

OUR ENVIRONMENT OUR ROLE

**2017 REPORT TO
THE COMMUNITY**
ENVIRONMENTAL
MASTER PLAN





LOOKING BACK: 2017 HIGHLIGHTS

As we look back on the successes and achievements of 2017, we cannot help but look ahead to the future as The City prepares to launch the new, refreshed Environmental Master Plan (EMP). This report marks the conclusion of the existing EMP as the new EMP will have some new measures, targets and actions.

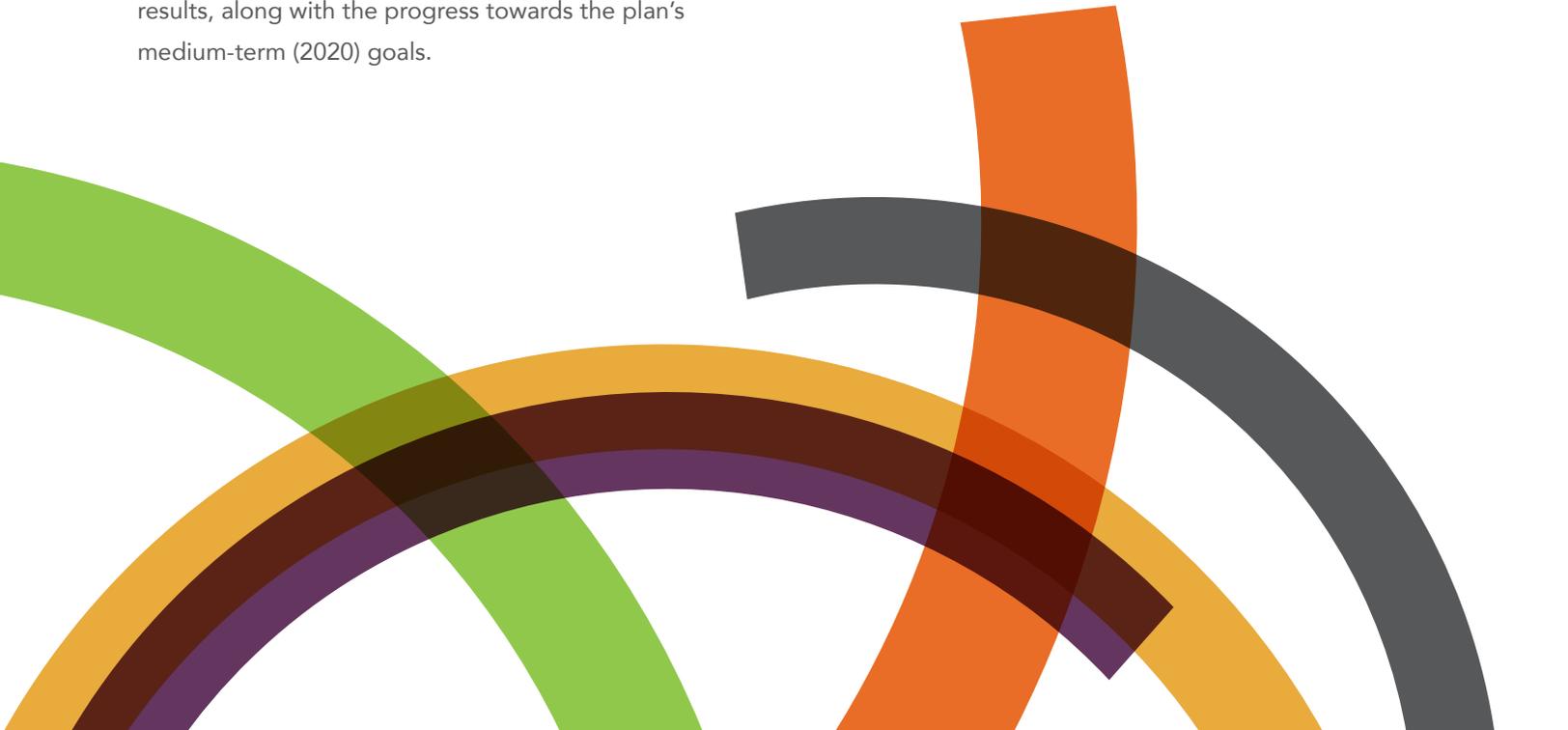
As for 2017, it was another successful year for the EMP with many measures on track to meet – or already exceeding in some cases – the 2020 targets.

The EMP was created in 2011 to provide both The City and the community with a road map to improved environmental sustainability. The plan established short, medium and long-term goals and measures in seven focus areas, and sets a course for achieving these outcomes. This report focusses on the 2017 results, along with the progress towards the plan's medium-term (2020) goals.

