

Bow River Reservoir Options (BRRO)

Frequently asked questions



Why has the government discontinued exploring the Morley option?

While Phase 2 of the Bow River Reservoir Options project was looking at three reservoir options in the Bow River basin, upstream of Calgary, work examining the feasibility of the Relocated Ghost Dam and Glenbow East has advanced much farther and is nearly complete. To move forward in a timely manner to prevent floods and mitigate drought along the Bow River, Alberta Environment and Protected Areas opted to focus on the Relocated Ghost Dam and Glenbow East options.

Has the government considered not building any of the dams?

The Phase 2: Feasibility Study is assessing, for comparability purposes, the technical requirements and costs of the environmental, social and cultural implications of the reservoir options. At the same time, much work has gone into assessing if there is something else, an alternative, that could be done that would provide equivalent flood mitigation and drought protection.

To date, no suitable feasible alternatives have been found that provide the water storage needed for water security during drought and mitigating flood impacts without significant issues, which is why engagement has primarily focused on discussing the two reservoir options. More information on work undertaken exploring alternatives is outlined in the July 2024 edition of [the Bow River Reservoir newsletter](#).

However, a final alternatives feasibility report will be released upon conclusion on Phase 2, as part of and alongside the feasibility study of the Relocated Ghost Dam and Glenbow East Options. This will help inform a decision by government on which of the options, if any, should be recommended to move forward to the Phase 3: Engineering and Regulatory Approval Process.

What is the infrastructure and financial impact of the reservoir options on neighbouring towns etc.? Has the government taken this into consideration in the project cost?

As part of Phase 2, the feasibility study is quantifying the estimated costs and potential benefits and impacts of each option. This includes assessing the land and infrastructure values within each potentially affected area to provide a comparison of the reservoir options under consideration.

What would the impact of the Glenbow East dam be on the operations of the Glenbow Ranch Provincial Park?

About 25 per cent of the Glenbow Ranch Provincial Park is below the conceptual maximum water level for the Glenbow East option.

Inundation, or flooding, of existing parkland, both within the Glenbow Ranch Provincial Park and other adjacent City of Calgary parks as well as land owned by the Glenbow Ranch Park Foundation, has been a focus of the study as it relates to both environmental and social impacts. These impacts are included in the Phase 2 evaluation of the two options, and will be closely considered when making a decision about how to proceed.

What was the feedback from the First Nations on these options?

The Government of Alberta has accepted and continues to accept ongoing feedback from First Nations communities about the Relocated Ghost Dam and Glenbow East options.

This input is being reviewed and will be considered as part of making a final decision. The final Phase 2 report will include relevant information shared between the Government of Alberta and Indigenous communities. All input received, whether through structured engagement activities or emails and other communications, will help us determine which reservoir option, if any, will proceed to Phase 3: Engineering and Regulatory Approval Process.

What happens to this project when there's a change of government?

As with all government work, following an election, the work done to date is passed along to the next elected government.

Was the Ghost Reservoir used for flood protection prior to 2013?

The existing Ghost Reservoir was used for flood management historically, documented by reservoir level records, but less so in the decade preceding the 2013 flood.

What considerations are being made around current levels of flood protection?

The Alberta government has an agreement with TransAlta, put in place in 2016, and renewed for another 5 years in 2021, to modify operations at the existing Ghost Reservoir and three existing Kananaskis-area reservoirs during the spring flood risk season.

[Learn more about the agreement between the Government of Alberta and TransAlta.](#)

Calgary is at risk of flooding along two rivers: the Bow River and Elbow River. In 2013, the flood waters from the two rivers combined at the confluence of these two rivers, creating more flooding downstream of the confluence.

Flood mitigation on both rivers is required. The Springbank Off-stream Reservoir will provide flood mitigation on the Elbow River and a potential new or expanded reservoir on the Bow River upstream of Calgary would provide flood mitigation on the Bow River.

For more information about the Springbank Off-stream Reservoir please call 310-3773 and your call will be directed.

Is it true the changes at the existing Ghost Reservoir would be sufficient to manage another 2013 level flood event?

A new or expanded reservoir along the Bow River upstream of Calgary will provide additional water storage during floods to protect Albertans who live work and recreate in the Calgary area. The 2013 flood was too large compared to the available flood storage in the existing Ghost reservoir to fully mitigate the downstream impacts. Even with the TransAlta Modified Operations Agreement, the existing Ghost Reservoir would have filled up early in the event, and the peak flow at Calgary would have been similar to that experienced in 2013.

What is the status of the Government's discussions with Canadian Pacific Kansas City (CPKC)? What is the cost of the relocation?

As one of many stakeholders, CPKC was kept informed during the Phase 1 Conceptual Assessment and continues to be provided with regular updates on the status of the Phase 2 Feasibility Study. During Phase 2, meetings with CPKC have been held to discuss technical aspects of the feasibility level rail realignment designs for both options.

At this Phase 2 Feasibility Study stage of the BRRO initiative, we are trying to determine which reservoir option, if any, should proceed to Phase 3, the Engineering and Regulatory Approval Process. If a reservoir option proceeds to Phase 3, further study and discussions with CPKC would be required to determine the final rail relocation alignment, impacts and costs. This information will be publicly shared and help inform any decisions.

What are the impacts of the reservoir if they build it? What about the impact of the warm water on the fisheries?

As part of the Phase 2 Feasibility Study, environmental evaluations were performed to assess the impacts of each reservoir option. Environmental field studies included surveys on fisheries, amphibians, songbirds, and vegetation and wetlands, winter wildlife tracking and historical resources landform verification. This will be included in the final report that is released once a decision is made.

If a decision is made to proceed with one of the options, future work would also be undertaken. Impacts of a new or expanded reservoir on the environment and these valued ecosystem components will be further assessed through an Environmental Impact Assessment (EIA) in Phase 3 if the BRRO initiative advances.