crowsnest conservation society

Box 242, Blairmore, AB T0K 0E0

Crowsnest Conservation Society (CCS)
Submission to the Alberta Energy Regulator:
Response to Northback Holdings' Reply to Statement of Concern
regarding Water Term Licence Applications #33861749 and #33861750

June 30, 2026

The Crowsnest Conservation Society (CCS) submits the following formal response to Northback Holdings Corporation's reply (dated April 27, 2026) to our Statement of Concern (SOC) regarding Water Act Applications #33861749 and #33861750. Our response includes a Summary Overview followed by a detailed accounting of the concerns originally raised in our SOC, Northback's formal response to those, and how Northback's responses either do or do not address the concerns.

SUMMARY OVERVIEW:
CCS has reviewed Northback's formal response, which was provided in table form, and has compared it directly with the concerns we raised in our April 11, 2026 Statement of Concern (SOC). Overall, we find that Northback's formal response does not adequately address the concerns we raised. While some attempt was made to clarify certain elements of their water license application (see following sections), Northback sidestepped most of our specific concerns with a common response to the effect that "*details would be forthcoming in a future integrated application for their proposed Grassy Mountain mining project*".

CCS subsequently had opportunity to meet directly with Northback representatives (June 17, 2026 in the Northback offices in Blairmore) to discuss our SOC and their written response. At the outset of that meeting, Northback representatives reiterated the point that they were not able to provide fulsome responses to most of our concerns at this time but that relevant details on the issues we raised would be forthcoming when the aforementioned integrated mining application was prepared and submitted sometime in the future. This frank acknowledgement – while appreciated for its honesty – simply underscores the first and over-arching point raised by CCS in our SOC, namely <u>that the application for water license is premature and cannot be approved now because it lacks key details that would allow a proper evaluation of its potential impacts</u>.

Indeed, Northback representatives accepted this point at the June 17 meeting and freely admitted that, because those important details are missing currently, they understand most stakeholders and concerned parties are unlikely to support (or approve) their water license application at this time. Indeed they do not expect such support or approval at this stage.

They explained that the reason for submitting the water licence application at this stage was simply a matter of work-flow convenience – the application would have to be submitted at some point, so it was logistically convenient for them to "*get it off their plate now*". Whether or not this

is a complete and honest explanation for the timing of the application, it does *prima facie and ipso facto*, confirm the prematurity of the application in the typical permitting process for large integrated projects as stipulated by the Alberta Energy Regulator. Ergo, the application should NOT be approved at this time.

DETAILED CONCERNS in CCS SOC

1. Application is premature and involves a piecemeal approach to permitting

CCS concern from SOC:
CCS argues the water licence application is premature because it is only one component of a much larger mine proposal and should be reviewed as part of the entire project, not separately. CCS asserts that cumulative impacts cannot be assessed properly through piecemeal permitting.

Northback response:
Northback states the application is "in support of the forthcoming integrated application" and that future studies will be included later.

Deficiency:
Northback does not address the central argument that the water licence should not be considered independently at all. They do not explain in their formal response why separate consideration is appropriate under regulatory or environmental assessment principles.

In a subsequent meeting with Northback representatives, they explained that the submission of the application at this point was simply a 'workflow convenience' for them and they did not actually expect it to be supported or approved on its own now and independently of an integrated mining project application (as noted in Summary Overview above).

2. Previous review and rejection by Joint Review Panel (JRP)

CCS concern from SOC:
CCS emphasizes that a previous Federal-Provincial Joint Review Panel rejected a previous application from Northback on a number of grounds including that it could not guarantee to protect watershed integrity and thus could negatively affect aquatic life and West Slope Cutthroat Trout which is a Federal recognized Species at Risk (SARA). CCS argued that, in the current application for a water diversion license, Northback has not shown that conditions have changed since the JRP decision, thereby providing no new justification for why the project should be approved now when it was rejected before.

Northback response:
No response was provided and no acknowledgement was made of the previous JRP review and decision.

Deficiency:
Northback never discusses:

- The prior JRP findings.
- Whether circumstances have changed.
- Why the JRP conclusions should not apply now.
- How its current proposal differs from what was previously reviewed.

