

Calgary



2017 Flood Resiliency and Mitigation Annual Update

Presentation to Standing Policy Committee on Utilities and Corporate Services
February 14, 2018

CITY OF CALGARY
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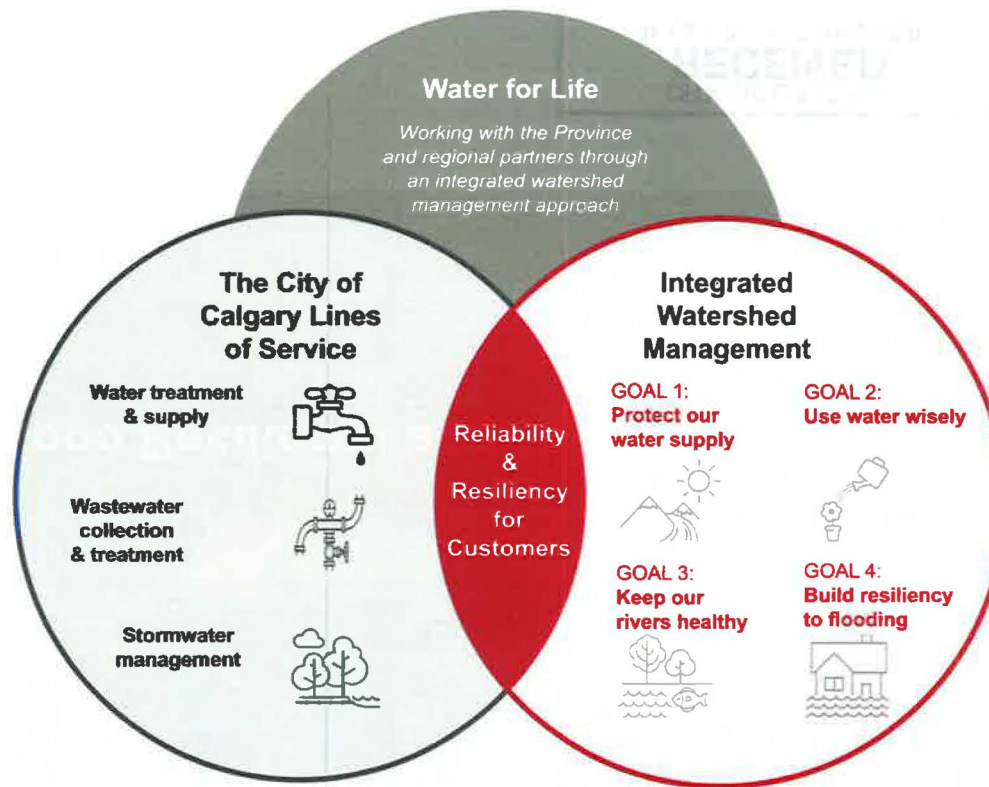
FEB 14 2018

ITEM: 5.3 UCS2018-0092
Distribution
CITY CLERK'S DEPARTMENT

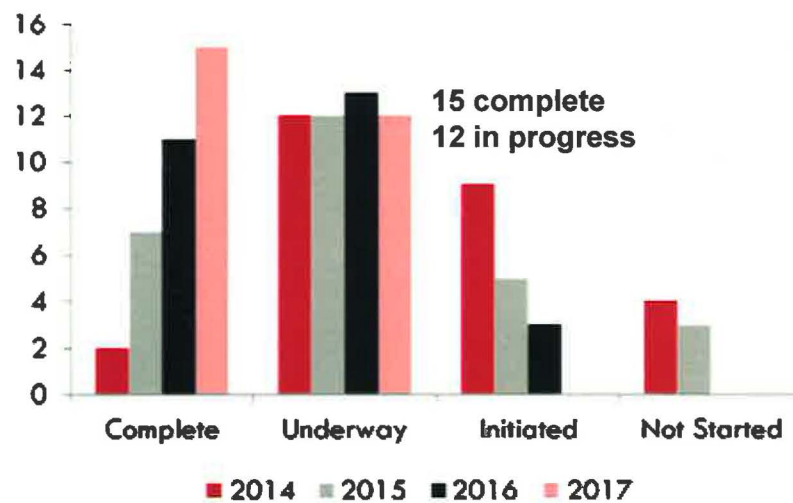
UCS2018-0092
The City of Calgary
Water Resources

