Fisheries and Oceans Canada | Pêches et Océans Canada

# Whale Tail Project

# ᐅᐃᔪ ᑕᓯ

Presentation to the

## Nunavut Water Board Board

## Final Hearing

Baker Lake, NU

Sept 25- 26, 2017

ᐅᓂᒃᑳᓕᐊᖑᔪᑦ

ᓄᓇᕗᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᖕᒋᑦ

ᑭᖑᓪᓕᕐᒃᐹᒥ

ᓈᓚᓐᓂᐅᓂᐊᕐᒃᑐᑦ

ᕐᑲᒪᓂᑦᑐᐊᕐᒃ, ᓄᓇᕗᑦ

ᓲᑏᐸᐱᕆ 25 ᑎᑭᓪᓗᒍ 26, 2017

Canada

# Overview ᕿᒥᕐᕈᔭᐅᓂᖏᑦ

1. DFO - Fisheries Protection Program Mandate, legislation and policies.
2. Final Technical Comments and Recommendations:
   - Habitat Losses
   - Valued Components
   - Habitat Alteration
   - Changes to Lake Ecosystem Productivity
   - Water Quality & Flow Monitoring Plan
3. Conclusions
4. Questions or Comments

1. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ (DFO) - ᐃᕐᑲᓗᓕᕆᓂᕐᒧᑦ ᐸᖅᑭᑦᑎᔨᑦ ᐱᓕᕆᐊᖏᑦ, ᒪᓕᒐᐃᑦ ᐱᕐᑯᔭᐃᓪᓗ.
2. ᑭᖑᓪᓕᖅᐹᒥ ᐱᓕᕆᔨᒻᒪᕆᓐᓂ ᐅᕐᑲᐅᓯᖏᑦ ᐊᑐᓕᕐᑯᔭᖏᓪᓗ:
   - ᔭᒐᐃᔭᑦ ᐊᖏᕐᕋᕆᔭᐅᔪᑦ
   - ᐱᓕᕆᓂᕐᒧᑦ ᐃᓚᖏᑦ
   - ᐃᓂᒋᔭᐅᔪᑦ ᐊᑲᐅᓐᖏᓕᐅᕈᑕᐅᔪᑦ
   - ᐊᓯᔾᔨᕐᓂᖏᑦ ᑕᓯᕐᓂᑦ ᒪᑭᔾᔪᑎᔅᓴᐅᔪᑦ
   - ᐃᒪᖓ ᐱᐅᓂᖓ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓂᖓᓄᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᓐᓂ ᐸᕐᓇᐅᑏᑦ
3. ᐱᔭᕇᕐᓂᖓ
4. ᐊᐱᖅᑯᑏᑦ ᐅᕐᑲᐅᓯᓪᓗᓐᓃᑦ

# DFO’s Fisheries Protection Program - Mandate

The **mandate** of the Fisheries Protection Program is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries.

# ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᐃᖃᓗᓐᓂ ᐸᖅᑭᓂᕐᒧᑦ ᐱᓕᕆᐊᑦ – ᐱᔭᕇᖏᑦ

ᐱᓕᕆᐊᕐᓴᖏᑦ ᐃᖃᓗᓕᕆᓂᕐᒥᑦ ᐸᖅᑭᑦᑎᓂᕐᒧᑦ ᐅᑎᖅᑕᖃᑦᑯᓪᓗᒋᑦ ᐱᕈᖅᐸᓪᓕᐊᖑᓐᓇᕐᑯᓪᓗᒋᑦ ᓂᐅᕐᕈᑎᕐᓴᐅᓗᑎᑦ, ᐃᓱᒪᖅᓱᑎᕐᓴᐅᓗᑎᑦ ᓄᓇᖃᖅᑳᖅᑐᒥᓂᕐᓄᓪᓗ ᐃᖃᓗᑦᑕᐅᖃᑦᑕᕈᓐᓇᕐᑯᓪᓗᒋᑦ.

