CITY OF CALGARY
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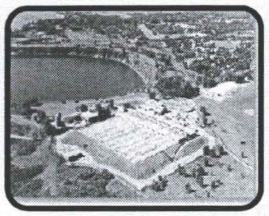
Water Infrastructure Investment Plan (WIIP)

C2014-0095

2014 March 17

Infrastructure Programs



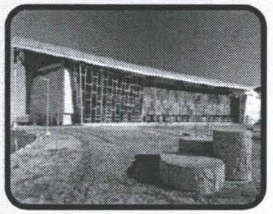
Water Treatment Plants

Water Distribution Network

Wastewater Treatment Plants

Wastewater Collection Network

Drainage



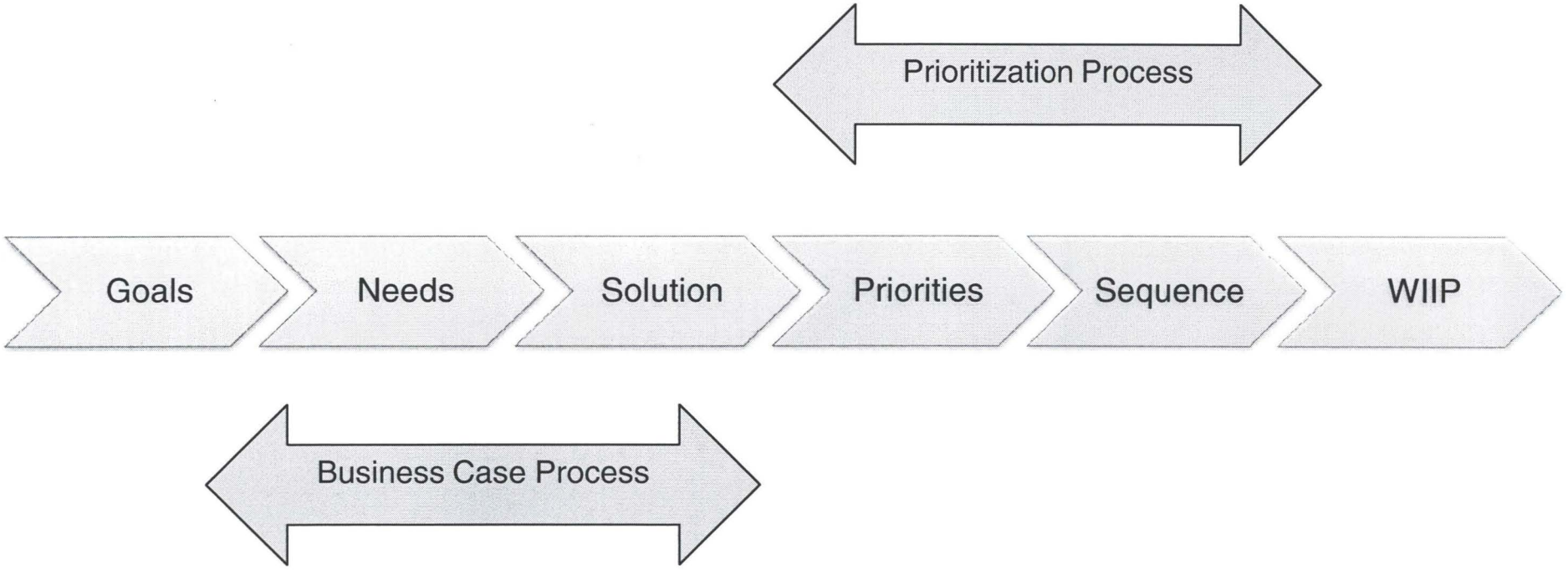
Facilities & Equipment

Four Investment Drivers

Maintain Assets	Maintaining, protecting and extending the life of infrastructure investments.
Regulatory and Environmental Protection	Continuing to meet increasingly stringent regulatory and environmental protection requirements.
Service	Continuing to provide reliable and high quality services to meet the needs of citizens.
Growth	Providing infrastructure to meet the needs of a growing Calgary.

More Outcome Focused

Building the WIIP



Maintaining Assets

Outcomes

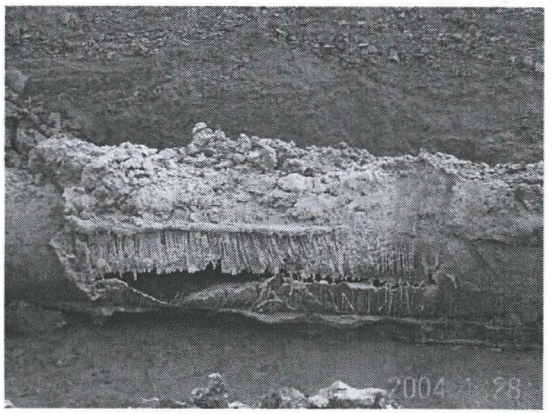
- Reduce interruptions
- Services at optimal cost
- Reduce lifecycle costs

