

# Grand River Conservation Authority **STRATEGIC PLAN**



*The Grand River Conservation Authority is a partnership of 39 municipalities created to manage water and natural resources for the benefit of the 960,000 residents of the Grand River watershed. The Strategic Plan, adopted in 2012, outlines the challenges facing the GRCA and the watershed, and the actions the GRCA will take to address them.*

## Vision

A healthy and sustainable natural environment in the Grand River watershed.



## Mission

We will develop and implement programs, directly or with our partners, to improve water quality, reduce flood damages, maintain a reliable water supply, facilitate watershed planning, protect natural areas and biodiversity, and provide environmental education.

We will be an environmentally responsible provider of outdoor recreation opportunities.

We will maintain a responsive, innovative, accountable and financially sustainable organization.

## Values

We will strive for clear and respectful communication within our organization, with our partners, and members of the public.

We will make decisions that reflect integrity, fairness and sensitivity to the parties affected by our actions.

We will conduct our work in an efficient and effective manner, exercising creativity and innovation.

We value the trust of our stakeholders, which will be gained through our commitment to openness and accountability.

# Protect life and minimize property damage from flooding and erosion

## The issues

Flooding is a persistent problem in the Grand River watershed and it will never go away. The changes that have been made to the land – cutting down forests, draining wetlands, paving large swaths of land, tile-draining rural areas – guarantee that flooding will continue.

It is possible to manage flood risks to reduce the chances of human injury and property damage. The GRCA does this by operating a network of dams and dikes to control high flows, managing flow monitoring stations and a flood warning system, and regulating development in areas prone to flooding and erosion.

## The challenges

- Climate change may alter traditional precipitation patterns – bigger rainstorms, faster melts – which could require changes in reservoir operating procedures and other elements of the flood management program.
- Vital institutional knowledge about flooding history and management has to be maintained as key personnel retire.
- Reliable sources of funding to maintain infrastructure have to be identified and priorities for investment have to be established.
- Decision-making tools and policies need to be updated to reflect new information and take advantage of new technology.

## Strategic priorities

1. Complete safety plans for dikes and dams.
2. Update the capital financing plan for water structures.
3. Review and document decision support tools.
4. Update GRCA permit policies, procedures and mapping (Ontario Regulation 150/06).
5. Develop a five-year forecast to update floodplain maps.



## Improve watershed health

### The issues

A healthy environment is a key component of healthy communities. The Grand River watershed suffered severe environmental degradation in the 19th and 20th centuries although there has been considerable progress in the past 50 years to improve the health of the natural system. Today, population growth, climate change and intensive agriculture are putting additional stress on the system.

The GRCA and its partners carry out programs to improve surface and groundwater quality, ensure adequate water supplies, enhance the resilience of the natural system by restoring terrestrial and aquatic ecosystems and protect these systems through the municipal planning process.

### The challenges

- The watershed is a natural management unit but responsibility for water issues is divided among several agencies including the GRCA, municipalities, the province and the federal government.
- Watershed residents expect improvements in water quality but these changes can take time.
- The process of developing sub-watershed plans is ad hoc and driven by development needs, rather than being done on a comprehensive basis.

### Strategic priorities

1. Complete and implement a Water Management Plan in partnership with other water management agencies.
2. Develop a Watershed Natural Heritage Strategy for protecting and enhancing natural areas and their functions, including their role as habitat for a variety of plant and animal species.
3. Consolidate and update the components of a larger Watershed Plan that includes management strategies for water, fisheries, forests, wetlands and other watershed features.

## Connect people with the environment through outdoor experiences

### The issues

The demand for outdoor recreational activities and environmental education opportunities is growing as the watershed population reaches one million. To meet the demand, the GRCA operates 11 active conservation areas, many more passive areas and 75 kilometres of rail-trails. The active conservation areas record more than one million paid visits a year.

The GRCA operates five nature centres providing curriculum-based environmental education programs on behalf of school boards, as well as evening and weekend programs for the public. Attendance totals more than 50,000 adults and children a year.

