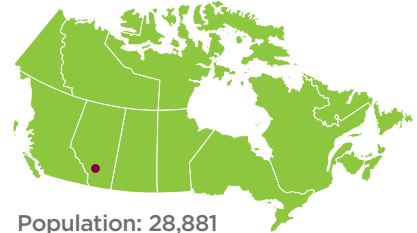




Town of Okotoks, AB



Population: 28,881
Project duration:
2015–2017

WATER: LIVING SOILS FILTRATION PROJECT

This guide is designed to help municipal staff and decision makers understand how excellent sustainability projects are developed, and help them adopt best practices in their community. Read the guide to learn more about award-winning strategies, then use the guiding questions to kick-start your sustainability initiative.

PROJECT OVERVIEW

- The Town of Okotoks collaborated with the Bow River Basin Council, Source 2 Source Inc. and the University of Calgary to launch a stormwater demonstration and research project at the Town Operations Centre. There were three key elements: a bioretention system that stores and filters stormwater, a research facility and a new Environmental Education Centre.
- The initial goal was to manage runoff from the centre’s impervious surfaces, but the project generated many more green infrastructure benefits.

How does this initiative benefit the environment?

- Improving water management moderates the **risks and effects of extreme climate events** such as flooding. Filtering water on-site reduces discharge of contaminants and pollutants into the river.
- The bioretention system uses different **vegetation and soils** to enhance the urban forest, promote biodiversity and wildlife habitat, improve air quality and sequester carbon.
- The bioretention system helps to **restore** a riparian area affected by stormwater runoff from the Town Operations Centre’s impervious surface.

How does this initiative benefit the community?

- The new research facility for the University of Calgary provides **in-depth knowledge about green stormwater management**. The Environmental Education Centre offers environmental education opportunities for school-aged children.
- The project protected a mature riparian forest important to a local First Nations community, enhancing the **cultural and spiritual** significance of the site.

How does this initiative benefit the local economy?

- Natural water management systems are **less costly** to maintain than engineered ones. Therefore the bioretention site permitted the **rehabilitation of a larger area** of flooded land than previously planned, saving taxpayer dollars.

What are some of the successes of this project?

- **Partnership with the City of Calgary will improve future projects.** Research done at the site will monitor the performance of different vegetation and soils, and allow other communities or future sites to **improve** on the results of this project.
- Although managing various stakeholders' interests, priorities and requirements can be complicated at times, collaboration **was essential** in securing federal **research funding** as it created a more competitive funding application.

Want to implement stormwater management in your community? To get started, answer these questions:

What is your community's water management or stormwater management challenge (e.g., heavy rainfall, flooding, droughts or changes to the water table)?

What could your community do to prevent and limit the impact of these events? Name two or three community resources (natural or built) that are likely to be impacted most by water and stormwater events.

Which natural resources (e.g., parks, wetlands, forests, streams) in your community could be part of preventing or reducing these impacts?

How could the benefits offered by these natural resources be protected, enhanced or restored?

Name organizations or stakeholders that you could collaborate with to protect and enhance your community's natural resources.

What would be the benefits of collaborating?

What would be challenging about working with these stakeholders?

How could you approach your project or your consultation to enhance the benefits and limit the challenges?
