

# BRIEFING

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Item # 11.3

Utilities & Environmental Protection Briefing to

Community Development Committee  
2022 April 27

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## 2021 Watershed Management Update

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### PURPOSE OF BRIEFING

The City is committed to ensuring a resilient watershed to make life better for Calgarians. The purpose of this Briefing and Attachment 1 is to provide highlights on The City's watershed management work in 2021 and the planned goals for 2022.

Increasing pressure on our watershed from human activity, population and economic growth and a changing climate makes watershed management one of Calgary's most critical challenges. The City focuses on four watershed management goals to provide long-term sustainability of water resources and services for communities and businesses:

Goal #1 **Protect our water supply** to ensure a water secure future.

Goal #2 **Use water wisely** to reduce consumption of our water resources.

Goal #3 **Keep our rivers healthy** to reduce the impacts of urbanization.

Goal #4 **Build resilience to flooding** to protect safety and property.

Council's decisions and significant investments to date have helped ensure Calgary's water security, increased resilience to flood and droughts, improved riparian health, and maintained high quality water in our rivers.

Watershed management helps achieve The City's Environmental Strategy goals, and supports Calgary's Climate Resilience Strategy, Council's Climate Emergency Declaration, Resilient Calgary Strategy, and Council's priority for a healthy and green city.

### SUPPORTING INFORMATION

#### Watershed resiliency goal updates:

- Goal #1: We advanced key actions from The City's Source Water Protection Policy and Plan, and represented Calgary's source water interests in many intermunicipal planning circulations. This work helps to ensure source water quality is maintained upstream of Calgary and that the integrity of our water supply is secure. We advocated for strong water policies in the Calgary Metropolitan Region Growth Plan and Servicing Plans finalized in 2021, which are awaiting Ministerial approval. During a major heat wave in 2021 we worked with Calgarians and other major water users in the region to balance water demand and protect the aquatic environment.
- Goal #2: We started The City's outdoor water campaign early in response to the heat wave and conducted water efficiency research to align programming with climate change, drought, and water security objectives. Per capita water use increased slightly in 2021, partially due to the heat wave, but Calgary is still well on track to reduce water consumption by 30 per cent by 2033.

- Goal #3: Major infrastructure upgrades at the Bonnybrook Wastewater Treatment Plant to protect river health and accommodate future growth continue to be on time and on budget. Stormwater investments and our pollution prevention program have kept sediment levels in the Bow River below thresholds. The health of riparian areas is improving with over 50 restoration projects designed, built or maintained in 2021.
- Goal #4: Construction started on the Downtown Flood Barrier and Upper Plateau Separation projects to protect downtown and Hillhurst-Sunnyside from flooding. The Province started construction on the Springbank Off-Stream Reservoir, and continued its Bow River Reservoir Options study. We completed \$21.6M in Community and Local Drainage improvements to reduce localized flooding in communities including Tuxedo, Northwest Inner-City and Macleod Trail areas.

### **Area of focus: Planning for a resilient river city**

We are reimagining the Calgary River Valleys Plan. The update will anchor the values and needs of our river valleys in long-term city planning decisions, creating consistent land use direction and policies. This work will help to inform updates to the Municipal Development Plan, local area plans, and Land Use Bylaw. The project is partially being driven by the release of Provincial flood hazard mapping which will result in the need to update municipal land use and floodplain policy and regulation. In 2022 we will undertake public engagement to inform the update of the Plan.

### **Area of focus: Water security – a dry year for Calgary**

Climate experts predict more heat waves and drought in our region, and we are taking proactive action to protect water security and build drought resilience. 2021 research and engagement on drought found that customers want proactive, clear, detailed drought communication and action from The City. These findings support our continued work with Calgarians as we draft an updated Drought Management Plan in 2022.

### **Area of focus: Stormwater management and city-building**

Stormwater management reduces impacts of urban development by decreasing stormwater runoff and pollution in the rivers. Building on extensive stakeholder engagement, we drafted a new Stormwater Strategy in 2021. The Strategy will meet service commitments, support climate goals, and enhance service value through collaboration and innovation. Focus for 2022 is to finalize the Stormwater Management Implementation Plan.

### **Area of focus: The importance of reservoirs in water management**

Reservoirs are critical water management structures in the Bow River Basin. We manage water security by working closely with the Province, TransAlta, and other major water users to coordinate reservoir operations year-round. New gates installed at Glenmore Dam in 2020 doubled the storage of the reservoir to reduce flooding and improve water supply. The City is a key stakeholder in the Province's Springbank Off-stream reservoir construction and the current Bow River Reservoir Options feasibility study.

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## ATTACHMENT(S)

1. Attachment 1 – 2021 Watershed Management Report