# DFO – Legislation

# ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ – ᒪᐃᒐᐃᑦ

## *Fisheries Act*

- Section 35
  - Prohibits serious harm to fish
  - Allows for authorization of impacts with conditions
- Sections 20, 21
  - Requirement for sufficient water, fish passage

## *Species at Risk Act*

- Sections 32, 33, 58
  - Prohibits killing, harming, harassing, capturing or taking of listed species, destruction of residence, critical habitat

## *Nunavut Land Claims Agreement (Article 12)*

## *ᐃᖃᓗᓕᕆᓂᕐᒧᑦᐱᖁᔭᐃᑦ*

•ᒪᓕᒐᖅ 35
- ᐱᔪᓐᓇᖅᑎᑕᐅᓐᖏᑦᑐᑦ ᐋᓐᓂᖅᑕᐅᕐᑯᓇᒋᑦ ᐃᖃᓗᐃᑦ
- ᐱᔪᓐᓇᖅᑎᑕᐅᓗᑎᑦ ᐊᑦᑐᖅᑕᐅᔪᑦ ᒪᓕᒐᖃᖅᑎᑕᐅᓗᑎᑦ

•ᒪᓕᒐᖅ 20, 21
- ᒪᓕᐊᓖᑦ ᐃᒪᕐᒥᑦ, ᐃᖃᓗᐃᓪᓗ ᐊᖅᑯᑎᖏᓐᓂ

## *ᓂᕐᔪᑏᑦᐅᓗᓇᐊᓇᖅᑐᒥᑦᑐᓄᑦᐱᖁᔭᐃᑦ*

•ᒪᓕᒐᖅ 32, 33, 58
- ᐱᔭᕆᐊᖃᖅᑎᑕᐅᖏᑦᑐᑦ ᑐᕐᑯᑕᐅᓗᑎ, ᐋᓐᓂᖅᑕᐅᓗᑎᑦ, ᐸᕝᕕᓴᑦᑕᐅᓗᑎᑦ, ᐱᔭᐅᓗᑎᑦ ᐅᕝᕙᓘᓐᓃᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ ᓂᕐᔪᑎᓂᑦ ᐱᔭᐅᓗᑎᑦ, ᓱᕋᑦᑕᐅᓗᑎᑦ ᐊᖏᕐᕋᖏᑦ, ᐊᖏᕐᕋᕆᔭᐅᔪᑦ ᐅᓗᕆᐊᓇᖅᑐᒦᓕᕐᓂᖏᓐᓂ

## *ᓄᓇᕗᑦᓄᓇᑖᕈᑎᐅᑉᐊᖏᕈᑎᖓ (ᒪᓕᒐᖅ 12)*



Canada

# DFO - Policy ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ – ᐱᕐᑯᔭᐃᑦ

- **Fisheries Protection Policy Statement** (2013)
  - Guidance on implementing the fisheries protection provisions of *Fisheries Act*
- **Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting** (2013)
  - Guidance on measures to offset serious harm to fish

- ᐃᕐᑲᓗᓕᕆᓂᕐᒥᑦ ᐸᖅᑭᑦᑎᓂᕐᒧᑦ ᐱᕐᑯᔭᐃᑦ ᐅᕐᑲᐅᓯᑦ (2013)
  - ᐊᑐᐊᒐᐃᑦ ᐊᑐᓕᖅᑎᑕᐅᓗᑎᑦ ᐃᕐᑲᓗᐃᓕᕆᓂᕐᒧᑦ ᐸᖅᑭᑦᑎᓂᕐᒥ ᐃᕐᑲᓗᓕᕆᓂᕐᒥᑦ ᐱᕐᑯᔭᖕᒋᓐᓂ
- ᐃᕐᑲᓗᓕᕆᓂᕐᒧᑦ ᕐᑲᐅᔨᓴᖅᑕᐅᓗᑎᑦ ᐃᑲᔫᑕᐅᔪᓐᓇᖅᑐᓂᑦ ᐱᕐᑯᔭᖕᒋᑦ: ᐊᒻᒪᓗ ᐊᑐᐊᒐᐃᑦ ᑕᒪᒃᑯᓂᖕᒐ ᑲᒪᓂᐊᕐᓗᓂ (2013)
  - ᐊᑐᐊᒐᐃᑦ ᐆᑦᑐᖅᑕᐅᔪᓐᓇᖅᑐᓂᑦ

# Final Technical Comments ᑭᖑᓪᓕᖅᐹᒥ ᐱᓕᕆᔨᒌᑦ ᐅᖃᐅᓯᖏᑦ

## DFO # 3.1 Habitat Losses

- 3.1.1 Request: DFO requests that AEM provide detailed illustrations, prior to the commencement of the regulatory phase to demonstrate the habitat viability of the proposed 13% increased surface area of Whale Tail Lake. DFO notes AEM had agreed to this request following DFO's technical submission March 28, 2017.

## ᐃᖃᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.1 ᔭᒐᑦᑐᑦ ᐊᖏᕐᕋᕆᔭᐅᔪᑦ

- 3.1.1 ᑐᔅᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᑐᑭᓯᒋᐊᕈᑎᓂ ᐊᔾᔨᓐᖑᐊᕐᓂᑦ, ᓯᕗᓂᖓᓐᓂ ᐊᒻᒪᓗ ᐃᓂᒋᔭᐅᔪᓂᑦ ᑐᔅᓯᕋᐅᑕᐅᔪᓂᑦ 13% ᐊᓂᒧᕈᕆᐊᕐᓂᖏᑦ ᓴᖅᐱᓕᓐᓂᑦ ᑕᓯᕐᒥ. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᐅᖃᖅᑐᑎᑦ AEM ᐊᖏᖅᓯᒪᔪᑦ ᑐᔅᓯᕋᐅᑎᐅᔪᓂᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑭᓯᐊᓂ ᑐᓂᓯᓗᑎᑦ ᒫᔾᔨᒥ 28, 2017.

# Final Technical Comments ᑭᖑᓪᓕᖅᐸᒥ ᐱᓕᕆᔨᒻᒧᑦ ᐅᖃᐅᓯᖏᑦ

## DFO # 3.1 Habitat Losses

- 3.1.2 Request: DFO request s that AEM provide additional details outlining the potential mixing or non-mixing in the pit portion of Whale Tail Lake as there is insufficient information as adopted from Meadowbank's CREMP and Water Quality Monitoring Plan to do so. If sustainable water quality and habitat suitable for fish in the post-closure scenario cannot be demonstrated, DFO requests AEM provide DFO with contingency offsetting options located outside the Whale Tail Lake basin.

## ᐃᖃᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.1 ᔭᒐᑦᑐᑦ ᐊᖏᕐᕋᕆᔭᐅᔪᑦ

- 3.1.2 ᑐᔅᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᑐᑭᓯᒋᐊᕈᑎᓂ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᑦ ᑲᑎᓯᒪᔪᓂᑦ ᑲᑎᓯᒪᓐᖏᑦᑐᓂᓪᓗ ᑕᒪᒃᑯᓂᖓ ᓴᖅᑭᓕᓐᓂᑦ ᑕᓯᖓᓐᓂ ᓈᒻᒪᖏᒻᒪᑕ ᑐᑭᓯᒋᐊᕈᑏᑦ ᒪᑐᐹᒃᒥ CREMP ᐊᒻᒪᓗ ᐃᒪᖓ ᖃᓄᑎᒋ ᐱᐅᑎᒋᒻᒪᖕᒑᖅ ᖃᐅᔨᓴᖅᑕᐅᓂᖓᓐᓄᑦ ᐸᕐᓇᐅᑎᓂᑦ. ᐅᑎᖅᑕᕈᓐᓇᕐᑯᓪᓗᒋ ᐃᒪᖓ ᐱᐅᓂᖓᓐᓂ ᐃᖃᓗᓐᓄᑦ ᒪᑐᓯᒪᓗᓂ ᓇᓗᓇᐃᖅᓯᒍᓐᓇᖏᒻᒪᑕ. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ AEM-ᑯᓐᓂ ᖃᓄᖅ ᓇᓖᕋᕈᓐᓇᖕᒑᑕ ᓯᓚᑖᓃᓐᓂᖅᑲᑕ ᓴᖅᐱᓖᑦ ᑕᑭᖓᓐᓂ.

# Final Technical Comments ᑭᖑᓪᓕᖅᐹᒥ ᐱᓕᕆᔨᒌᑦ ᐅᖃᐅᓯᖏᑦ

## DFO # 3.1 Habitat Losses

- 3.1.3 Request: DFO requests that AEM provide additional and updated information on the evaluation of end pit lake scenarios, with references, to address DFO's concerns regarding long term water quality and physical habitat in the proposed end pit lakes. DFO notes this information was requested in it's Technical submission.

## ᐃᖃᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.1 ᔭᒐᑦᑐᑦ ᐊᖏᕐᕋᕆᔭᐅᔪᑦ

- 3.1.3 ᑐᔅᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᔅᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᑐᑭᓯᒋᐊᕈᑎᓂ ᐊᒻᒪᓗ ᐅᓪᓗᒥᒧᑦ ᐋᖅᑭᒋᐊᖅᓯᒪᔪᓂᑦ ᖃᐅᔨᓴᐅᑎᒥᓂᕐᓂᑦ ᑕᓲᑦ ᒥᔅᓵᓅᖓᔪᓂᑦ, ᓇᒥᓗ ᖃᐅᔨᒋᐊᕈᓐᓇᕐᒪᖔᑕ, ᖃᓄᖅ ᑲᒪᒍᓐᓇᕐᒪᖔᑕ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᐃᓱᒫᓘᑎᖏᓐᓂ ᐊᑯᓂᒧᑦ ᐃᒪᕐᒥᑦ ᐱᐅᓂᖅᐹᖓᓐᓂ ᐃᓂᒋᔭᔪᓪᓗ ᑕᓯᐅᑉ ᐃᓗᐊᓂ. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᐅᖃᖅᓯᒪᔪᑦ ᑕᒪᓐᓇ ᑐᔅᓯᕋᐅᑎ ᐱᓕᕆᔨᒻᒪᕆᓐᓂ ᐅᖃᐅᓯᐅᓯᒪᔪᖅ ᐱᖃᓯᑎᓯᒪᓪᓗᒋᑦ.

# Final Technical Comments ᑭᖑᓪᓕᖅᐸᒥ ᐱᓕᕆᔨᒻᒪᓗᑦ ᐅᖃᐅᓯᖏᑦ

## DFO # 3.2 Valued Components

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.2 ᐅᐱᕆᔭᐅᑦᑎᐊᖅᑐᖅ ᑕᒪᓐᓇ ᑕᐃᒪᐃᓪᓗᖓᖅᑐᓂᑦ ᓂᕐᔪᑎᓂᑦ ᑲᒪᒍᓐᓇᕐᓗᑎᑦ

- 3.2.1 Request: DFO requests that AEM give equal weights to species based on presence/absence in the offsetting calculation. DFO notes that the request to assign equal value to all fish species was part of Commitment #31 from the Technical Meeting in April 2017.

- 3.2.1 ᑐᔅᓯᕋᐅᑎ: ᐱᑕᖃᖅᑐᓂᑦ/ᐱᑕᖃᓐᖏᑦᑐᓂᓪᓗ ᐊᒥᓲᓂᖏᓂ ᖃᐅᔨᓴᖅᑕᐅᑎᓪᓗᒋᑦ. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᖃᐅᔨᒪᔪᑦ ᑐᔅᓯᕋᖅᑕᒥᓂᒃ ᑕᐃᒪᐃᓪᓗᐊᖅᑐᓂᑦ ᐊᑭᖏᓐᓂ ᐃᖃᓗᓕᒫᓂ ᑲᒪᒋᔭᐅᕐᑯᔭᐅᒻᒪᑕ ᐱᓕᕆᐊᖏᓐᓂ ᓈᓴᐅᑎᖅᑐᓂᑦ 31-ᒥ ᐱᓕᕆᔨᒻᒪᓈᑦ ᑲᑎᒪᓂᕆᓚᐅᖅᓯᒪᔭᖓᓐᓂ ᐊᐃᐳᓗ - 17, 2017.

# Final Technical Comments Inuktitut Translation Here

## DFO # 3.3 Habitat Alteration

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.3 ᓇᔪᖅᑕᐅᕙᑦᑐᑦ ᖃᓄᖅᑑᕈᑕᐅᔪᓐᓇᕐᓂᖏᑦ

- 3.3.1 Request: DFO requests AEM provide additional information to clarify the calculations respecting the 24 hectares and 3390 linear metres of habitat loss associated with impacted waterbodies in the post-closure scenario, and how the proposed June 17 offsetting plan accounts for these losses.