3. Species at Risk Act (SARA) and Critical Habitat

CCS concern from SOC:
CCS emphasizes that Northback's application for water diversion involves Blairmore Creek which contains West Slope Cutthroat Trout and potentially Critical Habitat protected under the Species at Risk Act (SARA).

Northback response:
No discussion is provided of SARA obligations but is deferred to the future integrated application: *"Northback wishes to emphasize that applications #33861749 and #33861750 are in support of the forthcoming integrated application for the Grassy Mountain Project (the Project) (Northback, 2026). Once submitted, the integrated application will include details relating to the Project's water management system, water demand calculations, proposed monitoring and mitigation plans, Water Act applications, and an environmental impact assessment."*

Deficiency:
Northback does not explain:

- Whether critical habitat exists.
- Whether federal authorizations are required.
- How the proposed diversion complies with SARA.

In a subsequent meeting with Northback representatives (noted in the Summary Overview above), they explained that, currently, only Gold Creek is recognized as Critical Habitat (formally defined) and that the same designation is not afforded to Blairmore Creek. They explained that they would nevertheless operate in a way consistent with treating Blairmore Creek as critical habitat, at least informally, to respect SARA obligations for the West Slope Cutthroat Trout in that waterway. However, they provided no further details on how this would be managed to ensure the integrity of Blairmore Creek in its endangered Cutthroat Trout.

4. Criticism of the Hatfield Study Methodology

CCS concern from SOC:
CCS emphasizes that the Northback water license application relies heavily on a desktop study by Hatfield that involved no field validation. The CCS specifically identified deficiencies in the assumptions and methodology of that desktop study.

- It is only a desktop study.
- It involves no field validation of the proposed methods.

- Its modelling is based on historical weekly stream-flow averages.
- Consequently, it fails to account for dynamic, short-term low-flow events that stress aquatic life.

Northback response:
Northback does not address concerns with the Hatfield desk-top method.

Deficiency:
Northback never responds to the various methodological concerns raised and their implication for stream-flow integrity. It fails then to defend:

Data quality.

- The study's Assumptions.
- The resulting Data Quality
- The rationale for using on weekly average stream-flow data for the model's temporal resolution.
- The study's validity without field validation.

In a subsequent meeting with Northback representatives (noted in the Summary Overview above), they explained that they do, in fact, have more fine-grained data on stream-flow volumes that track stream-flow cycles on a daily (and not just weekly) basis. They acknowledged not including this resolution in their water license application but accepted that the data at that resolution could be incorporated into future modelling exercises and any possible operational plans that might arise.

5. Dam Safety and Flood Risk

CCS concern from SOC:
CCS emphasizes that the Northback water diversion proposal requires storing very large quanties of water to cover the 80% of days when, as their application acknowledges, real-time water removal would not allow sustaining minimum stream flows (the WCO Water Conservation Objective minimum requirement). That requirement to store very large quantities of water for operational needs could create significant risk of dam failure during major rainfall or flood events, potentially threatening downstream infrastructure, including the human community hospital. The Northback water license does not address any of these risks.

Northback response:
No detailed response was provided to these concerns. Instead reference was made to a future integrated application:

"The assessment accompanying this Application suggests that Water Conservation Objective flows are met by "natural" daily flows (as gauged at WSC 05AA008) ranging from approximately 20% of the time in mid-winter (week 10, early March), to nearly 100% of the time in peak freshet (week 21, late May). Modelling a worst-case scenario highlights a range from 1.4% over a short duration to less than 0.05% impact (no statistical difference) to natural flows annually. <u>The integrated application will address mitigation strategies</u>."

Deficiency:
No discussion of:

- Storage facility design.
- Flood modelling.
- Dam safety standards.
- Emergency planning.

6. Climate Change Effects on Water Availability

CCS concern from SOC:
CCS emphasizes that the Hatfield study used only current climate conditions in its water diversion modelling exercise and therefore and failed to account for a number of projected potential climate changes:

- Higher future temperatures.
- Reduced precipitation.
- Reduced streamflows over the term of the water licence.

Northback response:
No response.

Deficiency:
Northback never explains how climate projections affect their desktop modelling and projected water availability scenarios.