LOOKING FORWARD: A NEW BEGINNING

Throughout 2017, The City was busy working on the EMP refresh process, including a thorough public participation process to ensure the plan meets the needs of the community. A Community Engagement Group (CEG), made up of citizens, along with other public participation opportunities, played an important role in our work towards refreshing the EMP.

The City looks forward to completing the updated EMP and working with the community and our partners to implement the refreshed actions within the plan to continue enhancing environmental sustainability in Red Deer.



ENVIRONMENTAL MASTER PLAN AT A GLANCE



**SHORT,
MEDIUM AND
LONG-TERM
TARGETS**

7 FOCUS AREAS



WATER



ECOLOGY



AIR



BUILT ENVIRONMENT



TRANSPORTATION



ENERGY



WASTE

**20
METRICS
MEASURED AND
REPORTED ON
ANNUALLY**



**7
ANNUAL
COMMUNITY
REPORTS**

**LOCAL,
NATIONAL AND
INTERNATIONAL
PARTNERSHIPS**





WATER



POTABLE WATER CONSUMPTION

Red Deer has made significant gains on decreasing water consumption and we are on track to meet the 2020 target. Popular water conservation campaigns, including the Toilet Rebate Campaign and the Rain Barrel Rebate Program, have contributed to this success. In addition, the Water Conservation, Efficiency and Productivity (CEP) Plan, which was launched in 2016, is a long-term, achievable and proactive strategy to reduce water waste and improve resource efficiency in the city.

2020 TARGET

DECREASE BY 22 PER CENT (189 L/CAP/DAY FOR RESIDENTIAL; 105 L/CAP/DAY FOR ICI).

WATER LOSSES

Through a concentrated effort to reduce water losses, we are already achieving the 2020 target (losses currently account for seven per cent). The CEP called for a focus on reducing our water losses by focusing on three key areas including: leakages, thefts, and unmetered water in municipal and contractor operations.

2020 TARGET

10 PER CENT MAXIMUM OF TOTAL WATER USE ATTRIBUTED TO LOSSES.

WATER QUALITY

When it comes to water quality, we are still learning how to reduce the impact on our waterways. In 2017, the city exceeded the target in nitrogen, dissolved oxygen and E.Coli. We continue to work towards achieving the 2020 target through implementing Low Impact Development (LID) techniques, which allow for improved drainage, more absorption and increased stormwater infiltration. This type of development can be seen in Timberlands North.

2020 TARGET

DO NOT EXCEED: TOTAL PHOSPHORUS (0.017 MG/L); TOTAL NITROGEN (0.381 MG/L); TOTAL SUSPENDED SOLIDS (4 MG/L); DISSOLVED OXYGEN (10.4 MG/L); AND E.COLI (9 COUNTS/100 ML).



ECOLOGY



NATURAL AREA AND MAN-MADE GREEN AREAS

In 2017 natural areas (land devoted to natural areas including native treed areas, wetlands and grasslands) increased by nine hectares to a total of 923, just 26 short of the 2020 target. Man-made green areas (land devoted man-made features such as city parks, turf areas, shrubs beds) decreased slightly by three hectares – due to a measurement refinement and we’re still on track to meet the 2020 target.

2020 TARGET

NATURAL AREAS - INCREASE BY 10 PER CENT TO 949 HECTARES; MAN-MADE GREEN AREAS - INCREASE BY 10 PER CENT TO 890 HECTARES.

INTEGRATED PEST MANAGEMENT

At 54 ml/acre, The City continues to far surpass the 2020 target when it comes to volume of toxic herbicide and insecticide use in the parks and green spaces. In fact, since the development of the EMP, the usage has decreased by 74 per cent.

2020 TARGET

DECREASE BY FIVE PER CENT TO 199.5 ML/ACRE.

URBAN FORESTRY

An Urban Forest Management Plan is in the final stages of development and will provide direction on how to best manage the urban forest. The 20-year plan will focus primarily on trees planted in public spaces, but will also address natural forested areas and privately owned trees. The plan will include its own actions, targets and measures.



AIR



GREENHOUSE GAS EMISSIONS

The EMP measures both corporate and community greenhouse gas emissions. The City is making strides on reducing corporate greenhouse gas emissions – those generated by City operations – through initiatives like Greening the Fleet. In the refreshed EMP The City will be taking a closer look at how to continue this trend, as well as how to decrease the emissions generated by the community. In 2017, The City corporate greenhouse gas emissions were 1.40 tonnes/person, a slight decrease from 2016; community emissions were 16.64 tonnes/person, a slight increase from 2016.

