

Hearne

5034

Tuzo



Gahcho Kué (Kennady Lake)

Highlights of Mine Development and Operation

❖ Impact Area	1,200 hectares (12 km ²)
❖ Kimberlite Resource	31 million tonnes
❖ Kimberlite Mined (over life of mine)	30 million tonnes
❖ Average grade	1.4 cpt
❖ Estimated Capital Cost	\$C 825 million
❖ Annual Revenue	\$C 342 million
❖ Operating Cost	\$C 65 per tonne
❖ Annual Production Rate	2.1 million tonnes
❖ Life of Project (Construction to Closure)	20 years
❖ Annual Employment (Operation of mine)	400 persons

2005 Study



Gahcho Kué (Kennady Lake)

Highlights of Mine Design

- ❖ Draw down of Kennady Lake
- ❖ Phased excavation of pits
- ❖ Use of country rock for construction
- ❖ Separating contact water with high total dissolved solids from non-contact water
- ❖ No chemicals used in processing
- ❖ Using two of the mined out pits to place country rock, processed kimberlite and contact water
- ❖ Refilling of Kennady Lake

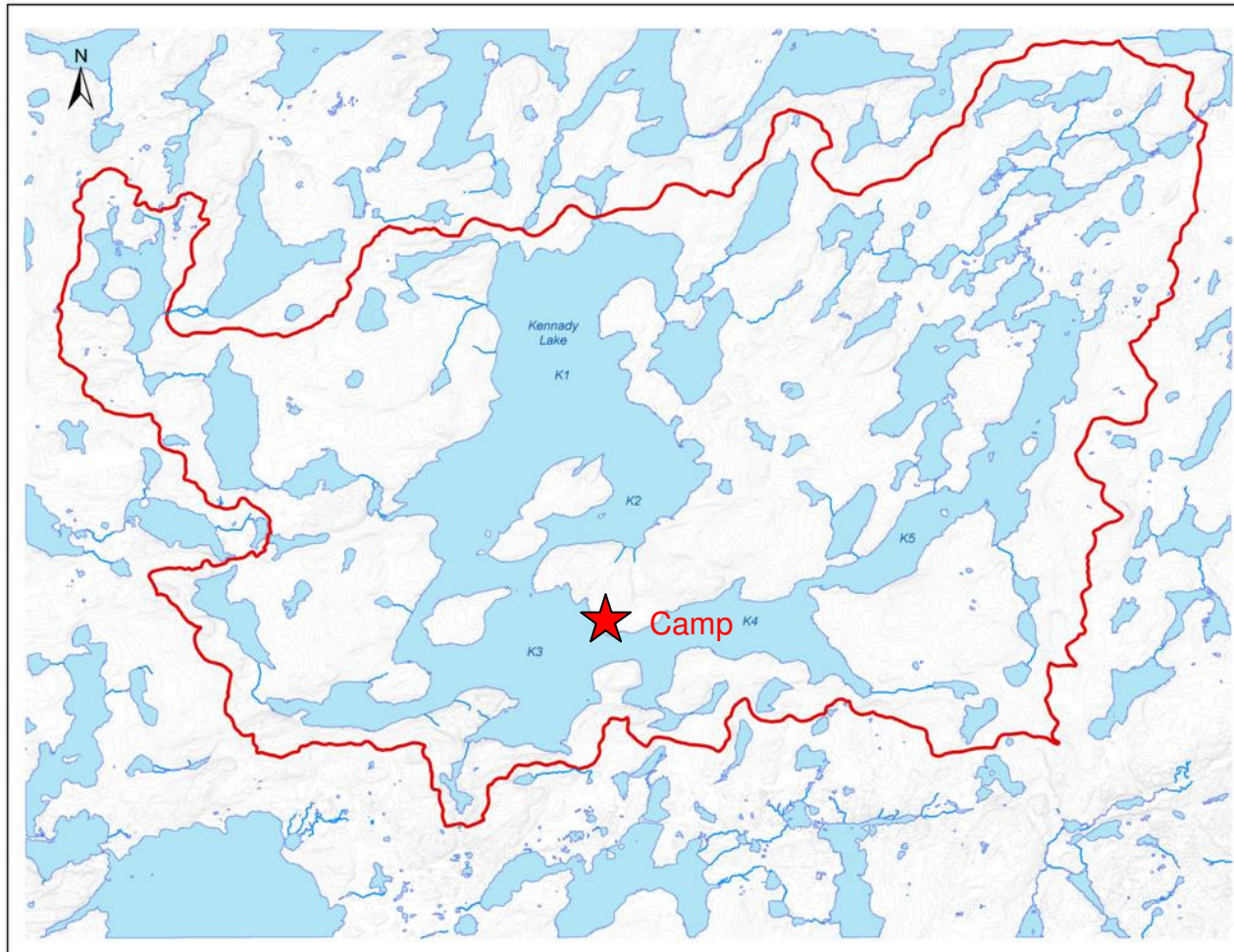
- ❖ Design principles
 - Minimize development footprint
 - Minimize refill time for Kennady Lake
 - Facilitate progressive reclamation