### The challenges

- Increasing demand for access to natural areas, particularly active conservation areas, puts stress on the ecological features of the properties.
- There can be conflicting priorities between environmental sustainability and financial sustainability.
- The GRCA's recreation business operates in a competitive marketplace which can complicate its ability to meet social needs.
- The outdoor education business is dependent on a few large clients i.e. school boards.

### Strategic priorities

1. Update master plans for active conservation areas.
2. Implement a business plan for sustainable operation of active conservation areas.
3. Complete a passive lands management strategy.
4. Conduct a strategic review of the environmental education program and facilities.



## Maintain an organization with a focus on teamwork, development, engagement and positive change

### The issues

The GRCA may be one agency but it operates in a wide variety of areas: engineering, planning, land management, education, recreation, construction and others. Its workforce must be well-trained, flexible, innovative, adaptable and capable of working in multidisciplinary teams committed to meeting public needs.

As a large and innovative conservation authority, the GRCA is often on the leading edge of adopting new methods and technologies. To maintain that position it needs to recruit, train and keep a top-notch workforce. It also has to maintain business continuity in critical public safety functions such as flood management and reservoir operations.

### The challenges

- Staff recruitment can be an issue as many of the skills required by the GRCA are also in high demand among other public and private agencies.
- A high number of experienced, senior staff members are nearing retirement. Succession planning and mentoring are needed to develop the next generation of staff.
- There is a growing reliance on sophisticated information management tools and technology to deliver programs and services.

### Strategic priorities

1. Create a mentoring / leadership training program.
2. Identify and address gaps in documentation processes.
3. Update human resources policies to address emerging issues.
4. Continue to leverage emerging technology and provide appropriate training and support.

## Deliver value and innovation to our watershed stakeholders

### The issues

The essence of the GRCA is partnership. It was created by municipalities to address their environmental issues. The GRCA also works closely with provincial authorities as well as universities, community groups, environmental organizations and others.

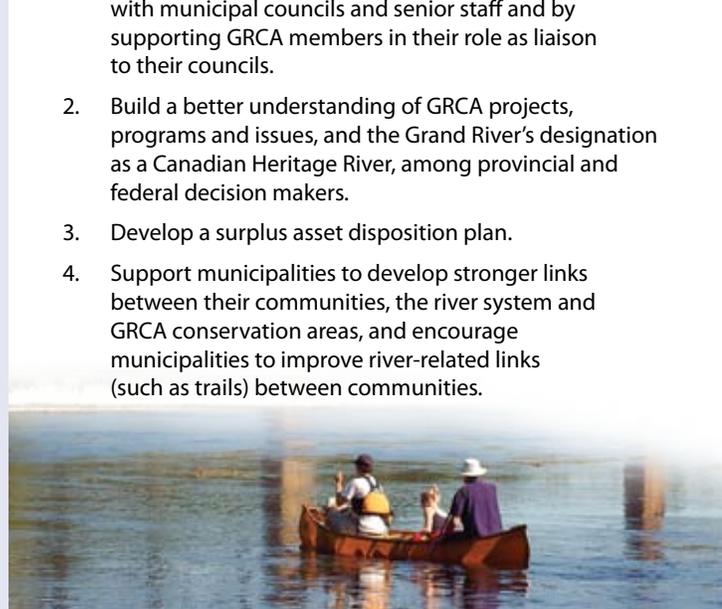
Building and maintaining those partnerships is important to the GRCA. About one-third of the GRCA's funding comes from municipalities and about 10 per cent from the province; it's important that the GRCA be able to demonstrate that it is a financially sustainable and transparent partner. And, because the majority of the GRCA's revenue is self-generated, it must continue to seek appropriate new business and revenue opportunities.

### The challenges

- Austerity at the municipal and provincial level can put pressure on their ability to continue financing the GRCA at historical levels.
- The GRCA owns complex, valuable assets (e.g. dikes, natural lands) with insufficient funds for maintenance.
- Some assets are undervalued, high risk and subject to overuse and misuse.
- The designation of the Grand River system as a Canadian Heritage River, and the partnerships the GRCA has created through the International River Foundation, require ongoing management and attention in order to maximize the related opportunities.
- Because of the nature of the work it does, the GRCA has to promote its efforts directly with the province in order to strengthen the relationship.

