

## **Additional Comments**

### **A Healthy and Green City SPC on Utilities & Corporate Services**

## **Watershed Management**

### **Council Directive**

(H3) Integrated watershed management is essential to protect public health and the environment, while strengthening our resiliency to a changing climate. Calgary must develop our communities with a focus on achieving future water security and a sustainable water supply. Accordingly, watershed management must be integrated into our land use policies, plans and decisions. Accomplishing sustainable, effective watershed management within Calgary and the region will also require working collaboratively with other orders of government, adjacent municipalities, residents, landowners, developers, businesses, and the First Nations.

### **Calgary Climate Hub's Comments**

#### **Watershed Management in general**

We agree fully with you that

- Integrated watershed management is essential to protect public health and the environment
- Watershed management must be integrated into the City's land use policies, plans and decisions

Much must be done to accomplish those things to ensure the security and sustainability of our water supply. Our proposals to the Priorities and Finance Committee for:

- A Low Carbon Transition and Climate Action Committee
- Strong Corporate Governance

will substantially approve the City's ability to identify and exploit opportunities to better protect the watersheds we rely on – the Bow, Elbow, and, yes, Nose Creek.

However, those actions will not succeed unless the City changes land use policies and design standards and Council holds all business units accountable to achieving results in these areas.

## **Floodplain Management**

One aspect of watershed management where the City needs to be pro-active is in managing floodplains. Much can be done by the City on its own. On other matters outside the City's control, it will be vital to achieve the cooperation of First Nations, the federal and provincial governments, and, especially, other municipalities in the watershed.

Flooding is a natural disaster that is predictable in terms of both location and frequency. It causes

- Immeasurable physical and psychological damage
- Catastrophic financial losses to families, businesses, and government
- Rising insurance and borrowing rates
- The risk of flood-related lawsuits, especially for negligence

Climate change is increasing the frequency of heavy precipitation events that lead to flooding.

We recommend that the City do the following – hopefully in cooperation with the provincial and federal government:

1. Follow Saskatchewan's lead and define the floodplain using:
  - The 1-in-500 year flood
    - plus additional freeboard for hydrologic and hydraulic uncertainties
2. During the 2019-2022 business cycle, adapt floodplain best management practices to conditions in Calgary and fully implement those practices (e.g., best management practices as developed by the Intact Centre on Climate Adaptation)
3. Allow new residential, commercial, and industrial development in a floodplain only if it will result in no-net loss of the watershed's natural capacity for flood absorption, storage, and conveyance.
4. Require all landowners in the City to carry full-protection flood damage insurance.
5. For construction, operation, maintenance, and rehabilitation of flood reduction and protection measures
  - Develop a cost-sharing program between the City, the Province, and owners of flood-prone land, buildings, and facilities

These measures will ensure that, as we adapt to climate change,

- the City, in its land use decisions, will provide superior protection of residents while not increasing the damage from flooding
- those who benefit from the advantages of using floodplain land will safeguard their interests and pay their fair share of the costs of flood mitigation efforts

- **PARKS & OPEN SPACES**
- **RECREATION OPPORTUNITIES**

### Council Directives

(H5) We need to continue to implement a range of accessible and affordable recreational programs and opportunities that encourage active daily living. Continuous investment in indoor and outdoor recreation facilities that address the changing needs of Calgarians will be important to support healthy lifestyles for all.

(H6) Finally, we must continue to make parks and green spaces a priority and proactively seek to increase green space in neighbourhoods.

### Calgary Climate Hub's Comments

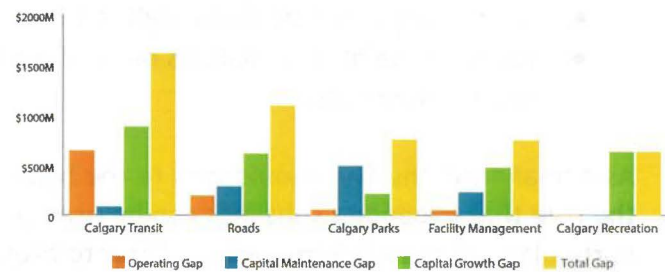
Based on the most recent *Infrastructure Status Report*, the City's recreation and parks departments face serious funding challenges from, among other things, aging buildings and equipment, increased standards, and a shortage of land in existing communities. This has led to a ten-year funding gap approaching \$1.5 billion (a quarter of the City's total funding gap).

### Appendix 4

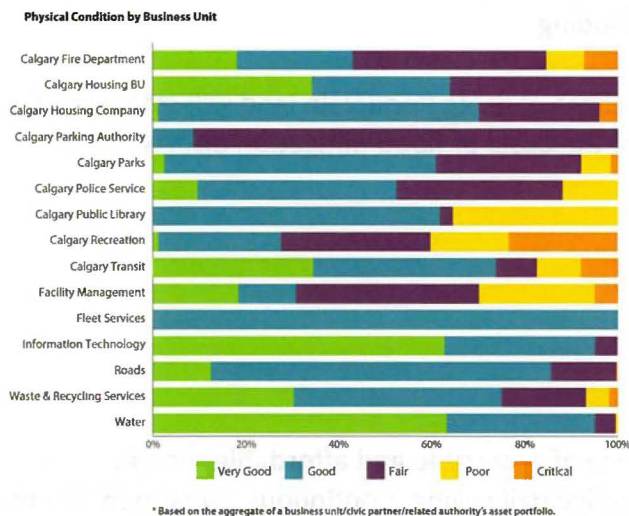
#### 10-year infrastructure funding gap by business unit/civic partner/related authority

Total Corporate Gap = \$5.67 billion (\$5670 Million)

Business units with a 10-year infrastructure funding gap of \$600 million or more



\*Recreation's capital maintenance requirements for assets that would be replaced as part of capital growth have been deducted from the overall maintenance requirement value resulting in capital maintenance cost savings of approximately \$101 million over 10 years, and hence, closing the capital maintenance gap.



The recreation department is in the most serious situation for all City departments with over 20% of its assets and the assets of its civic partners in critical condition. Combined with assets in poor condition, just under 40% of the recreation departments investment portfolio do not achieve the minimal rating of “fair.”

This may seem unconnected to the effort to reduce greenhouse gas emissions. However, buildings and equipment that are old and inefficient

require more energy to operate, resulting in higher emissions. More importantly, the City will not achieve its twin goals of reduced emissions and increased active transportation if recreation and park facilities are

- not in place
- are not conveniently available to residents
- do not meet their needs.

This is because

- fewer people will be fit enough to benefit from walking and cycling opportunities
- to reach the fitness facilities beyond a walking or cycling distance – people will have to rely on their cars.

As a final note, the City should look to the higher recreational participation rates in Toronto and the role that expanded subsidies can be used to get more people more active, more often. In particular, we note the free access Toronto provides all residents in districts with low income levels. [See Attachment 1: Service Plan Review, p. 9 – Benchmarking]