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 focuses on the 2017 results, along with the progress towards the plan’s medium-term (2020) goals.

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

FOCUS AREAS
- WATER
- ECOLOGY
- AIR
- BUILT ENVIRONMENT
- TRANSPORTATION
- ENERGY
- WASTE

SHORT, MEDIUM AND LONG-TERM TARGETS

METRICS MEASURED AND REPORTED ON ANNUALLY

LOCAL, NATIONAL AND INTERNATIONAL PARTNERSHIPS

ANNUAL COMMUNITY REPORTS

7

20
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.

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 AQUIRED FROM RENEWABLE SOURCES.
Green Cart

Simple and streamlined instructions for your new cart.

1. Store your Green Cart where most convenient, like in your yard or garage.
2. Write your address in the white area provided on the side of your cart.
3. Review what goes in your cart in this brochure, or online.
4. Set your cart out for collection, following the how-to’s in this brochure, or online.
5. Place any excess yard waste beside the Green Cart, according to the pick up guidelines.
6. Return the cart back to your property after collection.
7. Periodically rinsing your cart can help keep it tidy.

Get acquainted

Red Deer, get ready to roll in style. Read on to learn how.

One lid. Two wheels. Efficient, agile and optimized. It’s time to wrap your restless fingers around the handle of the all-new Green Cart.

This modern organic waste container is designed to make your life easier and our community greener.

Paired with the Kitchen Container, now, it’s simpler than ever to continue to reduce your household waste.

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