitating insightful discussions with about 150 recycling and waste management professionals from throughout Alberta. The event featured tours of city facilities such as the solar project and the regional landfill materials recovery facility.



Community Information

Registration Day: Families stepped up to play the Toss and Sort game, an entertaining way to remind everyone at this September event to sort smarter and use the Sort Smart app. Staff also gave away a year's supply of compostable bags.



Communities in Bloom:

Leduc's participation in this program since 1995 has encouraged civic pride and enhanced our community. In 2017 Leduc won first place in the Class of Champions (large category).

Festival of Trees:

The alternative energy bike enticed many visitors Nov. 11 and 12 as they lit the LEAB Christmas tree with their own pedal power. The tree featured the Christmas bird count and displayed tree ornaments made from recycled materials.

Large item pickup:

Residents disposed of 20 tonnes of large items in 2017. This clean-up event is held each year in May.

Committee involvement:

The Capital Region is working together on a range of sustainability subjects such as waste diversion, sharing ideas and collaborating on potential solutions.



Reporting environmental progress:

The Environmental Progress Report 2016 was distributed to residents, environmental partners, stakeholders and regional municipalities, and posted on Leduc.ca for downloading.

Earth Hour:

The city again participated in this one-hour event, on March 25, to highlight the need to take action on our changing climate. Leduc recorded a 1.3% energy reduction during the event.



Waste diversion... we **Sort Smarter**

Waste diversion initiatives in 2017 reflected the cautious fiscal climate adopted throughout the City of Leduc. Established initiatives continued with strategically timed public awareness reminders throughout the year to maximize participation and reinforce good waste diversion habits.

The year focused on emphasizing sorting principles so Leduc can contain, or reduce, contamination of organics and recyclable loads. Several Eco Station promotions targeted Leduc businesses and residents living in multi-family units to encourage these groups of residents to take fuller advantage of the facility.

Policy development

Municipal solid waste cell closure at the landfill:

The city worked closely with the Leduc & District Regional Waste Management Facility as facility management explored options for Leduc's waste management when the cell for mixed waste reaches capacity and closes. The cell is expected to close by 2019.



WHAT WE ACHIEVED

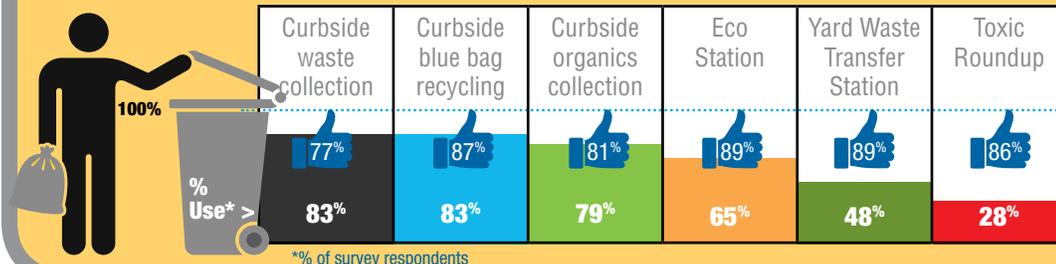
Leduc's curbside organics collection program recorded the largest amount of material since the inception of the program both overall and per household. Since 2013, the curbside organics program has diverted more than 12,000 tonnes of organics from the landfill.

Blue bag collection continues its recent trend with fewer recyclables collected overall and per household. The amount of waste collected increased overall and per household.

The City of Leduc has achieved its waste diversion with a 2017 monthly household user fee of \$22.00.



Citizen satisfaction survey 2017



Thanks for
your feedback!