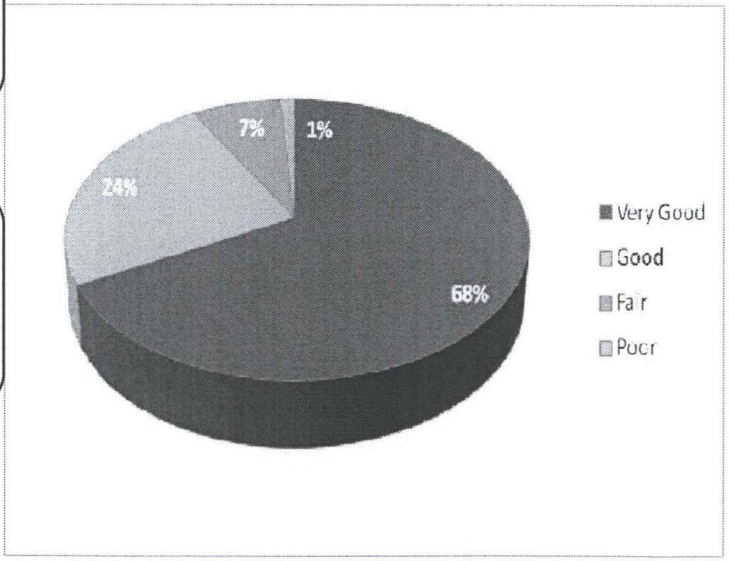
Pressures

- Aging assets
- Growing inventory

Investments

- Condition assessment programs
- Main replacements
- Capital maintenance
- Corrosion protection programs



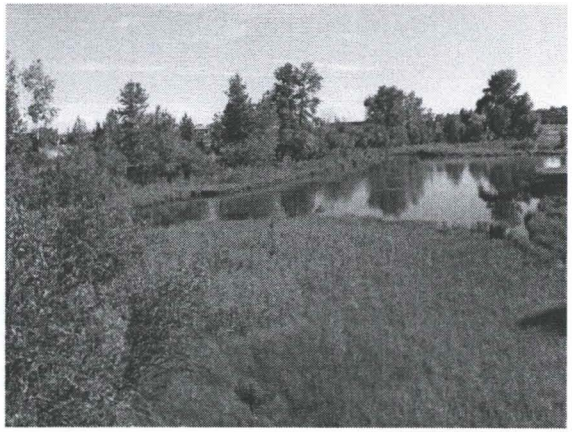


Investments of $70-$90 M/year

Regulatory & Environmental Protection

Outcomes

- Protect public health and environment
- High quality drinking water
- Responsible management of wastewater



Pressures

- Increasingly stringent regulations
- Growing population

Investments

- Bonnybrook wastewater treatment plant upgrades and expansion
- Drinking water disinfection
- Stormwater management

Investments of $50-$70 M/year

Services

Outcomes

- Increase levels of service (older communities)
- Increased resiliency

Pressures

- Sewer backups
- Changing standards and expectations

Investments

- Community Drainage Improvement
- Sanitary upgrade program
- Flood mitigation programs

Investments of $40-$70 M/year

Growth

Outcomes

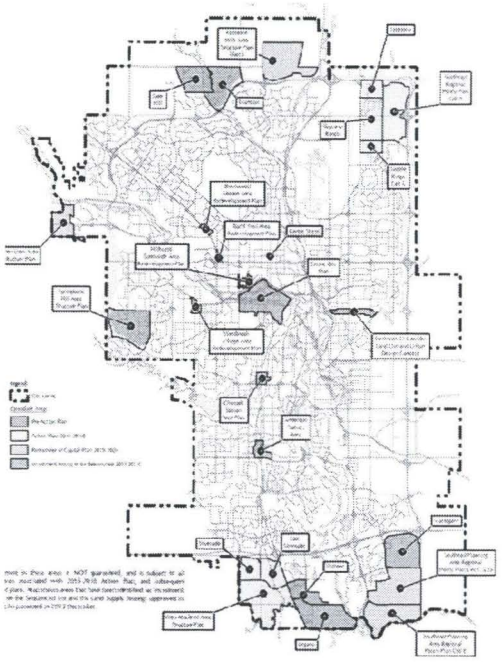
- Capacity to meet demands
- Serviced land supply

