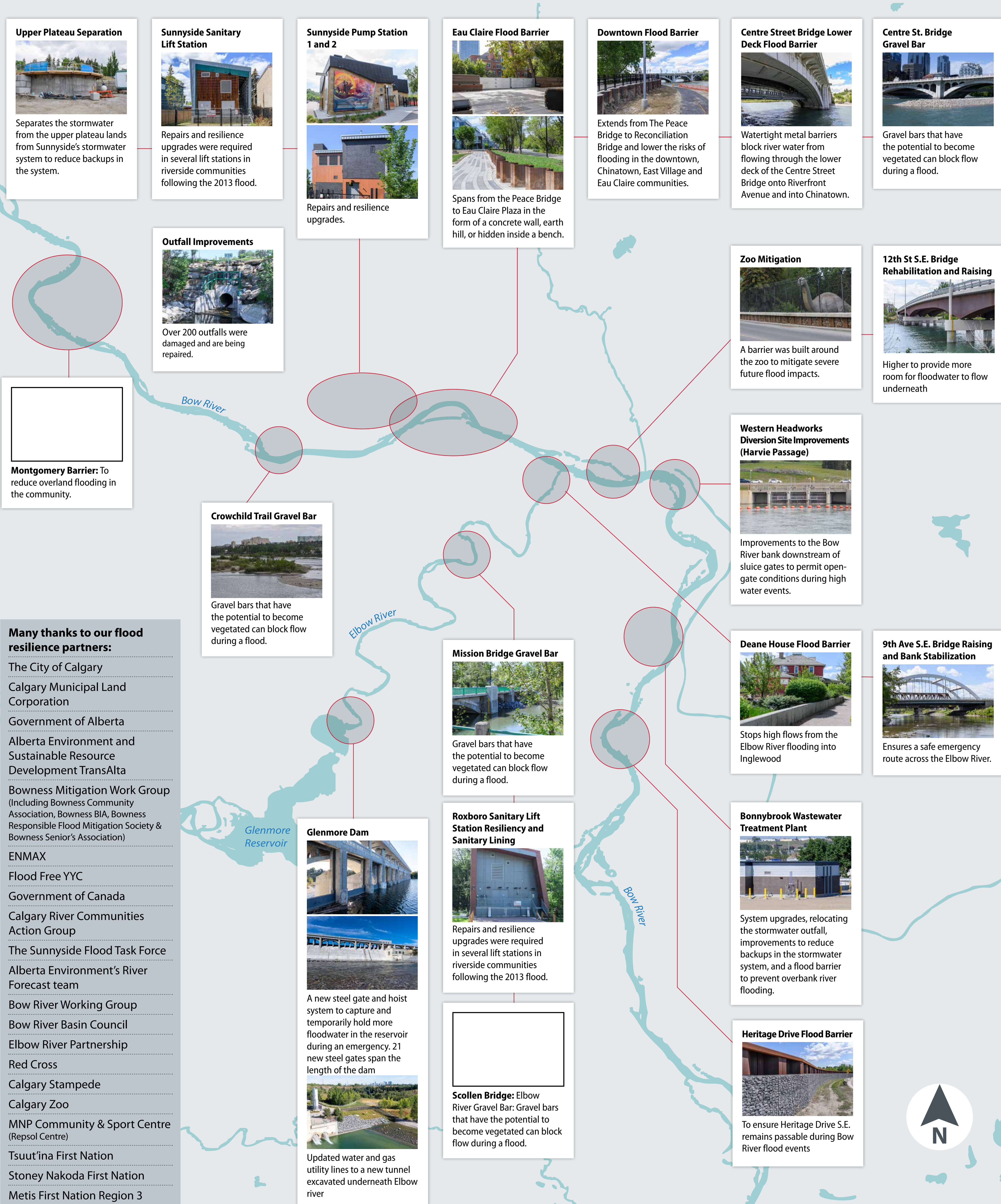




## Ten Years of Building Calgary's Flood Resilience

The 2013 floods taught us that The City of Calgary needed to create more flood resilience for our city. Since then, The City of Calgary improved our Flood Resilience Program, and created advanced mitigation measures in these seven key areas of Calgary. Measures included flood barriers, gravel bars, erosion/bank stability and drainage improvement, reservoirs and other flood mitigation infrastructure, as well as building community readiness.

