

# Drainage Services Master Plan 2015-2024

---

Aspirational Plan

May 5, 2014



## Background

Drainage Services provides wastewater and stormwater drainage services to Edmonton residents by planning, building, operating, and maintaining the pipes, tunnels, pump stations, biosolids management, and stormwater management facilities that make up the City's drainage network. It is our mission to protect the environment and public health for residents with effective and efficient wastewater and stormwater drainage systems.

The 2004-2014 Drainage Services Master Plan (the 2004 DMP) was developed by the Branch and received approval from Edmonton's City Council in January 2004. The plan was developed through a working committee comprised of the various sections within the Branch. Several workshops were held during 2001 and 2002 involving Drainage Services' management group, a team of expert advisors and the Infrastructure Technical Advisory Committee (ITAC) that was working with the City in developing the corporation's Infrastructure Strategy.

Replacing the 1991 Policy Document, the 2004 DMP reviewed the Branch's mandate, identified key stakeholders and presented 23 issues in four categories so that Drainage Services could focus our efforts over the subsequent decade or so. Based on these, thirteen strategies were identified in the 2004 DMP. Of these, some are no longer relevant (wastewater treatment is now under EPCOR Water Services), some have changed, and some will continue for many years into the future. Further, during this period new strategies have been developed and implemented.

As the time frame of the 2004 DMP draws to a close, the Branch has undertaken to develop a new strategic plan to guide our direction for the next ten years. The 2015-2024 Drainage Services Master Plan has been developed through extensive consultation with City staff and management as well as our key external partners and stakeholders.

It is also critical for Drainage Services to remain aligned with the City's corporate strategic directions, which have undergone significant changes including a new vision for Edmonton in 2040 as outlined in The Way Ahead.



# Supporting the City Vision

*The Way Ahead* is a visioning document that lays out Council's goals for change. It forms the foundation for the work of the City and guides us in our continued commitment to enhance quality of life for Edmontonians. *The Way Ahead* was established by City Council in 2008. It was updated in 2011 and 2014.

The 30-year, citizen-built City vision in *The Way Ahead* is a creative description of Edmonton's future in 2040. Six 10-year strategic goals describe the areas where Council believes significant change is required to achieve this vision. The strategic goals are to:



Transform Edmonton's Urban Form;



Enhance Use of Public Transit and Active Modes of Transportation;



Improve Edmonton's Livability;



Preserve and Sustain Edmonton's Environment;



Ensure Edmonton's Financial Sustainability; and



Diversify Edmonton's Economy.

A set of 12 corporate outcomes define success in achieving these goals. Corporate outcomes particularly relevant to the DMP are:

- » The City of Edmonton has sustainable and accessible infrastructure; and
- » The City of Edmonton's operations are environmentally sustainable.

Strategies to achieve the 10-year strategic goals are contained in six directional plans, called the Ways plans. They contain additional sub-goals and objectives and often include foundational programs. The six Directional Plans are:

## **The Way We Grow**

Municipal Development Plan

## **The Way We Move**

Transportation Master Plan

## **The Way We Live**

Edmonton's People Plan

## **The Way We Green**

Edmonton's Environmental Strategic Plan

## **The Way We Finance**

Edmonton's Financial Sustainability Plan

## **The Way We Prosper**

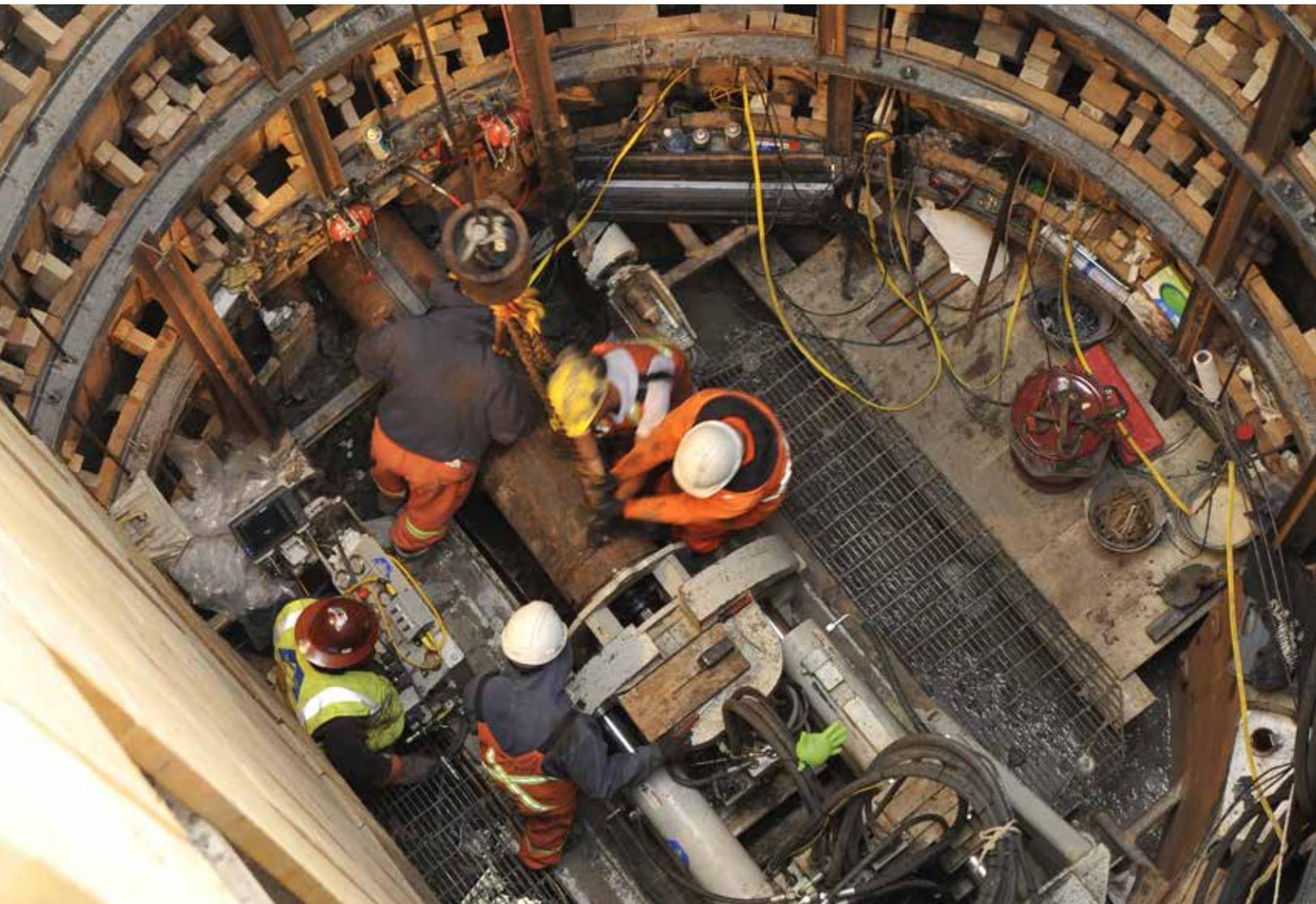
The City of Edmonton's Economic Development Plan

Tactics and initiatives necessary to implement these strategies are highlighted in The Ways Implementation Plans.

Drainage Services' 2015-2024 Master Plan has been designed to ensure alignment with *The Way Ahead* and the Ways Plans. In particular the DMP speaks to the 10-year strategic goals of *Transform Edmonton's Urban Form, Improve Edmonton's Livability, and Preserve and Sustain Edmonton's Environment*. In addition, day-to-day operations of Drainage Services are foundational to supporting many of the strategies in the Ways plans.

The new DMP will be presented in two parts. The first, this document, is the Aspirational Plan. The Aspirational Plan outlines the six goals Drainage Services has set for the next decade and introduces a number of key strategic directions to support our achievement of each goal. The strategic directions are further detailed in the second document, the Action Plan, wherein actions have been developed and assigned to each strategic direction to enable us to successfully implement these strategies.