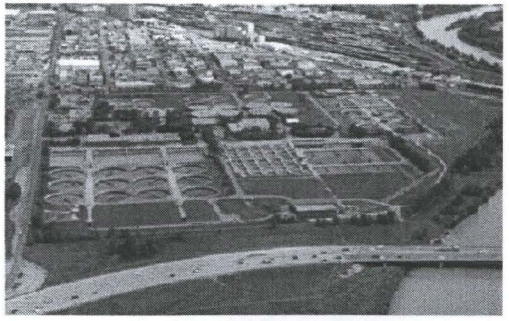
Pressures

- High rate of growth
- Increased redevelopment

Investments

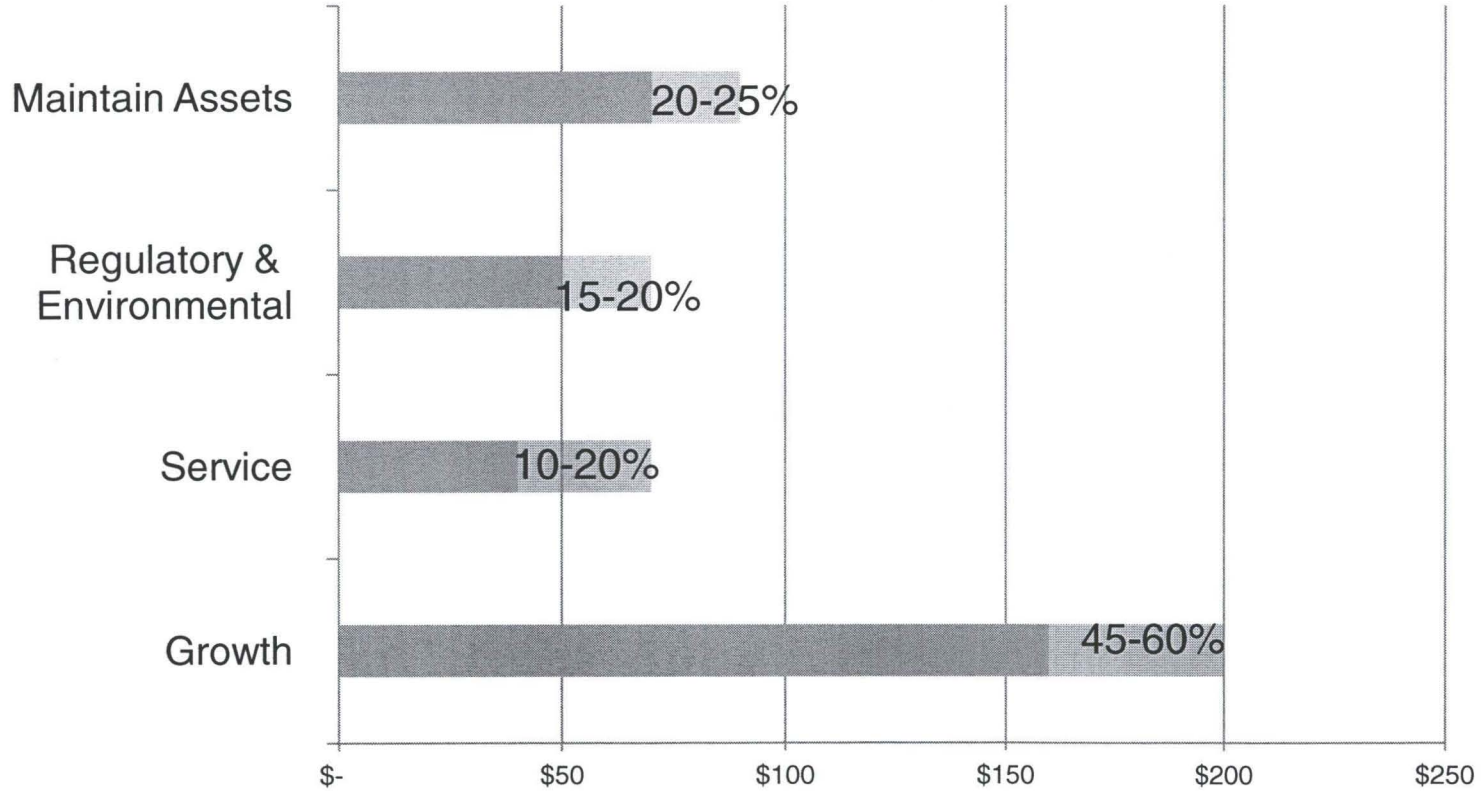
- Wastewater treatment plant expansions
- Water treatment plant expansion
- Linear infrastructure





Investments of $160-$200 M/year

Utilities Investment Allocation by Driver
($ millions)



WIIP Framework

Programs

Drivers

	Water Treatment Plants	Water Distribution Network	Wastewater Treatment Plants	Wastewater Collection Network	Drainage	Facilities & Equipment	% of Total
Maintain Assets	<5%	5-10%	<5%	<5%	<5%	<5%	20-25%
Regulatory & Environmental Protection	<5%	<5%	5-15%	5-15%	<5%	<5%	15-20%
Services	<5%	<5%	<5%	5-15%	<5%	<5%	10-20%
Growth	<5%	5-15%	20-30%	5-15%	<5%	<5%	45-60%
% of Total	5-10%	15-25%	35-45%	15-25%	10-15%	3-5%	

<5%
Between 5-15%
Greater tthan 15%

Recommendation

That Council:

1. Direct administration to incorporate the Water Infrastructure Investment Plan into the 2015-2018 Action Plan.