

Overall Project Timeline

The entire process for implementation of a new reservoir project on the Bow River will take a minimum of 12 years to complete.

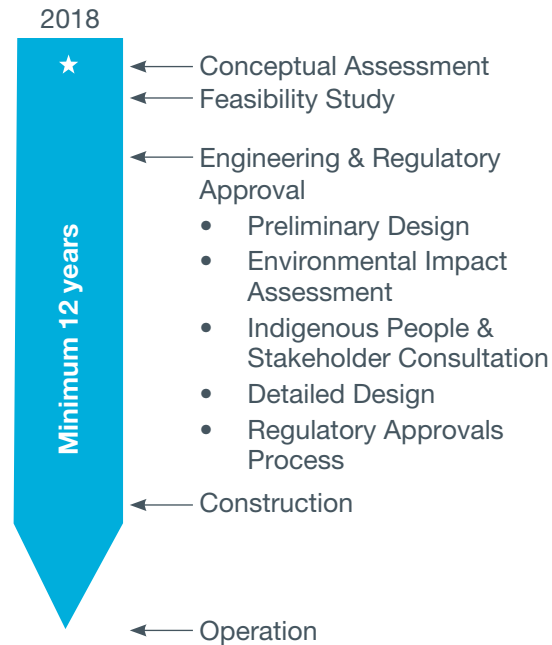
The conceptual assessment currently underway is anticipated to be complete in spring 2020. Conceptual designs for all three reservoir options, along with stakeholder and public engagement will inform a decision whether to proceed to a feasibility study.

A feasibility study would include intensive soil and bedrock investigations to assess the viability of the reservoir options and may result in the selection of a preferred option based on technical, social and economic factors. The engineering & regulatory approval phase of the project would include a comprehensive environmental impact assessment of the preferred option, along with consultation with Indigenous communities and other stakeholders, in accordance with applicable provincial and federal legislation, policies and procedures.

At each phase, information regarding the reservoir options and engagement opportunities will be provided to those interested.

The government's intention to proceed further will be required following the completion of each phase of the project.

Project Timeline



Bow Basin Water Management Options

Conceptual Assessment

For additional information about the Conceptual Assessment go to:

alberta.ca/bow-basin-water-management-options

Environment and Parks, Government of Alberta

September 2019

Alberta

Background

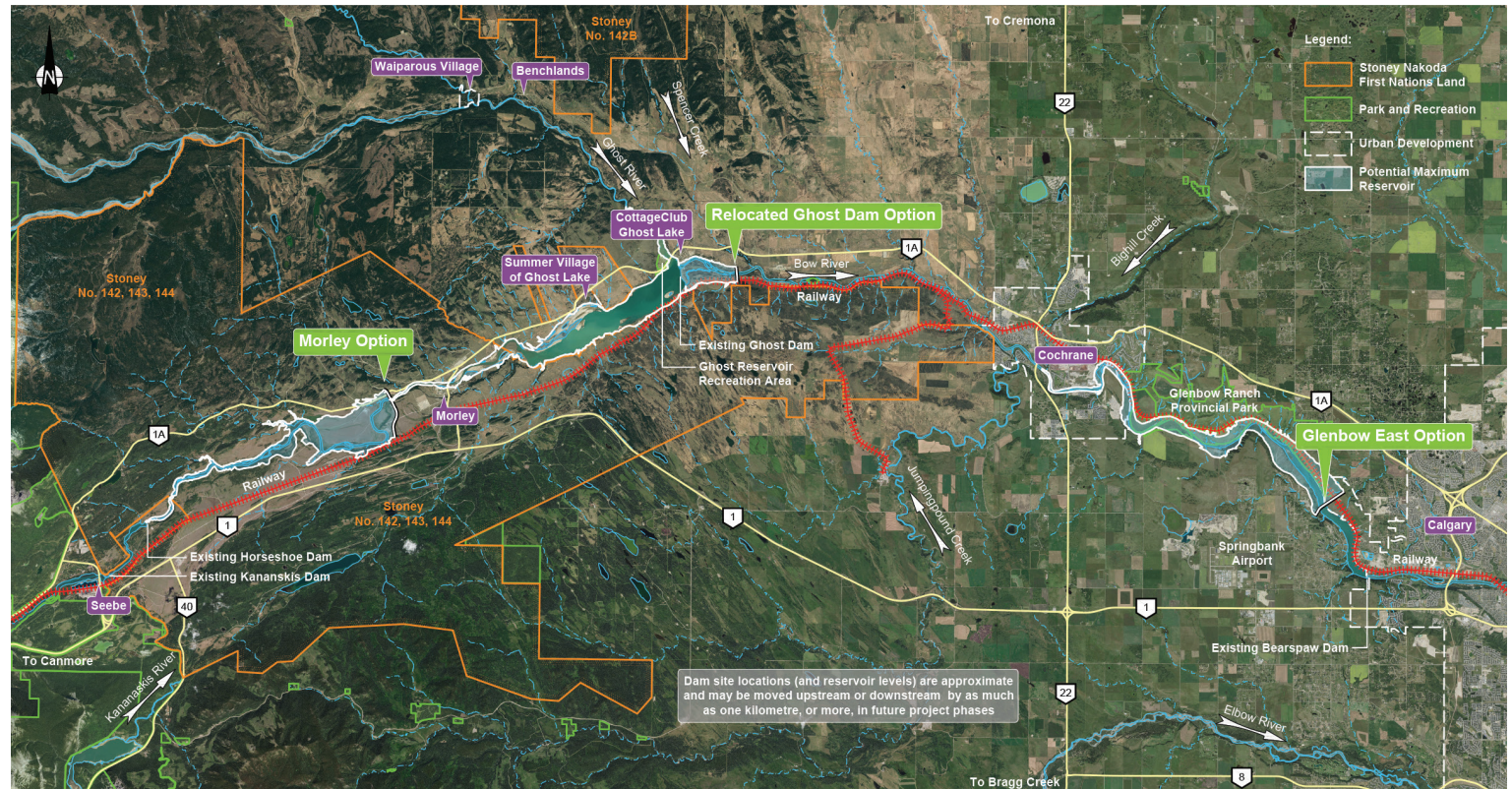
The 2005 and 2013 floods surpassed any on the Bow River since 1932, resulting in significant risk to public safety and substantial damage to homes and infrastructure in the floodplain. Droughts also pose significant risk to the reliable supply of clean water for municipal, residential, commercial and agricultural users, and the environment.

In 2015, the Bow River Working Group (BRWG), a multi-stakeholder group of water managers and users including Provincial Ministries, Municipalities, First Nations, Non-Government Organizations, Industry and Irrigation Districts, was asked to study and provide recommendations on how to reduce flood and drought risk, while protecting the long-term health of the Bow River basin. The BRWG's

May 2017 report, *Advice to Government on Water Management in the Bow Basin*, identified new reservoir storage on the Bow River upstream of Calgary to reduce flood and drought risk.

Conceptual Assessment Scope of Work

In November 2018, Environment and Parks commissioned Wood Environment & Infrastructure Solutions to study the reservoir options identified by the BRWG at a conceptual level.



The conceptual assessment scope of work includes:

- developing conceptual designs for each option;
- completing geological/geotechnical desktop studies of existing soil & bedrock information;
- completing environmental desktop studies; and
- engaging and sharing information with potentially affected stakeholders, Indigenous people, and the public.

The conceptual assessment will identify potential engineering, environmental, social, economic, cultural and traditional land use factors (both positive and negative) for each option, and estimate the associated development cost, all at a very high level.

The map above shows the potential locations of three reservoir options. The Morley and Glenbow East options would both involve constructing a dam to create a new reservoir, while the Relocated Ghost Dam Option would involve decommissioning the existing Ghost Dam and building a new dam about 2.5 km downstream to expand the size of the existing Ghost Reservoir.

Details regarding the reservoir options, potential dam locations and potential reservoir extents are all subject to change. Refinement of reservoir levels and development of future operating procedures during normal operations, flood events and drought events will be completed in subsequent phases.