With financial assistance from the Government of Alberta and the Government of Canada, we have invested or committed approximately one billion dollars in flood mitigation infrastructure for Calgary, reducing Calgary's flood damage exposure by 55 percent, which will be reduced by a further 15 percent by 2025.



### Upper Plateau Separation



Separates the stormwater from the upper plateau lands from Sunnyside's stormwater system to reduce backups in the system.

### Sunnyside Sanitary Lift Station



Repairs and resilience upgrades were required in several lift stations in riverside communities following the 2013 flood.

### Sunnyside Pump Station 1 and 2



Repairs and resilience upgrades.

### Eau Claire Flood Barrier



Spans from the Peace Bridge to Eau Claire Plaza in the form of a concrete wall, earth hill, or hidden inside a bench.

### Downtown Flood Barrier



Extends from The Peace Bridge to Reconciliation Bridge and lower the risks of flooding in the downtown, Chinatown, East Village and Eau Claire communities.

### Centre Street Bridge Lower Deck Flood Barrier



Watertight metal barriers block river water from flowing through the lower deck of the Centre Street Bridge onto Riverfront Avenue and into Chinatown.

### Centre St. Bridge Gravel Bar



Gravel bars that have the potential to become vegetated can block flow during a flood.

### Outfall Improvements



Over 200 outfalls were damaged and are being repaired.

**Montgomery Barrier:** To reduce overland flooding in the community.

### Zoo Mitigation



A barrier was built around the zoo to mitigate severe future flood impacts.

### 12th St S.E. Bridge Rehabilitation and Raising



Higher to provide more room for floodwater to flow underneath

### Crowchild Trail Gravel Bar



Gravel bars that have the potential to become vegetated can block flow during a flood.

### Western Headworks Diversion Site Improvements (Harvie Passage)



Improvements to the Bow River bank downstream of sluice gates to permit open-gate conditions during high water events.

### Many thanks to our flood resilience partners:

- The City of Calgary
- Calgary Municipal Land Corporation
- Government of Alberta
- Alberta Environment and Sustainable Resource Development TransAlta
- Bowness Mitigation Work Group (Including Bowness Community Association, Bowness BIA, Bowness Responsible Flood Mitigation Society & Bowness Senior's Association)
- ENMAX
- Flood Free YYC
- Government of Canada
- Calgary River Communities Action Group
- The Sunnyside Flood Task Force
- Alberta Environment's River Forecast team
- Bow River Working Group
- Bow River Basin Council
- Elbow River Partnership
- Red Cross
- Calgary Stampede
- Calgary Zoo
- MNP Community & Sport Centre (Repsol Centre)
- Tsuut'ina First Nation
- Stoney Nakoda First Nation
- Metis First Nation Region 3

### Mission Bridge Gravel Bar



Gravel bars that have the potential to become vegetated can block flow during a flood.

### Roxboro Sanitary Lift Station Resiliency and Sanitary Lining



Repairs and resilience upgrades were required in several lift stations in riverside communities following the 2013 flood.

**Scollen Bridge:** Elbow River Gravel Bar: Gravel bars that have the potential to become vegetated can block flow during a flood.

### Glenmore Dam



A new steel gate and hoist system to capture and temporarily hold more floodwater in the reservoir during an emergency. 21 new steel gates span the length of the dam



Updated water and gas utility lines to a new tunnel excavated underneath Elbow river

### Deane House Flood Barrier



Stops high flows from the Elbow River flooding into Inglewood

### 9th Ave S.E. Bridge Raising and Bank Stabilization



Ensures a safe emergency route across the Elbow River.

### Bonnybrook Wastewater Treatment Plant



System upgrades, relocating the stormwater outfall, improvements to reduce backups in the stormwater system, and a flood barrier to prevent overbank river flooding.

### Heritage Drive Flood Barrier



To ensure Heritage Drive S.E. remains passable during Bow River flood events