- 3.3.1 ᑐᓴᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᑐᑭᓯᒋᐊᕈᑎᓂ ᓇᓗᓇᐃᑦᑎᐊᕐᑯᓗᒋᑦ ᐊᒥᓵᓂᖏᑦ ᑖᒃᑯᓂᖓ ᐊᖏᓂᓕᓐᓂᑦ 24 ᑭᑉᐸᓛᕆᑦᑐᓂᑦ 3390 ᒥᑕᓂ ᔭᒐᑕᐅᔪᖅ ᐊᑦᑐᖅᑕᐅᓯᒪᔪᖅ ᐃᒪᖓ ᒪᑐᓯᒪᓂᐊᖅᑲ ᐃᓱᒪᒋᔭᓯᒪᔪᖅ, ᐊᒻᒪᓗ ᖃᓄᖅ ᑐᓴᓯᕋᐅᑎᖏᓐᓂ ᔫᓂᒥ 17-ᒥ ᐸᕐᓇᐅᑎᓂᑦ ᐅᖃᐅᓯᐅᓚᐅᖅᓯᒪᔪᖅ ᑕᒪᒃᑯᓂᖓ ᔭᒐᓴᓯᒪᔪᓂᑦ.

# Final Technical Comments Inuktitut Translation Here

## DFO # 3.3 Habitat Alteration

- 3.3.2 Request: DFO requests AEM clarify the calculated numbers for habitat losses for all phases of the project, including providing the rationale and raw data for the calculations.

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.3 ᓇᔪᖅᑕᐅᕙᑦᑐᑦ ᖃᓄᖅᑑᕈᑕᐅᔪᓐᓇᕐᓂᖏᑦ

- 3.3.2 ᑐᓴᔪᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᔪᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᓇᓗᓇᐃᑦᑎᐊᕐᓗᒋ ᐊᒥᓲᓂᖏᑦ ᔭᒐᑕᐅᔪᑦ ᐃᓂᒋᔭᕙᑦᑐᑦ ᐱᓕᕆᐊᖑᕙᑦᑐᓂᑦ, ᐱᖃᓯᐅᑎᓗᒋᑦ ᖃᓄᖅ ᐊᐅᓚᒐᔭᕐᒪᖔᒌᑖ ᑕᒪᒃᑯᐊᓗ ᓄᐊᑕᐅᔪᑦ ᑐᑭᓯᒋᐊᕈᑎᔅᓴᐃᑦ.

# Final Technical Comments Inuktitut Translation Here

## DFO # 3.3 Habitat Alteration

- 3.3.3 Request: DFO requests AEM provide more information regarding their plan to permanently flood Whale Tail Lake by raising the water level by 0.5m, including an analysis of the long-term sustainability of the higher water condition and a clear rationale for considering it a habitat gain.

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.3 ᓇᔪᖅᑕᐅᕙᑦᑐᑦ ᖃᓄᖅᑑᕈᑕᐅᔪᓐᓇᕐᓂᖏᑦ

- 3.3.3 ᑐᓴᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᑐᑭᓯᒋᐊᕈᑎᓂ ᐱᔾᔪᑎᓖᑦ ᐸᕐᓇᐅᑎᓐᓂ ᐅᓕᒍᔾᔭᐅᓂᐊᕐᓂᖓᓐᓄᑦ ᖁᕙᕙᓯᐸᐸᓪᓕᐊᑐᐃᓇᖅᑐᓂᓗ ᑕᓯᖅ ᐃᒪᓐᓇ 0.5m, ᐱᖃᓯᐅᑎᓪᓗᒋ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᔪᑦ ᐊᑯᓂᒧᑦ ᐊᑐᖅᑕᐅᔪᓐᓇᕐᓂᖓᓐᓄᑦ ᐃᒪᖓ ᖃᓄᐃᑦᑑᓂᖓᓐᓂ ᐊᒻᒪᓗ ᖃᓄᖅ ᐊᑐᖅᑕᐅᒍᓐᓇᕋᔭᕐᒪᖔᖅ ᐅᑎᖅᑎᓇᓱᓐᓂᐊᕈᑦᑎᒍ.

# Final Technical Comments Inuktitut Translation Here

## DFO # 3.4 Changes to Lake Ecosystem Productivity

- 3.4.1 Request: DFO requests clarification on whether the newly proposed changes to the project, specifically in the form of the phosphorus treatment, will still result in a change to the trophic status of the lake.

