



FITFIR
Importance for Municipal Licenses
A City of Calgary Perspective

AIPA Conference 2010, February 23

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The City of Calgary, Water Resources,



Protecting what's precious.
Land. Air. Water.



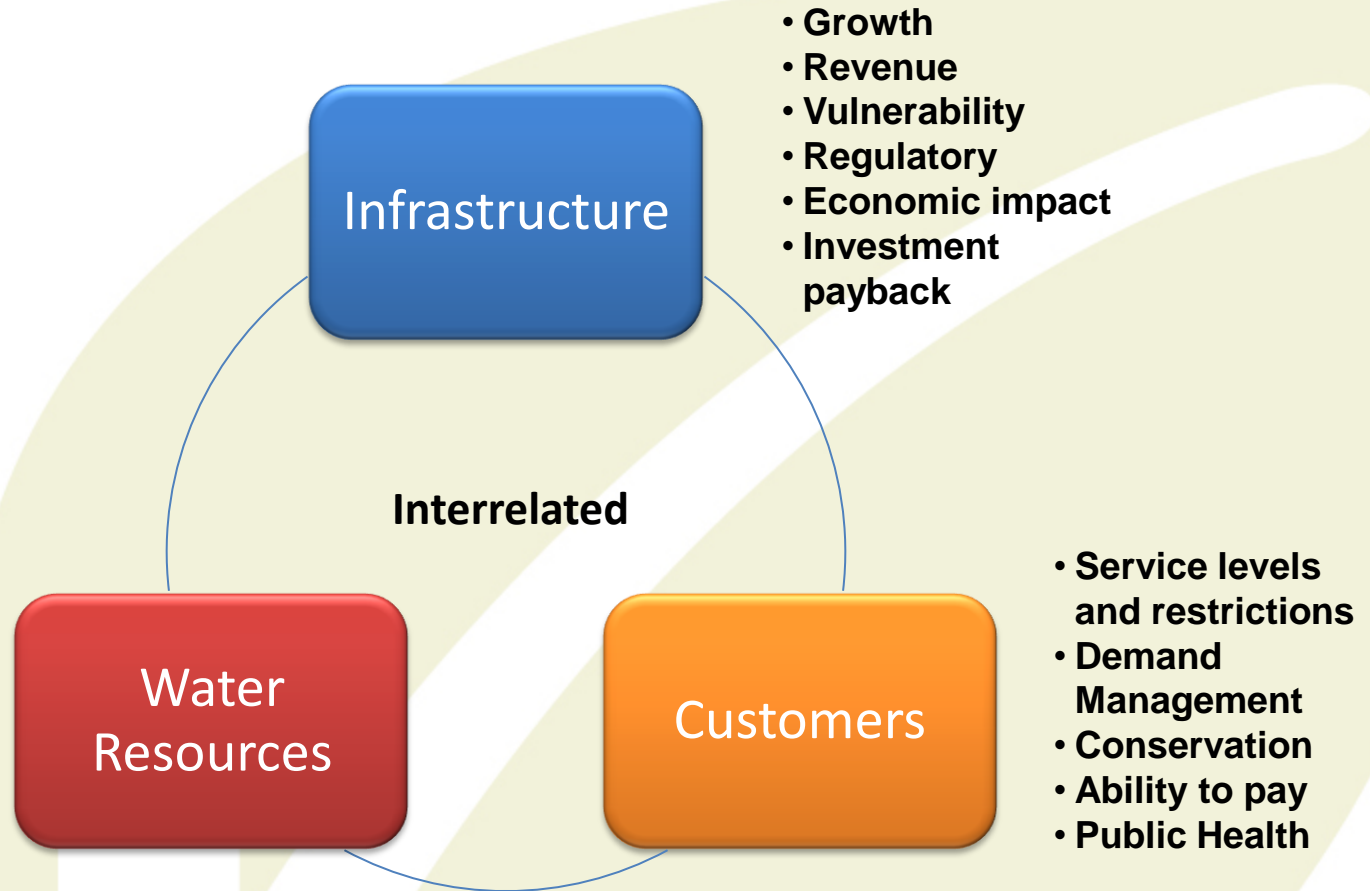
THE CITY OF
CALGARY

Calgary Water Resources Vision

- City of one million, growing at 3 % per year has no negative impact on the watershed
- This vision has been key to our long term strategies for water resource and utility management