### Strategic priorities

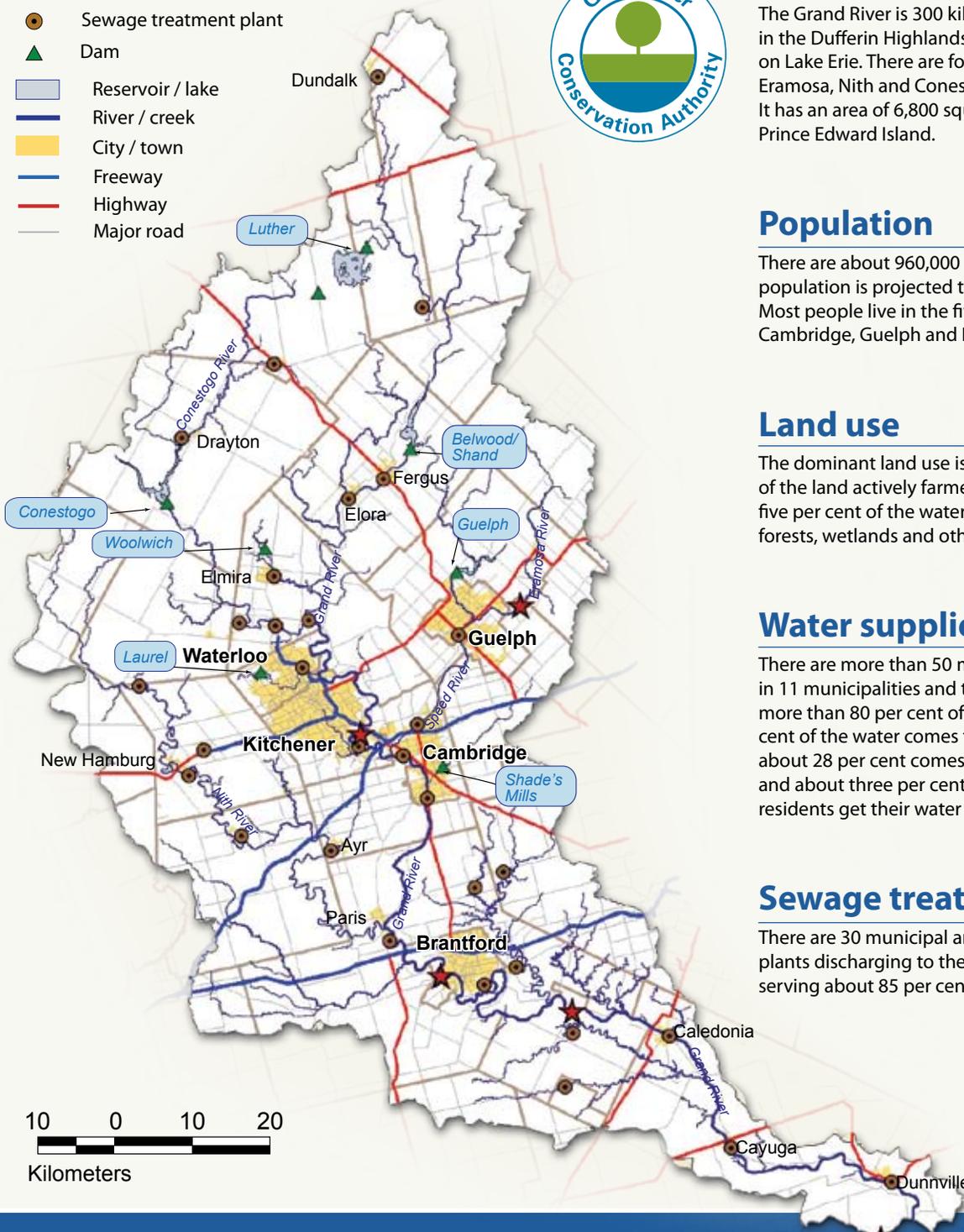
1. Enhance the GRCA's relationship with member municipalities through direct, regular communication with municipal councils and senior staff and by supporting GRCA members in their role as liaison to their councils.
2. Build a better understanding of GRCA projects, programs and issues, and the Grand River's designation as a Canadian Heritage River, among provincial and federal decision makers.
3. Develop a surplus asset disposition plan.
4. Support municipalities to develop stronger links between their communities, the river system and GRCA conservation areas, and encourage municipalities to improve river-related links (such as trails) between communities.