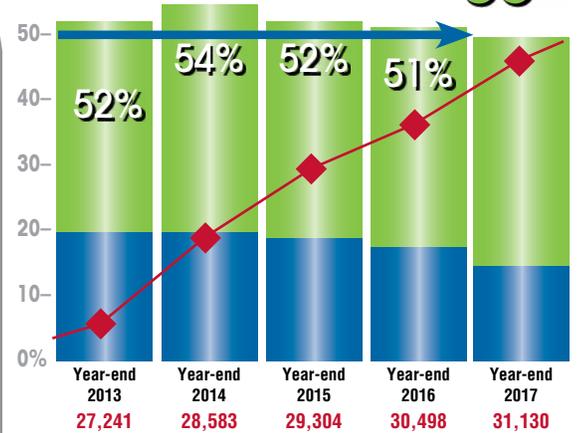


RESULTS: % RESIDENTIAL CURBSIDE DIVERSION

70-
60-
50-
40-
30-
20-
10-
0%

..... 2021 GOAL 65%

2017 WHAT WE ACHIEVED **50%**



◆ LEDUC POPULATION
■ CURBSIDE BLUE BAG RECYCLING
■ CURBSIDE ORGANICS

Curbside ORGANICS*

* INCLUDES CHRISTMAS TREES PICKED UP BY SPECIAL COLLECTION
* CURBSIDE SERVICE STARTED IN SEPTEMBER 2012



	2013	2014	2015	2016	2017
MATERIAL COLLECTED (TONNES)	2,138	2,415	2,375	2,675	2,802
PER HOUSEHOLD (KG)	294	318	294	319	323
% DIFFERENCE / HOUSEHOLD (KG) FROM 2012 START OF SERVICE					+708%

Curbside BLUE BAG RECYCLABLES



	2013	2014	2015	2016	2017
MATERIAL COLLECTED (TONNES)	1,360	1,439	1,328	1,197	1,126
PER HOUSEHOLD (KG)	187	189	165	143	130
% DIFFERENCE / HOUSEHOLD (KG) FROM 2012					-17%

Curbside WASTE COLLECTION



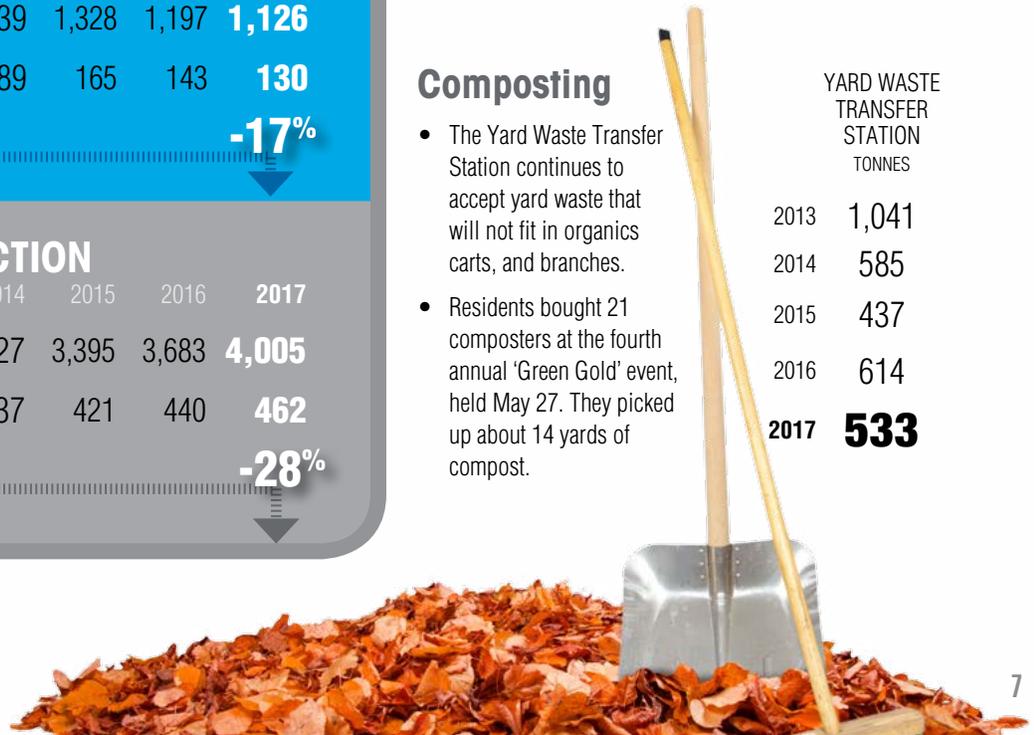
	2013	2014	2015	2016	2017
MATERIAL COLLECTED (TONNES)	3,148	3,327	3,395	3,683	4,005
PER HOUSEHOLD (KG)	433	437	421	440	462
% DIFFERENCE / HOUSEHOLD (KG) FROM 2012					-28%

Composting

- The Yard Waste Transfer Station continues to accept yard waste that will not fit in organics carts, and branches.
- Residents bought 21 composters at the fourth annual 'Green Gold' event, held May 27. They picked up about 14 yards of compost.