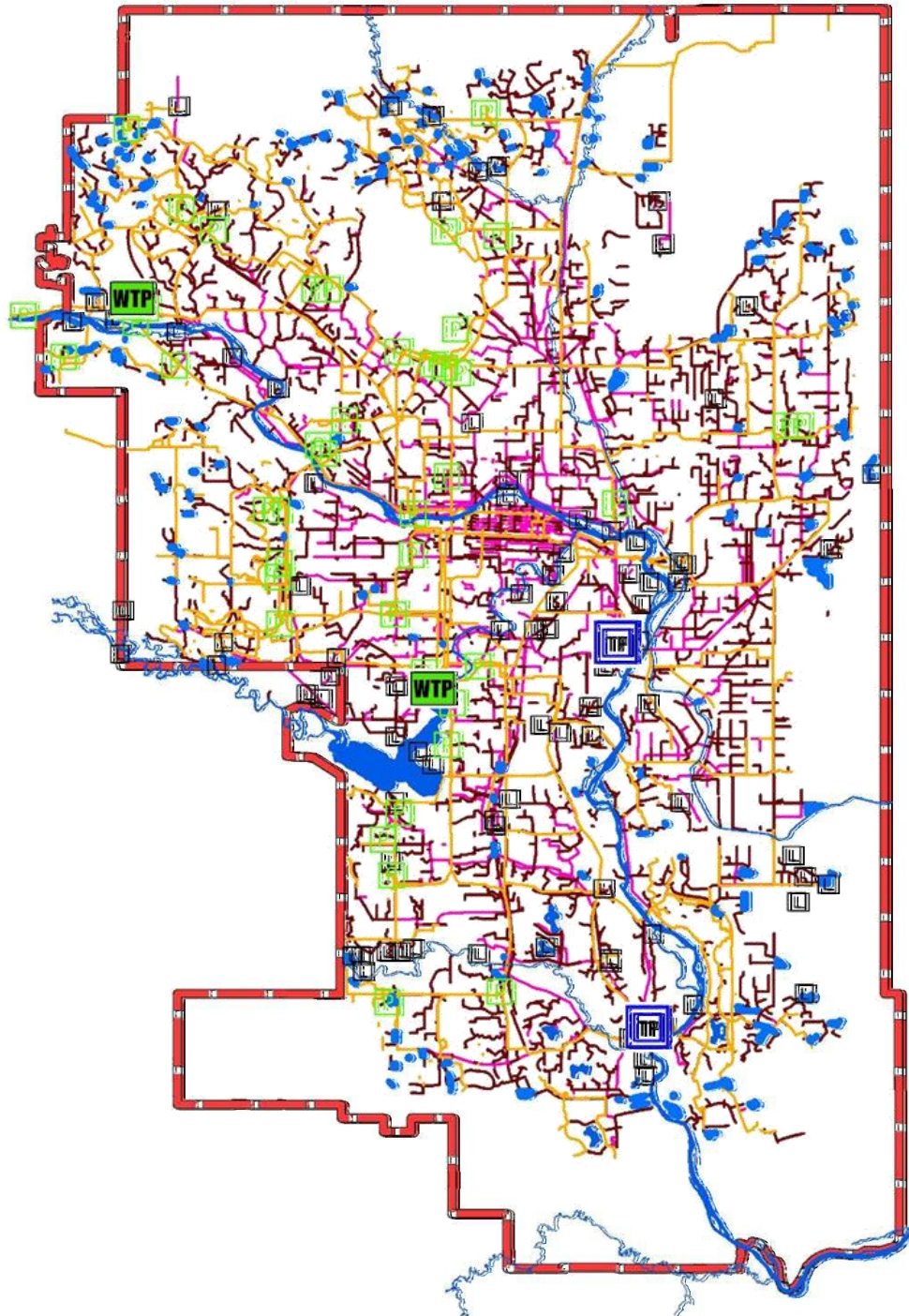


Water Risks



FITFIR provides certainty for large investments in infrastructure





The City of Calgary has a \$30 billion investment in infrastructure for the purpose of producing drinking water, moving water around and cleaning wastewater and stormwater.



