

Land Drainage & Flood Control

Includes:

- Flood Control
- Land Drainage

Service Overview

DESCRIPTION

To provide property owners with storm and flood water control in order to prevent flood damage to property.

KEY GOALS

1. To improve the state of the environment / improve public health.
2. To exceed our customer's needs and expectations.
3. To increase the efficiency and effectiveness of our services.
4. To implement best practices throughout the Department.
5. To maintain a high quality working environment for our staff.
6. To improve information management in the Department.

SERVICE LEVEL STATISTICS

Description	2003	2004	2005	2006	4 Year Average
No. of Stormwater Retention Basins (SRB)	71	71	73	73	
No. of Permanent Flood Pumping Stations	32	33	33	33	
No. of Temporary Flood Pumping Stations	45	47	47	47	
No. of SRB Pumping Stations	5	5	5	5	
No. of Land Drainage Underpass Stations	7	7	7	7	
Kilometres of Land Drainage Sewer mains	1,559.8	1,574.7	1,587.4	1,590.8	1,584.3
Kilometres of Storm Relief Sewer mains	183.0	183.3	183.4	183.4	
Peak River Elevations (>8.5 feet) – Spring	n/a	19.0	18.8	20.3	
Peak River Elevations (>8.5 feet) – Summer	n/a	15.3	20.0	n/a	

Strategic Direction

LINK TO PLAN WINNIPEG

3D-08 Provide Land Drainage and Flood Protection
5C-04 Protect Environmentally-Sensitive Lands

SYNOPSIS OF POLICY DIRECTION

In March 2004, the Province of Manitoba introduced the Floodway Authority Act. The legislation outlines the roles and responsibilities of the Manitoba Floodway Expansion Authority, a separate independent, publicly accountable, provincial agency that will manage the expansion and maintenance of the Red River Floodway and directly influence the City's flood protection works.

- Sewer By-Law No. 7070/97
- Lot Grading By-Law No. 7294/98
- Secondary Dyke By-Law No. 7600/2000

KEY FACTORS INFLUENCING SERVICE

An increased capacity of the floodway is needed to provide adequate flood protection for Winnipeg. The floodway expansion project may impact the City's capital projects. For example, the Clean Environment Commission recommended that the City increase the level of the permanent dikes to match the higher design water level in Winnipeg to convey the 700 year flood. The risk of major spring flooding will remain high until completion of the floodway expansion

The ability of the system to protect property and minimize environmental impacts are affected by topography, land use, design capabilities, river flood events, and heavy rains. The flat topography in Winnipeg requires larger and deeper land drainage and combined sewers, than would normally be required with greater geographical relief.

Increased public interest in environmental stewardship has led to development agreements that provide for more naturalized Stormwater Retention Basins in new developments. These basins offer both improvements in land drainage discharge water quality, and more natural surroundings for residents to enjoy.

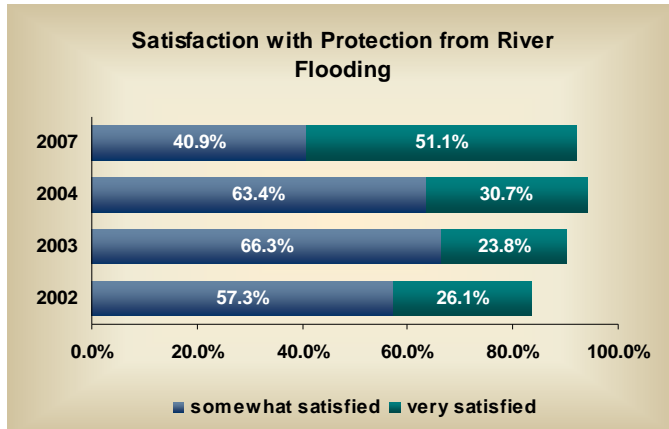
Winnipeg has a large area serviced by combined sewers that are a concern with respect to capacity and pollution. Public environmental concerns and scrutiny regarding wastewater collection and treatment processes are on the increase. In response to this, the department has expanded its public information efforts for example the Sewer Overflow Information System on the City's website <http://winnipeg.ca/waterandwaste/default.stm>

SUMMARY OF GOALS AND STRATEGIES

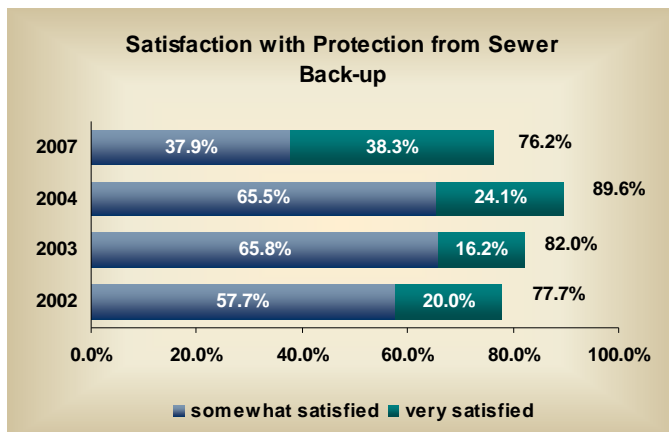
- 1. To improve the state of the environment and improve public health**
 - Provide flood protection to the City of Winnipeg.
- 2. To exceed our customers needs and expectations**
 - Establish service levels.
 - Implement procedures to improve the level of flood protection and reduce basement flooding.
 - Implement procedures to protect property against flooding.
- 3. To increase the efficiency and effectiveness of our services**
 - Update By-laws.
 - Move land drainage from mill rate support to a utility by studying and implementing a land drainage utility.
- 4. To implement best practices throughout the Department**
 - Expand / formalize / exercise standard operating procedures, special operating procedures and emergency response plans.
- 5. To maintain a high quality working environment for our staff**
 - Improve safety and health practices.
 - Increase capacity to meet new regulations and operate the new wastewater treatment plant.
 - Improve employee performance management practices.
 - Develop formalized training procedures / evaluation.
- 6. To improve information management in the Department.**
 - Expand the utilization of Synergen - custom reports, GIS interface, timekeeping interface.
 - Expand the use of technology in the field.

Performance Information

CITIZEN SATISFACTION

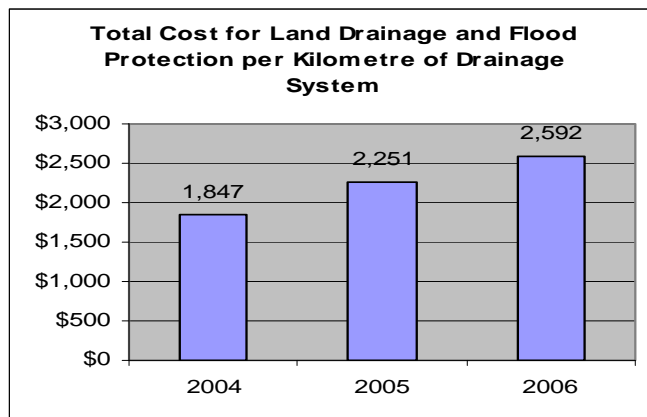


Citizen satisfaction for protection from river flooding remains stable.



Citizen satisfaction for protection from sewer backup declined from 90% in 2004 to 76% in 2007.

EFFICIENCY



In 2005 and 2006 there was an increase in incremental flood fighting costs, in the amount of \$201,227 and \$312,235 respectively, which is reflected in the total costs for land drainage and flood as shown in the chart. Total expenses exclude debt and finance charges.