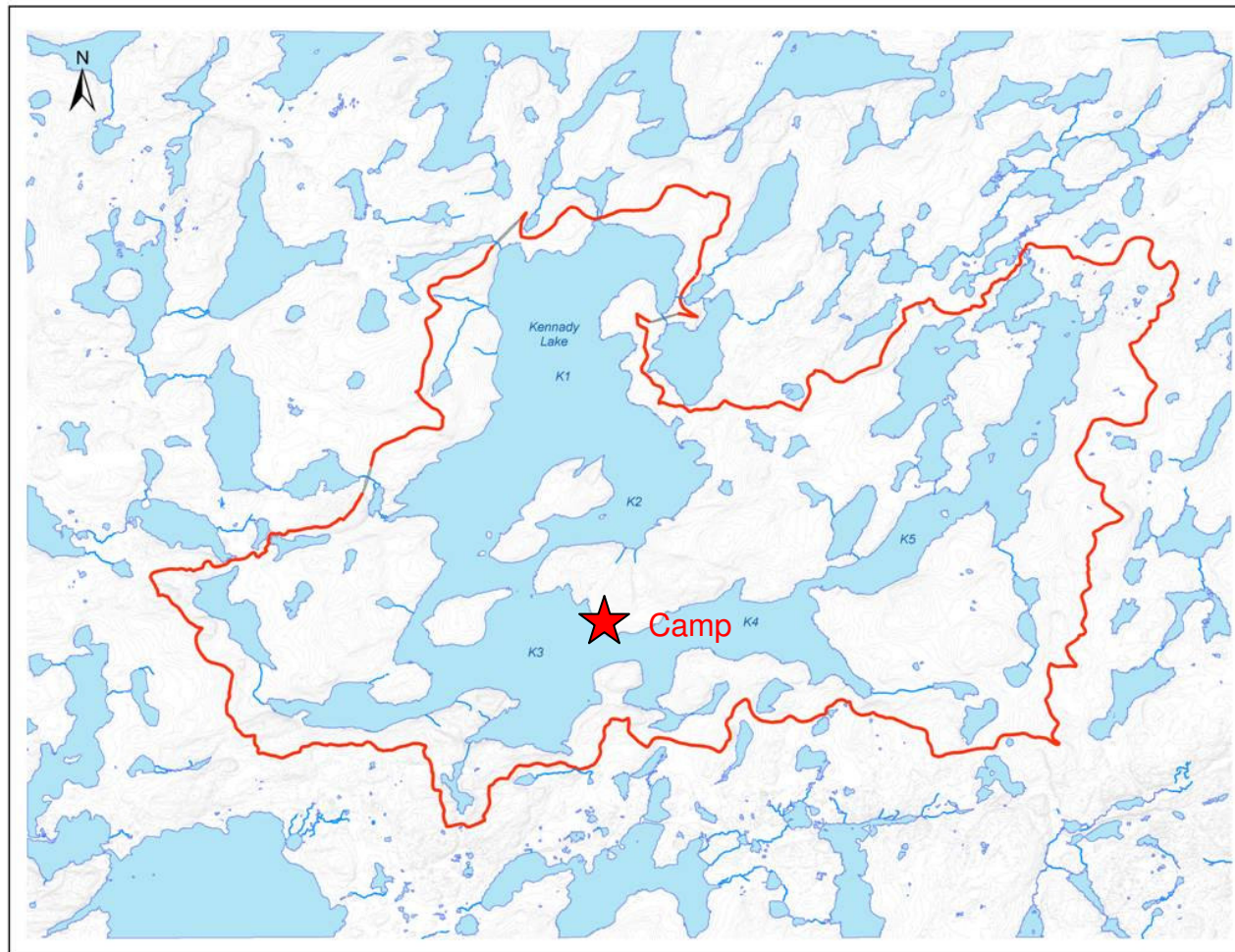
Water Management

- ❖ Drawing down of Kennady Lake and temporary re-alignment of the watershed boundaries.
- ❖ Flows during construction, operations and closure.