Water Treatment Plant

- \$360 M in upgrades to the Bearspaw and Glenmore Water Treatment Plants
- Two water supplies
- Flexible processes
- Water recycling
- Zero discharge



Bearspaw Water Treatment Plant

FITFIR encourages good
management of water resources

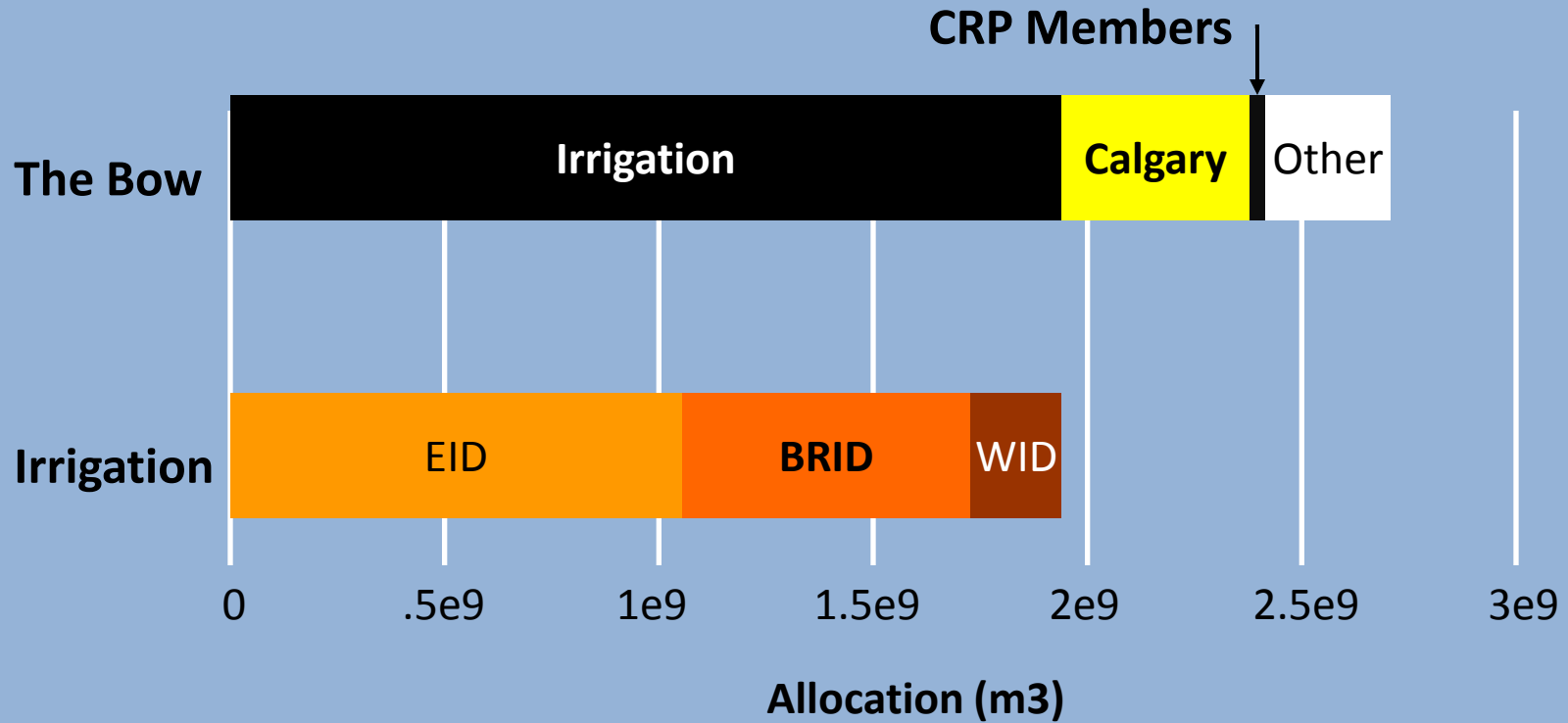


Calgary's Water Allocations

River	License	Instantaneous Diversion Rate (ML/day)	Annual Diversions (ML)	Priority
Elbow	No.8835 (interim), Glenmore Raw Issued 2 Aug 1977	None stated	66,608 41,938	1929-10-24 1971-11-25
Bow	No.8834,Bearspaw Raw I Issued 2 Aug 1977		5,551	1895-08-02
Bow		318.1	135,066	1971-11-29
Bow	No14568, Bearspaw Raw II Issued 7 Dec 1988	308.3	210,925	1981-11-02
		328.3		2005-07-18
	TOTAL		460,088	