ISC: Unrestricted

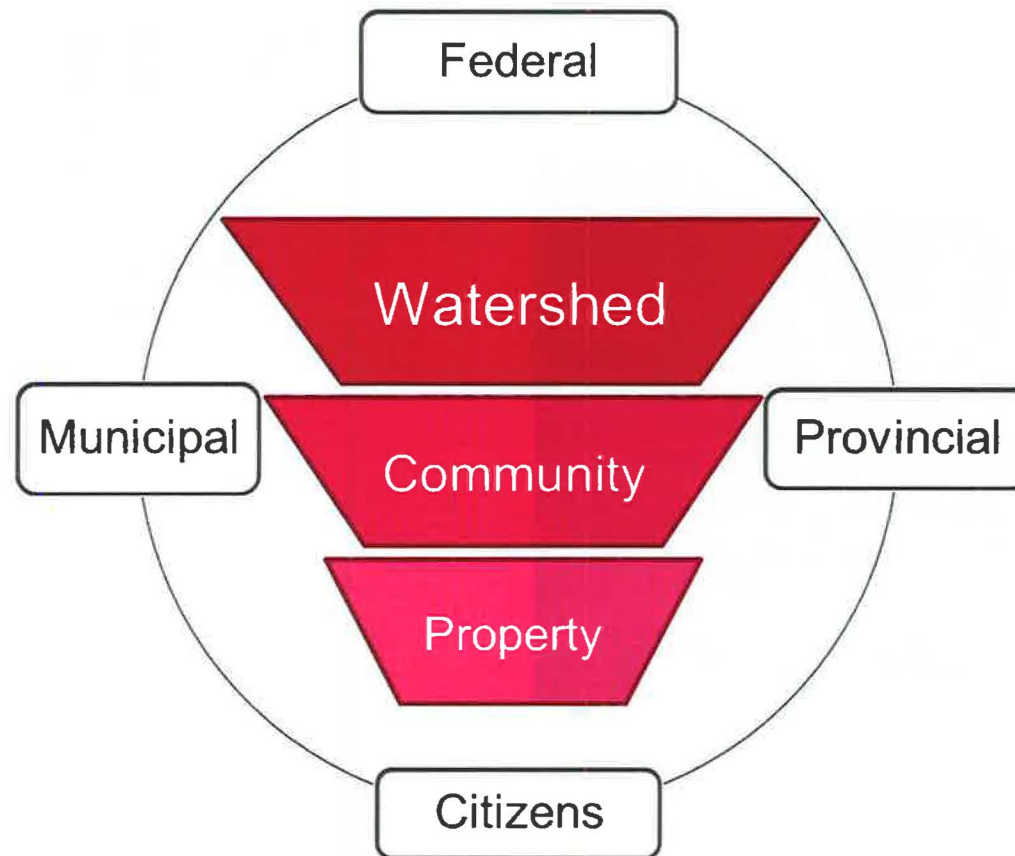
Integrated Watershed Management



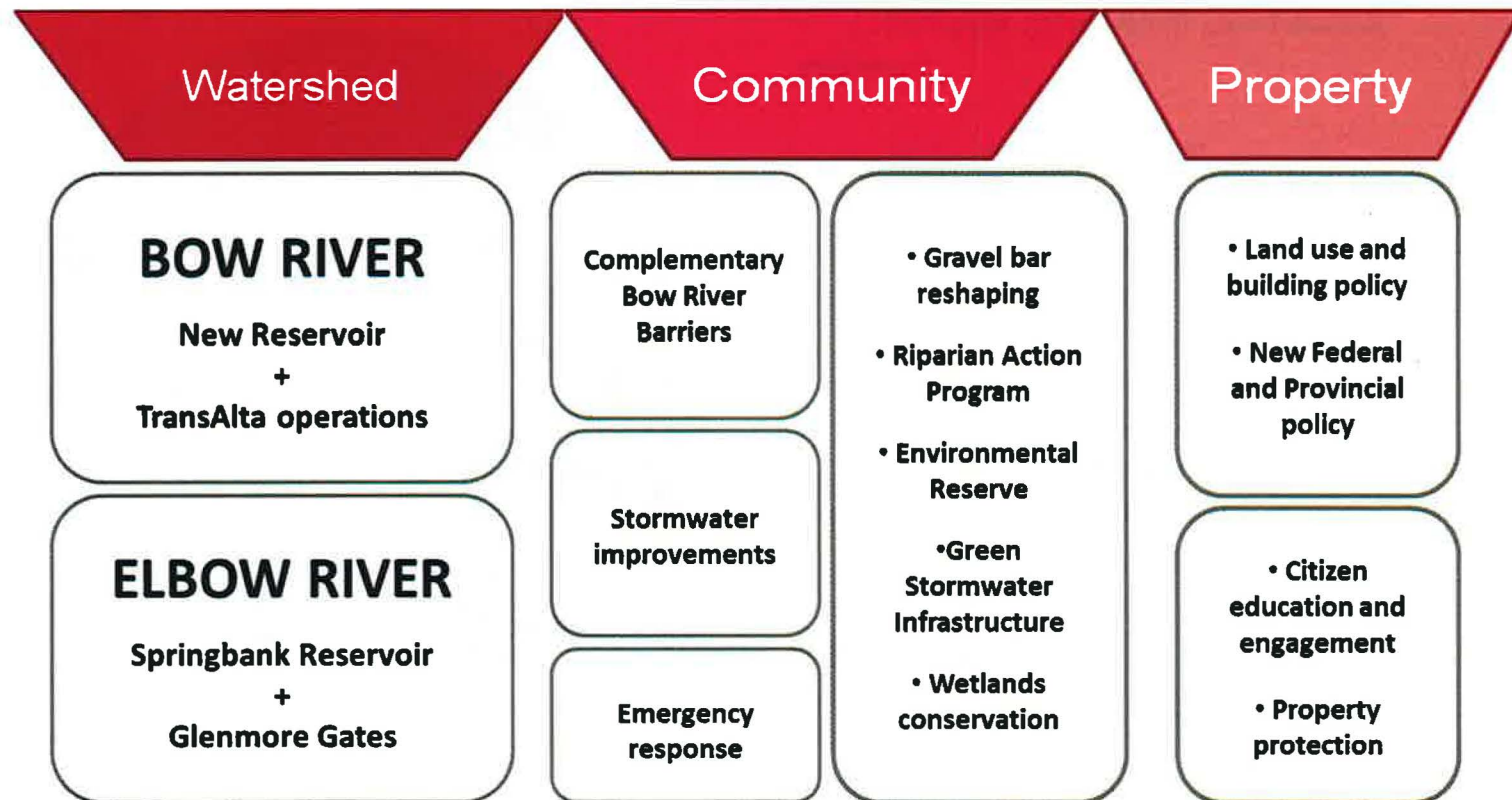
Expert Management Panel on River Flood Mitigation



Integrated levels of flood mitigation

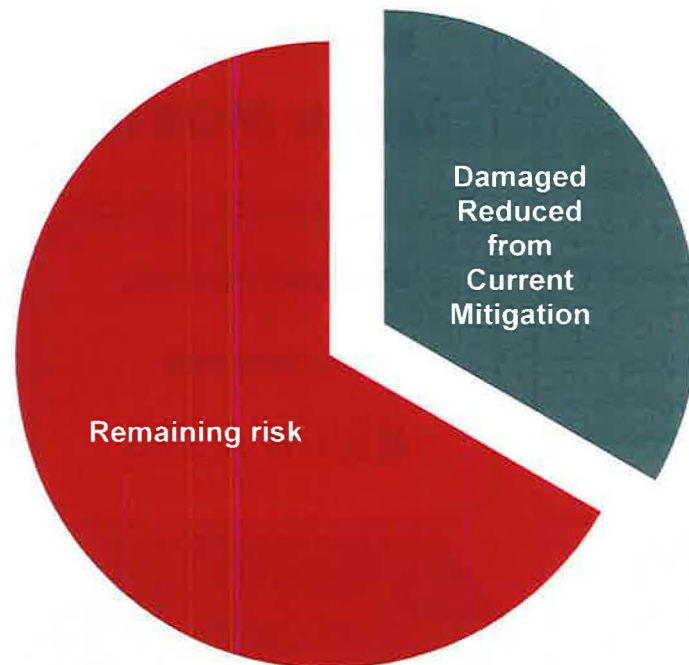


Flood Mitigation and Resiliency Framework





Flood mitigation to date



City Projects:

- Glenmore gates
- Reinforce existing barriers
- New local barriers underway
 - West Eau Claire
 - Centre Street
 - Montgomery
 - Heritage Drive
 - Bonnybrook
- Drainage improvements
- Emergency response
- Gravel bar reshaping

Others:

- TransAlta Operating Agreement
- Springbank Reservoir Project

Remaining risk is primarily on the Bow River.