This Plan will serve as Drainage Services' business strategy document. As such, it is the highest level document that will drive our business planning process.



## Our Role in Building a Great City

The creation of wastewater drainage systems marked a turning-point in the history of human civilization. These essential systems are our first line of defence in protecting public and environmental safety and health while contributing to our economic wellbeing.

These systems are required to function continuously yet for many of us they remain out of sight, out of mind.

Without sanitation, urban landscapes such as Edmonton could not exist.

Sanitation and stormwater drainage supports the safety and integrity of the water we consume, the land on which we live, and the air we breathe for the benefit of all our citizens and future generations.

As a municipal utility, we work hard to maintain these vital systems. We are skilled, knowledgeable, and passionate about our work and are dedicated to

serving our customers and community.

We commit to protect our homes, businesses and communities from damage resulting from major storm events. We resolve to preserve the integrity of our collective investment

in critical drainage infrastructure. We pledge to ensure the river flowing out of our great City is as healthy and vibrant as the river and tributaries flowing in. We strive toward zero pollutants discharged into our river, zero flooding, and zero emergency repairs across our system.

Effective wastewater and stormwater drainage is the

cornerstone of public health and essential to a vibrant, prosperous Edmonton. At Drainage Services, we take very seriously our commitment as stewards of these indispensable systems, remaining acutely aware of the key role we play in building a great City.

“For individuals, for households and for whole societies access to clean water and sanitation is one of the foundations for progress in human development.”

*(United Nations Development Programme (UNDP), 2006)<sup>1</sup>*

<sup>1</sup>UN Development Programme (UNDP), *Human Development Report 2006 - Beyond Scarcity: Power, poverty and the global water crisis, 2006, ISBN 0-230-50058-7, available at: <http://hdr.undp.org/en/content/human-development-report-2006> [accessed 23 December 2013].*





## Goal 1: Healthy Living and Environmental Stewardship

The goal of Healthy Living and Environmental Stewardship reflects Drainage Services' commitment to reducing its impact on our water, land, and air through continuous improvement toward zero pollutants and contaminants. We will protect the health of our people and our ecosystem and ensure the landscape in which we live can be safely enjoyed by all members of our community.

### Key Strategic Directions

- » Mitigate the environmental and public health impacts of combined sewers.
- » Reduce the amount and improve the quality of stormwater discharge through a variety of approaches, including encouraging low impact development, increasing the use of green infrastructure, and exploring innovative techniques.
- » Examine the costs and benefits of a water reuse program.
- » Engage in proactive watershed management and planning, such as the River for Life strategy.
- » Coordinate with regulators to ensure understanding and compliance with current and emerging regulations.
- » Proactively manage the potential impacts of climate change through adaptation of current systems.
- » Support conservation of natural areas and wetlands.
- » Develop solutions to support the beneficial use of biosolids.
- » Minimize system odour emissions and air entrapment impacts.

### Alignment with The Way Ahead Goals



**Improve Edmonton's Liveability (The Way We Live)**



**Preserve and Sustain Edmonton's Environment (The Way We Green)**



## Goal 2: Citizens Well Served

The goal of Citizens Well Served communicates a desire to ensure that our customers are well served by Drainage Services as a utility. Serving customers well means that citizens feel they receive good value for the cost of drainage services, which includes uninterrupted and seamless service, flood risk reduction, and timely and enthusiastic customer support. Our customers will have a positive understanding of what Drainage Services does and how they as individuals can contribute to a healthy and sustainable drainage system.

### Key Strategic Directions

- » Reduce the risk of flooding for private property and public spaces.
- » Increase customer satisfaction with drainage services and responsiveness.
- » Strengthen customer relations through communication, engagement, and education by developing proactive programs.

