WHALE TAIL PIT

THE FUTURE OF THE MEADOWBANK MINE

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ
ᓯᕗᓂᒃᓴᖓ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ ᐅᔭᖅᑕᓇᐊᑉ

PART IX – FRESHWATER ENVIRONMENT

ᐊᕕᒃᑐᖅᓯᒪᔪᖅ IX - ᐃᒪᕐᑎᐊᕙᒃ

TECHNICAL MEETINGS - DAY 1 – APRIL 28
ᐱᓕᕆᐊᑉᒥᒃᓵᓄᑦ ᑲᑎᒪᓃᑦ - ᐅᑉᓗᖅ 1 - ᐄᐳᕆ 28, 2017

FRESHWATER ENVIRONMENT – PRESENTATION OVERVIEW
ᐃᒪᕐᑎᐊᕙᒃ-ᑕᑯᕋᓐᓈᖅᑎᑦᑎᓂᕐᒥᒃ ᐱᔾᔪᑎᓕᒃ

AGNICO EAGLE

Freshwater Environment

- Description of VCs and Inuit concerns related to Freshwater Environment
- Water Management

i. Contact and Non- Contact Water Management
  - Describe surface hydrology
  - Designs for Water Management Infrastructure (iv.)
  - Alternatives assessment/ Multiple Accounts Analysis for Water Management

ii. Hydrogeology (Talik within Whale Tail Open Pit)

- Summary of the FEIS results
- Fisheries Offsetting

iii. Adaptive Management

ᐃᒪᕐᑎᐊᕙᒃ

- ᖃᓄᐃᑦᑑᓂᖓ ᐃᒃᐱᒋᓂᖅᑲᖅᕙᐅᔪᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐊᒻᒪᓗ ᐃᓅᔪᑦ ᐃᓱᒫᓘᑎᖏᑦ ᐱᔾᔪᑎᖃᖅᑐᑦ ᐃᒪᕐᑎᐊᕙᖕᒥᑦ
- ᐃᒪᕐᓂᒃ ᐊᐅᓚᑦᑎᓂᖅ

i. ᐊᑐᖅᑕᐅᔪᖅ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᙱᑦᑐᖅ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ
  - ᖃᓄᐃᑦᑑᓂᖓ ᖄᖓᓃᑦᑐᑦ ᐃᒪᐃᑦ
  - ᖃᓄᐃᖓᓂᖏᑦ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐱᕐᑯᑏᑦ (iv.)
  - ᐊᓯᐊᒍᑦ ᖃᐅᔨᓴᐃᓂᖅ / ᐊᔾᔨᒌᙱᑦᑐᑦ ᖃᐅᔨᓴᐃᓃᑦ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ

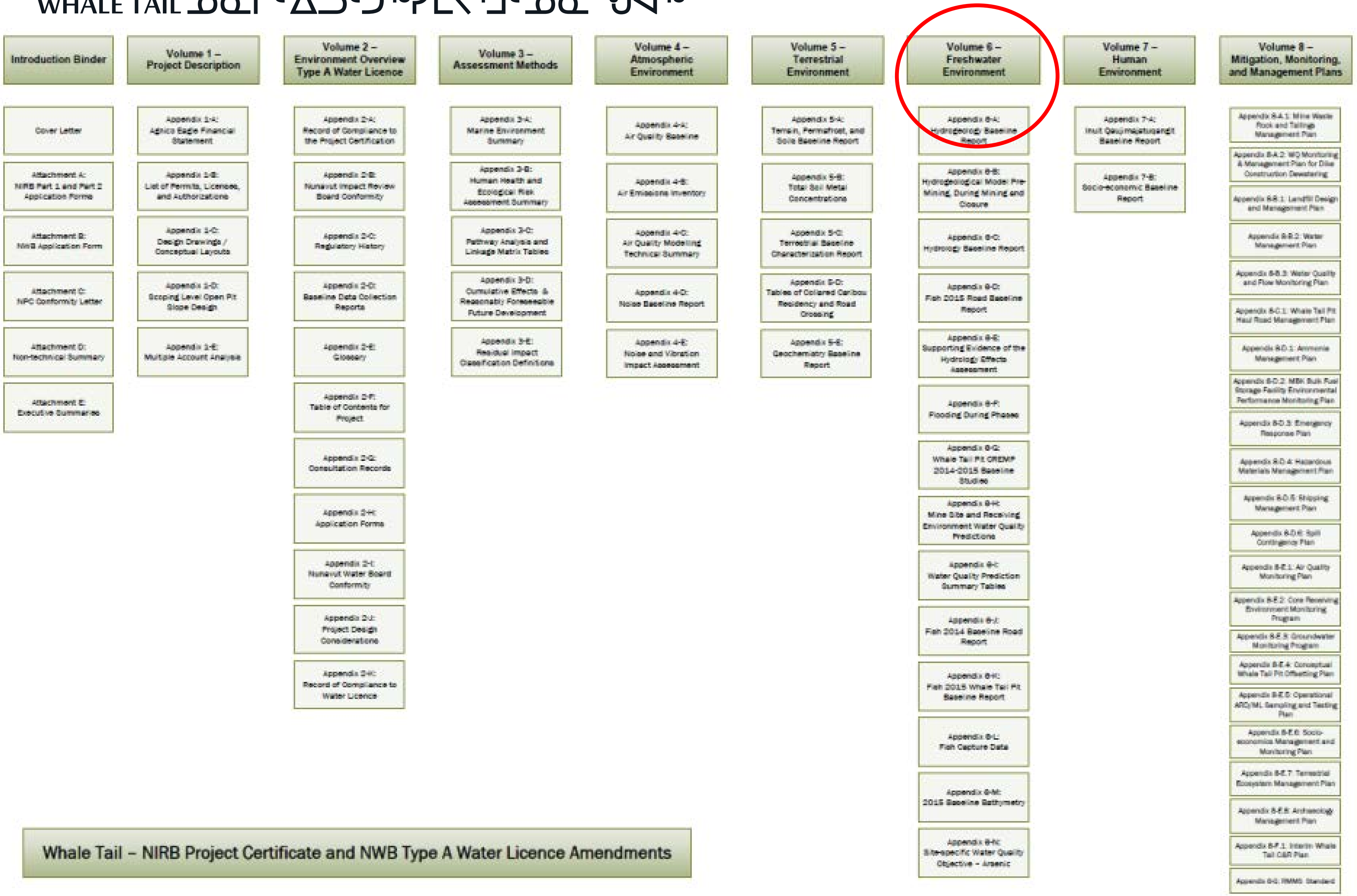
ii. ᐃᒪᓕᕆᓂᖅ (ᓄᓇᐅᑉ ᐃᓗᐊᓂᑦ ᐃᒪᐃᑦ ᐊᐅᓚᓂᖏᑦ Whale Tail ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ)

- ᓇᐃᓈᖅᓯᒪᔪᑦ ᑭᖑᓪᓕᖅᐹᖅ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᒥᑦ ᖃᓄᐃᖓᓃᑦ
- ᐃᖃᓗᓕᕆᓂᕐᒧᑦ ᐋᖅᑭᒋᐊᖅᓯᓃᑦ

iii. ᐊᑐᓕᖅᑎᑦᑎᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᖅ

WHALE TAIL PIT DOCUMENT MAP

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒧᑦ ᓄᓇ ᖑᐊᖅ



Introduction Binder
- Cover Letter
- Attachment A: NIRB Part 1 and Part 2 Application Forms
- Attachment B: NWB Application Form
- Attachment C: NPC Conformity Letter
- Attachment D: Non-technical Summary
- Attachment E: Executive Summaries

Volume 1 – Project Description
- Appendix 1-A: Agnico Eagle Financial Statement
- Appendix 1-B: List of Permits, Licences, and Authorizations
- Appendix 1-C: Design Drawings / Conceptual Layouts
- Appendix 1-D: Scoping Level Open Pit Slope Design
- Appendix 1-E: Multiple Account Analysis

Volume 2 – Environment Overview Type A Water Licence
- Appendix 2-A: Record of Compliance to the Project Certification
- Appendix 2-B: Nunavut Impact Review Board Conformity
- Appendix 2-C: Regulatory History
- Appendix 2-D: Baseline Data Collection Reports
- Appendix 2-E: Glossary
- Appendix 2-F: Table of Contents for Project
- Appendix 2-G: Consultation Records
- Appendix 2-H: Application Forms
- Appendix 2-I: Nunavut Water Board Conformity
- Appendix 2-J: Project Design Considerations
- Appendix 2-K: Record of Compliance to Water Licence

Volume 3 – Assessment Methods
- Appendix 3-A: Marine Environment Summary
- Appendix 3-B: Human Health and Ecological Risk Assessment Summary
- Appendix 3-C: Pathway Analysis and Linkage Matrix Tables
- Appendix 3-D: Cumulative Effects & Reasonably Foreseeable Future Development
- Appendix 3-E: Residual Impact Classification Definitions

Volume 4 – Atmospheric Environment
- Appendix 4-A: Air Quality Baseline
- Appendix 4-B: Air Emissions Inventory
- Appendix 4-C: Air Quality Modelling Technical Summary
- Appendix 4-D: Noise Baseline Report
- Appendix 4-E: Noise and Vibration Impact Assessment

Volume 5 – Terrestrial Environment
- Appendix 5-A: Terrain, Permafrost, and Soils Baseline Report
- Appendix 5-B: Total Soil Metal Concentrations
- Appendix 5-C: Terrestrial Baseline Characterization Report
- Appendix 5-D: Tables of Collared Caribou Residency and Road Crossing
- Appendix 5-E: Geochemistry Baseline Report

Volume 6 – Freshwater Environment
- Appendix 6-A: Hydrogeology Baseline Report
- Appendix 6-B: Hydrogeological Model: Pre-Mining, During Mining and Closure
- Appendix 6-C: Hydrology Baseline Report
- Appendix 6-D: Fish 2015 Road Baseline Report
- Appendix 6-E: Supporting Evidence of the Hydrology Effects Assessment
- Appendix 6-F: Flooding During Phases
- Appendix 6-G: Whale Tail Pit CREMP 2014-2015 Baseline Studies
- Appendix 6-H: Mine Site and Receiving Environment Water Quality Predictions
- Appendix 6-I: Water Quality Prediction Summary Tables
- Appendix 6-J: Fish 2014 Baseline Road Report
- Appendix 6-K: Fish 2015 Whale Tail Pit Baseline Report
- Appendix 6-L: Fish Capture Data
- Appendix 6-M: 2015 Baseline Bathymetry
- Appendix 6-N: Site-specific Water Quality Objective – Arsenic

Volume 7 – Human Environment
- Appendix 7-A: Inuit Qaujimajatuqangit Baseline Report
- Appendix 7-B: Socio-economic Baseline Report

Volume 8 – Mitigation, Monitoring, and Management Plans
- Appendix 8-A.1: Mine Waste Rock and Tailings Management Plan
- Appendix 8-A.2: WQ Monitoring & Management Plan for Dike Construction Dewatering
- Appendix 8-B.1: Landfill Design and Management Plan
- Appendix 8-B.2: Water Management Plan
- Appendix 8-B.3: Water Quality and Flow Monitoring Plan
- Appendix 8-C.1: Whale Tail Pit Haul Road Management Plan
- Appendix 8-D.1: Ammonia Management Plan
- Appendix 8-D.2: MBK Bulk Fuel Storage Facility Environmental Performance Monitoring Plan
- Appendix 8-D.3: Emergency Response Plan
- Appendix 8-D.4: Hazardous Materials Management Plan
- Appendix 8-D.5: Shipping Management Plan
- Appendix 8-D.6: Spill Contingency Plan
- Appendix 8-E.1: Air Quality Monitoring Plan
- Appendix 8-E.2: Core Receiving Environment Monitoring Program
- Appendix 8-E.3: Groundwater Monitoring Program
- Appendix 8-E.4: Conceptual Whale Tail Pit Offsetting Plan
- Appendix 8-E.5: Operational ARD/ML Sampling and Testing Plan
- Appendix 8-E.6: Socio-economics Management and Monitoring Plan
- Appendix 8-E.7: Terrestrial Ecosystem Management Plan
- Appendix 8-E.8: Archaeology Management Plan
- Appendix 8-F.1: Interim Whale Tail C&R Plan
- Appendix 8-G: RMMS Standard

Whale Tail – NIRB Project Certificate and NWB Type A Water Licence Amendments

FRESHWATER ENVIRONMENT – VALUED COMPONENTS
ᐃᒪᕐᑎᐊᕙᒃ - ᐃᒃᐱᒋᓂᖅᑲᖅᕕᐅᔪᑦ ᐃᓚᒋᔭᐅᔪᑦ

- Valued Components and other components assessed:
  - Hydrogeology
  - Groundwater quality and quantity,
  - Surface Water Quality,
  - Water Quality,
  - Sediment Quality,
  - Arctic Grayling, Arctic Char, Lake Trout, Round Whitefish

- ᐃᒃᐱᒋᓂᖅᑲᖅᕕᐅᔪᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐊᓯᖏᓪᓗ ᐃᓚᒋᔭᐅᔪᑦ ᖃᐅᔨᓴᖅᑕᐅᔪᑦ:
  - ᐃᒪᓕᕆᓂᖅ
  - ᓄᓇᒦᑦᑐᖅ ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᖓ ᐊᒻᒪᓗ ᖃᓄᑎᒋᐅᓂᖓ,
  - ᐃᒪᖅ ᓄᓇᐅᑉ ᖄᖓᓃᑦᑐᖅ ᖃᓄᐃᓐᓂᖓ,
  - ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᖓ,
  - ᑕᓯᐅᑉ ᐊᓗᐊᓃᑦᑐᑦ ᖃᓄᐃᓐᓂᖏᑦ,
  - ᐊᒥᕋᕐᓗᒃᑐᑦ, ᐃᖅᑲᓗᒃᐲᑦ, ᐃᓘᕋᐃᑦ, ᓱᓗᒃᐸᐅᒐᓛᑦ

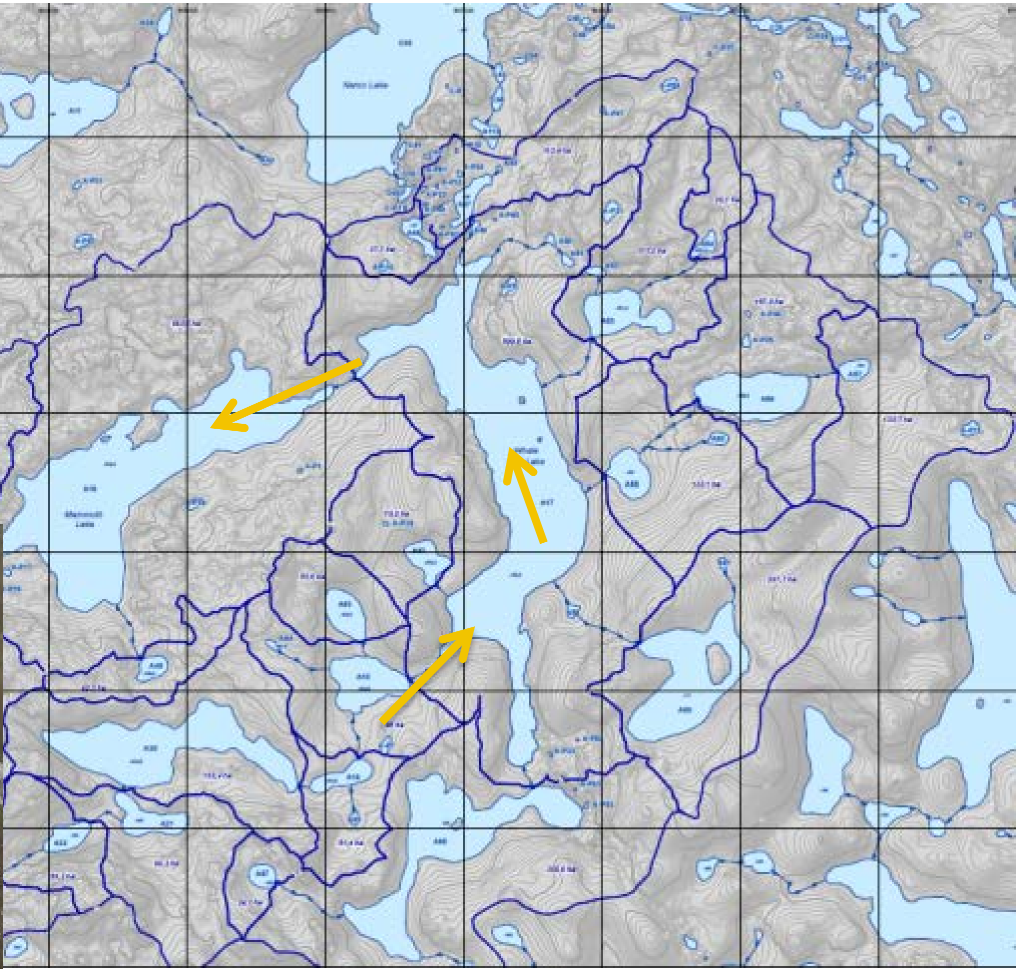
FRESHWATER ENVIRONMENT
ᐃᒪᑦᑎᐊᖅ

- Inuit Concerns:
  - importance of rivers and lakes as travel routes during the winter;
  - fish are an important secondary source of traditional food;
  - traditionally fishing did not take place within the project lakes area; and
  - concerns of effects of mining on water quality (e.g. spills, dust, disturbance to lakes and dewatering).

