

# OUR ENVIRONMENT, OUR ROLE

#### 2013 REPORT TO THE COMMUNITY

**ENVIRONMENTAL MASTER PLAN** 



## OUR ENVIRONMENT, OUR HOME

The natural world and the world we've built around us are intrinsically linked – two parts creating a whole. As Red Deer grows and evolves, protecting our natural environment will become an even greater priority and, thanks to the Environmental Master Plan, we have steps in place to make sure that happens.

The plan is ambitious. It began in 2011, and it provides an environmental road map for The City, partners and residents for the next 25 years. To truly be effective, though, it outlines clear goals and ways to achieve them.

This document, the Environmental Master Plan 2013 Report to the Community, provides a snapshot of how we've been doing with these goals and achievements. Through structured measurements and calculations, we can identify the changes each year. The results for 2013 show that, for the most part, we are on track and meeting our goals. By sharing the successes and the areas needing improvement, we hope to provide you with the complete environmental picture from last year and ideas for how to continue our progress.

On the following pages, you'll find information for each of the seven focus areas of the Environmental Master Plan. You will see the measured changes, along with actions that are in progress. There are also celebration days that

connect to each of the seven focus areas: these are days when residents can take action to protect and to celebrate our environment, whether it's participating at home or attending community events. Finally, there are tips on things you can do to make a difference, because we can all play a role in protecting our environmental home.

The Environmental Master Plan's seven focus areas are:



WATER



**ECOLOGY** 



✓ AIR



**BUILT ENVIRONMENT** 



TRANSPORTATION



ENERGY



WASTE



#### 2013 Sustainability in Action Award

The City of Red Deer's commitment to the environment was recognized in 2013, when Mayor Tara Veer and City representatives were presented with a "Sustainability in Action Award" from the Alberta Urban Municipalities Association.

## WATER



#### POTABLE WATER CONSUMPTION

- Residential potable water use decreased from 210 L per person per day in 2012 to 204 L per person per day in 2013.
- Baseline in 2009: 242 L per capita per day
- Industrial, commercial and institutional potable water use decreased from 120 L per capita per day in 2012 to 118 L per capita per day in 2013.
- Baseline in 2009: 135 L per capita per day.

#### **WATER QUALITY**

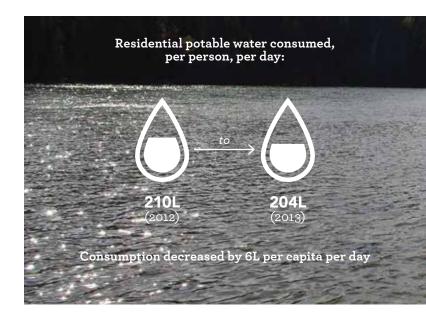
 Water quality monitoring program began in 2012 to assess key points along the Red Deer River and creek tributaries; baseline data and targets to be established in 2015.

**Actions in progress:** Preparing an integrated storm water management plan // developing environmental standards for City buildings, including water conservation measures

#### **YOUR ROLE**

Want to cut your water bills and water consumption? Look into options for low flow toilets, faucets and shower heads to reduce your water use at home.

Visit reddeer.ca/toiletrebate to learn about the toilet rebate program.





#### Mark your calendar for World Water Day - March 22, 2015

The City of Red Deer joins the United Nations in recognizing World Water Day each year as a day to focus on critical water issues in our world and our community. **Visit unwater.org for details.** 

## **ECOLOGY**



#### **NATURAL AREAS**

- Total land within the city's developed area dedicated to native natural features increased from 990 ha in 2012 to 998 ha in 2013.
- Baseline in 2009: 863 ha.

#### MAN-MADE GREEN AREAS

- Total land devoted to preserving man-made natural features increased from 838 ha in 2012 to 847 ha in 2013.
- Baseline in 2009: 809 ha.

