Fisheries and Oceans Canada | Pêches et Océans Canada

Fish and Fish Habitat Protection Program
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Programme de protection du poisson et de son habitat
Région de l'Arctique
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October 9, 2026

Your file *Votre référence*
3BM-ARC2530

Subject: **Water Supply Facility Operation & Maintenance Plan for the Arctic Bay Water Licence 3BM-ARC2530**

To whom it may concern,

On September 22, 2026, the Nunavut Water Board (NWB) invited parties to comment on the Water Supply Facility Operation & Maintenance Plan for the Arctic Bay Water Licence 3BM-ARC2530. The Fish and Fish Habitat Program of Fisheries and Oceans Canada (FFHPP-DFO) appreciates the opportunity to review the application and offers comments below.

DFO Comments:

Comment DFO-01:

DFO has reviewed Arctic Bay's Operation and Maintenance Plan for the Water Supply Facility, File Number: 3BM-ARC2530, in accordance with DFO's mandate and based on the proposed in water construction, DFO recommends the proponent to complete and submit a request for review form (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-004-eng.html), as the application meets the criteria for a site specific review, as described on DFO's website (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-003-eng.html).

Recommendation DFO-01:

In order to comply with the *Fisheries Act*, it is recommended that the Proponent follow DFO's protective measures for fish and fish habitat and standard codes of practice which can be found on DFO's website (https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html and https://www.dfo-mpo.gc.ca/pnw-ppe/practice-practique-eng.html). By doing so, you ensure that any works, undertaking or activities where impacts to fish and fish habitat can be avoided.

It is also the proponent's *Duty to Notify* DFO if they have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to (DFO.ARCEMTriage-TriageGEARC.MPO@dfo-mpo.gc.ca).

Comment DFO-02:

The documents discuss water withdrawal activities from Marcil Lake for the duration of the project, which has the potential to impact fish and fish habitat.

Direct fish mortality can occur during water withdrawal activities through entrainment/impingement. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when a fish is held in contact with the intake screen and is unable to free itself. Excessive amounts of water withdrawn from ice-covered waterbodies can impact fish through oxygen depletion, loss of over-wintering habitat and/or reductions in littoral habitat.

Recommendation DFO-02:

DFO recognizes the existing gap in the regulatory and operational framework governing of open-water withdrawals. However, in order to comply with the *Fisheries Act*, it is recommended that the Proponent follow DFO's Measures to avoid and mitigate risks to fish and fish habitat, Standards for routine projects near water, and Codes of practice for routine projects.

Proponents are also asked to respect the Nunavut in-water works restricted activity timing windows (Projects Near Water - Nunavut Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat (dfo-mpo.gc.ca) to protect fish during spawning and incubation periods when spawning fish, eggs and fry are vulnerable to disturbance or sediment.

The Proponent should refer to DFO's Interim standard for Water intake end-of-pipe fish screens.

In addition, the proponent should follow the DFO Protocol for Winter Water Withdrawal, and not withdraw more than 10% of under-ice water volumes (Attachment 1: DFO Winter Water Withdrawal Protocol, 2010).

Can you please provide DFO with:

- Evidence that withdrawals from Marcil Lake will not result in outflow reductions of more than 10% of instantaneous flow, and/or in reducing flows <30% of mean annual discharge (MAD).
- Confirm field monitoring will be implemented during withdrawal periods to validate model predictions and ensure that changes in hydraulic conditions are accurately reflected in the natural environment.
- Establish contingency measures (e.g., reduction or cessation of withdrawal rates) that will be implemented if monitoring identifies adverse effects to fish or fish habitat that were not predicted.
- Provide supporting information demonstrating that the proposed withdrawal rate will not result in a significant loss of littoral habitat (e.g. description and area (m^2) of littoral habitat that will be lost during water withdrawal activities).

Yours sincerely,

Pakozdi, Sarah

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