- ᐃᓄᐃᑦ ᐃᓱᒫᓘᑎᖏᑦ
  - ᐱᒻᒪᕆᐅᓂᖏᑦ ᑰᑦ ᐊᒻᒪᓗ ᑕᓰᑦ ᐊᑉᕐᑯᑎᒋᔭᐅᓂᕐᒧᑦ ᐃᖏᕐᕋᔭᖕᓂᕐᒧᑦ ᐅᑭᐅᒃᑯᑦ;
  - ᐃᖃᓗᐃᑦ ᐱᒻᒪᕆᐅᒋᔭᐅᑦ ᓂᕿᒋᔭᐅᓂᕐᒧᑦ ᐃᓄᖕᓄᑦ;
  - ᐱᖅᑯᓯᑐᖅᑲᓇᔭᐅᙱᑦᑐᖅ ᐃᖃᓗᒃᓯᐅᕐᕕᐅᓂᕐᒧᑦ ᐱᓕᕆᐊᕐᒥᑦ ᑕᓯᐅᕙᑦ; ᐊᒻᒪᓗ
  - ᐃᓱᒫᓘᑏᑦ ᖃᓄᐃᖓᓚᖅᑎᑦᑎᓂᕐᓄᑦ ᐅᔭᕋᒃᑕᓇᐊᕐᒥᑦ ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᖓᓄᑦ (ᑯᕕᔪᑦ, ᐳᔪᖅᑲᑖᒃ, ᐃᓗᐃᓵᓇᓂᖅ ᑕᓯᕐᓂᑦ ᐊᒻᒪᓗ ᐃᒪᐃᔭᐃᓂᕐᒥᑦ).

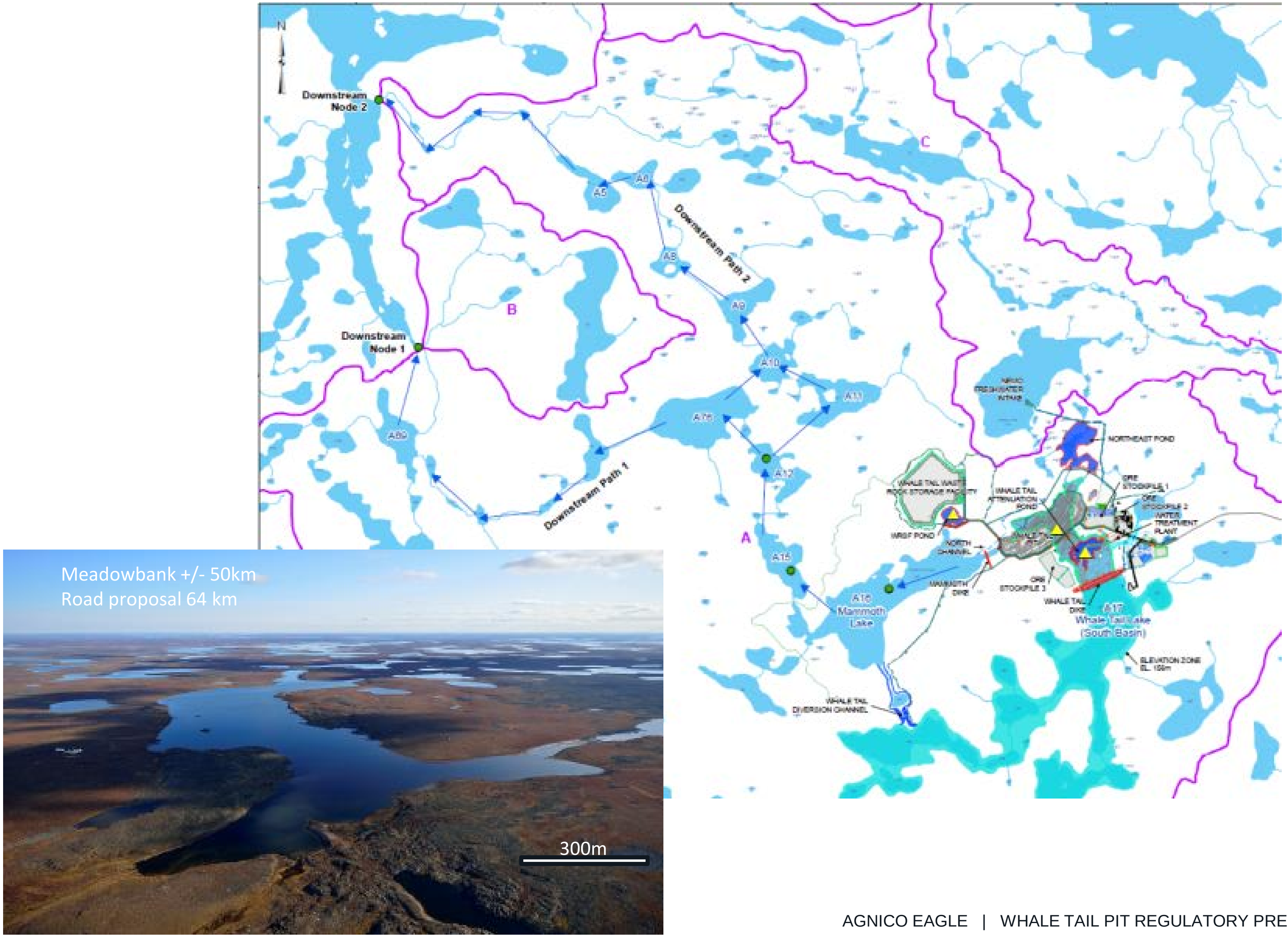
WHALE TAIL PIT – WATER MANAGEMENT
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ

Meadowbank +/- 50km
Road proposal 64 km



WHALE TAIL PIT – WATER MANAGEMENT

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ


N
Downstream Node 2
Downstream Node 1
C
B
A
A5
A6
A8
A9
A10
A11
A76
A12
A15
A69
Downstream Path 2
Downstream Path 1
NPWC FRESHWATER INTAKE
NORTHEAST POND
WHALE TAIL WASTE ROCK STORAGE FACILITY
WHALE TAIL ATTENUATION POND
ORE STOCKPILE 1
ORE STOCKPILE 2
WATER TREATMENT PLANT
WRSF POND
NORTH CHANNEL
MAMMOTH DIKE
ORE STOCKPILE 3
WHALE TAIL DIKE
A16 Mammoth Lake
A17 Whale Tail Lake (South Basin)
ELEVATION ZONE EL. 156m
WHALE TAIL DIVERSION CHANNEL
Meadowbank +/- 50km
Road proposal 64 km
300m

WHALE TAIL PIT – WATER MANAGEMENT
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ

Surface Water Management

Volume 8- Appendix 8-B.2 – Water Management Plan

- Objective: to minimize the potential impact of the project on the receiving water surrounding the proposed mining activities
- Strategies:
  1. Reduce the amount of contact water requiring management, pumping, monitoring and treatment
  2. Divert non-contact water away from the mine site
  3. Limit freshwater quantity requirements

ᓄᓇᐅᑉ ᖄᖕᒐᓂᑦ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ

ᐅᖃᓕᒫᒐᖅ 8 - ᑎᑎᖅᑲᒧᑦ ᐃᓚᒋᔭᐅᔪᖅ 8-8.2 - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ

- ᐱᓕᕆᐊᖑᔪᒪᔪᖅ: ᒥᑭᓛᒃᑰᖅᑎᓪᓗᒍ ᐊᒃᑐᖅᓯᓂᐅᔪᖕᓇᖅᑐᖅ ᐱᓕᕆᐊᕐᒥᑦ ᖃᓂᑕᖕᒐᓂᑦ ᐃᒪᕐᒧᑦ ᐅᔭᕋᒃᑕᕆᐊᕐᕕᐅᔪᒪᔫᑉ
- ᖃᓄᖅᑑᕈᑏᑦ:
  1. ᒥᒃᓵᒋᐊᕐᓗᒍ ᖃᓄᑎᒋᐅᓂᖕᒐᑦ ᐊᑐᖅᑕᐅᔪᖅ ᐃᒪᖅ ᐱᔭᕆᐊᖃᖅᑐᖅ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ, ᑯᕕᖅᑕᐃᓂᕐᒧᑦ, ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐱᓕᕆᐊᖑᓂᕐᒧᑦ
  2. ᓴᖑᑎᓪᓗᒋᑦ ᐃᒪᖅ ᐊᑐᖅᑕᐅᖖᒋᑦᑐᖅ ᐅᔭᕋᒃᑕᕐᕕᐅᔪᒥᑦ
  3. ᑭᒡᓕᖃᖅᑎᓪᓗᒋᑦ ᐃᒪᑦᑎᐊᕙᐅᑉ ᖃᓄᑎᒋᐅᓂᖕᒐᓄᑦ ᐱᔭᕆᐊᖄᑦ

WHALE TAIL PIT – WATER MANAGEMENT
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ

Surface Water Management

- Contact water:
    - Water that has come into contact with mine site processes or reports from disturbed catchment areas
    - All contact water intercepted, contained, analyzed and re-used in mine operations or treated and released once discharge criteria are met
- Non contact water:
    - Water originating from areas unaffected by mining activity (undisturbed catchments)
    - Non- contact water is intercepted and/or directed away from mining areas by means of natural or constructed diversions (such as frozen saddledams, roads or channels)

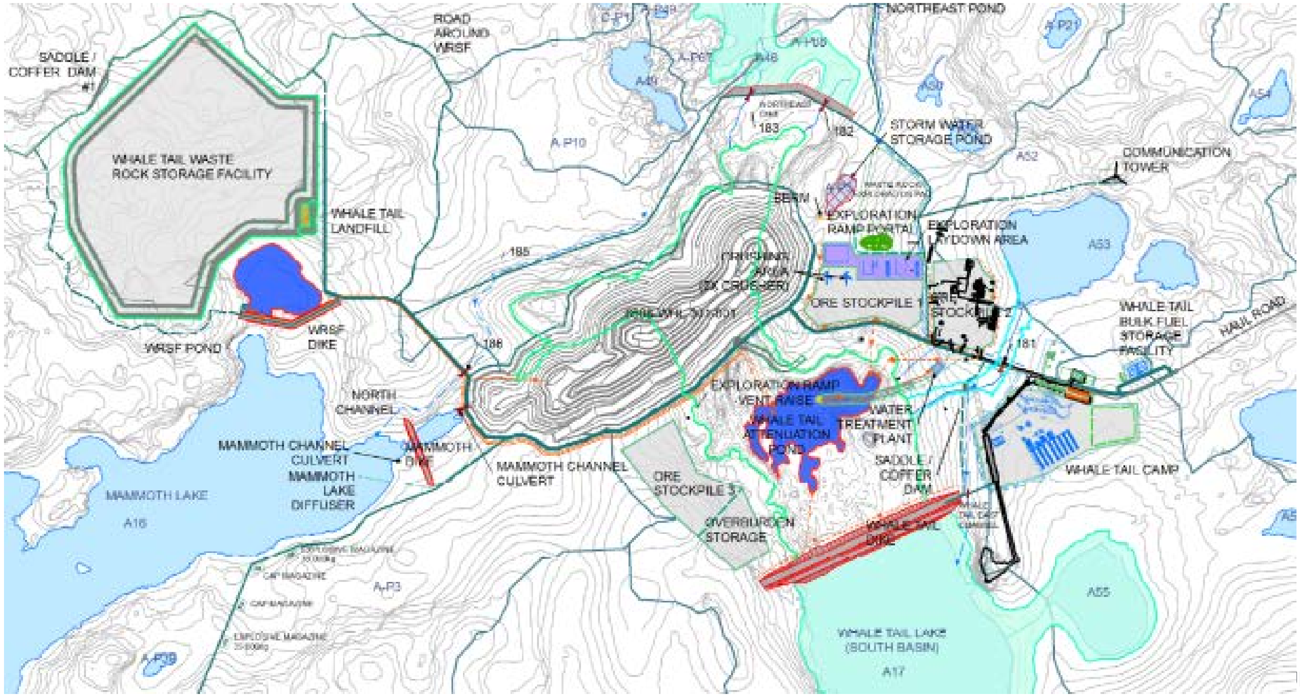
ᓄᓇᐅᑉ ᖄᖓᓂᑦ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ

- ᐊᑐᖅᑕᐅᔪᖅ ᐃᒪᖅ:
    - ᐃᒪᖅ ᐊᑐᖅᑕᐅᓯᒪᓕᖅᑐᖅ ᐅᔭᕋᒃᑕᕆᐊᒥᑦ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᐅᕝᕙᓘᓐᓃᑦ ᐅᖃᐅᓯᐅᔪᑦ ᐅᕈᐃᓵᖅᑕᐅᓂᖏᓐᓄᑦ
    - ᐊᒃᑐᖅᑕᐅᔪᓗᒃᑖᑦ ᐃᒪᐃᑦ ᐱᓕᕆᐊᖑᔪᑦ, ᑐᖅᑯᖅᑕᐅᔪᑦ, ᖃᐅᔨᓴᖅᑕᐅᔪᑦ ᐊᒻᒪᓗ ᐊᑐᒃᑲᓐᓂᖅᑕᐅᔪᑦ ᐅᔭᕋᒃᑕᕆᐊᒥᑦ ᐅᕝᕙᓘᓐᓃᑦ ᐱᓕᕆᐊᖑᓯᒪᔪᑦ ᓴᑉᑯᑕᐅᑉᓗᑎᒃ ᑯᕕᔭᐅᑉᓗᑎᒃ ᓈᒻᒪᒋᔭᐅᓂᕐᒧᑦ ᑎᑭᐅᑎᒃᐸᑕ
- ᐊᒃᑐᖅᑕᐅᓯᒪᙱᑦᑐᖅ ᐃᒪᖅ:
    - ᐃᒪᖅ ᐱᔭᐅᔪᖅ ᐊᒃᑐᖅᑕᐅᓯᒪᙱᑦᑐᓂᑦ ᐅᔭᕋᒃᑕᕆᐊᕐᒧᑦ (ᐊᒃᑐᖅᑕᐅᓯᒪᙱᑦᑐᑦ ᐃᒪᐃᕐ)
    - ᐊᒃᑐᖅᑕᐅᓯᒪᙱᑦᑐᑦ ᐃᒪᐃᑦ ᐱᓕᕆᐊᖑᓚᐅᖅᑐᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᓴᖑᑎᑕᐅᔪᑦ ᐊᓯᐊᓄᑦ ᐅᔭᕋᒃᑕᕆᐊᑉ ᐃᓂᖓᓂᑦ ᐃᖕᒥᓂᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓴᓇᔭᐅᓯᒪᔪᒃᑯᑦ ᓴᖑᑎᑦᑎᓂᕐᒧᑦ (ᓲᕐᓗ ᖁᐊᖅᓯᒪᔪᑦ ᓄᖅᑲᖓᑎᑦᑎᓃᑦ, ᐊᑉᖁᑏᑦ ᓱᑉᓗᐃᓪᓘᓐᓃᕐ)

WHALE TAIL PIT – WATER MANAGEMENT
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ-ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ

- Separate contact water from non-contact water
- Contact water is directed to Whale Tail Attenuation Pond
- Pit sumps, Waste Rock Storage Facility Pond
- Treated Effluent is discharged to Mammoth Lake

- ᐊᑉᑎᕐᓗᒋᑦ ᐊᒃᑐᖅᑕᐅᓯᒪᔪᖅ ᐃᒪᖅ ᐊᒃᑐᖅᑕᐅᓯᒪᙱᑦᑐᓂᑦ
- ᐊᒃᑐᖅᑕᐅᓯᒪᔪᖅ ᐃᒪᖅ Whale Tail-ᒥᑦ ᐊᖏᓗᐊᖏᒋᐊᖅᑎᑦᑎᕝᕙᖕᒧᑦ ᑕᓯᕋᕐᒧᐊᖅᑕᐅᖅᑲᑦᑕᖅᑐᖅ
- ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᒥᑦ ᑯᕕᖅᑕᐃᕝᕖᑦ, ᐊᒃᑕᑰᖅᑕᐅᔪᑦ ᐅᔭᖅᑲᐃᑦ ᑐᖅᑯᖅᓯᓯᒪᕝᕕᖕᒐᓄᑦ ᑕᓯᕋᔭᒃ
- ᐱᓕᕆᐊᖑᓯᒪᔪᖅ ᐃᒪᖅ ᑯᕕᔭᐅᖅᑲᑦᑕᖅᑐᖅ Mammoth ᑕᓯᕐᒧᑦ