Baseline watershed boundary

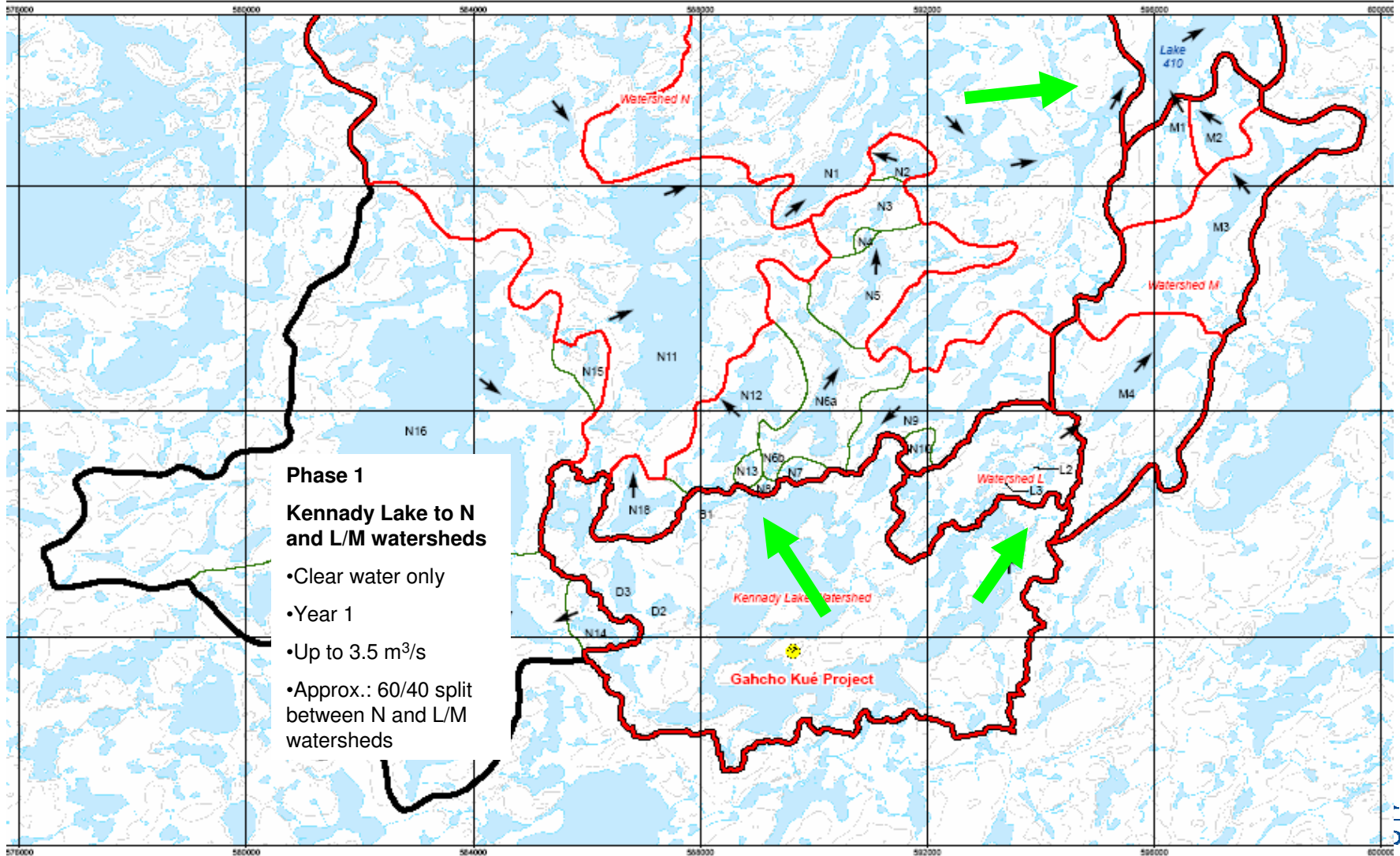


Re-aligned watershed boundary



Downstream Flows

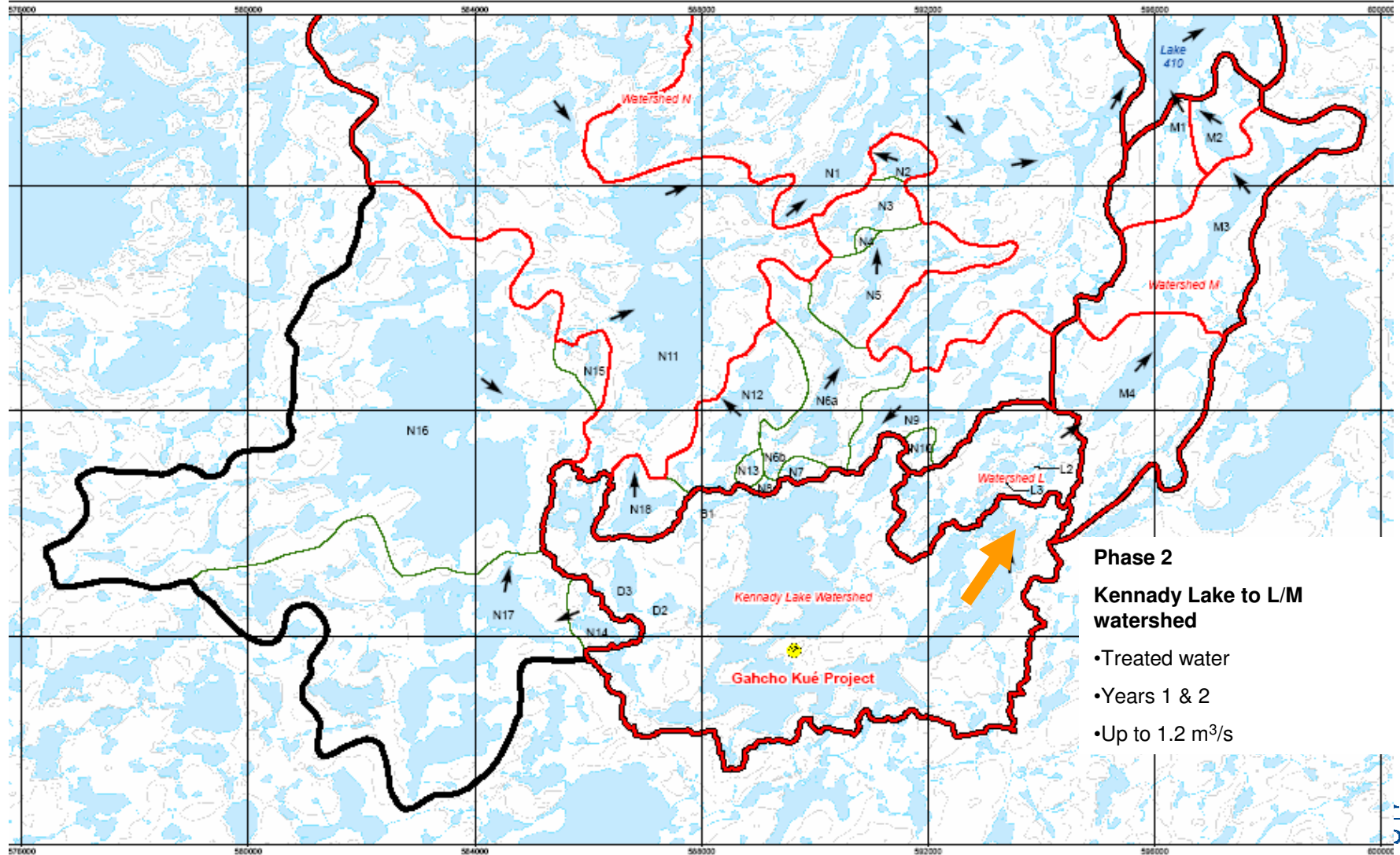