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.4 ᐊᓯᔾᔨᕐᓂᖏᑦ ᑕᓯᕐᒥ ᖃᓄᐃᑦᑑᓕᕐᓂᖏᑦ ᐱᕈᖅᐸᓪᓕᐊᒻᒪᖕᒑᑖ

- 3.4.1 ᑐᑦᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᑦᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᑐᑭᓯᒋᐊᕈᑎᓂ ᓄᑖᕐᒥᑦ ᑐᑦᓯᕋᖅᑐᑦ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖕᒐᓂ ᐱᓕᕆᐊᔅᓴᐃᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᑕᒪᒃᑯᐊ ᐊᔾᔨᒌᓐᖏᑦᑐᑦ ᖃᓄᖅ ᑲᒪᒋᔭᐅᔪᓐᓇᕋᔭᕐᒪᖕᒑᑕ, ᐊᓯᔾᔨᕆᐊᖃᕋᔭᖅᑐᖅ ᐆᓇᕐᓂᖕᒐᓐᓂ ᑕᓯ ᒫᓐᓇ ᖃᓄᐃᓕᖕᒐᓂᖕᒐᓂ.

# Final Technical Comments Inuktitut Translation Here

## DFO # 3.4 Changes to Lake Ecosystem Productivity

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.4 ᐊᓯᔾᔨᕐᓂᖏᑦ ᑕᓯᕐᒥ ᖃᓄᐃᑦᑑᓕᕐᓂᖏᑦ ᐱᕈᖅᐸᓪᓕᐊᒻᒪᖔᑖ

- 3.4.2 Request: DFO requests that the losses caused by a trophic change in the lake ecosystem from nutrient overloading be considered as losses in the calculations for offsetting.

- 3.4.2 ᑐᓴᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᔭᒐᑦᑐᑦ ᐱᔾᔪᑎᕐᑲᖅᑐᑎᑦ ᓂᑦᓕᓇᓂᖓ ᐊᓯᔾᔨᐸᓪᓕᐊᓂᖓᓂ ᐆᒪᔪᐃᑦᓗ ᐊᓯᖏᓐᓂ ᓂᕆᕙᓕᖅᑐᑎ ᑕᒪᒃᑯᐊ ᖃᐅᔨᓴᖅᑕᐅᑦᓗᑎ ᐊᒥᓲᓂᖏ.

# Final Technical Comments Inuktitut Translation Here

## DFO # 3.4 Changes to Lake Ecosystem Productivity

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.4 ᐊᓯᔾᔨᕐᓂᖏᑦ ᑕᓯᕐᒥ ᖃᓄᐃᑦᑑᓕᕐᓂᖏᑦ ᐱᕈᖅᐸᓪᓕᐊᒻᒪᖔᑖ

- 3.4.3 Request: DFO requests clarification on whether AEM is planning on conducting a study in conjunction with University of Manitoba on the change in fisheries productivity due to a change in the lake ecosystem from oligotrophic to eutrophic and back again.

- 3.4.3 ᑐᓴᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᑐᑭᓯᒋᐊᕈᑎᓂ ᑖᒃᑯᐊ AEM-ᑯᑦ ᐸᕐᓇᒻᒪᖔᑕ ᖃᐅᔨᓴᕐᓂᐊᕐᓗᑎᑦ ᐱᓕᕆᕐᑲᑎᕐᑲᕐᓗᑎᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᔾᔪᐊᖔᓐᓄᑦ ᒫᓂᑑᐸᒥ ᐊᓯᔾᔨᕐᓂᖏᓐᓂ ᐃᕐᑲᓗᐃᑦ ᐱᔾᔪᑎᕐᑲᕐᓗᑎᑦ ᑕᓯᕐᒥ ᐃᓗᓕᖏᑦ ᐊᓯᔾᔨᕐᓂᑦ ᐊᒻᒪᓗ ᐊᓯᔾᔨᓚᐅᖅᑐᑎᑦ ᐅᑎᖅᑕᖅᑯᑦ.