ROAD AROUND WRSF
SADDLE / COFFER DAM #1
WHALE TAIL WASTE ROCK STORAGE FACILITY
WHALE TAIL LANDFILL
WRSF POND
WRSF DIKE
185
186
NORTH CHANNEL
MAMMOTH CHANNEL CULVERT
MAMMOTH LAKE DIFFUSER
MAMMOTH DIKE
MAMMOTH CHANNEL CULVERT
MAMMOTH LAKE
A16
A-P10
A-P3
A-P39
A49
A-P67
A-P1
A-P49
A48
A-P55
NORTHEAST POND
A-P21
A50
A54
NORTHEAST DIKE
183
182
STORM WATER STORAGE POND
A52
COMMUNICATION TOWER
BERM
EXPLORATION RAMP PORTAL
EXPLORATION LAYDOWN AREA
A53
CRUSHING AREA (3X CRUSHER)
ORE STOCKPILE 1
ORE STOCKPILE 2
WHALE TAIL BULK FUEL STORAGE FACILITY
HAUL ROAD
181
EXPLORATION RAMP VENT RAISE
WHALE TAIL ATTENUATION POND
WATER TREATMENT PLANT
SADDLE / COFFER DAM
WHALE TAIL CAMP
ORE STOCKPILE 3
OVERBURDEN STORAGE
WHALE TAIL DIKE
A55
WHALE TAIL LAKE (SOUTH BASIN)
A17
CAP MAGAZINE
EXPLOSIVE MAGAZINE

WHALE TAIL PIT – WATER MANAGEMENT

WHALE TAIL ᓄᓇᒥᑦᐃᓗᑦᑐᖅᓯᒪᔪᖅ-ᐃᒪᕐᒥᒃᐊᐅᓚᑦᑎᓂᖅ

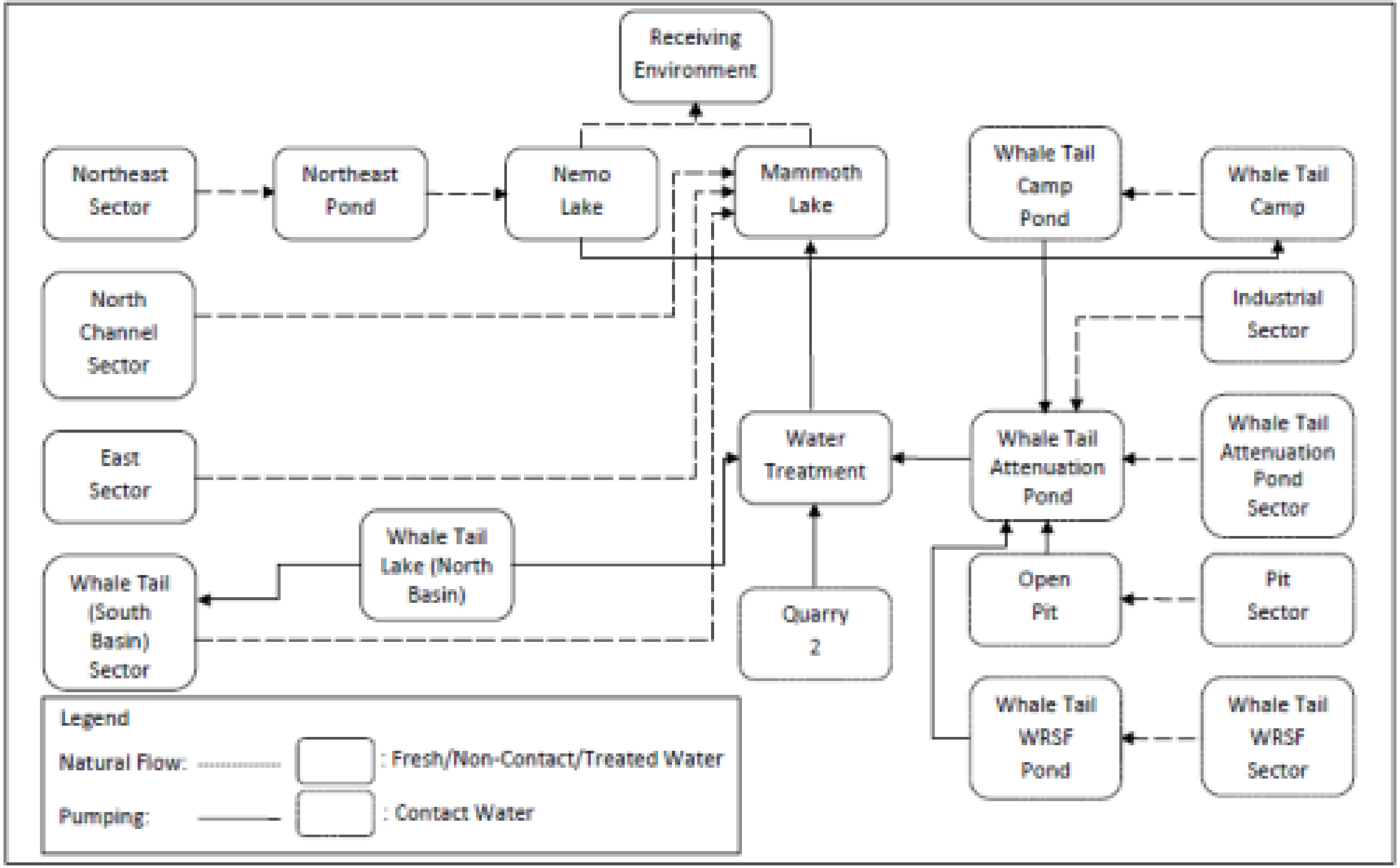

Receiving Environment
Northeast Sector
Northeast Pond
Nemo Lake
Mammoth Lake
Whale Tail Camp Pond
Whale Tail Camp
North Channel Sector
Industrial Sector
East Sector
Water Treatment
Whale Tail Attenuation Pond
Whale Tail Attenuation Pond Sector
Whale Tail Lake (North Basin)
Whale Tail (South Basin) Sector
Quarry 2
Open Pit
Pit Sector
Whale Tail WRSF Pond
Whale Tail WRSF Sector
Legend
Natural Flow:
Pumping:
: Fresh/Non-Contact/Treated Water
: Contact Water

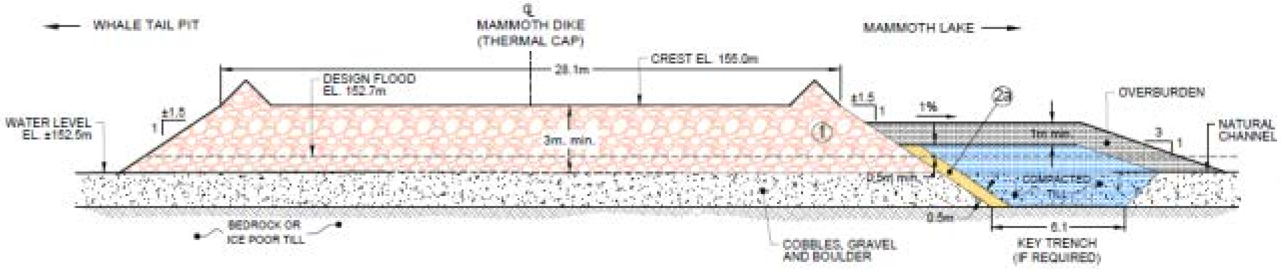
Figure B.1 Water Management Flowsheet during Construction and Operations

WHALE TAIL PIT – WATER MANAGEMENT - SADDLEDAM DESIGN
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ-ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ-ᐃᒪᕐᓄᑦ ᓄᖅᑲᖓᕝᕚᑦ ᖃᓄᐃᖓᓂᖕᒋᑦ

AGNICO EAGLE

- Mammoth Dike is similar in design to South Camp and Vault Dike

- Mammoth-ᒥᑦ ᐃᒪᕐᒥᒃ ᑲᑎᖅᓱᐃᕝᕚᑦ ᐊᔾᔨᒋᔭᖕᒋᑦ ᖃᓄᐃᖓᓂᖕᒋᑦᑕ ᓂᒋᐊᓂᑦ ᓄᓇᓕᐊᓛᑉ ᐊᒻᒪᓗ Vault-ᒥᑦ ᐃᒪᕐᓄᑦ ᑲᑎᖅᓱᐃᕝᕙᖕᓄᑦ


WHALE TAIL PIT
℄
MAMMOTH DIKE
(THERMAL CAP)
MAMMOTH LAKE
CREST EL. 155.0m
28.1m
DESIGN FLOOD
EL. 152.7m
WATER LEVEL
EL. ±152.5m
±1.5
1
3m. min.
①
±1.5
1
1%
②a
OVERBURDEN
1m min.
3
1
NATURAL
CHANNEL
0.5m min.
COMPACTED
TILL
0.5m
6.1
KEY TRENCH
(IF REQUIRED)
COBBLES, GRAVEL
AND BOULDER
BEDROCK OR
ICE POOR TILL

MAMMOTH DIKE - TYPICAL SECTION

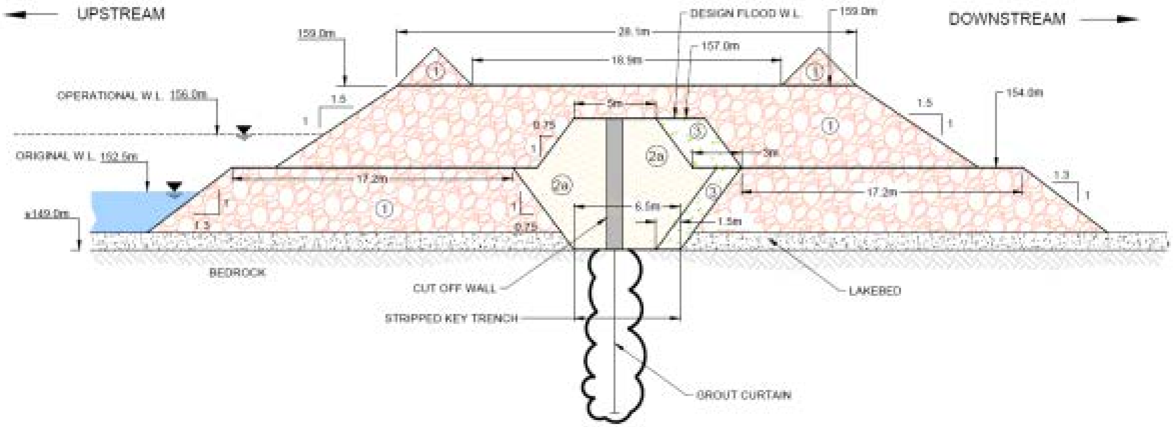
SCALE 1: 250

WHALE TAIL PIT – WATER MANAGEMENT - DIKE DESIGN

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ - ᐃᒪᕐᓄᑦ ᑲᑎᖅᓱᐃᕝᕖᑦ ᖃᓄᐃᖓᓂᖏᑦ

AGNICO EAGLE

- Whale Tail Dike is similar in design as East Dike and Bay Goose Dike at Meadowbank
- Whale Tail-ᒥᑦ ᐃᒪᕐᓄᑦ ᑲᑎᖅᓱᐃᕝᕖᑦ ᐊᔾᔨᕐᓚᒋᔭᖏᑦ ᖃᓄᐃᖓᓂᖓᑕ ᑲᓇᖕᓇᖓᓂᑦ ᐃᒪᕐᓂᒃ ᑲᑎᖅᓱᐃᕝᕖᑦ ᐊᒻᒪᓗ Bay Goose-ᒥᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ


UPSTREAM
DOWNSTREAM
DESIGN FLOOD W.L.
159.0m
28.1m
157.0m
18.9m
159.0m
OPERATIONAL W.L. 156.0m
ORIGINAL W.L. 152.5m
±149.0m
1.5
1
0.75
1
5m
3m
154.0m
1.5
1
1.3
1
17.2m
17.2m
6.5m
1.5m
1.3
1
0.75
1
①
②a
③
BEDROCK
CUT OFF WALL
STRIPPED KEY TRENCH
LAKEBED
GROUT CURTAIN

TYPICAL SECTION - WHALE TAIL DIKE

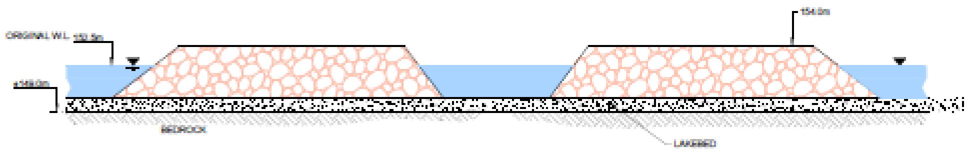
SCALE 1:250

WHALE TAIL PIT – WATER MANAGEMENT - DIKE CONSTRUCTION
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ - ᐃᒪᕐᓂᒃ ᑲᑎᖅᓱᐃᕝᕕᓕᐅᕆᓂᖅ

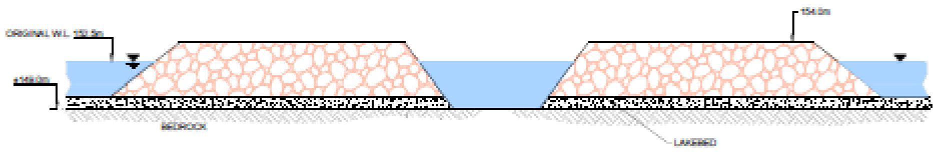
- Step 1: Install turbidity curtains and begin monitoring (lake elevation 152.5 masl)
- Step 2: Begin platform construction to elevation 154 masl.
- Step 3: Excavate lake bottom till down to bed rock
- Step 4: Fill cut-off with gravel

- ᓯᕗᓪᓕᖅ: ᐃᓕᓗᒋᑦ ᑕᓇᐅᖅᑲᓗᐊᖅᑕᐃᓕᔾᔪᑏᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓗᒍ (ᑕᓯᐅᑉ ᖁᑦᑎᖕᓂᖓ 152.5 masl)
- ᑐᒡᓕᐊ: ᑐᙵᕕᒃ ᓴᓇᕙᓪᓕᐊᓗᒍ ᖁᑦᑎᖕᓂᕐᒧᑦ 154 masl.
- ᐱᖓᓱᐊ: ᐲᔭᕐᓗᒍ ᑕᓯᐅᑉ ᐊᓗᐊ ᐅᔭᖅᑲᓄᑦ ᑭᓯᐊᓂ ᑎᑭᐅᑎᒃᐸᑕ
- ᓯᑕᒪᖓ: ᐃᓗᓪᓕᖅᑐᕐᓗᒍ ᓯᐅᕋᕐᒥᑦ

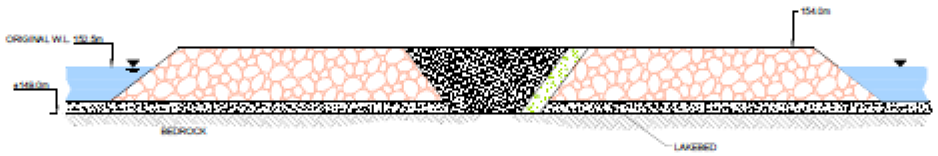
2


ORIGINAL W.L. 152.5m
±149.0m
154.0m
BEDROCK
LAKEBED

3


ORIGINAL W.L. 152.5m
±149.0m
154.0m
BEDROCK
LAKEBED

4


ORIGINAL W.L. 152.5m
±149.0m
154.0m
BEDROCK
LAKEBED

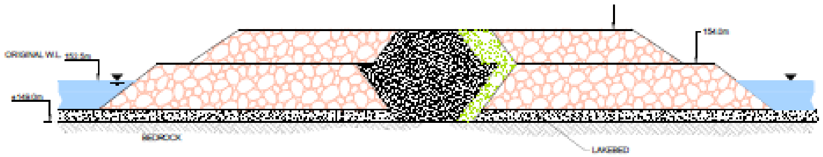
WHALE TAIL PIT – WATER MANAGEMENT - DIKE CONSTRUCTION

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ - ᐃᒪᕐᓂᒃ ᑲᑎᖅᓱᐃᕝᕕᓕᐅᕆᓂᖅ

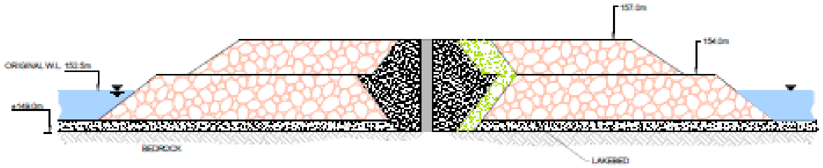
- Continuously assess the need of additional turbidity curtains along the face of the dike or alternative construction mitigation
- Step 5: place final lift of dike platform material to elevation 157 masl
- Step 6: begin completion of the bentonite cut-off