Construction Phase 1 Drawdown





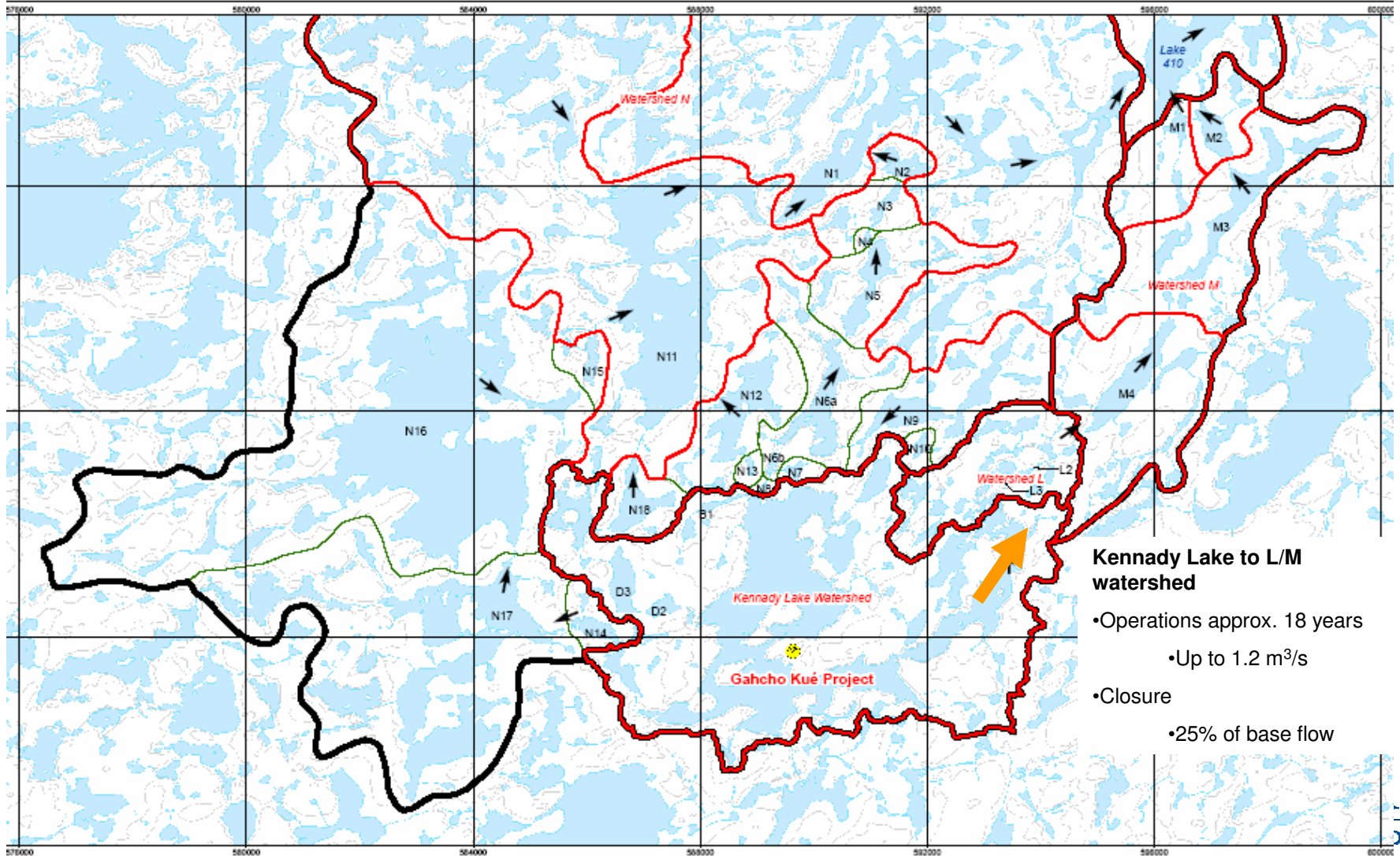
Downstream Flows

Construction Phase 2 Drawdown



Downstream Flows

Operations & Closure



- Kennedy Lake to L/M watershed**
- Operations approx. 18 years
 - Up to 1.2 m³/s
 - Closure
 - 25% of base flow