# The Grand River WATERSHED



- ★ Surface water intake
- Sewage treatment plant
- ▲ Dam
- Reservoir / lake
- River / creek
- City / town
- Freeway
- Highway
- Major road



## Size

The Grand River is 300 kilometres long from the headwaters in the Dufferin Highlands to the mouth at Port Maitland on Lake Erie. There are four major tributary rivers – Speed, Eramosa, Nith and Conestogo – and many streams. It has an area of 6,800 square kilometres – larger than Prince Edward Island.

## Population

There are about 960,000 people in the watershed. The population is projected to grow to 1.4 million by 2041. Most people live in the five cities of Kitchener, Waterloo, Cambridge, Guelph and Brantford.

## Land use

The dominant land use is agriculture, with about 75 per cent of the land actively farmed. Urban areas make up less than five per cent of the watershed. Most of the remainder is forests, wetlands and other natural areas.

## Water supplies

There are more than 50 municipal drinking water systems in 11 municipalities and the Six Nations Territory serving more than 80 per cent of watershed residents. About 69 per cent of the water comes from close to 200 municipal wells; about 28 per cent comes from the Grand and Eramosa rivers and about three per cent from the Great Lakes. Most rural residents get their water from private wells.

## Sewage treatment

There are 30 municipal and First Nation sewage treatment plants discharging to the Grand River and its tributaries, serving about 85 per cent of the watershed's residents.

# About the GRCA

The Grand River Conservation Authority is a partnership through which municipalities work cooperatively to manage the water and natural resources of the watershed for the benefit of all.

In the early 1800s, the Grand River was a source of transportation, power and water. Settlement led to deforestation, intensive farming and urbanization, which began to hinder the natural cycles of the river.

By the 1930s, river conditions had become so severe that annual floods, drought and pollution were affecting public health and the economic development of the communities up and down the Grand.

Watershed communities formed the Grand River Conservation Commission (GRCC), which met for the first time in 1934. It was Canada's first water management agency and one of the first in the world. It built dams, planted trees and undertook other work to repair the environmental damage.

The success of the commission, its watershed scope and municipal partnership became the model for Ontario, which passed the Conservation Authorities Act in 1946. In 1948, the Grand River watershed municipalities formed the Grand Valley Conservation Authority (GVCA) under this new act.

This new agency had the power to undertake activities the commission could not do. It acquired many wetlands, forests and natural areas as well as land for parks featuring camping, swimming, fishing and canoeing.

In 1966 the two agencies merged to form the Grand River Conservation Authority.

## The GRCA carries out programs in seven business areas:

- Improve water quality
- Protect natural areas and biodiversity
- Ensure adequate water supplies
- Reduce flood damages
- Facilitate watershed planning
- Provide environmental education
- Supply outdoor recreation opportunities

## GRCA facts

- The GRCA is administered by a board of 26 people appointed by municipalities.
- Its annual budget is about \$31 million (2012) which comes from municipalities (30 per cent), the province (22 per cent), self-generated funds (42 per cent) and reserve accounts (six per cent).
- The contribution to the GRCA from municipalities works out to about \$10.05 per person.
- The GRCA preserves about 20,000 hectares of land including reservoirs, floodplains, wetland, forests and other natural areas. That's about three per cent of the area of the watershed.
- The GRCA has helped thousands of landowners to plant more than 26 million trees.
- The GRCA operates seven dams and reservoirs which are used to reduce flood damage, and to ensure minimum flows during the summer and fall to support river health and the operation of drinking water and sewage treatment plants.
- The GRCA operates 11 active conservation areas offering camping, swimming, canoeing and other activities which record more than one million paid visits a year.
- The Grand River and its major tributaries were designated a Canadian Heritage River in 1994.
- In 2000 the GRCA won the Thiess International Riverprize in Brisbane, Australia for Excellence in River Management.

