

# Springbank Off-stream Reservoir

## Frequently Asked Questions

### 1. Why is the Government of Alberta planning to construct flood mitigation for the Elbow River?

In 2014, a Flood Mitigation Report was done by Alberta Environment and Parks to identify locations for flood mitigation for the Elbow River, following the devastating 2013 flood in Calgary and upstream communities.

Two locations were identified by the report as preferred flood mitigation site options for the Elbow River—the Springbank Off-stream Reservoir (SR1) and McLean Creek (MC1).

### 2. What flood mitigation is planned for SR1?

SR1 is a dry reservoir that will store water temporarily during a flood. It will work in tandem with the Glenmore Reservoir in Calgary. Together, the combined storage capacity would accommodate water volumes equal to the 2013 flood.

### 3. Why has government chosen Springbank as the site for this flood mitigation project?

Springbank was determined to be the best choice over McLean Creek because it:

- is less costly,
- has less environmental impact,
- has less impact on the Elbow River,
- has shorter construction timelines
- will capture more runoff due to the location further downstream,
- is less sensitive to impacts from sediment and debris,
- is closer to operational response teams and access roads, and
- is less vulnerable to damage during extreme weather

#### **4. If Springbank has been identified as the chosen flood mitigation site, why is government doing additional geotechnical and environmental work on the McLean Creek site?**

Government will be doing some additional environmental and engineering work including geotechnical drilling at McLean Creek to complete an Environmental Impact Assessment (EIA) report required by the National Resources Conservation Board (NRCB) and Canadian Environmental Assessment Agency (CEAA) for the SR1 review process.

Both regulatory authorities require an “option assessment”. This means that the feasibility of other sites must be explored in greater detail than was required to select the SR1 project as the preferred option. This is standard process for NRCB and CEAA reviews and would be required for any project application involving an EIA. For example, if McLean Creek was the preferred option additional work would be required at the Springbank site to support the EIA for McLean Creek.

#### **5. Does this mean that McLean Creek may be reconsidered as the site for flood mitigation?**

No. Springbank has been determined to be the best choice over McLean Creek and government has every intention of moving forward with flood mitigation with SR1. The work that is being done is required for federal review.

#### **6. What work will be happening and when?**

Area residents will likely see drilling equipment start moving into the McLean Creek location during the first week of December. Test holes will be drilled to conduct geotechnical surveys. These surveys will provide data on soil condition, ground water and the depth of bedrock on the MC1 site.

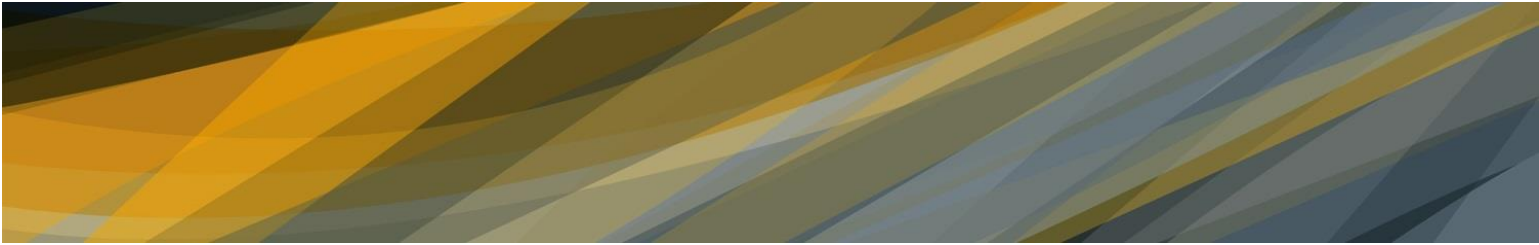
This testing is anticipated to take between six and eight weeks, weather dependent.

Once this testing is done, the data will be used to develop the business case required by NRCB and CEAA, in time for the EIA submission deadline in June.

The environmental work will involve the assessment of many of the same ecosystem components as the SR1 project, including but not limited to, fish and fish habitat, wildlife (including migratory birds), and vegetation, surface water quality and quantity. Environmental assessment work should be complete in March 2017.

#### **Will there be impacts to the trail system and environment because of this testing?**

The existing trail system will be used to move drilling equipment to the test hole sites. In the case of two remote test sites, helicopters will be used to move the drilling equipment to minimize impacts to trees and vegetation.



Every effort will be made to minimize disturbance, however widening of the trails and the removal of trees in some places may be necessary.

Test holes are only about 10 to 12 centimetres in diameter, though some will go as deep as 30 to 60 metres. In some places, test pits will be dug out of the topsoil, roughly three metres deep and one to two metres in size. Samples are extracted right away and the holes filled in immediately. The intent is to leave the smallest possible footprint and ensure the safety of local trail users while completing the geotechnical work.

The contractor completing the test drilling has obtained a Temporary Field Authorization for the work through Alberta Environment and Parks and will observe all guidelines for responsible environmental management throughout the project.