2020 TARGET

**30 PER CENT REDUCTION FOR CORPORATE;
A COMMUNITY TARGET WILL BE SET IN THE
REFRESHED EMP.**

AIR QUALITY

The most recent data available (2013-2015) indicates that we met all of the air quality measures, with the exception of fine particulate matter (PM2.5), which we have previously exceeded. The City continues to work in partnership with Alberta Environment and Parks, and The City is proactively implementing initiatives, such as the idle-free campaign, regional partnerships (including the BOLT regional bus service), commuter challenge and other education campaigns, to decrease our PM2.5.



BUILT ENVIRONMENT



LAND DEVELOPMENT FOOTPRINT

We continue to work towards the 2020 target when it comes to managing our land development footprint – or the amount of land we all use to live, work, learn, play and travel in the city. The City is making progress on this measure through redevelopment projects like Capstone at Riverlands.

2020 TARGET

674 M²/PERSON.

LAND AREA USE FOR COMMUNITY GARDENS

With a growing demand for community gardens, we are excited about all the fruits and vegetables Red Deerians have been growing. We are making incremental progress in this area. While The City is still short of the 2020 target, in 2017 The City added more community partnership gardens (now a total of 121 boxes/raised beds) and increased the total garden area to 0.24m²/capita.

2020 TARGET

0.75 M²/CAPITA.



TRANSPORTATION



FUEL CONSUMPTION (GASOLINE AND DIESEL)

While there was a slight decrease in fuel consumption in 2017, overall fuel consumption has been increasing since 2009 and we have not yet met the 2015 target (1,156 L/capita). With the EMP refresh underway, we're looking at this area to determine how best to affect change.

MODAL SPLIT

We have not met specific targets in this area; however, in 2017 The City adopted the new Multimodal Transportation Plan (MTP), which charts the course for the future of driving, walking, cycling and transit in Red Deer. Enabling The City to plan, prioritize and evaluate transportation projects, the MTP aims to improve the safety, quality, comfort, connection of all modes and provide more choice for residents.

DWELLING UNIT PROXIMITY TO COMMUNITY AMENITIES

The City is continuing to make progress in this area, ensuring citizens are within walking distance (400 metres) of common amenities. The City has already met the 2020 targets for trails and parks, transit stops, and commercial sites, and The City is just shy of the target for existing schools. Planning for new pedestrian friendly neighbourhoods, like Capstone at Riverlands and Timberlands, demonstrate efforts to put these targets in action. No new targets have been set.

LENGTH OF TRAIL INFRASTRUCTURE

Red Deerians love and cherish their parks and trails, and for good reason. At an impressive 198.9 km of trail – an increase of just over eight km from last year – we have 1 km of trail for every 502 residents. At this level, we have already achieved the 2020 target of 1 km for every 605 people.



ENERGY



BUILDING ENERGY

This measures the amount of energy (natural gas, electricity and diesel) used to run City owned and operated buildings, including energy used for heating, cooling, lighting and running appliances/machinery. Overall The City only made incremental improvements since 2009 and will not meet the 2020 target. In the EMP refresh The City will examine whether this is the right measure and approach for making significant change.

2020 TARGET
20 PER CENT DECREASE FROM 2012 LEVELS.

RENEWABLE ENERGY SOURCES

While The City generates some of its own renewable energy (for instance with solar panels), in previous years, The City has purchased green energy certificates for renewable sources to fully meet this target; however this was discontinued in 2017, and The City will be reviewing how best to utilize renewable energy in the refreshed EMP.

2020 TARGET
40 PER CENT ACQUIRED FROM
RENEWABLE SOURCES.



WASTE

Waste is an area where we continue to make significant progress and we are on our way or already meeting the targets. Initiatives like the Green Cart, which rolled out city-wide in Spring 2018 are playing a big role in helping us achieve these goals.

RESIDENTIAL SOLID WASTE

At 499 kg in 2017, we are on track to meet the 2019 target of 450 kg annually, as set out in the Waste Management Master Plan. Since 2009, that's a 22 per cent decrease in the amount of waste collected per household.

OVERALL DISPOSAL RATE

With a slight increase this year, we still have some work to do when it comes to the overall per capita disposal rate.

2020 TARGET
600 KG PER CUSTOMER.

WASTE DIVERSION

In 2017 The City saw a slight decrease in the waste diversion rate, but is still on track to meet the 2020 target. This measure is a critical element in helping The City achieve the other waste-related measures, and we believe the new initiatives like the Green Cart will help us get there.

2020 TARGET
INCREASE THE DIVERSION RATE TO 30 PER CENT.



THANK YOU TO OUR PARTNERS

For helping us advance our goals and initiatives

- Red Deer Public Library
- Red Deer River Watershed Alliance
- Waskasoo Environmental Education Society
- Parkland Airshed Management Zone
- Local school boards
- Red Deer College
- Re-Think Red Deer
- Alberta Environment and Parks
- Trout Unlimited Canada
- Clean Air Strategic Alliance
- Inside Education
- Commuter Challenge



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