

## Healthy Watersheds

The Watershed Resiliency and Restoration Program (WRRP) has supported the restoration and enhancement of over 1,500 hectares of wetlands and riparian lands in the Bow River basin. Investing in healthy wetlands is an important element in fighting floods as they hold water on the land during spring melts and rainfall events.

## Flood Mapping

New flood mapping for more than 1,500 kilometres of river through more than 60 communities across Alberta is currently underway. This includes new flood mapping for both the Elbow River and Bow River through Calgary.

## Flood Forecasting

Since 2013, the province's River Forecast Centre partnered with Environment and Climate Change Canada to improve the use of weather forecast data in the flood forecasting models. The province has also installed new rainfall and river level alarms upstream of Calgary.

## Emergency Preparedness

The province's new emergency managers' portal provides near real-time information and instant contact with the River Forecast Centre, allowing our municipal partners to respond faster and more efficiently during a flood emergency.

The Alberta Rivers app and new rivers.alberta.ca website provide Albertans with detailed information on river conditions. The mobile application also enables important advisories to be sent directly to users via a push notification.

## Upstream Storage

The province is committed to improving and developing upstream storage to protect the City of Calgary. This includes moving forward with the Springbank Reservoir.

We are also making progress on upstream storage along the Bow River. An agreement with TransAlta to modify operations at Ghost Reservoir and three Kananaskis-area reservoirs for flood and drought mitigation purposes runs through 2021. Conceptual assessments for three new upstream storage options are well underway, as is an assessment for increasing the drawdown rate at Ghost Reservoir.

## Erosion Control

Following the 2013 floods the province invested more than \$50 million to reinforce riverbanks at over 40 sites in Calgary.

## Community Protection

In 2015 the province committed \$150 million over 10 years in dedicated funding for the City of Calgary through the Alberta Community Resilience Program (ACRP) to fund high priority flood resilience projects that protect communities, improve municipal water and wastewater infrastructure, and better manage stormwater.

Key projects include improvements to the Centre Street Bridge lower deck flood barrier and new flood barriers along Heritage Drive and West Eau Claire. These projects are funded in partnership with City of Calgary.

## Water and Wastewater Infrastructure

Upgrades to Glenmore Dam, Bonnybrook Wastewater Treatment Plant and the Roxboro Sanitary Lift Station will improve the flood resilience of these critical municipal infrastructure assets. These projects are funded in partnership with City of Calgary.

## Stormwater Management

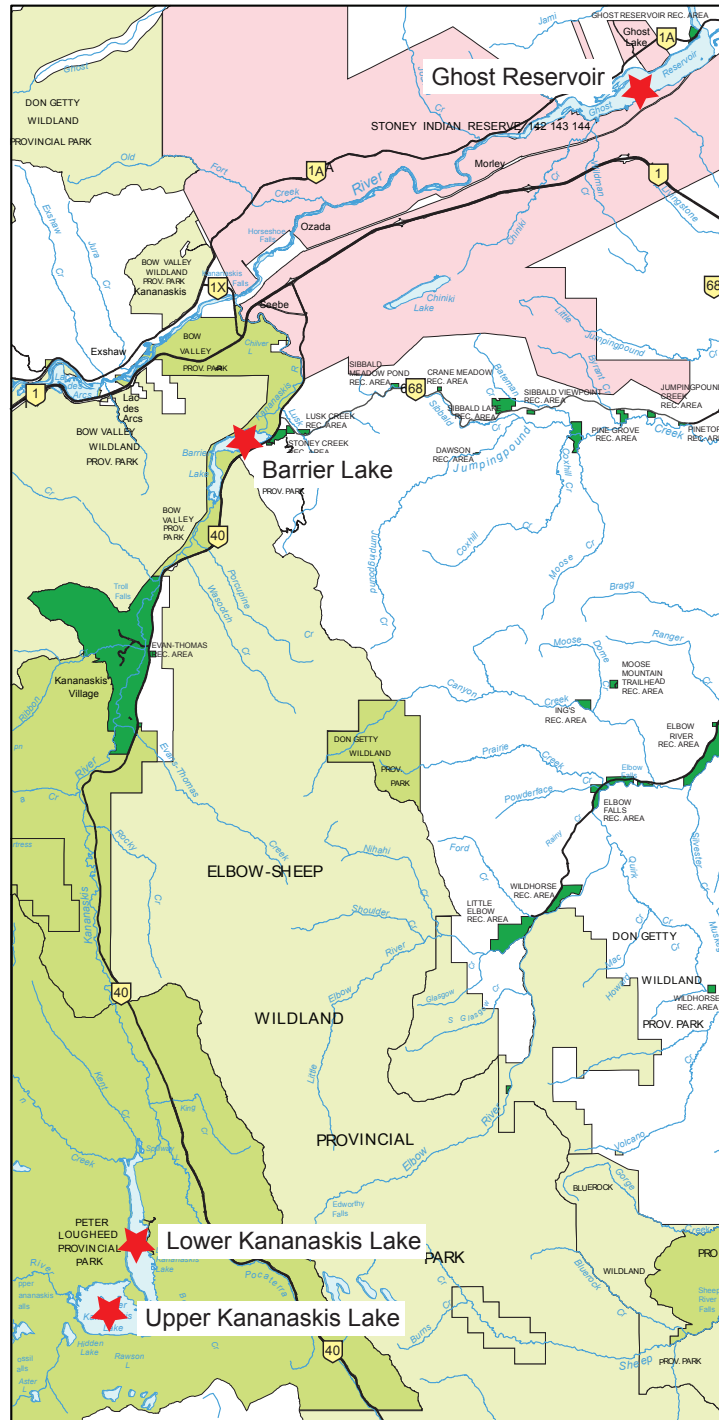
New pump stations in Sunnyside and various new stormwater outfall gates will improve how stormwater is managed in vulnerable parts of the city. These projects are funded in partnership with City of Calgary.