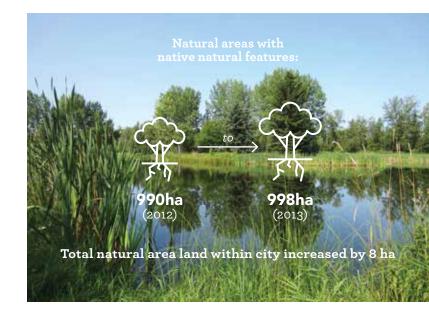
#### INTEGRATED PEST MANAGEMENT

- The amount of toxic pest control products used on City owned land increased from 156 mL/acre in 2012 to 180 mL/acre in 2013.
- Baseline in 2009: 210 mL/acre

Actions in progress: Preparing an Urban Forest Management Plan // enhancing the existing City set-back policy to include water body and ecological protection

#### YOUR ROLE

When planting in your yard, consider incorporating plants native to Alberta including ones that attract pollinators. These helpful creatures play a critical role in ensuring fruit and vegetable production, maintaining natural plant communities and ensuring production of seeds in most flowering plants.





Mark your calendar for Earth Day – April 22, 2015
Earth Day is an annual event, celebrated worldwide.
In Red Deer, the day helps us recognize and support environmental protection and ecology.
Visit reddeer.ca/earthday for details.



#### Celebrate Clean Air Day - June 3, 2015

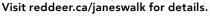
Show your commitment to clean air by participating in activities that contribute to cleaner air, healthier communities and a better quality of life for all. Visit reddeer.ca/cleanairday for details.







Celebrate our city during Jane's Walk - May 2 & 3, 2015 How do you celebrate our built environment? Participate in Jane's Walk! These free, guided walking tours encourage people to explore our city, see how it's built and connect with neighbours.





#### AIR QUALITY

- Red Deer is meeting its targets for reduced emissions in ozone, sulphur dioxide, nitrogen dioxide and carbon monoxide.
- Improvement needed: Red Deer exceeds the Canada Wide Standard for particulate matter (PM2.5) emissions, with 31.4  $\mu$ g per m<sup>3</sup> in 2012 and 30.7 µg per m<sup>3</sup> in 2013. These emissions are generated from sources such as vehicle engines and industrial processing. Alberta Environment and Sustainable Resource Development is spearheading a management plan to address these levels in Red Deer.

Actions in progress: Developing a climate change adaptation plan // working with local industry to develop pollution reduction strategies // promoting our schools and community idle free program

#### YOUR ROLE

To protect our air, turn your key and be idle free. Save the air and fuel costs by warming your engine for no more than two to three minutes before driving and by turning your engine off when waiting in a parked vehicle.

Visit reddeer.ca/idlefree to learn more.

# ENVIRONMENT



#### **COMMUNITY GARDENS**

- Based on a per capita comparison, there was no increase in community garden and urban agriculture space; metrics were 0.21 m<sup>2</sup> per capita in 2013 and  $0.21 \text{ m}^2$  per capita in 2012.
- Baseline in 2009: 0.4 m<sup>2</sup> per capita

Actions in progress: Partnering with a developer to identify a showcase infill pilot project on City land // updating Neighbourhood and Industrial Planning Guidelines and Standards // introducing a new community garden each year for 10 years

#### YOUR ROLE

Look at the new and different housing options that help to protect our built environment in Red Deer, and consider how these will help us to have a smaller development footprint.

## TRANSPORTATION



#### **ALTERNATIVE MODES OF TRAVEL**

- 2011 Federal census data: for people travelling to work, 89% use vehicles, 5% walk or bike, 4% take transit and 2% use other transportation
- Our targets for 2016, the next Federal census: 86% use vehicles, 8% walk or bike, 5% take transit and 1% other
- Baseline in 2009: 88% use vehicles, 7% walk or bike, 4% take transit and 1% other

#### LENGTH OF TRAIL INFRASTRUCTURE

- Additional trails were created in 2013, increasing the ratio from 1 km: 610 residents in 2012 to 1km: 579 residents in 2013
- Baseline in 2009: 1 km: 672 residents

**Actions in progress:** Partnering on regional commuting resources such as carpooling and transit // investigating options to increase the frequency and coverage of transit services

#### YOUR ROLE

Consider walking, taking the bus, or biking to your destinations whenever possible.





#### Mark your calendar for World Car Free Day – September 22, 2015

World Car Free Day encourages motorists to give up their vehicles for a day. In Red Deer, it's a chance to move around using our trails, bike paths, transit – or even carpooling!

Visit reddeer.ca/worldcarfreeday for details on local initiatives.