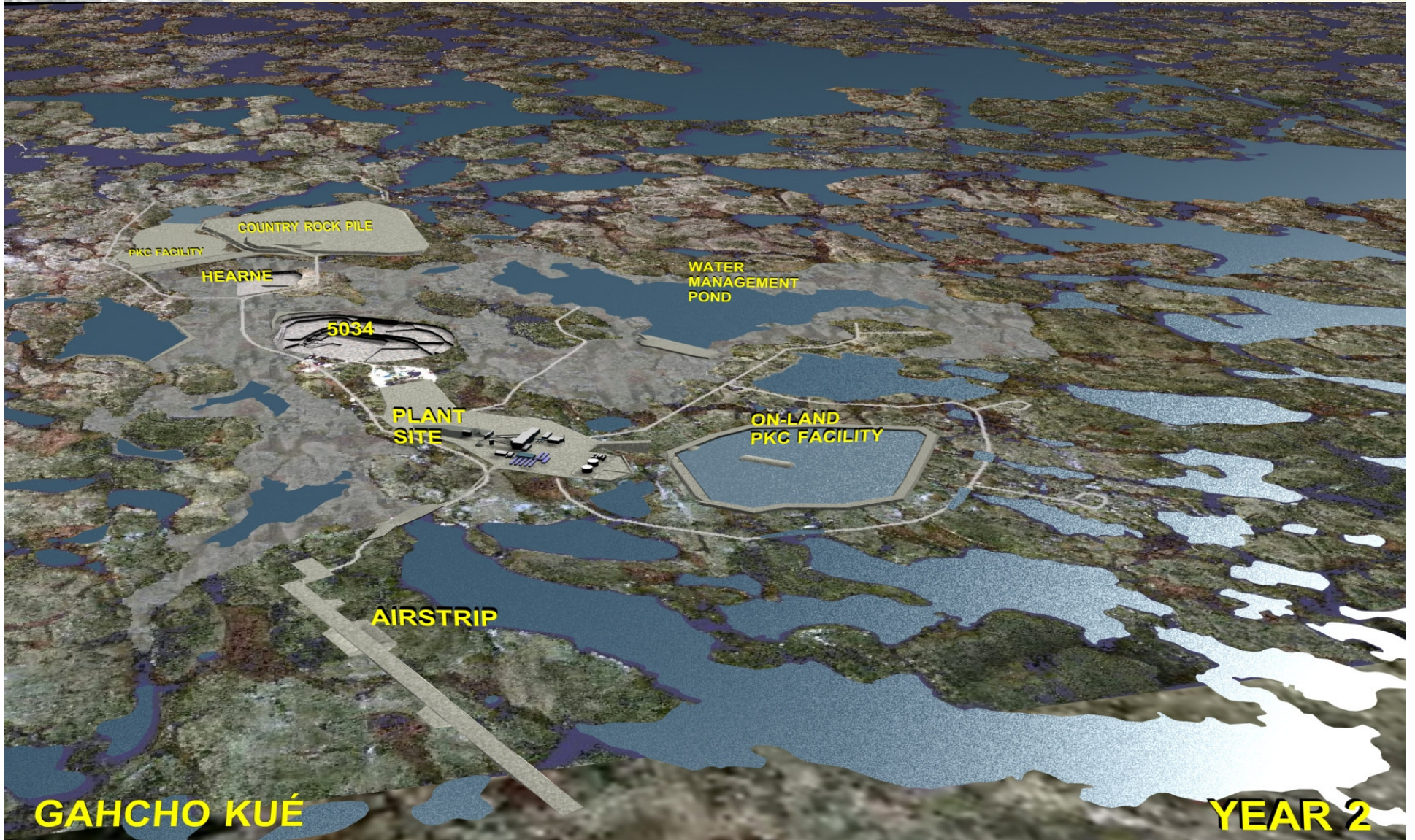
Lake at Outset of Drawdown



GAHCHO KUÉ

CONST. YR 1

Construction Complete



Mining – Late Life