Elbow River mitigation

Watershed

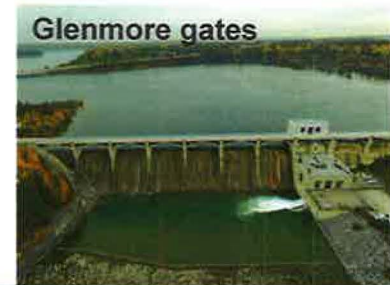
~1240 cms in 2013

- SR1 = 2013 reduced to ~640cms
+ Glenmore gates = 2013 reduced to ~170 cms (mitigates event similar to 2013)
- Property level mitigation (land use policy, education, emergency response, etc.) can provide additional benefits
- **Underway**
- **Some opposition from outside stakeholders**



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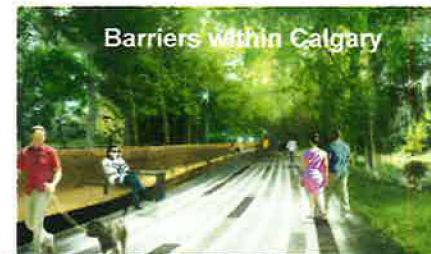
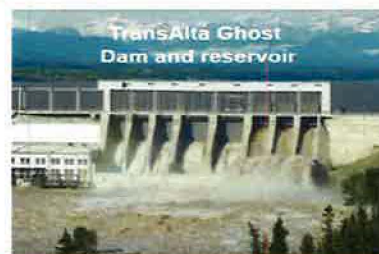
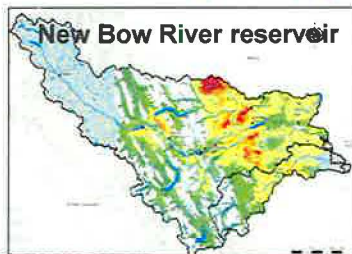
Bow River mitigation

Watershed

~1840 cms in 2013

- New Upstream Reservoir + TransAlta agreement = reduces 2013 to ~1200 cms
+ Complementary barriers = mitigates event similar to 2013
- Property level mitigation (land use policy, education, emergency response, etc.) can provide additional benefits

- **Commitment required**
- **Bow River Working Group next steps needed**



Community-level river flood mitigation

Community

- FMMA projects, with support from Province:
 - Upper Plateau Separation
 - Community barriers:
 - Downtown
 - Sunnyside-Hillhurst
 - Bowness
 - Pearce Estate
- Gravel bar reshaping



Engagement and Policy

Property

- Flood Readiness
- Community engagement
- Land use and building policy
- Provincial flood mapping and policy

Workshops



6 Sessions



140 Participants

1,216
Comments

Open Houses



2 Sessions



47 Participants

216
Comments

Online



23 Days Online



~750 Unique
Participants

2,051
Online
Comments



25,062 Likes
on Comments

Key Actions for 2018

River flood mitigation and resilience

WATERSHED

- Springbank Off-stream Reservoir
- Bow River Working Group Recommendations
- New Bow Upstream Reservoir

COMMUNITY

- Flood Mitigation Projects

PROPERTY

- City-wide working group
- Provincial flood policy
- Federal development guidelines

Stormwater flooding

- I. Localized flooding
- II. Community Drainage Improvement Program



Key Actions for 2018 Community Drainage Improvement Program

PROJECT DELIVERY

- Sunnyside-Hillhurst
- Woodlands/Woodbine
- Cedarbrae/Braeside

STUDY & ADD VALUE

- Complete Macleod Trail and Renfrew Studies
- Initiate Deer Run Study

ONGOING INVESTMENT

- 2019-2022 Service-based Plans and Budgets

ADMINISTRATION RECOMMENDATION

That the Standing Policy Committee on Utilities and Corporate Services recommends that Council receive this report for information.

Calgary



Thank you