## ENERGY



#### **RENEWABLE ENERGY SOURCES**

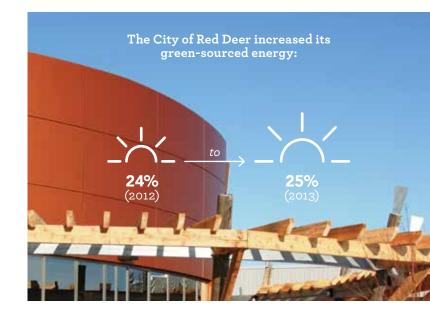
- Civic Yards provides energy through green sources: the vehicle wash produced and sent 5,940 kWh of power to the grid, and the solar panels generated 1,383 kWh of solar energy, which was used within our office building.
- Baseline in 2009: 15% of energy from green sources

**Actions in progress:** Expanding energy efficient street light program // partnering with renewable energy providers and community stakeholders to provide information about private renewable energy options // exploring the potential to increase the energy captured from The City's wastewater facilities

#### **YOUR ROLE**

Do you have a block heater timer? Your vehicle's engine only needs two to three hours to warm up before you drive in cold weather, so consider using a block heater timer this winter. This simple tool can help you to save money and energy.

Visit reddeer.ca/blockheatertimer for details.





#### Celebrate Earth Hour - March 28, 2015, from 8:30-9:30 p.m.

Celebrate energy conservation. Each year on Earth Hour, Red Deerians and millions of other people around the planet switch off lights and non-essential appliances to celebrate the planet and resource conservation.

Visit earthhour.org for details.



"Kick it to the Curb" continues in 2015

Do you have unwanted items to give away? Are you looking to pick up something unique? Check out "Kick it to the Curb," held on June 6 & 7, 2015, and on October 17 & 18, 2015. You never know what useful things you'll find! **Visit reddeer.ca/kickit for details.** 



## WASTE



#### **RESIDENTIAL CURBSIDE GARBAGE**

- Total weight of solid waste from single family residences decreased slightly, from 183 kgs/capita/year in 2012 down to 180 kgs/capita/year in 2013.
- Improvement needed: while this decrease is encouraging, there will need to be a substantial decrease to reach our goal of 164.7 kgs/capita/year by 2015.
- Baseline in 2009: 183 kgs/capita/year

Actions in progress: Implementing the new Waste Management Master Plan adopted in 2013 // continuing an educational campaign about household and community composting // partnering with the industrial, commercial and institutional (ICI) sector to advance recycling and diversion of waste

#### YOUR ROLE

Do you know what kinds of products that can be diverted from our landfill? Year-round, the waste management facility accepts used batteries, fluorescent light bulbs, yard waste, shingles, drywall, tires, old electronics, old toilets, scrap metal and household hazardous waste. Don't trash these items – divert!



# WE ALL PLAY A ROLE IN PROTECTING OUR ENVIRONMENT



#### Members of the Environmental Advisory Committee (EAC)

are the ambassadors of the Environmental Master Plan. The committee is made up of both citizens and City Councillors, and it is supported by City staff. The EAC liaises with citizens, learning their needs and ideas and informing them about environmental issues. It also connects with Council, providing an educated perspective on the environmental topics that are important to the growth and vibrancy of Red Deer.

Clean Air Day

#### **PARTNERS**

In addition to the work of the EAC, the following partners provided significant support to implementing the Environmental Master Plan in 2013:

- Alberta Environment and Sustainable Resource Development
- Alberta Energy Efficiency Alliance
- ICLEI Canada
- Lafarge Canada Inc.
- Municipal Climate Change Action Centre
- NOVA Chemicals Corporation
- Parkland Airshed Management Zone
- Red Deer Public Library
- Red Deer River Watershed Alliance
- ReThink Red Deer
- Waskasoo Environmental Education Society

#### **RESIDENTS**

We all share Red Deer as our home. We can all make choices to improve environmental sustainability. Throughout this report, you've seen the "Your role" headings in each section. These helpful tips are ideas that you can plan for or incorporate into your daily routines. We've also invited you to join in our celebrations of Red Deer's environment by including the seven environmental celebration days we host each year. Together we can make environmental choices a part of our lifestyles: small steps can have big results when we all pitch in.

World Car Free Day

Kick it to the Curb

### CELEBRATE OUR ENVIRONMENT IN 2015

Decorate your calendars with these handy reminders about local environmental initiatives.

Kick it to the Curb





reddeer.ca/environmentalmasterplan Printed on 100% post-consumer recycled paper Printed using vegetable based ink