- ᖃᐅᔨᓴᐃᓐᓇᕐᓗᒍ ᑕᕆᐅᖃᖅᑕᐃᓕᔾᔨᑎᒃᑲᓐᓂᕐᓂᒃ ᐱᔭᕆᐊᖃᕐᒪᖔ ᐃᒪᕐᓂᑦ ᑲᑎᖅᓱᐃᔾᔨᑏᑦ ᐊᓯᖏᓐᓂᒡᒎᓐᓃᑦ ᓴᓇᓗᓂ ᐊᖏᓗᐊᖏᑎᐊᖅᑎᑦᑎᓂᕐᒧᑦ
- ᑕᓪᓕᒪᖓ: ᐃᓕᕐᓇᓗᒍ ᑭᖑᓪᓕᖅᐹᒃᑯᑦ ᕐᑯᑎᒃᓯᔾᔨᑎ ᐃᒪᕐᒥᒃ ᑲᑎᖅᓯᐅᕝᕕᐅᑉ ᑐᖓᕕᖓᓄᑦ ᐊᑐᖅᑐᓂᒃ ᕐᑯᑎᒃᓯᑎᓪᓗᒍ 157 masl-ᒧᑦ
- ᐊᕐᕕᓂᓕᖓ: ᐱᐊᓂᒃᐸᓪᓕᐊᓗᒍ bentonite-ᒧᑦ ᐃᓱᓕᕝᕕᒃ

5


ORIGINAL W.L. 152.5m
±149.0m
154.0m
BEDROCK
LAKEBED

6

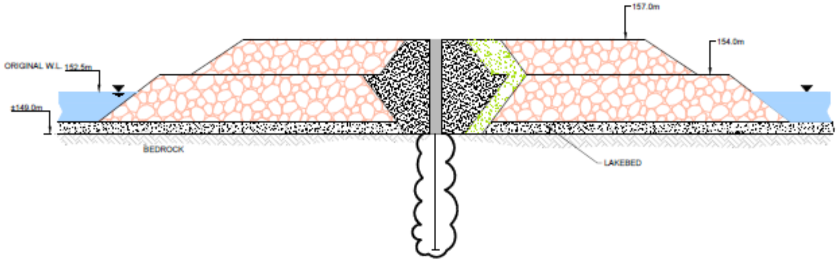

ORIGINAL W.L. 152.5m
±149.0m
157.0m
154.0m
BEDROCK
LAKEBED

WHALE TAIL PIT – WATER MANAGEMENT - DIKE CONSTRUCTION
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ - ᐃᒪᕐᓂᒃ ᑲᑎᖅᓱᐃᕝᕕᓕᐅᕆᓂᖅ

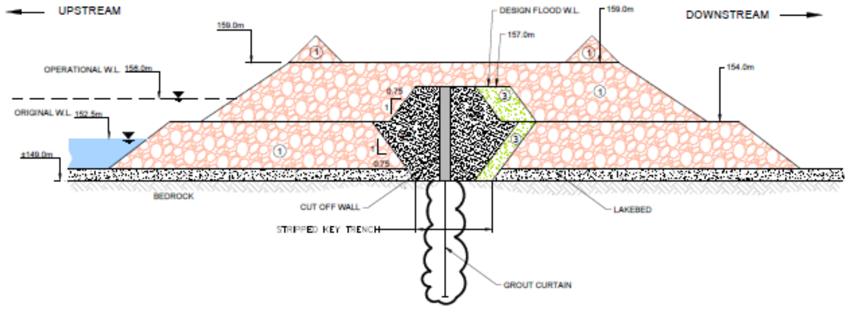
- Step 7: Complete grout curtain within the key trench
- Step 8: Dike construction completion
- Dewatering of Whale Tail Lake North will begin
- Operational Maintenance and Surveillance of the Dike

- 7-ᖓ: ᐱᐊᓂᒡᓗᒍ ᑕᓗ ᐃᓗᑦᑐᖅᓯᒪᔪᒥᑦ
- 8-ᖓ: ᐃᒪᕐᒥᒃ ᑲᑎᖅᓱᐃᕝᕕᒃ ᓴᓇᔭᐅᓂᖓ ᐱᐊᓂᒡᓗᒍ
- ᐃᒪᐃᔭᐃᓂᖅ Whale Tail ᑕᓯᕐᒥᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᐱᒋᐊᕐᓂᐊᖅᑐᖅ
- ᐊᐅᓛᕐᓂᕐᒧᑦ ᐱᓕᕆᐊᕐᑲᕐᓂᖅ ᕐᑲᐅᔨᓴᐃᓂᕐᓗ ᐃᒪᕐᒥᒃ ᕐᑲᑎᖅᓱᐃᕝᕕᖕᒥᑦ

7

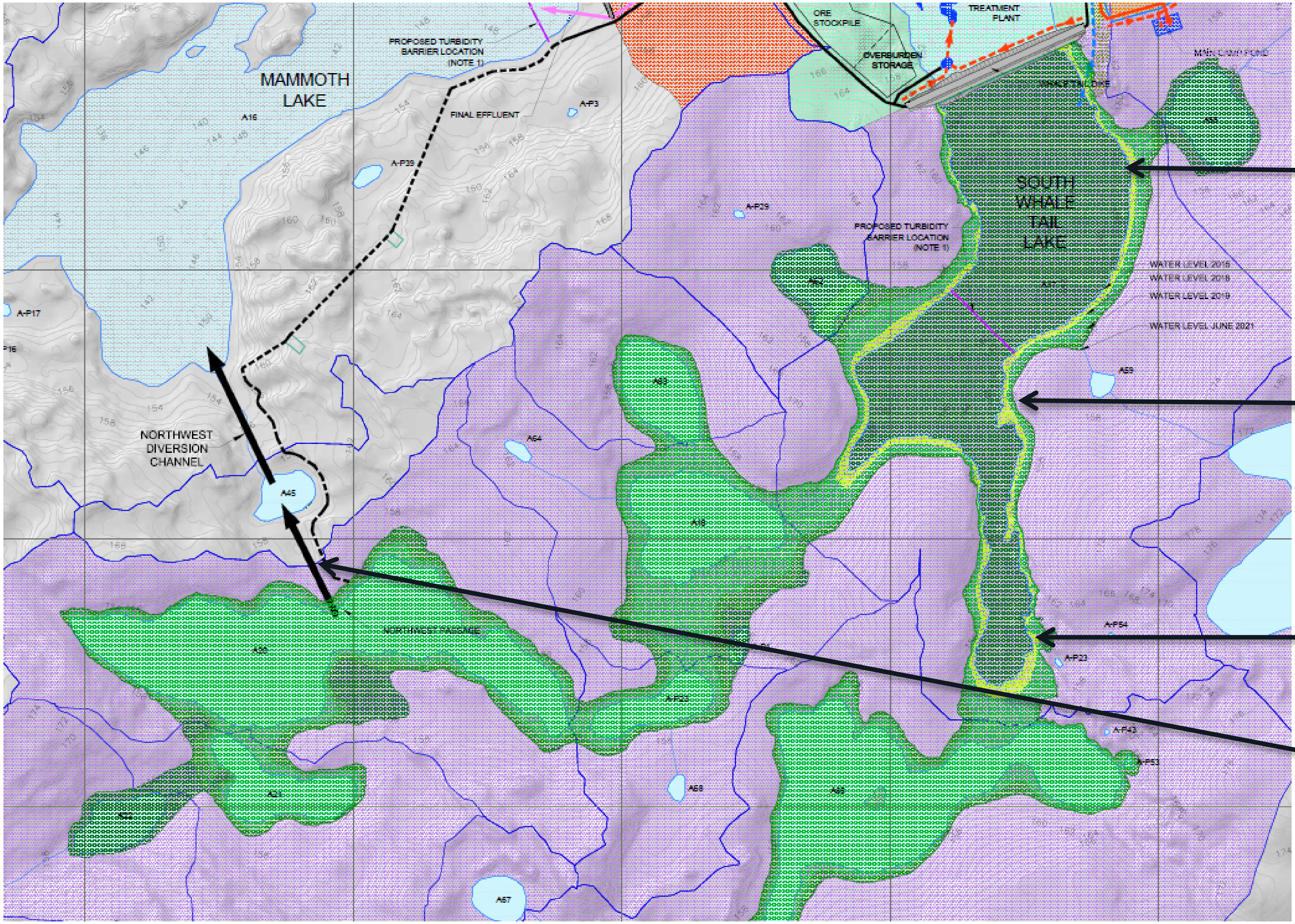

157.0m
154.0m
ORIGINAL W.L. 152.5m
±149.0m
BEDROCK
LAKEBED

8


UPSTREAM
DOWNSTREAM
159.0m
DESIGN FLOOD W.L.
159.0m
157.0m
OPERATIONAL W.L. 158.0m
ORIGINAL W.L. 152.5m
±149.0m
154.0m
0.75
1
0.75
1
①
③
BEDROCK
CUT OFF WALL
STRIPPED KEY TRENCH
LAKEBED
GROUT CURTAIN

WATER MANAGEMENT - WHALE TAIL LAKE (SOUTH BASIN) FLOODING AND WATER DIVERSION

ᐃᒪᕿᒃ ᐊᐅᓚᑦᑎᓂᖅ - WHALE TAIL ᑕᓯᕿᒥᑦ (ᓂᒋᐊᓂᑦ ᐃᓂᐅᔪᖅ) ᐃᒥᖅᑐᐃᓂᖅ ᐊᒻᒪᓗ ᐃᒪᕿᒃ ᓴᖑᑎᑦᑎᓂᖅ


MAMMOTH LAKE
PROPOSED TURBIDITY BARRIER LOCATION (NOTE 1)
FINAL EFFLUENT
NORTHWEST DIVERSION CHANNEL
NORTHWEST PASSAGE
ORE STOCKPILE
OVERBURDEN STORAGE
TREATMENT PLANT
WHALE TAIL DIKE
MAIN CAMP POND
SOUTH WHALE TAIL LAKE
PROPOSED TURBIDITY BARRIER LOCATION (NOTE 1)
WATER LEVEL 2015
WATER LEVEL 2018
WATER LEVEL 2019
WATER LEVEL JUNE 2021
A16
A-P3
A-P39
A-P29
A-P17
A45
A64
A63
A18
A62
A37
A59
A53
A-P54
A-P23
A-P43
A-P53
A20
A-P22
A21
A22
A68
A65
A67

2015/
2016

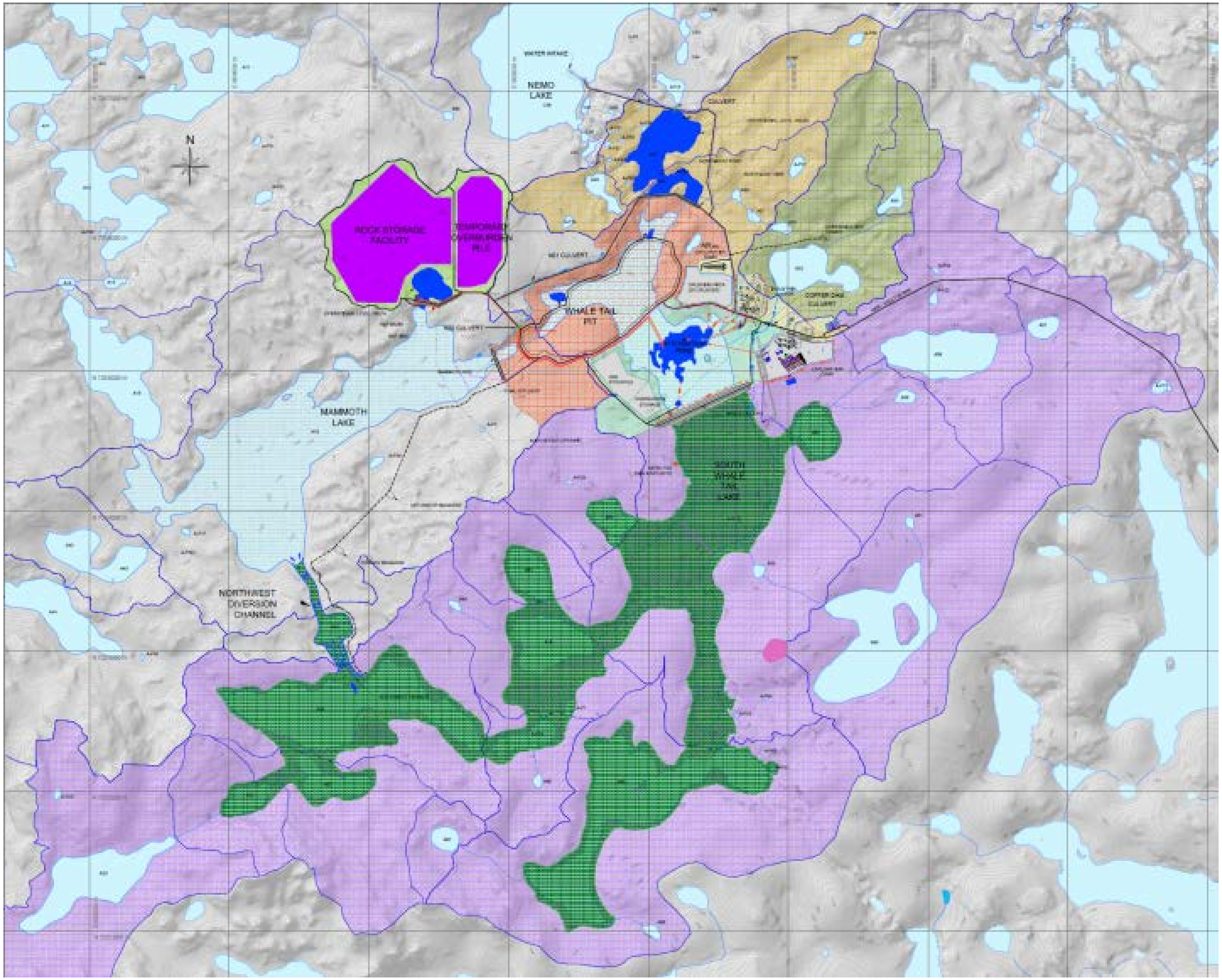
2018
(yellow)

2019
(light
green)

2020

WHALE TAIL PIT – WATER MANAGEMENT

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ - ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ


WATER INTAKE
NEMO LAKE
N
CULVERT
ROCK STORAGE FACILITY
TEMPORARY OVERBURDEN PILE
WHALE TAIL PIT
COPPER DAM CULVERT
MAMMOTH LAKE
SOUTH WHALE TAIL LAKE
NORTHWEST DIVERSION CHANNEL

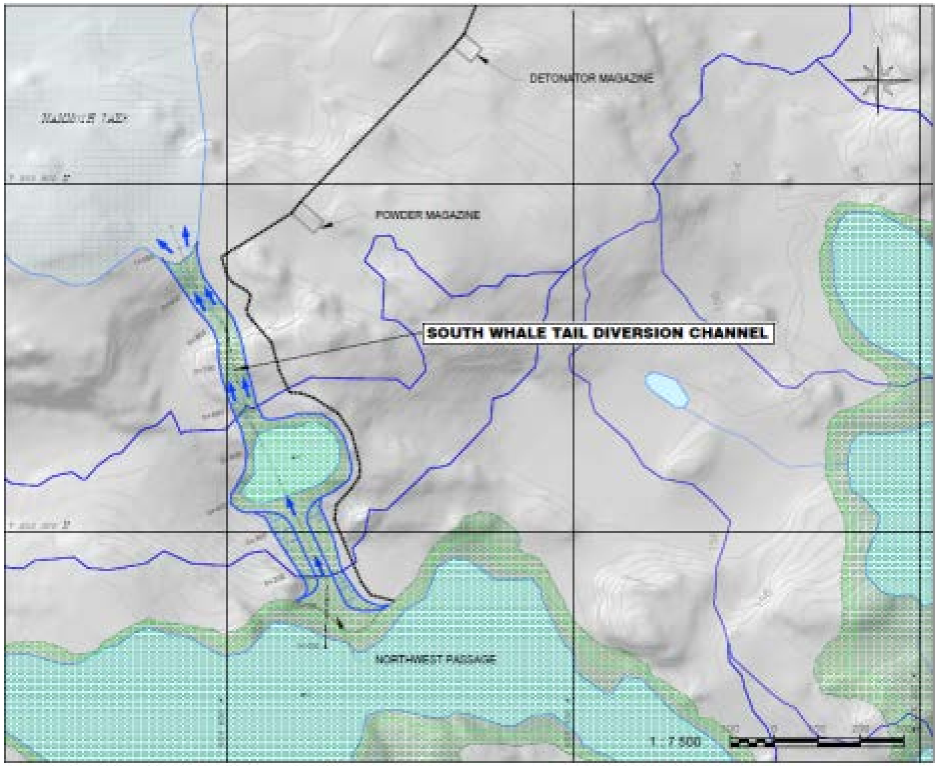
WHALE TAIL PIT WATER MANAGEMENT - DIVERSION DITCH DESIGN

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ - ᓴᖑᑎᑦᑎᓂᕐᒧᑦ ᐃᒪᕐᒥᒃ ᑲᑎᖅᓱᐃᕝᕕᐅᑉᖃᓄᐃᖓᓂᖓ