YARD WASTE TRANSFER STATION
TONNES

2013	1,041
2014	585
2015	437
2016	614
2017	533





ECO STATION



	VISITS	BLUE BAG RECYCLABLES	CARDBOARD (COMPACTED ONLY)	ELECTRONIC WASTE [‡]		HOUSEHOLD HAZARDOUS WASTE [‡]
		TONNES	TONNES	UNITS	TONNES	LITRES
2013	21,651	263	N/A	2,959	56.1	60,094
2014	20,119	344	15.39	3,316	59.5	54,608
2015	25,786	271	29.65	3,944	68.6	92,865
2016	27,995	302	28.93	3,447	59.3	90,645
2017	27,666	133	N/A	3,499	63.8	99,354

[‡] INCLUDING MATERIALS COLLECTED AT THE OCTOBER 2017 TOXIC & E-WASTE ROUNDUP

Good to see you!

With business reps and families from multi-unit residences using the Eco Station more and more, visits to the facility have increased **28%** since 2013.



Toxic & E-Waste Roundup

- The Oct. 17 Roundup attracted 345 vehicles.
- About 170 people visited the information tent.
- Residents dropped off 10 bins of paint and four bins of household hazardous waste.

	ELECTRONIC WASTE		HOUSEHOLD HAZARDOUS WASTE
	UNITS	TONNES	LITRES
2013	150	2.3	14,370
2014	104	2.1	8,010
2015	240	4.4	11,410
2016	125	2.0	9,597
2017	144	2.5	9,562





Program development & implementation

Leduc enhanced the concept of the Alberta Summer Games “sustainability torch” by building a new “torch,” complete with bee hotels. Leduc has passed the new “torch” to Grande Prairie, host of the 2018 Alberta Summer Games.

About 200 residents attended the fourth annual ‘Green Gold’ event, held May 27 again with support from RONA. Participants bought 128 rain barrels and 21 discounted composters, and shoveled up about 14 yards of free compost.

Installation of 21 three-stream waste receptacles along 50 Avenue was completed, making it easy for residents to sort their recyclables, organics and waste as they enjoy downtown.

A special Peter Puffin eco-educational performance delighted 372 Grade 4 students.

Communication & community outreach

- An anti-contamination Sort Smarter public education campaign encouraged residents to fine-tune their organics material sorting practices to keep the organics stream free of plastics and other non-organic materials.
- The Sort Smarter phone app was updated.
- The pedal power bike at the Festival of Trees proved a popular way to highlight alternative means of energy as residents lit the LEAB tree, which featured the Christmas bird count and displayed tree ornaments made from recycled materials.

Social media

Throughout the year, Environmental Services participated with many other city departments to reach residents through social media posts and a series of short advertising campaigns on Facebook.



Highlights of Facebook advertising campaigns:

CAMPAIGN	# People reached	# Impressions	# Clicks	# People taking action
ECO STATION				
Small loads for business	15,217	23,865	57	36
Recycle cardboard	8,800	14,843	24	13
Free e-waste drop-off	12,126	18,289	52	37
'Green Gold' event	78,251	106,342	235	152
Arbour Day	693	15,117	347	512
Spring bird count	337	12,351	281	267

Popular Page!

The Leduc.ca collection calendars and routes page had 12,953 page views (10,394 unique page views) in 2017.

ENHANCING *our natural areas*

Program development & implementation

Pollinator garden:

Leduc's first pollinator garden, near the Community Gardens at Telford Lake, is attractive to pollinators such as butterflies and bumble bees, which increase plant biodiversity and the community's food supply.

Telford Lake Boardwalk extension:

With the extension, the boardwalk totals 280 metres, connecting the existing trails to the North Telford Playground. Trail users will enjoy several scenic viewpoints along the picturesque path. The grand opening took place June 28 with support from Canada 150.