7. Effects of Mine Disturbance and Forest Removal on Hydrology

CCS concern from SOC:
CCS argues that the open-pit mining activity, that the water license is submitted to support, along with recent forest vegetation removal (under the Hazardous Fuels Reduction program and other local permitted logging operations) will significantly alter runoff patterns and streamflow dynamics and extremes.

Northback response:
Response reiterates the assumptions of the modelling exercise of the Hatfield study with no further detailed response to the specific concerns raised. Hydrological impacts were ultimately deferred to a future integrated application.

"The Final Terms of Reference for the Grassy Mountain Project (dated March 19, 2026) requires Northback to describe the extent of hydrological changes that will result 7from Project disturbances, under section 3.4.2 (AER, 2026). This information will be included in the Project's forthcoming integrated application."

Deficiency:
No detailed response is provided to important hydrological concerns.

8. Water Quality Degradation from Returned Mine Water

CCS concern from SOC:
CCS argues that even if the current application for water diversion includes provision for water to be returned to the stream network, there are a number of anticipatable implications that must be mitigated, including:

- Harmful changes to water chemistry (including but not limited to selenium concentrations)
- Short-term changes in temperature regimes harmful to aquatic life including Species at Risk.
- Cumulative impacts on aquatic ecosystems may be substantial.

Northback response:
No response is provided to water quality concerns. Answers to these question are deferred to a future integrated application.

"Impacts to water quality will be assessed in the Project's forthcoming integrated application. Water quality requirements for the project will be regulated by the AER through an Environmental Protection and Enhancement Act (EPEA) approval, which will be applied for as part of Northback's integrated application."

Deficiency:
No substantive response regarding:

- Selenium.
- Temperature.
- Mine-contact water.
- Water treatment.
- Predicted water quality outcomes.

9. Impacts on Existing and Future Water Withdrawals

CCS concern from SOC:

CCS notes that applications for new water licences in Alberta are subject to the 'precautionary principle' which prioritizes ensuring long-term watershed integrity and quality in service of diverse current and future needs. CCS argues that Northback's application for a license to divert water pertains to a watershed that is already heavily committed (over-committed), and that additional water flow diversions could have detrimental effects on the watershed and current and future stakeholders reliant upon it for agriculture, tourism, economic development, community uses, that include:

- Municipal allocations.
- York Creek licence transfers.
- Evolve Power pumped storage project.
- Population growth associated with the mine.

Northback response:
Northback does not address precautionary management or watershed protection obligations. It refers only to the total allocation that is currently allowed for all uses under Alberta's Water Act and the proportion of that represented by their own water application:

"Under Alberta's Water Act the Oldman River Basin Allocation Order reserves 11,000 acre-feet of water in the Oldman River Basin each year for various purposes such as municipal, commercial, recreational, and industrial use (GoA, 2010). Northback's Application is for 150 acre-feet per year for industrial use."

Deficiency:
This response reiterates the existing formal regulation concerning total water allocations in Alberta but it does not address the central question of whether the requested diversion is consistent with the precautionary principle and its emphasize on the need to respect and balance diverse public, private, economic and environmental interests. It also does not clarify whether Northback's application for 150-acre feet represents a request for an allocation that goes beyond the current (already fully allocated water licenses in the South Saskatchewan River Basin) or a request to "borrow" an allocation currently licensed to another stakeholder.

CONCLUSIONS:

Ultimately, Northback's responses do not adequately address the issues raised in our Statement of Concern. Northback's responses:

- Repeatedly defer critical information to a future integrated mine application.
- Fail to provide data or other evidence that ensure that risks to watershed integrity, water quality, and affected Species at Risk can be mitigated.
- Fail to acknowledge and address formal and informal barriers to new water allocations in a drought-prone and heavily committed watershed.
- Fail to justify why a water licence should be issued prior to, and independent of, an application for a mine for which the water is intended.

Given the absence of essential project information and the inability to meaningfully assess environmental, hydrological, and cumulative impacts, the Crowsnest Conservation Society maintains that the AER should deny Water Act Applications #33861749 and #33861750.

Sincerely,

Brenda Davison, President,
Crowsnest Conservation Society