# Building a more flood-resilient Calgary

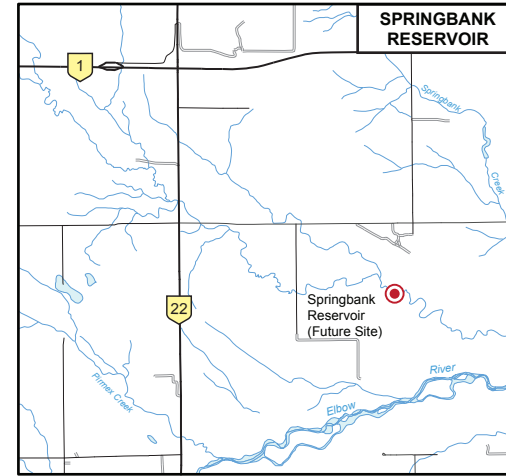


Since the flood of 2013, significant improvements have been made to protect Calgary residents and businesses. The Government of Alberta, in partnership with the City of Calgary, is committed to developing, investing and building critical flood infrastructure that will better prepare the city for extreme weather events.

# Calgary Flood Resilience Projects



1. Upper Plateau Separation Project - \$12,210,000 - Approved
2. Sunnyside Pumpstation #2 Improvements - \$6,416,953 - Active Construction
3. Sunnyside Pump Station #1 - \$3,400,000 - Active Construction
4. West Eau Claire Flood Barrier - \$2,115,005 - Complete
5. Centre Street Bridge lower deck flood barrier improvements - \$1,530,000 - Complete
6. Downtown Flood Barrier - \$11,096,055 - Approved
7. Calgary Zoo Erosion Protection - \$600,000 - Complete
8. 9th Avenue (Inglewood) Bridge - Flood Resiliency - \$5,240,487 - Approved