Eco-friendly pest and salt management:

In early 2018, City Council approved the 2017 Integrated Pest Management (IPM) and Salt Management Plans. The plans offer environmentally sensitive ways to prevent and manage invasive species, pests and weeds on public and private lands as well as ways to minimize winter salt applications to roads.

Environmental study:

A draft Environmentally Significant Areas (ESA) Study was completed and, along with a supplementary report, will go to Council for approval in 2018.

Air monitoring at the dog park:

Initial results indicate good air quality at the park.

Ian's Playground:

Planning has begun for Ian's Playground in Fred Johns Park (West). It will be Leduc's first natural playground, reconnecting children with nature and the environment.

Assessment of new lands:

New Area Structure Plan (ASP) guidelines require a biophysical assessment of new lands.

Telford Lake weir:

The city installed a new weir in partnership with Ducks Unlimited to help maintain lake levels.



WHAT WE ACHIEVED:

TREE PLANTING

# Volunteers	# Planted
2015: 70	2015: 600
2016: 200	2016: 600
2017*: 180	2017*: 1,050

*The City of Leduc gratefully acknowledges the Canada 150 sponsorship of the 2017 Arbour Day ceremonies.

SPRING BIRD COUNT

	Birds	Bird Species
2015:	1,022	101
2016:	1,253	98
2017:	1,489	94

CHRISTMAS BIRD COUNT

	Birds	Bird Species
2015:	677	30
2016:	744	28
2017:	473	26



ENERGY CONSERVATION

- reducing our eco footprint

Leduc's solar project:

Leduc's solar project – involving huge rooftop solar arrays on the Leduc Recreation Centre (LRC) and the City of Leduc Operations Building – was initiated because of Leduc's commitment to power the LRC with 100% clean energy during the 2016 Alberta Summer Games.

The solar project saves money and reduces greenhouse gas emissions.



2017 Energy Benefits LRC & Operations Building



GHG plan: The city secured a \$113,600 grant from the Federation of Canadian Municipalities (FCM) for public engagement and to develop the Greenhouse Gas Climate Mitigation Plan. The plan is to be completed in 2019.

MANAGING our water resources

Program development & implementation

Summer conservation: The city again put energy-wise conservation measures, including closing the spray park, into effect during the dry summer.



PUBLIC TRANSIT

good for the environment

Year-over-year improvements in routes, schedules and transit amenities have resulted in steady, incremental increases in the number of residents using Leduc Transit, and also the number of times they use more than one bus route each trip.

Of particular note are the increases in the number of boardings, which count a passenger each time he or she boards a bus. The comparatively stronger boarding numbers show riders are transferring more frequently to other routes to make their way around Leduc and outside the city.

Leduc Transit is an inter-municipal transit partnership between the City of Leduc and Leduc County, funded in part by the Public Transit Infrastructure Fund (PTIF). Leduc Transit provides three local routes, 96 bus stops connecting Leduc, the Leduc Business Park, Nisku and the Edmonton International Airport (EIA) and service between Leduc and Edmonton.

- The city received PTIF funding to purchase an additional Leduc Assisted Transportation Service (LATS) bus.
- 33 waste/recycling bins – 23 two-stream and 10 three-stream – were placed at bus stops throughout the city, allowing transit users to help divert waste.
- Leduc residents enjoyed free transit service June 7, Clean Air Day, while city employees again participating in the initiative.

Increasing transit ridership reduces use of private vehicles, reducing GHG emissions and making a positive impact on air quality.



WHAT WE ACHIEVED:



% difference from start of service in 2011 (ridership & boardings: 33,106)

	2013	2014	2015	2016	2017
RIDERSHIP*	53,827	58,269	69,031	68,641	81,654
BOARDINGS+	53,827	59,548	76,775	77,664	90,504

*A PASSENGER IS COUNTED ONCE EVEN IF HE OR SHE TRANSFERS MULTIPLE TIMES.

+A PASSENGER IS COUNTED EACH TIME HE OR SHE BOARDS A BUS.



FOR MORE INFORMATION:

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RECYCLE MIX

CITY OF
Leduc
Leduc.ca