# Final Technical Comments

## DFO # 3.5 Water Quality & Flow Monitoring Plan

- 3.5.1 Request: DFO requests that AEM place monitoring stations in Whale Tail South Basin, Mammoth Lake and Nemo Lake in the locations or similar to the locations described in the table provided in DFO's Final Written Submission. DFO also requests that multiple depths , temperature, Pressure, Dissolved Oxygen, pH, Salinity and Conductivity be sampled at  all locations.

# Inuktitut Translation Here

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.5 ᐃᒪᐃᑦ ᐱᐅᓂᖏᑦ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓂᖏᓐᓄ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᑦ ᐸᕐᓇᐅᑎᖏᑦ

- 3.5.1 ᑐᓴᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓗᑎᑦ ᖃᐅᔨᓴᖅᑕᐅᓗᑎᑦ ᑕᓯᕐ ᐃᒪᖓ, ᒫᒪᑦ ᑕᓯᖓᓐᓂ ᐊᒻᒪᓗ ᓃᒧ ᑕᓯᖓᓐᓂ ᓇᓗᓇᐃᖅᓯᒪᔪᑦ ᒪᓕᑦᑐᒋᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᓂᕐᒧᑦ ᑭᖑᑦᓕᖅᐸᖅᓯᐅᑎᓐᓂ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓂᑦ. ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᕐᒥᔪᑦ ᐊᒥᓲᓂ ᓇᓗᓇᐃᔭᖅᓯᒪᓂᖅᓴᐅᔪᓂᑦ, ᐆᓇᕐᓂᖓᓐᓂ, ᓱᑲᖓᓂᖏᓐᓂ, ᐊᓂᕐᓂᕐᑲᕐᓂᖏᓐᓂ, pH, ᐱᐊᓐᓂᖏᓂ ᐊᒻᒪᓗ ᖃᓄᐃᑑᓂᖏᓐᓂ ᑖᒃᑯᓇᓐᖓᓕᒫᖅ ᑕᓯᐅᔪᓂᑦ.

# Final Technical Comments

## DFO # 3.5 Water Quality & Flow Monitoring Plan

- 3.5.2 Request: DFO requests that AEM include at least 2 control lake monitoring stations in the Water Quality and Flow Monitoring Plan and include rationale to as to why the reference lakes that are chosen are appropriate.

# Inuktitut Translation Here

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.5 ᐃᒪᐃᑦ ᐱᐅᓂᖏᑦ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓂᖏᓐᓄ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᑦ ᐸᕐᓇᐅᑎᖏᑦ

- 3.5.2 ᑐᓴᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᐱᖃᓯᐅᔾᔨᓗᑎᑦ ᒪᕐᕉᓐᓂᒃ ᐊᐅᓚᑦᑎᒍᓐᓇᕐᓗᑎᑦ ᑕᓐᓂ ᒃᕐᑲᐅᔨᓴᖃᑦᑕᕋᔭᖅᑐᓂᑦ ᐃᖏᕐᕋᓂᖏᓐᓂ ᐸᕐᓇᐅᑎᖏᓐᓂ ᐊᒻᒪᓗ ᓱᒻᒪᑦ ᑕᓲᑦ ᓂᕈᐊᖅᑕᐅᒻᒪᖕᒑᖅ ᐅᕐᑲᖅᓯᒪᓗᑎᑦ.

# Final Technical Comments

## DFO # 3.5 Water Quality & Flow Monitoring Plan

- 3.5.3 Request: DFO requests AEM ensure consistency in sampling frequency i.e. all stations as suggested by DFO are sampled each monitoring year rather than 1 station in year 4 and a different one in year 11 as is currently the case in AEM's Water Quality and Flow Monitoring Plan.

# Inuktitut Translation Here

## ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ # 3.5 ᐃᒪᐃᑦ ᐱᐅᓂᖏᑦ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓂᖏᓐᓄ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᑦ ᐸᕐᓇᐅᑎᖏᑦ