Bow River Allocations

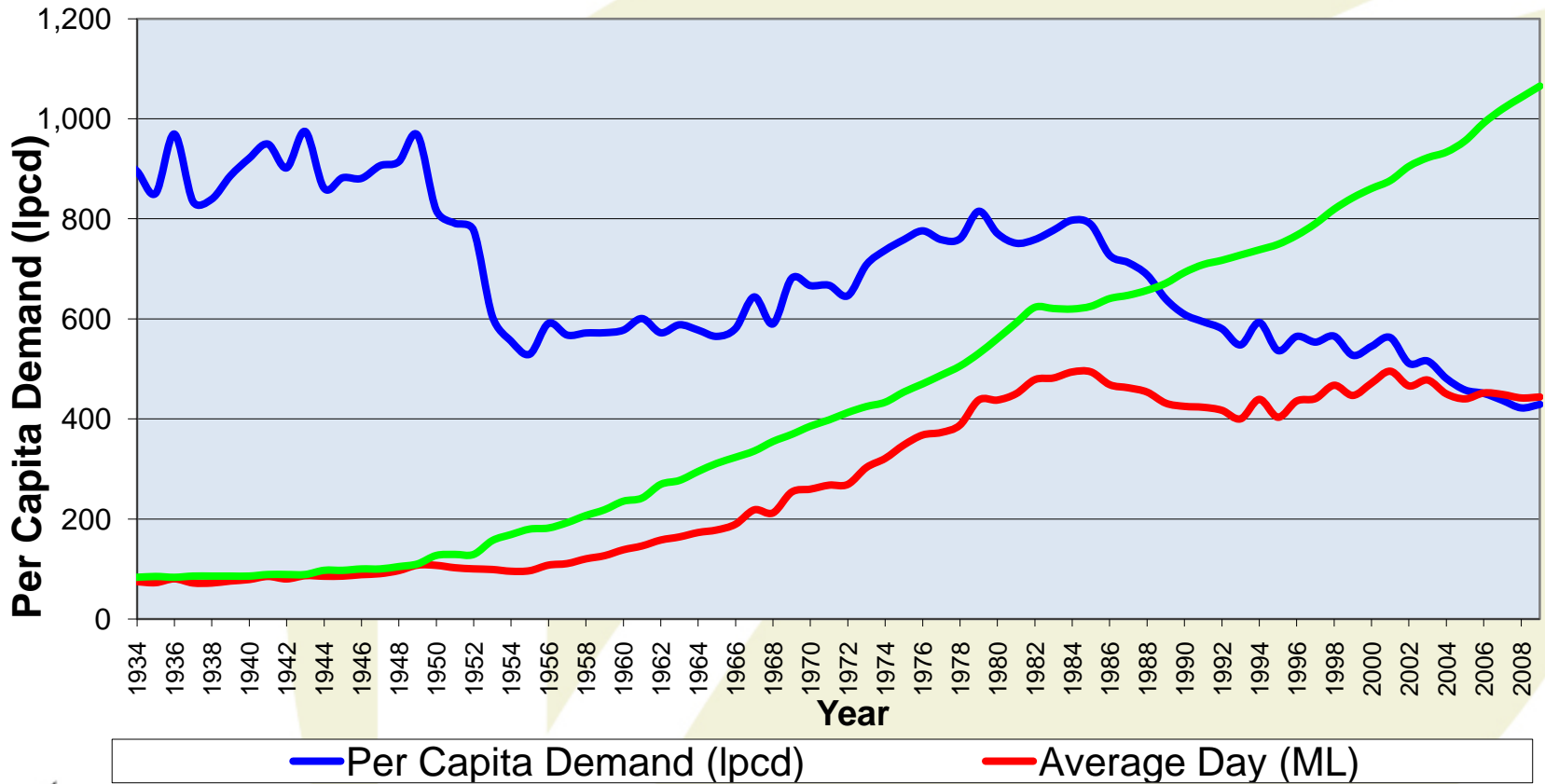


Historical Water Planning

Date	Licensed Annual Water Quantity (ML)	Per Capita Use (l/day)	Population	Future Population That Could Be Served at that Time	Year New License Needed	License Life (yrs)
1895	5,551					
1929	66,608	923 (1933)	83,363 (1933)	214,188	1959	30
1971	41,938	667	398,034	468,657	1976	17
1971	135,066	667	398,034	1,015,831	2006	35
1981	210,925	751	591,857	1,653,063	2036??	30