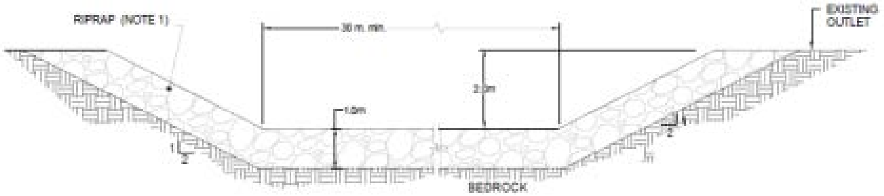
AGNICO EAGLE

- Connects Lake A20 to pond A45
- Simple channel design with 2:1 slope
- Excavated and armored
- Similar to other diversion channels constructed at Meadowbank

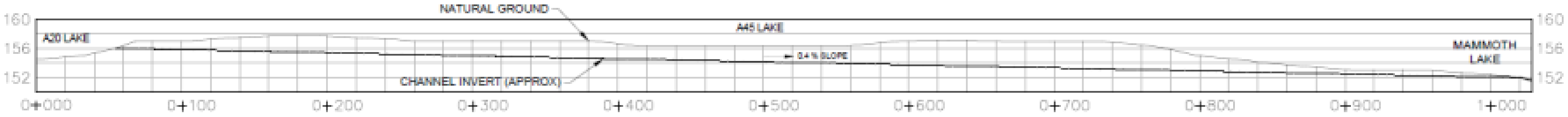
- ᑲᑎᓪᓗᓂ ᑕᓯᖅ A20 ᑕᓯᕐᔭᒃ A45-ᒧᑦ
- ᓱᑉᓘᑉ ᖃᓄᐃᖓᓂᖓ ᐅᕕᖓᓂᖃᕐᓗᓂ 2:1-ᒥᑦ
- ᓄᓇ ᐲᔭᖅᑕᐅᑉᓗᓂ ᐊᒻᒪᓗ ᐊᕙᓗᔭᐅᑉᓗᓂ
- ᐊᔾᔨᕐᓚᖓ ᐊᓯᖏᓐᓄᑦ ᓴᖑᑎᑦᑎᔾᔪᑎᓄᑦ ᓱᑉᓗᓄ ᓴᓇᔭᐅᓯᒪᔪᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ


DETONATOR MAGAZINE
MAMMOTH LAKE
POWDER MAGAZINE
SOUTH WHALE TAIL DIVERSION CHANNEL
NORTHWEST PASSAGE
1 : 7 500

SOUTH WHALE TAIL DIVERSION CHANNEL - PLAN VIEW
SCALE 1:7 500


RIPRAP (NOTE 1)
30 m. min.
EXISTING OUTLET
2.0m
1.0m
1
2
BEDROCK

TYPICAL SECTION - SOUTH WHALE TAIL DIVERSION CHANNEL
SCALE 1: 100


NATURAL GROUND
A20 LAKE
A45 LAKE
0.4 % SLOPE
MAMMOTH LAKE
CHANNEL INVERT (APPROX)
160
156
152
0+000
0+100
0+200
0+300
0+400
0+500
0+600
0+700
0+800
0+900
1+000

SOUTH WHALE TAIL DIVERSION CHANNEL PROFILE
SCALE HOR. 1: 2 5000
VER. 1: 500

WATER MANAGEMENT - MULTIPLE ACCOUNTS ANALYSIS
ᐃᒪᕐᓂᒃ ᐊᐅᓚᑦᑎᓂᖅ- ᖃᑉᓯᐊᕐᔪᓂᒃ ᖃᐅᔨᓴᐃᓃᑦ

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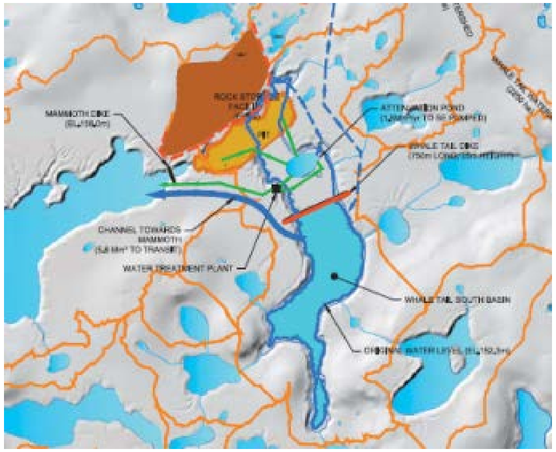
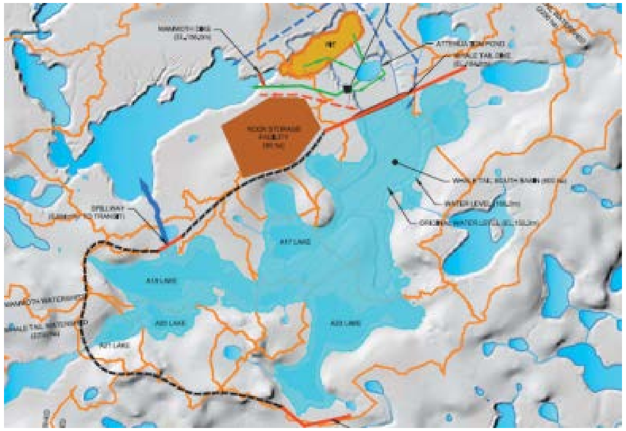
1. Option 1 – Pumping To Mammoth Lake (east basin)
2. Option 2 – Channel from Whale Tail Lake to Mammoth Lake (east basin)
3. Option 3 – Rerouting water towards Mammoth Lake (larger area to be flooded)
4. Option 4 – Channel and re-routing water towards Mammoth Lake (preferred option)

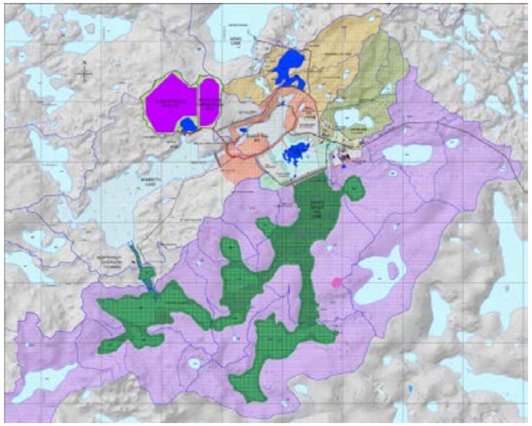
1. ᐊᑐᖅᑕᐅᔪᖕᓇᖅᑐᖅ 1: ᑯᕕᑎᑦᑎᓗᓂ Mammoth ᑕᓯᕐᒧᑦ (ᑲᓇᖕᓇᖕᒐᓂᑦ)
2. ᐊᑐᖅᑕᐅᔪᖕᓇᖅᑐᖅ 2: ᓱᑉᓗ Whale Tail ᑕᓯᕐᒥᑦ Mammoth ᑕᓯᕐᒧᑦ (ᑲᓇᖕᓇᖕᒐᓄᑦ)
3. ᐊᑐᖅᑕᐅᔪᖕᓇᖅᑐᖅ 3: ᓴᖑᑎᓪᓗᒍ ᐃᒪᖅ Mammoth ᑕᓯᐅᑉ ᒥᒃᓵᓄᑦ (ᐊᖏᓂᖅᓴᖅ ᐃᒻᒥᖅᑕᐅᔭᕆᐊᓕᒃ)
4. ᐊᑐᖅᑕᐅᔪᖕᓇᖅᑐᖅ 4: ᓱᑉᓗ ᐊᒻᒪᓗ ᓴᖑᑎᒃᑲᓂᕐᓗᒍ ᐃᒪᖅ Mammoth ᑕᓯᐅᑉ ᒥᒃᓵᓄᑦ (ᐊᑐᖅᑕᐅᖕᒑᕈᒪᔪᖅ)


MAMMOTH DIKE
ROCK STORAGE FACILITY
PIT
ATTENUATION POND
WHALE TAIL DIKE
CHANNEL TOWARDS MAMMOTH
WATER TREATMENT PLANT
WHALE TAIL SOUTH BASIN
ORIGINAL WATER LEVEL

Option 1 and 2


MAMMOTH DIKE
PIT
ATTENUATION POND
WHALE TAIL DIKE
ROCK STORAGE FACILITY
WHALE TAIL SOUTH BASIN
WATER LEVEL
ORIGINAL WATER LEVEL
SPILLWAY
A17 LAKE
A18 LAKE
A20 LAKE
A21 LAKE
A22 LAKE
MAMMOTH WATERSHED
WHALE TAIL WATERSHED

Option 3



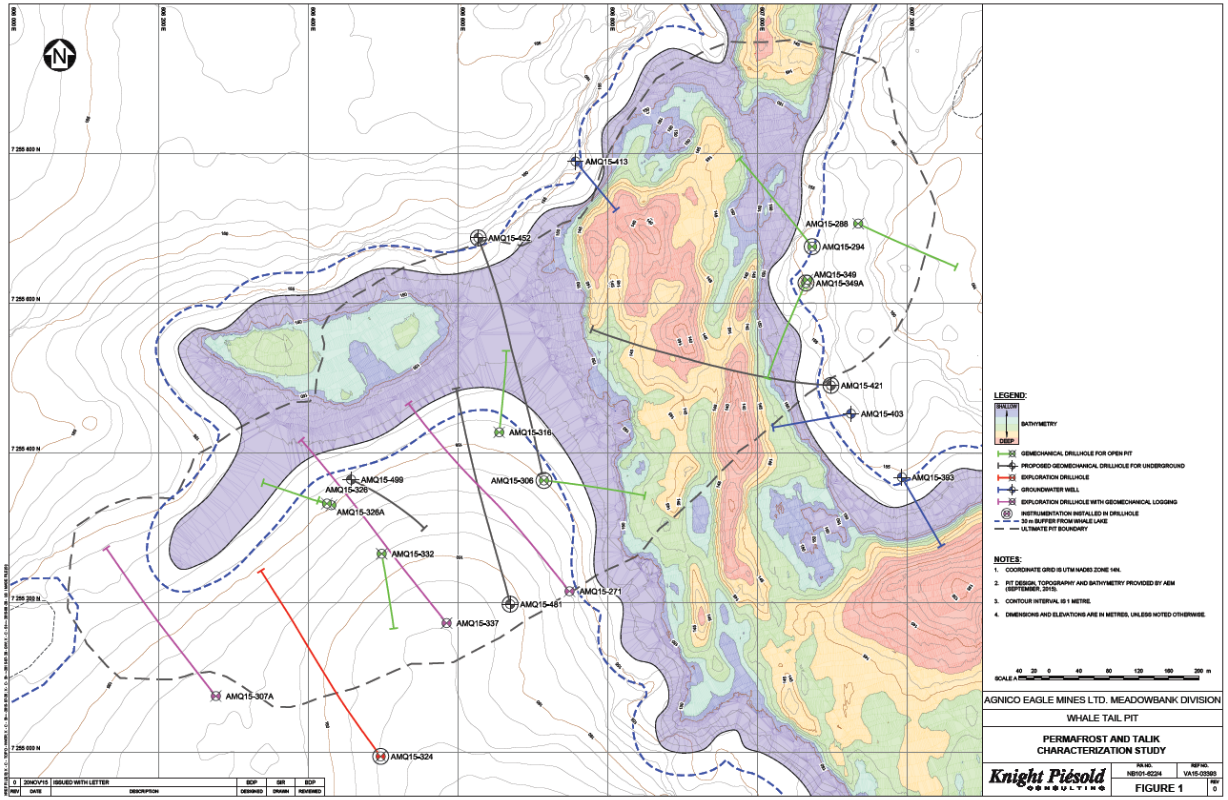
Option 4

WHALE TAIL PIT WATER MANAGEMENT - HYDROGEOLOGY

WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ ᐃᒪᕐᒥᒃ ᐊᐅᓚᕐᑎᓂᖅ-ᐃᒪᓕᕆᓂᖅ

- Baseline conditions are characterized in Appendix 6-A – Hydrogeology Baseline Report
- 2015 –installed 3 GW Wells
- 2016 – installed a multi port Westbay GW Well

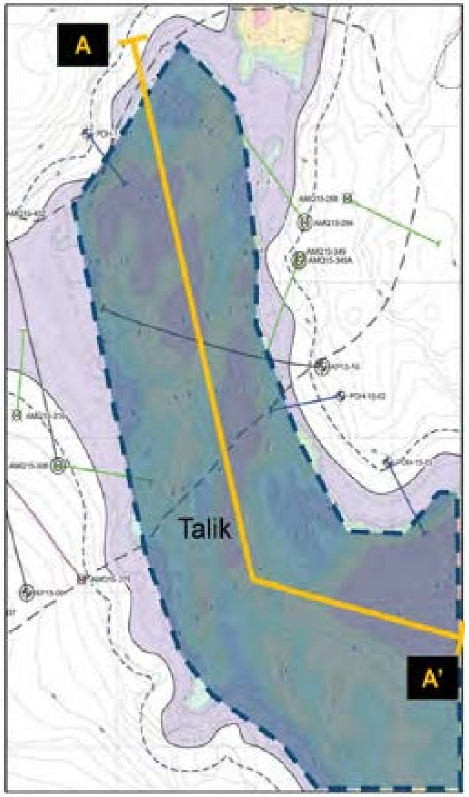
- ᑭᒡᓕᐅᔪᓄᑦ ᖃᓄᐃᖓᓂᐅᔪᑦ ᖃᓄᐃᖓᔪᓕᐅᖅᑕᐅᔪᑦ ᑎᑎᖅᑲᒧᑦ ᐃᓚᒋᔭᐅᔪᖅ 6-A-ᒥᑦ-ᐃᒪᓕᕆᓂᕐᒧᑦ ᑭᒡᓕᒋᔭᐅᔪᓄᑦ ᐅᓂᑉᑳᖅ
- 2015-ᒥᑦ-ᐃᓕᓯᔪᑦ ᐱᖓᓱᓂᑦ GW ᐃᒪᖃᐅᓯᕝᕕᖕᓂᑦ
- 2016-ᒥᑦ-ᐃᓕᓯᔪᑦ ᖃᑉᓲᖓᔪᓂᒃ ᑐᓚᒃᑕᕐᕕᖃᖅᑐᓂᒃ Westbay GW ᐃᒪᖃᐅᓯᕝᕕᖕᓂᑦ

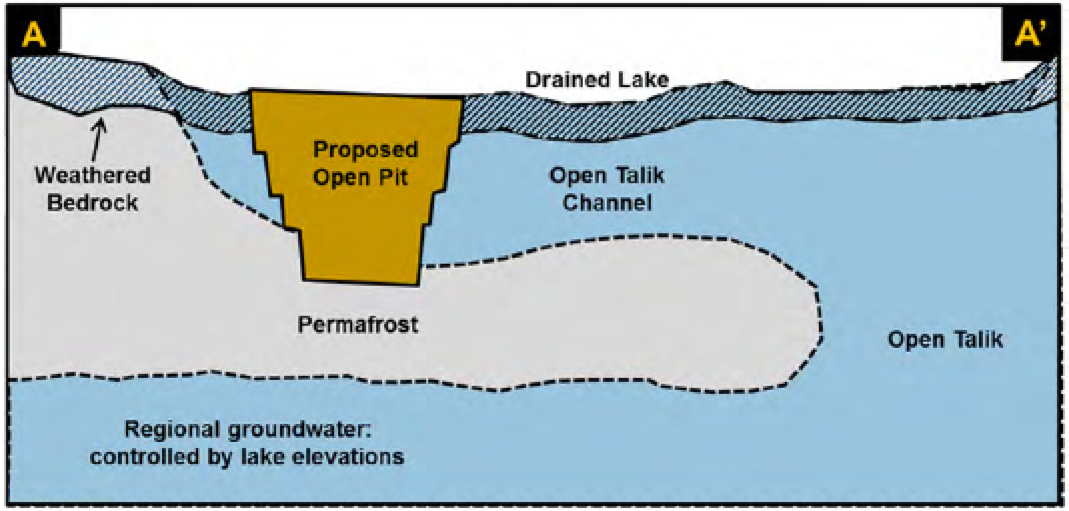

N
7 255 800 N
7 255 600 N
7 255 400 N
7 255 200 N
7 255 000 N
AMQ15-413
AMQ15-452
AMQ15-288
AMQ15-294
AMQ15-349
AMQ15-349A
AMQ15-421
AMQ15-403
AMQ15-393
AMQ15-316
AMQ15-306
AMQ15-499
AMQ15-326
AMQ15-326A
AMQ15-332
AMQ15-271
AMQ15-481
AMQ15-337
AMQ15-307A
AMQ15-324
LEGEND:
SHALLOW
DEEP
BATHYMETRY
GEMECHANICAL DRILLHOLE FOR OPEN PIT
PROPOSED GEOMECHANICAL DRILLHOLE FOR UNDERGROUND
EXPLORATION DRILLHOLE
GROUNDWATER WELL
EXPLORATION DRILLHOLE WITH GEOMECHANICAL LOGGING
INSTRUMENTATION INSTALLED IN DRILLHOLE
30 m BUFFER FROM WHALE LAKE
ULTIMATE PIT BOUNDARY
NOTES:
1. COORDINATE GRID IS UTM NAD83 ZONE 14N.
2. PIT DESIGN, TOPOGRAPHY AND BATHYMETRY PROVIDED BY AEM (SEPTEMBER, 2015).
3. CONTOUR INTERVAL IS 1 METRE.
4. DIMENSIONS AND ELEVATIONS ARE IN METRES, UNLESS NOTED OTHERWISE.
40 20 0 40 80 120 160 200 m
SCALE A
AGNICO EAGLE MINES LTD. MEADOWBANK DIVISION
WHALE TAIL PIT
PERMAFROST AND TALIK CHARACTERIZATION STUDY
Knight Piésold CONSULTING
P/A NO. NB101-622/4
REF NO. VA15-03393
FIGURE 1
REV 0
0 20NOV'15 ISSUED WITH LETTER BDP SIR BDP
REV DATE DESCRIPTION DESIGNED DRAWN REVIEWED