- 3.5.3 ᑐᓴᓯᕋᐅᑎ: ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑐᓴᓯᕋᖅᑐᑦ ᑖᒃᑯᐊ AEM ᓈᒻᒪᔾᔪᒥᖃᑦᑕᕐᓗᑎᑦ ᖃᐅᔨᓴᕐᓂᖏᓐᓂ ᓲᕐᓗ ᐊᑕᖏᓪᓗᒋᑦ ᖃᐅᔨᓴᖃᑦᑕᕐᓗᒋᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᓐᓂ ᖃᐅᔨᓴᐅᑎᔅᓴᓂ ᐱᖃᑦᑕᕐᓗᑎ ᐊᕐᕌᒍᑕᒫᑦ ᐊᑕᐅᓯᑐᐃᓐᓇᕐᒥᐅᓐᖏᑦᑐᑦ ᐊᕐᕌᒍᓂᑦ ᑐᓴᒪᓄᑦ ᐊᔾᔨᒌᖃᑦᑕᖏᒻᒪᑕ ᐊᕐᕌᒍᓄᑦ 11-ᓄᑦ ᒫᓐᓇ AEM-ᑯ ᐃᒪᖅ ᐱᐅᓂᖓᓐᓂ ᐊᒻᒪᓗ ᐃᖏᕐᕋᓂᖓᓐᓂ ᖃᐅᔨᓴᖅᑕᐅᓂᖓᓐᓂ ᐸᕐᓇᐅᑎᓂᑦ.

# Conclusion

# ᐃᓱᓕᕝᕕᖓ

Fisheries and Oceans Canada will continue to work cooperatively with the Proponent and stakeholders, including potentially impacted communities, to ensure that:

- appropriate mitigation measures, follow-up and monitoring programs are implemented;
- The proponent continues to work with Fisheries and Oceans Canada and the impacted communities to finalize the Fish Habitat Offsetting Plan, the Fish-Out plan, the Water Quality and Flow Monitoring Plan and the Fisheries and Offsetting Monitoring Plan

ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒃᑯᑦ ᑲᓇᑕᒥ ᐱᓕᕆᖅᑎᖅᑲᐃᓐᓇᕐᓗᑎᑦ ᑎᒍᒥᐊᖅᑎᐅᔪᓂᑦ ᐊᓯᖏᓐᓂᓪᓗ ᐊᑦᑐᖅᑕᐅᓯᒪᔪᓂᑦ ᓄᓇᓕᓐᓂ, ᑕᒪᒃᑯᐊ ᑲᔪᓯᑦᑎᐊᖅᑯᓪᓗᒋᑦ ᐃᒪᐃᑦᑐᑦ:

- ᓈᒻᒪᓐᓂᖏᓐᓂ ᐃᖅᕋᓂᖏᓐᓂ ᐆᑦᑐᖅᑲᑦᑕᕐᓗᑎᑦ, ᖃᐅᔨᒋᐊᖅᑲᑦᑕᕐᓗᒋᑦ ᖃᐅᔨᓴᕐᔫᒥᖅᑲᑦᑕᕐᓗᒋᓪᓗ ᐊᑦᑐᓕᖅᑎᑕᐅᖏᓐᓇᕐᓗᑎᑦ ᑕᒪᒃᑯᐊ;
- ᑲᔪᓰᓐᓇᕐᓗᓂ ᐱᓕᕆᐊᖑᔪᑦ ᐃᒪᕐᒥᐅᑕᓕᕆᔨᒥ ᑲᓇᑕᒥ ᐊᒻᒪᓗ ᐊᑦᑐᖅᑕᐅᓯᒪᔪᑦ ᓄᓇᓕᓐᓂᑦ ᑖᒃᑯᓂᖓ ᐃᖃᓗᐃᑦ ᐃᓂᖏᓐᓂ ᐸᕐᓇᐅᑎᒋᔭᐅᔪᓂᑦ, ᐃᖃᓗᕝᕕᐅᖃᑦᑕᕐᓂᐊᖅᑐᓂᑦ ᐸᕐᓇᐅᑎᓂᑦ, ᐃᒪᕐᓗ ᐱᓂᖓᓂ ᐃᖏᕐᕋᓂᖓᓐᓂᓪᓗ ᐸᕐᓇᐅᑎᓂᑦ ᒻᒪᕐ ᐃᖃᓗᓕᕆᔨᒃᑯᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᖃᑦᑕᕐᓂᖏᓐᓂ ᐸᕐᓇᐅᑎᓂᑦ

ᖁᔭᓐᓇᒥ Thank You

ᐊᐱᖅᑯᑎᔅᓴᓯ? Questions?