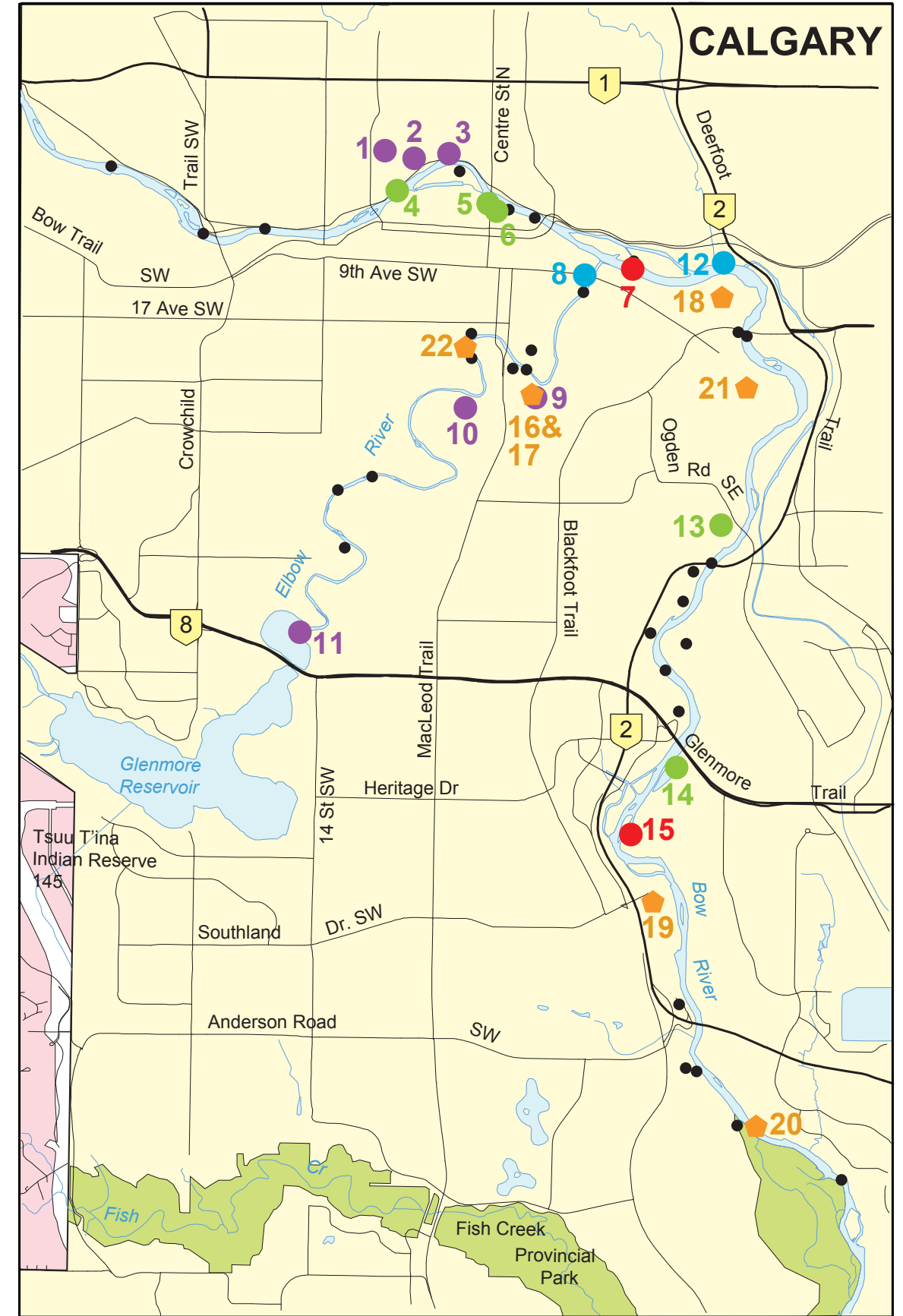


9. Stormwater outfall improvements - \$1,800,000 - Complete
10. Roxboro Sanitary Lift Station Replacements - \$1,728,900 - Complete
11. Glenmore Dam Infrastructure Improvement Program - Elevated Hoists - \$7,600,000 - Active Construction
12. Site Condition Improvements at the Western Headworks Diversion - \$567,000 Complete
13. Bonnybrook WWTP - Flood Mitigation Prg. \$11,455,600 - Active Construction
14. Heritage Drive permanent flood barrier - \$3,960,000 - Pre-construction stage
15. Carburn Park - \$110,000 - complete
16. Rain Gardens for Resilience - \$100,000
17. Rainwater for Resilience - \$873,246
18. Bioengineering Demonstration and Education Project Partnership - Implementation of Project Education Plan \$522,500 - Active construction
- 19 - 22. Riparian Health Restoration - Multiple Sites - \$750,000

**Cost-shared with the City of Calgary**

- Flood Barriers
- Emergency Access Improvements
- Infrastructure Upgrades

- ★ Five-year modified operations agreement with TransAlta - \$5,500,000/year
- Risk Assessments
- Healthy Watersheds/Riparian Restoration
- Erosion Control/Bank Stabilization  
All erosion control/bank stabilization projects are complete, except for one (Montgomery) - \$50,800,000



Produced by Information & Data Provisioning Services, Informatics Branch; April 17, 2018  
Base map data provided by the Government of Alberta under the Open Government Licence - Alberta  
© 2018 Government of Alberta