WHALE TAIL PIT WATER MANAGEMENT - HYDROGEOLOGY
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ - ᐃᒪᓕᕆᓂᖅ

- Permafrost is expected below land and in shallow areas of Whale Tail Lake
- Talik is underlain by permafrost near the pit
- Open talik towards the central portion or deeper section of Whale Tail Lake

- ᖁᐊᖑᐃᓐᓇᐅᓴᖅᑐᖅ ᓂᕆᐅᒋᓴᐅᔪᖅ ᓄᓇᐅᑉ ᐊᑖᓃᓐᓂᐊᕐᓂᖕᒐᓄᑦ ᐊᒻᒪᓗ ᐃᒃᑲᑦᑑᓂᐅᔪᓂᑦ Whale Tail ᑕᓯᕐᒥᑦ
- ᓄᓇᐅᑉ ᐃᓗᐊᓂᑦ ᐃᒪᐃᑦ ᐊᐅᓚᔪᑦ ᐊᑖᓃᕐᓱᑎᒃ ᖁᐊᖑᐃᓐᓇᐅᓴᖅᑐᑦ ᖃᓂᑕᖕᒐᓂᑦ ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔫᑉ
- ᐅᒃᑯᐃᖕᒐᔪᒥᑦ ᐃᒪᐃᑦ ᐊᐅᓚᐃᓐᓇᐅᓴᖅᑐᑦ ᕿᑎᑭᔪᐊᓂᑦ ᐃᑎᓂᖅᓴᒦᑦᑐᒥᑦ Whale Tail ᑕᓯᐅᑉ




A
A'
Drained Lake
Weathered Bedrock
Proposed Open Pit
Open Talik Channel
Permafrost
Open Talik
Regional groundwater: controlled by lake elevations

WHALE TAIL PIT WATER MANAGEMENT - HYDROGEOLOGY

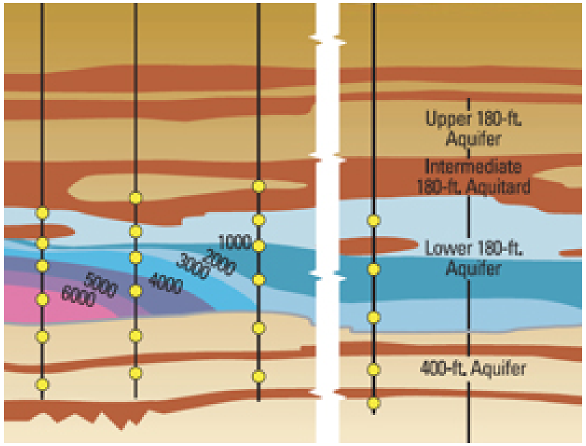
WHALE TAIL ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᖅ ᐃᒪᕐᒥᒃ ᐊᐅᓚᑦᑎᓂᖅ - ᐃᒪᓕᕆᓂᖅ

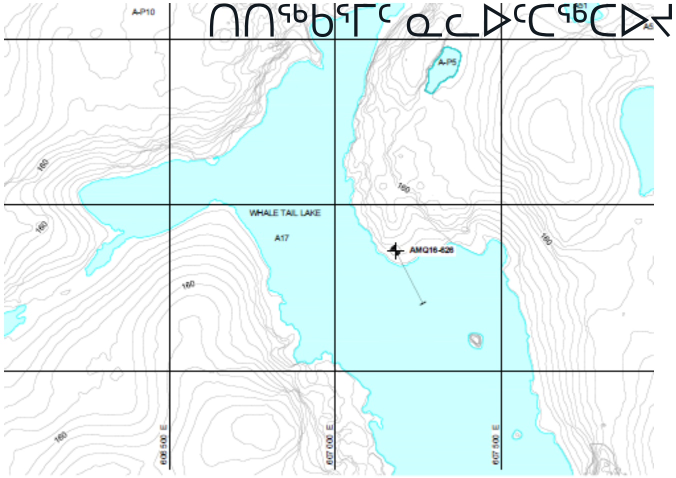
- Westbay groundwater well installed to a depth of 500m below surface
- Ports are positioned at different intervals:

  For example:
  - Port 1 – 488.3 to 499 m
  - Port 3 – 381.5 to 392.3 m
  - Port 6 – 276.2 to 286.9 m
- Data from 2016 are reliable and are consistent with FEIS predictions

- Westbay ᓄᓇᒥᑦ ᐃᒪᕐᓄᑦ ᐃᒪᕐᑲᐅᓯᖕᕕᓕᖅᑕᐅᓚᐅᖅᑐᖅ ᐃᑎᓂᕐᒧᑦ 500 ᒦᑕᓂᒃ ᕐᑳᖕᒐᑕ ᐊᑖᓄᑦ
- ᑐᓚᒃᑕᕐᕖᑦ ᐃᓕᔭᐅᓯᒪᔪᑦ ᐊᔾᔨᒌᖖᒋᑦᑐᓂᑦ ᐊᑉᓯᒪᔫᑉᓗᑎᒃ:

  ᐆᒃᑑᑎᒋᓗᒍ
  - ᑐᓚᒃᑕᕐᕕᒃ 1 – 488.3-ᒥᑦ 499 ᒦᑕ-ᒧᑦ
  - ᑐᓚᒃᑕᕐᕕᒃ 2 – 381.5-ᒥᑦ 392.3 ᒦᑕ-ᒧᑦ
  - ᑐᓚᒃᑕᕐᕕᒃ 3 – 276.2-ᒥᑦ 286.9 ᒦᑕ-ᒧᑦ
- ᓈᓴᐅᑏᕐ/ᑎᑎᖅᑲᐃᑦ 2016-ᒥᑦ ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᐊᒻᒪᓗ ᐊᔾᔨᒋᑉᓗᓂᒋᑦ ᑭᖑᓪᓕᖅᐹᒥᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᒥᑦ ᓇᓚᐅᑦᑖᖅᑕᐅᔪᓂᑦ


Upper 180-ft. Aquifer
Intermediate 180-ft. Aquitard
Lower 180-ft. Aquifer
400-ft. Aquifer
1000
2000
3000
4000
5000
6000


A-P10
A-P5
WHALE TAIL LAKE
A17
AMQ16-626
160
606 500 E
607 000 E
607 500 E

FEIS SUMMARY – HYDROGEOLOGY AND WATER QUANTITY
ᑭᖑᓪᓕᖅᐹᒥᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᒧᑦ ᓇᐃᓵᖅᓯᒪᔪᑦ- ᐃᒪᓕᕆᓂᖅ ᐊᒻᒪᓗ ᐃᒪᖅ ᖃᓄᑎᒋᐅᓂᖓ

Summary of Results

Volume 6 – Freshwater Environment

- Hydrogeology and Groundwater
  - Pit operations will remain within the permafrost and no primary pathways were identified
- Surface Water Quantity
  - Dewatering, mine infrastructure development and diversion activities of the Project will alter surface water quantity
  - Dewatering of Whale Tail Lake (North Basin) and flooding of Whale Tail Lake (South Basin) and diverting water to Mammoth through the diversion channel will alter the water levels, flow and channel/bank stability

ᓇᐃᓵᖅᓯᒪᔪᖅ ᖃᓄᐃᖓᓂᐅᔪᓂᑦ

ᐅᖃᓕᒫᒐᖅ 6 - ᐃᒪᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖏᑦ

- ᐃᒪᓕᕆᓂᖅ ᐊᒻᒪᓗ ᓄᓇᒥᑦ ᐃᒪᖅ
  - ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒥᑦ ᐊᐅᓛᕐᓃᑦ ᖁᐊᖑᐃᓐᓇᐅᔭᖅᑐᓃᖏᓇᕐᓂᐊᖅᑐᑦ ᐊᒻᒪᓗ ᐊᑉᖁᑕᐅᓗᐊᖅᑐᓂᒃ ᐃᓕᑕᖅᓯᓚᐅᙱᑦᑐᑦ
- ᐃᒪᐃᑦ ᓄᓇᐅᑉ ᖄᖓᓃᑦᑐᑦ ᖃᓄᑎᒋᐅᓂᖏᑦ
  - ᐃᒪᐃᔭᐃᓂᖅ, ᐅᔭᕆᒃᑕᓚᐊᑉ ᐱᖁᑎᖏᓐᓄᑦ ᐱᕙᓪᓕᐊᓃᑦ ᐊᒻᒪᓗ ᓴᖑᑎᑦᑎᓂᕐᒨᖓᔪᑦ ᐱᓕᕆᐊᕐᒥᑦ ᐊᓯᐊᖑᖅᓯᓂᐊᖅᑐᑦ ᐃᒪᐃᑦ ᓄᓇᐅᑉ ᖄᖓᓃᑦᑐᑦ ᖃᓄᑎᒋᐅᓂᖏᓂᒃ
  - ᐃᒪᐃᔭᐃᓂᖅ Whale Tail ᑕᓯᕐᒥᑦ (ᐅᐊᖕᓇᖓᓂᑦ) ᐊᒻᒪᓗ ᐃᒻᒥᖅᑐᐃᓂᖅ Whale Tail ᑕᓯᕐᒥᑦ (ᓂᒋᐊᓂᑦ) ᐊᒻᒪᓗ ᓴᖑᑎᑦᑎᓂᖅ ᐃᒪᕐᒥᒃ Mammoth-ᒧᑦ ᓱᑉᓗᒃᑯᑦ ᐊᓯᐊᖑᖅᓯᓂᐊᖅᑐᑦ ᐃᒪᐅᑉ ᖃᓄᑎᒋᐅᓂᖓᓂᑦ, ᑯᕕᓂᕐᓂᑦ ᐊᒻᒪᓗ ᓱᑉᓗᓂᒃ/ᐹᖏᑦᑕ ᐊᔪᙱᓐᓂᖏᓐᓂᑦ

FEIS SUMMARY – WATER QUALITY
ᑭᖑᓪᓕᖅᐹᒥᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᒧᑦ ᓇᐃᓵᖅᓯᒪᔪᑦ- ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᖓ

AGNICO EAGLE

Summary of Results continued…

Volume 6 – Freshwater Environment

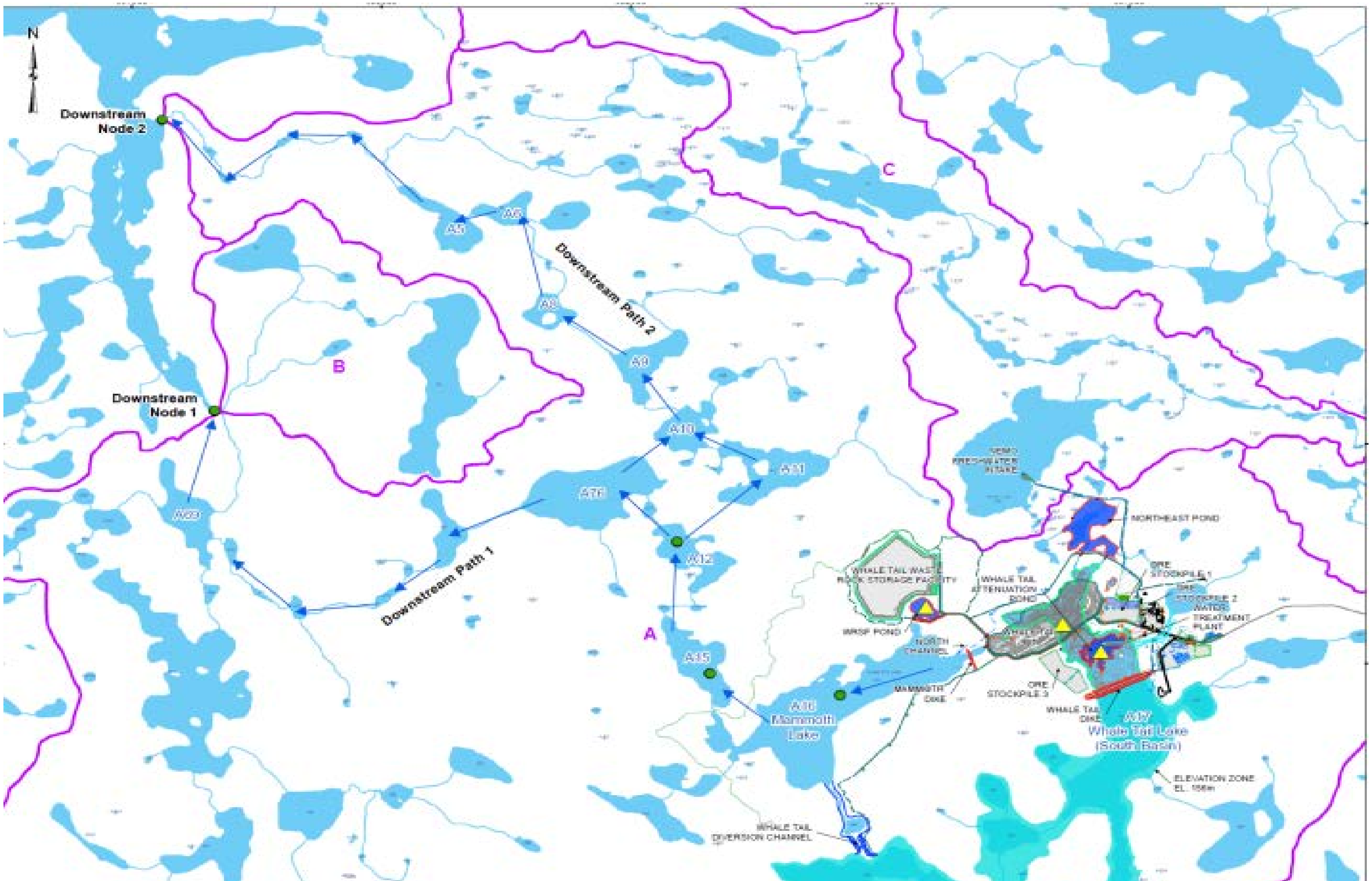
- Surface Water Quality
  - Dust and air emissions will have negligible effects on water quality
  - Flooding of Whale Tail Lake (South Basin) may result in increased concentrations of contaminants but given the short duration of flooding, the magnitude of effects is moderate.
  - Lakes and Rivers of cultural importance such as Innugugayualik and Pipedream lakes & tributaries of the Meadowbank River are not expected to be impacted
  - Changes to the downstream receiving environment from Mammoth Lake to Node 2 in one parameter over the long term (i.e. Phosphorus) with a return to baseline condition post-closure

ᓇᐃᓵᖅᓯᒪᔪᖅ ᖃᓄᐃᖓᓂᐅᔪᓂᑦ ᑲᔪᓯᔪᑦ...