Water Resource Trends



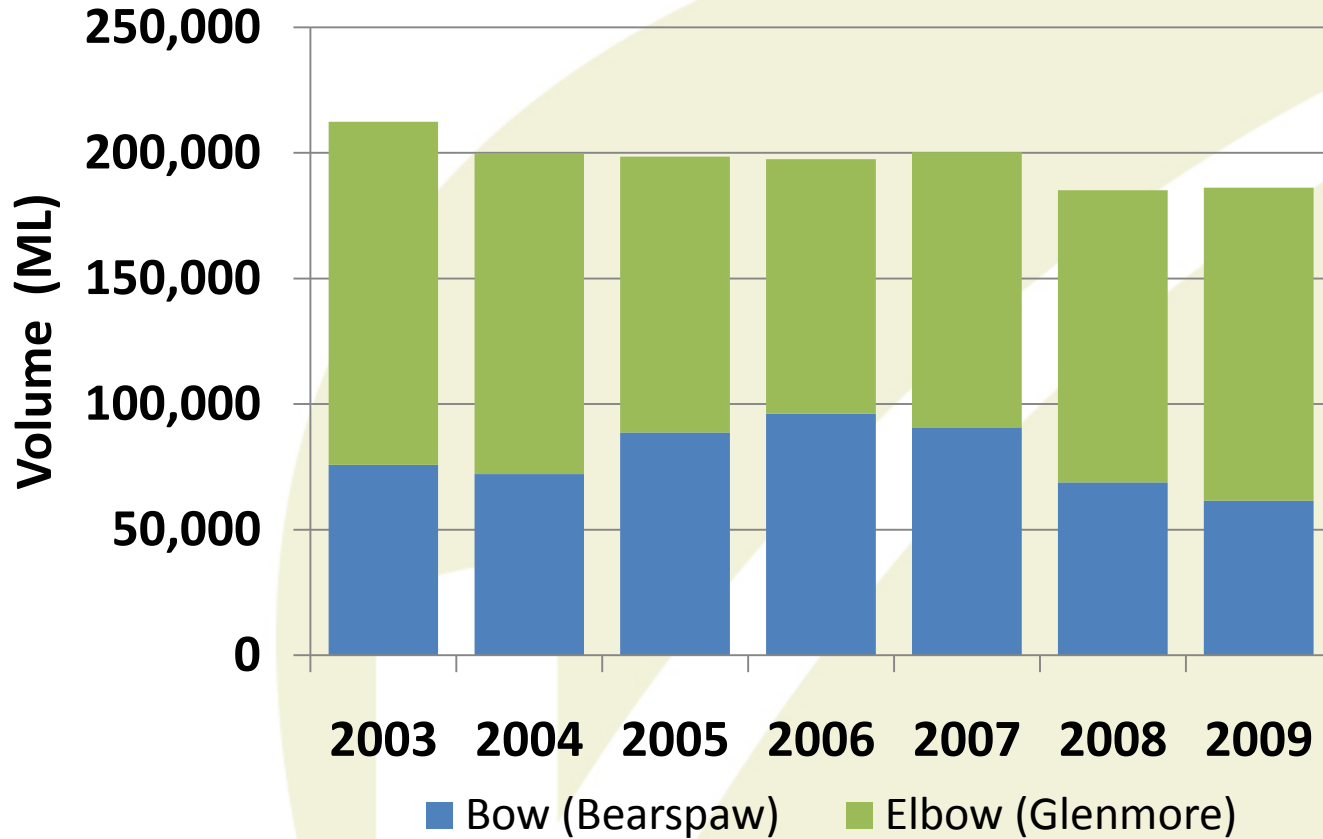
The Price of Water Resource Management (since the 80's)

- Leak detection \$30 M
- Main Replacement \$600 M
- Water Metering (mid 1990's) \$60 M
- Demand Programs \$30 M
- Plant recycling \$60 M

- TOTAL approx \$780 M



Annual Bow and Elbow Diversions



Regional Per Capita Demand (lpcd)

Canmore

481

Calgary

429

Includes Industry
Demand

Airdrie

371

Strathmore

371

Chestermere

338

Okotoks

318



Regional Per Capita Demand (lpcd)

Canmore 481

Airdrie 371

Strathmore 371

Chestermere 338

Okotoks 318

Calgary 280

Estimated Residential Demand

