

## Flood Mitigation - Calgary

Following last summer's floods, the Government of Alberta is investing more than \$600 million in community recovery and flood mitigation. The following provides some information on the work currently being done in Calgary.

### Calgary Flood Recovery Erosion Control (FREC) Program Funding

50 approved projects for a total of more than \$52.1 million. Work done through FREC is primarily erosion control work to rebuild and reinforce river banks to protect the City of Calgary.

### Calgary Underground Diversion Study (\$250 thousand)

This study will determine the feasibility of diverting water during flood conditions underground along 58 Avenue from Glenmore Reservoir to the Bow River. The underground diversion could accommodate a peak flow of roughly 500 cubic metres per second. The peak flow rate of the Elbow River entering Glenmore Reservoir during the June 2013 floods was approximately 1,240 cubic metres per second.

This feasibility study is directed by the City of Calgary to determine if this project will fill their needs. The next steps would be environmental screening and community consultations.

## Infrastructure projects on the Elbow that impact Calgary

### Springbank Road off-stream reservoir

The Springbank Road off-stream reservoir would have storage capacity of 59 million cubic metres. The proposed reservoir would help control Elbow River flow rates during a flood and help protect residents and property in Rocky View County and Calgary by temporarily store flood water and release it back to the Elbow River in a controlled manner when the flood subsides.

Preliminary design work, environmental review and community consultation are currently underway.

### McLean Creek Dry Dam (Elbow River Basin)

This proposed dry dam would help control river flow rates during a flood and help protect residents and property in Rocky View County, Bragg Creek, Redwood Meadows (Tsuu T'ina Nation), and Calgary. The McLean Creek dry dam would have storage capacity of 49 million cubic metres. Elbow River flows would be significantly reduced during a flood with this and the Springbank Road reservoir downstream.

Conceptual design is complete and community consultation is underway. A decision on this project will be made after the Calgary underground diversion feasibility study is complete.

## Modified operations at TransAlta – Ghost Reservoir

A new agreement between the Alberta government and TransAlta involves holding the reservoir at an elevation of 3902 feet until July 31, approximately six weeks longer than the current operating pattern, to provide greater capacity to hold water during flood conditions. It is estimated that modified operations at Ghost Reservoir would reduce peak flows along the Bow River by an additional 100 cubic metres per second.