ᐅᖃᓚᒫᒐᖅ 6 - ᐃᒪᑦᑎᐊᕙᐃᑦ ᐊᕙᑎᖏᑦ

- ᓄᓇᐅᑉ ᖄᖓᓂᑦ ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᖓ
  - ᐳᔪᕐᑲᑖᖅ ᐊᒻᒪᓗ ᓯᓚᒧᑦ ᐊᓂᐊᔪᑦ ᒥᑭᑦᑐᒥᒃ ᖃᓄᐃᖓᓕᖅᑎᑦᑎᓂᖅᑲᖅᓂᐊᖅᑐᑦ ᐃᒪᐅᑉ ᖃᓄᐃᓐᓂᖓᓄᑦ
  - ᐃᒻᒥᖅᑐᐃᓂᖅ Whale Tail ᑕᓯᕐᒥᑦ (ᓂᒋᐊᓂᕐ) ᐊᖏᓪᓕᑎᑦᑎᑐᐃᓐᓇᓇᐊᓕᒃ ᑲᑎᓯᒪᔪᓂᑦ ᐱᐅᖏᑦᑐᓂᑦ ᑭᓯᐊᓂ ᓇᐃᑦᑐᒥᑦ ᐃᒻᒥᖅᑐᐃᓂᖅ, ᐊᖏᓂᓇᔭᖓᑕ ᖃᓄᐃᖓᓕᖅᑎᑦᑎᓃᑦ ᖁᑎᐊᓃᕈᔪᒃᑐᖅ.
  - ᑕᓲᑦ ᐊᒻᒪᓗ ᑰᑦ ᐱᖅᑯᓯᓇᔭᐅᔪᒃᑯᑦ ᐱᒻᒪᓇᐅᕆᔭᐅᔪᑦ ᓲᕐᓗ ᐃᓐᓄᒍᒐᔪᐊᓕᒃ ᐊᒻᒪᓗ Pipedream ᑕᓲᑦ ᐊᒻᒪᓗ ᐊᐳᖅᑎᓐᓅᑑᑉ ᑰᖓᓃᑦᑐᑦ ᓂᓇᐅᕆᔭᐅᔪᑦ ᐊᒃᑐᖅᑕᐅᔾᔮᙱᓐᓂᖏᓐᓄᑦ
  - ᐊᓯᐊᖑᕐᓃᑦ ᑰᒃᑐᓄᑦ Mammoth ᑕᓯᕐᒥᑦ Node 2-ᒧᑦ ᐊᑕᐅᓯᕐᒥᑦ ᑭᓪᓕᒋᔭᐅᔪᒥᑦ ᐊᑯᓂᐅᔪᒥᑦ (ᓲᕐᓗ Phosphorus) ᐅᑎᕐᓗᓂ ᑭᓪᓕᒋᔭᐅᔪᓄᑦ ᖃᓄᐃᓐᓂᕐᓄᑦ ᐅᒃᑯᐊᖅᓯᒪᓕᖅᑎᓪᓗᒍ

FEIS SUMMARY – WATER QUALITY
ᑭᖑᓪᓚᖅᐹᒥᑦᐊᕙᑎᓕᕆᓂᕐᒧᑦᑎᑎᖅᑲᕐᒧᑦᓇᐃᓵᖅᓯᒪᔪᑦ-ᐃᒪᐅᑉᖃᓄᐃᓐᓂᖓ


N
Downstream Node 2
Downstream Node 1
B
C
A
A5
A6
A8
A9
A10
A11
A76
A20
A12
A15
Downstream Path 1
Downstream Path 2
NEMO FRESHWATER INTAKE
NORTHEAST POND
ORE STOCKPILE 1
ORE STOCKPILE 2
WATER TREATMENT PLANT
WHALE TAIL WASTE ROCK STORAGE FACILITY
WHALE TAIL ATTENUATION POND
WRSF POND
NORTH CHANNEL
MAMMOTH DIKE
ORE STOCKPILE 3
WHALE TAIL DIKE
A16 Mammoth Lake
A17 Whale Tail Lake (South Basin)
ELEVATION ZONE EL. 156m
WHALE TAIL DIVERSION CHANNEL

FEIS SUMMARY – FISH AND FISH HABITAT
ᑭᖑᓪᓕᖅᐹᒥᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᑎᑎᖅᑲᕐᒧᑦ ᓇᐃᓵᖅᓯᒪᔪᑦ - ᐃᖃᓗᐃᑦ ᐃᓂᒋᔭᖏᓪᓗ

Summary of Results continued…

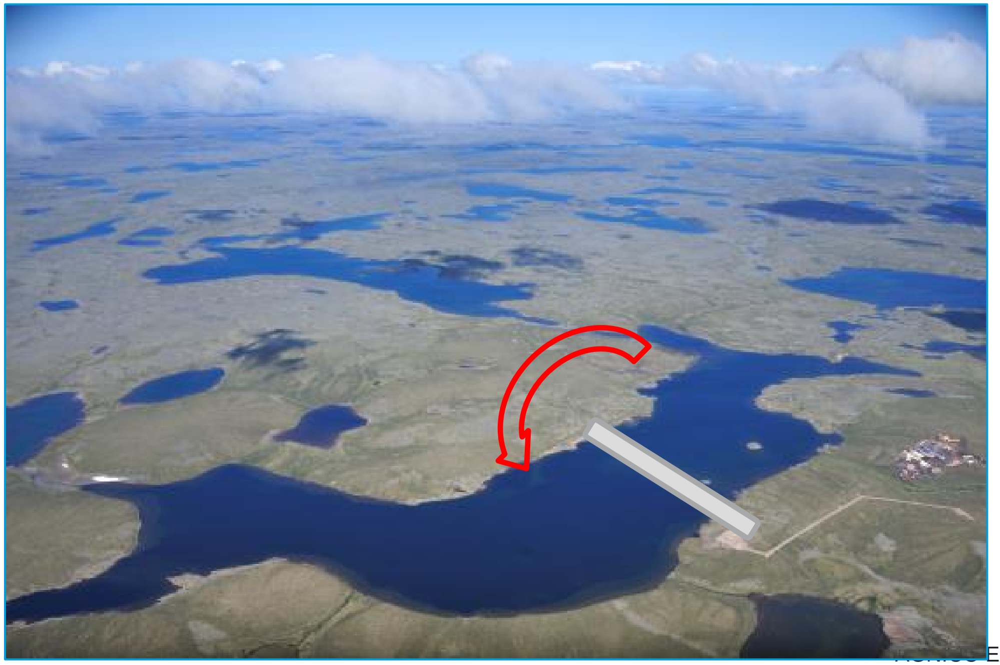
- Fish and Fish Habitat
  - Indirect effects to fish and fish habitat are predicted
  - Measurable effects within the local study area including dewatering of Whale Tail Lake (north basin) and flooding of Whale Tail Lake (South Basin)
  - Permanent habitat loss due to Whale Tail Dike and Mammoth Dike footprints
  - Downstream changes to flows
  - Reflooding Whale Tail Lake (North Basin), breaching the dikes and returning the water levels and flows to the natural levels

ᓇᐃᓵᖅᓯᒪᔪᖅ ᖃᓄᐃᖓᓂᐅᔪᓂᑦ ᑲᔪᓯᔪᑦ…

- ᐃᖃᓗᐃᑦ ᐃᓂᒋᔭᖏᓪᓗ
  - ᑕᐃᑲᙵᐅᙱᑦᑐᖅ ᖃᓄᐃᖓᓕᖅᑎᑦᑎᓂᐅᔪᑦ ᐃᖃᓗᖕᓄᑦ ᐃᓂᒋᔭᖏᓐᓄᑦᓗ ᓂᕆᐅᒋᔭᐅᔪᑦ
  - ᐆᒃᑐᕋᖅᑕᐅᔪᖕᓇᖅᑐᑦ ᖃᓄᐃᖓᓕᖅᑎᑦᑏᑦ ᖃᓂᑦᑐᒥᑦ ᖃᐅᔨᓴᐃᓂᕐᒥᑦ ᐃᓚᐅᑉᓗᑎᒃ ᐃᒪᐃᔭᐃᓂᖅ Whale Tail ᑕᓯᕐᒥᑦ (ᐅᐊᖕᓇᖓᓂᑦ) ᐊᒻᒪᓗ ᐃᒻᒥᖅᑐᐃᓂᖅ Whale Tail ᑕᓯᕐᒥᑦ (ᓂᒋᐊᓂᑦ)
  - ᐊᓯᐅᔨᓯᒪᐃᓐᓇᕐᓂᖅᑕᖅᑲᕐᓗᓂ ᐃᓂᐅᔪᓂᒃ Whale Tail ᑕᓯᕐᒥᑦ ᐃᒪᕐᒥᒃ ᑲᑎᖅᓱᐃᕝᕕᖕᒥᑦ ᐊᒻᒪᓗ Mammoth ᐃᓂᖓᓃᑐᓄᑦ
  - ᑰᒃᑐᑦ ᑕᐅᓄᖓ ᐊᓯᐊᙳᕐᓗᑎᒃ ᑯᕕᔪᑐᑦ
  - ᐃᒻᒥᖅᑐᐃᒃᑲᓐᓂᕐᓂᖅ Whale Tail ᑕᓯᕐᒥᑦ (ᐅᐊᖕᓇᖓᓂᑦ), ᑐᖓᐅᑦᑎᔪᖅ ᐃᒪᕐᓂᒃ ᑲᑎᖅᓱᐃᕝᕕᖕᓂᑦ ᐊᒻᒪᓗ ᐅᑎᖅᖢᑎᒃ ᐃᒪᐃᑦ ᓇᓃᓐᓂᕆᔭᖏᓐᓄᑦ ᐊᒻᒪᓗ ᑯᕕᔪᓄᑦ ᐃᓕᖅᑯᓯᑐᖅᑲᖏᓐᓄᑦ ᓇᓃᓐᓂᐅᔪᓄᑦ

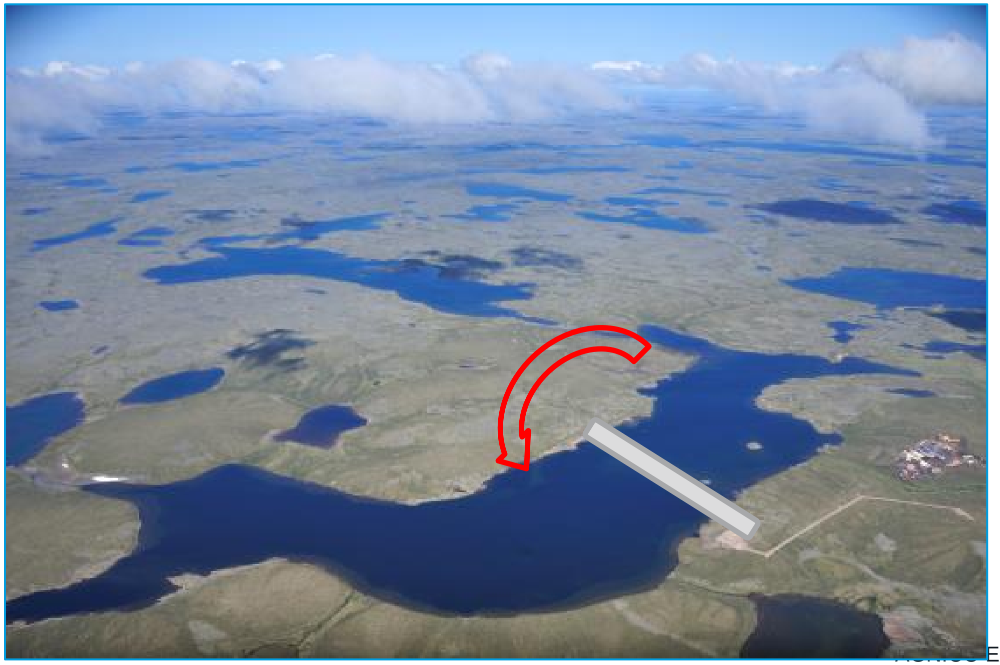
FISHERIES OFFSETTING - WHALE TAIL LAKE (NORTH BASIN) FISHOUT
ᐃᖃᓗᓕᕆᓂᕐᒧᑦᐋᖅᑭᒃᓱᐃᓂᖅ - WHALE TAIL ᑕᓯᖅ (ᐅᐊᖕᓇᖕᒐᓂᑦ) ᐃᖃᓗᐃᔭᐃᓂᖅ

- Fishout is planned to begin in open water season of 2018
- Fish transferred from Whale Tail Lake North Basin to South Basin
- Conceptual Whale Tail Lake (North Basin) Fishout Workplan to NIRB/ DFO on Feb 28, 2017.
- The benefit of backflooding Whale Tail is to create a “reservoir” for fish/ fisheries productivity during operations

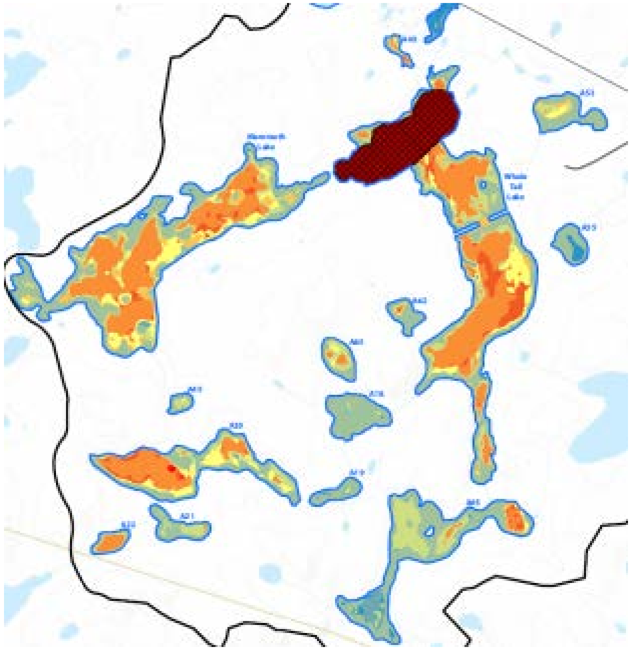


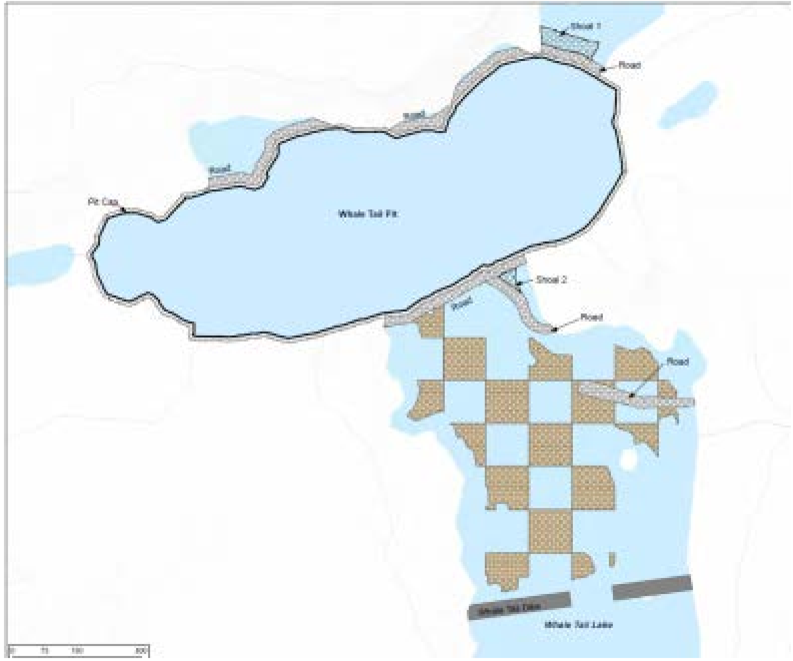
FISHERIES OFFSETTING - WHALE TAIL LAKE (NORTH BASIN) FISHOUT
ᐃᖅᑲᓗᓕᕆᓂᕐᒧᑦᐋᖅᑭᒃᓯᐃᓂᖅ - WHALE TAIL ᑕᓯᖅ (ᐅᐊᖕᓇᖕᖓᓂᕐ) ᐃᖅᑲᓗᐃᔭᐃᓂᖅ

- ᐃᖅᑲᓗᐃᔭᐃᓂᖅᑲᓇᐊᕈᒪᔪᑦ ᐊᐅᔭᐅᓕᖅᐸᑦ 2018-ᒥᑦ
- ᐃᖅᑲᓗᐃᑦ ᓈᑕᐅᓗᑎᒃ Whale Tail ᑕᓯᕐᒥᑦ ᐅᐊᖕᓇᖕᖓᓂᑦ ᓂᒋᐊᓄᑦ
- ᑕᐅᑐᒐᐅᔪᖅ Whale Tail ᑕᓯᕐᒥᑦ (ᐅᐊᖕᓇᖕᖓᓂᕐ) ᐃᖅᑲᓗᐃᔭᐃᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ ᐊᕙᑎᓕᕆᔨᒃᑯᓐᓄᐊᖅᑕᐅᓂᐊᕐᓂᖕᖓᓄᕐ/ᐃᖅᑲᓗᓕᕆᔨᒃᑯᓐᓄᑦ ᓴᕗᐊᓇ 28, 2017-ᒥᑦ.
- ᐃᑲᔪᐃᓂᖅ ᐃᒪᐃᔭᐃᓂᕐᒧᑦ Whale Tail ᑕᓯᕐᒥᑦ "ᐃᒪᖅᑲᐅᓯᕝᕙᓕᐅᕐᓂᕐᒧᑦ" ᐃᖅᑲᓗᖕᓄᕐ/ᐃᖅᑲᓗᐃᑦ ᐊᒥᓱᓕᐅᕈᖕᓇᕐᓂᖕᒋᓐᓄᑦ ᐊᐅᓛᖅᑎᑦᑎᓂᐅᑎᓪᓗᒍ



CONCEPTUAL FISHERIES OFFSETTING PLAN
ᑕᐅᑐᒐᐅᔪᖅ ᐃᖃᓗᖕᓂᑦ ᐋᖅᑭᒃᓯᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ


Whale Tail Lake

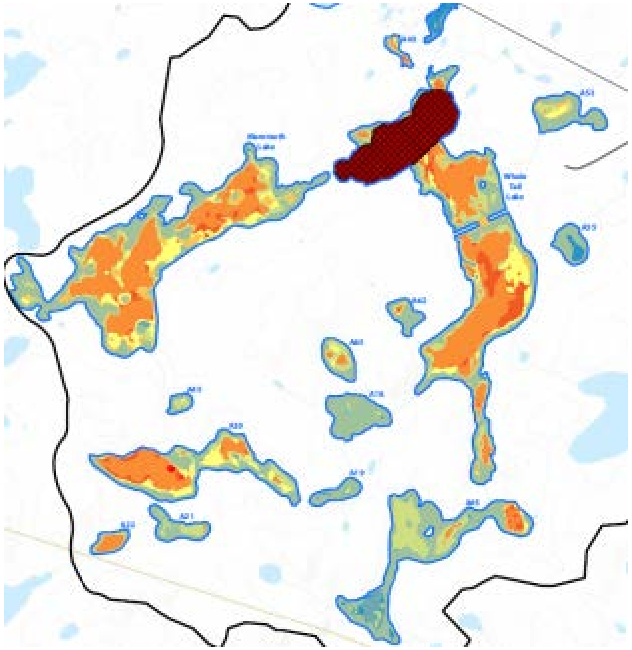

Shoal 1
Road
Road
Road
Pit Cap
Whale Tail Pit
Shoal 2
Road
Road
Road
Whale Tail Dike
Whale Tail Lake
0
75
150
300

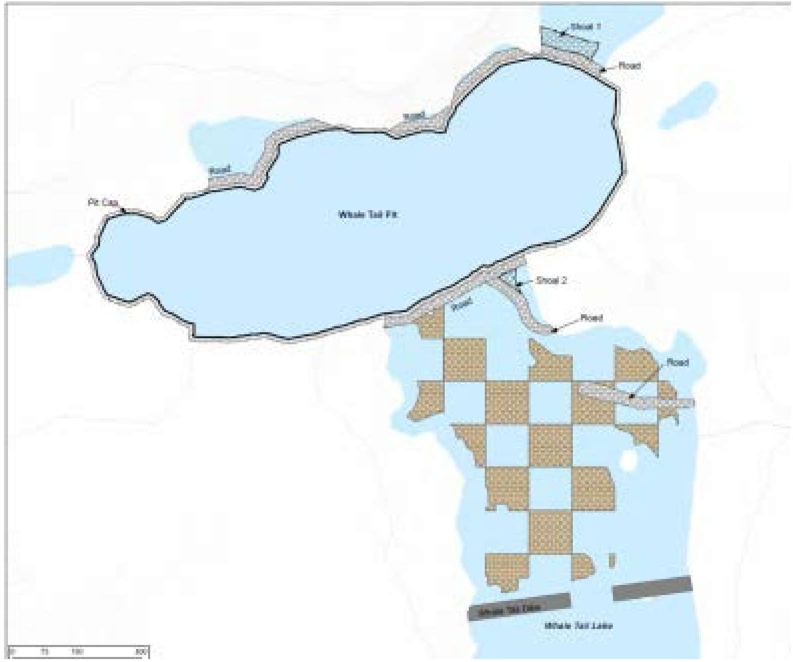
- For consistency, the Meadowbank Habitat Evaluation Procedure (HEP) methods were used for the Whale Tail Pit Project Conceptual Offsetting Plan
- Volume 8 – Appendix 8-E.4 Conceptual Offsetting Plan

- ᐊᔾᔨᒌᒃᑎᑦᑎᓂᕐᒧᑦ, ᐊᐳᖅᑎᖕᓈᖅᑐᒥᑦ ᐃᓂᒋᔭᐅᔪᓂᒃ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᒃᓴᐃᑦ (HEP) ᐋᖅᑭᐅᒪᔪᑦ ᐊᑐᖅᑕᐅᓚᐅᖅᑐᑦ Whale Tail ᓄᓇᒥᑦ ᐃᓗᑦᑐᖅᓯᒪᔪᕐᒧᑦ ᑕᐅᑐᒐᐅᔪᓄᑦ ᐋᖅᑭᒃᓯᐃᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᒧᑦ
- ᐅᖃᓕᒫᒐᖅ 8 - ᑎᑎᖅᑲᖅ ᐃᓚᒋᔭᐅᔪᖅ 8-E.4 ᑕᐅᑐᒐᐅᔪᑦ ᐋᖅᑭᒃᓯᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ

CONCEPTUAL FISHERIES OFFSETTING PLAN
ᑕᐅᑐᒐᐅᔪᖅ ᐃᖃᓗᓐᓄᑦ ᐋᖅᑭᒃᓯᓂᖅᒧᑦ ᐸᖅᓇᐅᑎ

AGNICO EAGLE


Mammoth Lake
Whale Tail Lake


Shoal 1
Road
Road
Road
Pit Cap
Whale Tail Pit
Shoal 2
Road
Road
Road
Road
Whale Tail Dike
Whale Tail Lake
0
75
150
300

- Conceptual offsetting may include:
  - Onsite habitat creation (new habitat creation, improved the connection between Mammoth and Whale Tail Lake);
  - Offsite habitat creation (e.g., Arctic grayling spawing pads); and
  - Complimentary measures (including research and sustainable projects that are intended to provide direct benefits to the community of Baker Lake)

- ᑕᐅᑐᒐᐅᔪᑦ ᐋᖅᑭᒃᓯᓂᖅᒧᑦ-ᒥᑦ ᐃᓚᐅᔪᓐᓇᖅᑐᑦ:
  - ᐃᓂᐅᔪᒥᑦ ᐃᓂᓕᐅᕆᓂᖅ (ᓄᑖᑦ ᐃᓂᐅᔪᓕᐅᖅᑐᓂ, ᐱᐅᓯᕆᐊᖅᑐᕆᑦ ᑲᑎᓐᓂᖕᕆᑦ ᐊᑯᓐᓂᖕᕆᓐᓂᑦ Mammoth ᐊᒻᒪᓗ Whale Tail ᑕᓰᑦ);
  - ᐃᓂᐅᑉ ᓯᓚᑖᓂᑦ ᐃᓂᕆᔭᐅᔪᓕᐅᕆᓂᖅ (ᓲᖅᓗ ᐊᒥᕋᖅᓗᒃᑐᐃᑦ ᒪᓐᓂᓕᐅᖅᕕᖕᕆᓐᓂᑦ); ᐊᒻᒪᓗ
  - ᐃᑲᔪᐃᓂᖅᒧᑦ ᐱᓕᕆᐊᖑᔪᑦ (ᐃᓚᐅᑉᓗᑎᒃ ᖃᐅᔨᓴᐃᓂᖅ ᐊᒻᒪᓗ ᓱᖅᑯᓯᐊᙱᑎᑦᑎᓂᖅᒧᑦ ᐱᓕᕆᐊᑦ ᑐᓂᓯᓂᐅᔪᒪᔪᑦ ᐃᑲᔫᑎᓂᒃ ᖃᒪᓂᑦᑐᐊᖅᒧᑦ)

CONCEPTUAL FISHERIES OFFSETTING PLAN
ᑕᐅᑐᒐᐅᔪᖅ ᐃᖃᓗᖕᓄᑦ ᐋᖅᑭᒃᓱᐃᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ

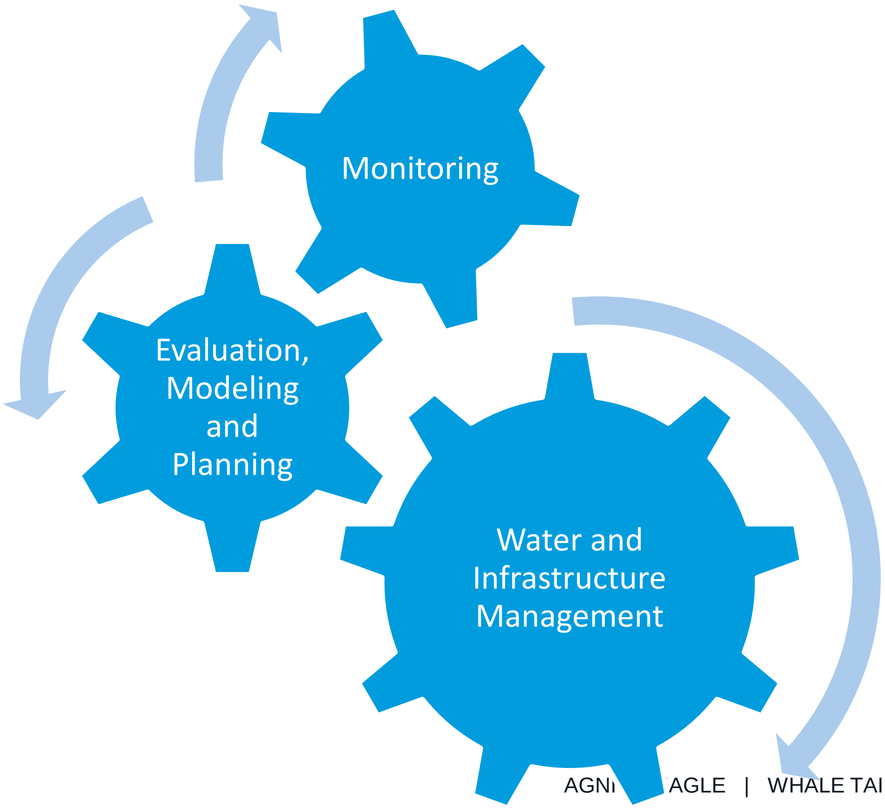
- Agnico Eagle is committed to the concepts presented in the offsetting plan
- Will continue to work with DFO and KivIA to finalize:
  - The Final Offsetting Plan
- Committed to finalizing the complimentary measures including:
  - research projects to provide regional benefits, and
  - sustainability projects that are intended to provide direct benefits to the community of Baker Lake (example - research and studies for Baker Lake sewage treatment)

- ᐊᒡᓃᑯᒃᑯᑦ ᑕᐅᑐᒐᐅᔪᓂᒃ ᐱᔭᖏᓐᓂᒃ ᐋᖅᑭᒃᓱᐃᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᒥᒃ ᐱᓂᐊᕐᓂᖃᖅᑐᑦ
- ᑲᔪᓯᓂᐊᖅᑐᑦ ᐱᓕᕆᖃᑎᒋᓂᖏᓐᓂᒃ ᐃᖃᓗᓕᕆᔨᒃᑯᓐᓂᑦ ᐊᒻᒪᓗ ᑮᐅᐄᒃᑯᓂᑦ ᑭᖑᓪᓕᖅᐹᒃᑰᖅᑎᓪᓗᒋᑦ:
  - ᑭᖑᓪᓕᖅᐹᒃᑯᑦ ᐋᖅᑭᒃᓱᐃᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ
- ᐱᓂᐊᕐᓂᖃᖅᑐᑦ ᑭᖑᓪᓕᖅᐹᒃᑰᖅᑎᓪᓗᒋᑦ ᐃᑲᔪᐃᓂᕐᒧᑦ ᐱᓕᕆᐊᖑᔪᓂᑦ ᐃᓚᐅᔪᑦ:
  - ᖃᐅᔨᓴᐃᓂᕐᒥᒃ ᐱᓕᕆᐊᓂᒃ ᑐᓂᓯᔪᑦ ᑭᕙᓪᓕᕐᒧᑦ ᐃᑲᔫᑎᓂᒃ, ᐊᒻᒪᓗ
  - ᓱᕐᑯᓯᐊᙱᑎᑦᑎᓂᕐᒧᑦ ᐱᓕᕆᐊᕐᒥᑦ ᑐᓂᓯᓂᐅᔪᑦ ᐃᑲᔫᑎᓂᒃ ᖃᒪᓂᑦᑐᐊᕐᒧᑦ (ᐆᒃᑑᑎᒋᓗᒍ - ᖃᐅᔨᓴᐃᓃᑦ ᖃᒪᓂᑦᑐᐊᕐᒥᑦ ᖁᕐᕕᖕᒥᙶᖅᑐᓕᕆᕝᕕᖕᒧᑦ)

ADAPTIVE MANAGEMENT
ᐊᑐᓕᖅᑎᑦᑎᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᖅ

- Adaptive Management requires continuous monitoring, evaluation, modeling and planning, with a feedback loop for continuous improvement
- This will result in adapting infrastructure, management plans, and mitigation accordingly

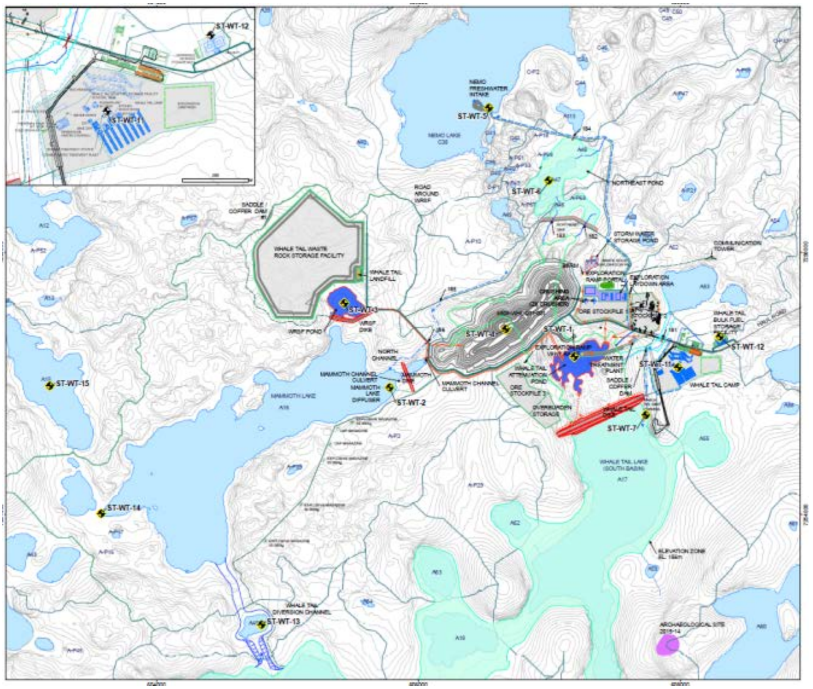
- ᐊᑐᓕᖅᑎᑦᑎᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᓂᖅ ᑲᔪᓯᔪᒥᒃ ᖃᐅᔨᒋᐊᕐᑲᑦᑕᕐᓂᕐᑲᕆᐊᕐᑲᖅᑐᖅ, ᐋᖅᑭᐅᒪᔪᓕᐅᕆᓗᓂ ᐊᒻᒪᓗ ᐸᕐᓇᐃᓂᕐᒥᑦ, ᑭᐅᔾᔪᑕᐅᔪᕐᑲᕐᓗᓂ ᑲᔪᓯᔪᒥᒃ ᐱᐅᓯᒋᐊᖅᑎᑦᑎᓂᕐᒧᑦ
- ᖃᓄᐃᖕᒐᓕᖅᑎᑦᑎᓂᕐᑲᕐᓂᐊᖅᑐᖅ ᐊᑐᓕᖅᑎᑦᑎᓂᕐᒧᑦ ᐱᕐᑯᑎᓂᒃ, ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᓂᒃ, ᐊᒻᒪᓗ ᐊᖕᒋᓗᐊᖕᒋᒋᐊᖅᑎᑦᑎᓂᐅᔪᓄᑦ


Monitoring
Evaluation, Modeling and Planning
Water and Infrastructure Management

ADAPTIVE MANAGEMENT
ᐊᑐᓕᖅᑎᑦᑎᓂᕐᒧᑦᐊᐅᓚᑦᑎᓂᖅ

- Applying lessons learned from Meadowbank
- Continuous improvement
- Transferable monitoring locations and approaches between sites and Type A Licenses including requirements for:
  - sampling and modeling

- ᐊᑐᕐᓗᒋᑦ ᐃᓕᑕᐅᔪᑦ ᐊᐳᖅᑎᓐᓈᖅᑐᒥᑦ
- ᑲᔪᓯᔪᒥᒃ ᐱᐅᓯᕆᐊᖅᑎᑦᑎᓂᖃᕐᓗᓂ
- ᓅᑕᐅᔪᓐᓇᖅᑐᓂᒃ ᖃᐅᔨᕆᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐃᓂᐅᔪᑦ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᔪᑦ ᐊᑯᓐᓂᖏᓐᓂᑦ ᐃᓂᐅᔪᑦ ᐊᒻᒪᓗ Type A ᓚᐃᓴᓐᓰᑦ ᐃᓚᐅᔪᑦ ᐱᔭᕆᐊᖃᖅᑐᑦ ᐅᑯᓇᙵ:
  - ᐆᒃᑐᕋᐃᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐋᖅᑭᐅᒪᔪᓕᐅᕆᓂᕐᒧᑦ


ST-WT-12
ST-WT-1
ST-WT-5
ST-WT-6
ST-WT-3
ST-WT-4
ST-WT-2
ST-WT-7
ST-WT-15
ST-WT-14
ST-WT-13
NEMO FRESHWATER INTAKE
NORTHEAST POND
WHALE TAIL WASTE ROCK STORAGE FACILITY
MAMMOTH LAKE
WHALE TAIL CAMP
WHALE TAIL LAKE (SOUTH BASIN)
WHALE TAIL DIVERSION CHANNEL
ARCHAEOLOGICAL SITE

AGNICO EAGLE

Trading Symbol:
AEM on TSX & NYSE

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info@agnicoeagle.com

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