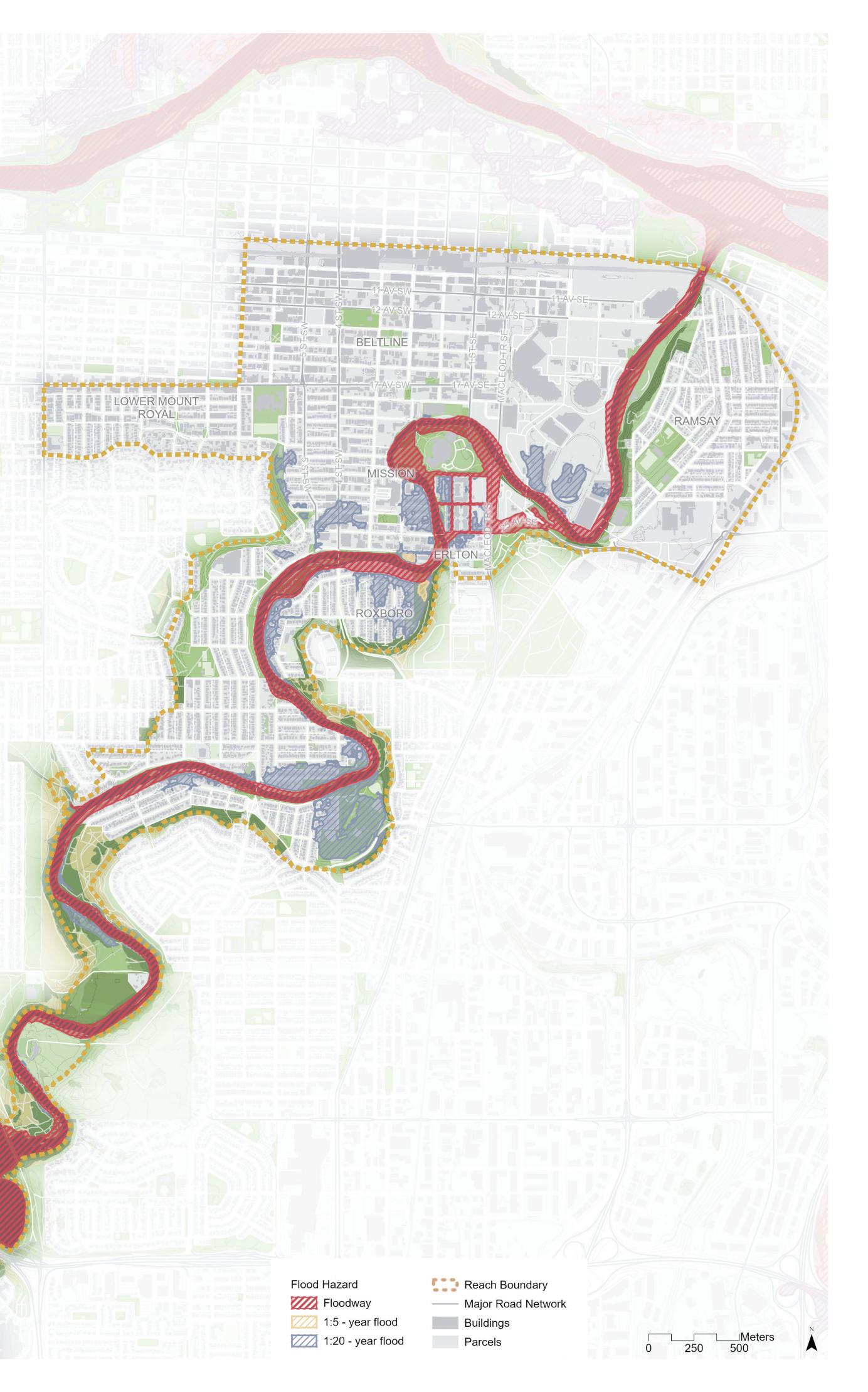


Elbow Fact Sheet



Communities:

Elboya	Mission / Cliff Bungalow
Ramsay	Beltline
Elbow Park	Victoria Park
Erlton	Lower Mount Royal

Rideau/Roxboro

Relevant Flood Topics:

Upstream protection (SR1 and Glenmore Reservoir)

Flood Mitigation Infrastructure:

Dams: Springbank Reservoir (SR1), Glenmore Reservoir operations

Bank protection and restoration: Sandy Beach Park bioengineering and bank restoration, Stanley Park

Rip rap: along some banks, bridges and outfalls

Barrier: none

Flood Hazard Updates:

The draft Provincial Flood Hazard Map shows the pre SR1 1:100 flood inundation extent.

No flood hazard classifications have been updated at this time for the Elbow River between the Glenmore

There will still be risks that exist in the Elbow River Valley with SR1 in place.

As such, some regulation will still be required to ensure these risks are adequately addressed in development planning and building design.

This includes:

- Risk of a larger event than SR1 and the Glenmore Reservoir can handle
- Increasing flood flows due to our changing climate
- High groundwater in the river valley due to high river levels during and after flood events

Dam and the confluence.

New flows and maps are being prepared for when SR1 is operational in 2025. The potential impacts of SR1 on a wide range of flood flows are currently being assessed with the Government of Alberta and will be reflected in flood maps when the reservoir is operational.

We can estimate, however, that with SR1, a 1:100 flood will look more like the current 1:5 flood map*. This map shows the 1:5 boundary and uses the 1:20 to delineate potential future climate flows**.

However, this number, and the flows between SR1 and Glenmore Reservoir, must still be refined and better understood before official post-SR1 Flood Hazard Maps are created.

We want to start the conversation of what future regulations will look like post SR1.

*1:5: As per preliminary modelling shared during the 2021 NRCB hearing. (February 26, 2021. City of Calgary submission to NRCB Hearing. Appendices A and B.) <u>https://www.nrcb.ca/natural-resource-projects/</u> <u>natural-resource-projects-listing/83/springbank-off-stream-reservoir-</u> <u>project/documents/10792/20210226-calgary-sub-to-nrcb-hearing-</u> <u>submission-appendices-a-and-bes Conservation Board</u>

**1:20: Future climate flow based on a preliminary estimate of a 20% increase in flows at the end of the century.