### Alignment with The Way Ahead Goals



**Improve Edmonton's Liveability (The Way We Live)**



**Preserve and Sustain Edmonton's Environment (The Way We Green)**





## Goal 3: Supporting and Enhancing Growth and Development

Drainage Services is committed to supporting and enhancing growth and development as the City continues to explore urban densification and infill; residential, commercial, and industrial development; and regional collaboration. We will work closely with other City departments and developers to ensure our neighbourhoods are sustainable and have minimal environmental impact.

### Key Strategic Directions

- » Manage ongoing wastewater and stormwater servicing programs to ensure growth and development is well planned and coordinated.
- » Support densification and infill development through planning and implementation of system upgrading and/or green infrastructure.
- » Enhance servicing in a regional context by supporting planning for growth and coordination / harmonization of regional servicing.
- » Coordinate on industrial land development to support the City's prosperity goals.

### Alignment with The Way Ahead Goals



**Transform Edmonton's Urban Form (The Way We Grow)**



**Diversify Edmonton's Economy (The Way We Prosper)**



## Goal 4: Sustainable Infrastructure

Ensuring Sustainable Infrastructure means that Drainage Services has a proactive, optimized and integrated asset management approach linking operational data with long term planning. This approach ensures the continued integrity of our assets and reduces the need for emergency repairs. We support innovation and the use of emerging technology to increase efficiency and reduce costs.

### Key Strategic Directions

- » Proactive maintenance, rehabilitation and replacement of assets through increased monitoring, inspection and condition assessment.
- » Integrate an asset management philosophy into day-to-day activities to extend responsibility across Drainage Services.
- » Enhance the processes around data gathering, management, and application and link the data more effectively into the planning, design, construction, and maintenance phases.
- » Increase innovation to achieve more efficient and effective management of Drainage infrastructure.

### Alignment with The Way Ahead Goals



**Transform Edmonton's Urban Form (The Way We Grow)**



**Ensure Edmonton's Financial Sustainability (The Way We Finance)**





## Goal 5: Fiscal Responsibility

The goal of Fiscal Responsibility means that Drainage Services has a well-planned, balanced, and managed budget that clearly demonstrates to customers the value they receive for the rates they pay. As a fiscally responsible utility, Drainage Services has planned our finances to enable us to support our operations and goals in a manner that is fair and equitable to current and future ratepayers.

### Key Strategic Directions

- » Ensure a fair and equitable rate structure that supports necessary Drainage Services initiatives.
- » Engage in transparent and efficient budgeting and reporting processes to provide clear and timely financial information.
- » Manage the process of funding the renewal of developer contributed assets.
- » The Drainage Utility is operating in a manner that is financially sustainable.

### Alignment with The Way Ahead Goals



**Ensure Edmonton's Financial Sustainability (The Way We Finance)**



## Goal 6: Organizational Excellence

Achieving our goal of Organizational Excellence means optimizing the way in which we manage our people, our equipment, and our workplace. This includes providing a healthy, engaging, productive workplace where employees feel a strong sense of pride and purpose. We implement sound management practices and processes and engage in effective communication. These factors all contribute to create an environment that ensures Drainage Services is recognized as an employer of choice for the region.

### Key Strategic Directions

- » Ensure workforce sustainability through effective recruitment, training and retention.
- » Improve internal communication, coordination and collaboration within Drainage Services and between City departments.
- » Enhance knowledge transfer within and across Drainage Services' functions.
- » Optimize equipment management and adopt new technology to support effective and efficient operations.
- » Develop a culture to support a high performing organization.

### Alignment with The Way Ahead Goals



**Ensure Edmonton's Financial Sustainability (The Way We Finance)**



**Improve Edmonton's Liveability (The Way We Live)**



## A Roadmap for Action

As the 2015-2024 Drainage Services Master Plan is implemented January 1, 2015, guidance on the actions to be undertaken in support of each of the key strategic directions described in this Aspirational Plan will be provided in the accompanying Action Plan. These actions were developed through extensive consultation with our Drainage Services staff and management, management from other City departments, external partners, and key external stakeholders.



THE CITY OF  
**Edmonton**