



DE BEERS
CANADA

Technical Scoping Hearing
April 10, 2006

GAHCHO KUÉ PROJECT



Presentation

- Introductions
- De Beers
- Project Design
- Issues Scoping
- Closing Remarks

Introductions

- **Maxwell Morapeli**, Project Manager, De Beers
- **Dr. Robin Johnstone**, Environmental Affairs Manager, NWT Projects De Beers
- **Paul Cobban**, Sr. EA & Permitting Coordinator, De Beers
- **Cathie Bolstad**, Public & Corporate Affairs Manager , NWT Projects, De Beers
- **Alex Forsythe**, Study Manager, AMEC
- **Tim Bekhuys**, Environmental Assessment Manager, AMEC
- **Dr. Paul Cox**, Human Environment Discipline Lead, AMEC
- **Christine Godwin-Shepherd**, Wildlife Discipline Lead, AMEC
- **Tim Slaney**, Fisheries Discipline Lead, AMEC
- **Timm Rochon**, Project Manager Public Consultation, Terriplan Consultants

De Beers Experience



Open Pit



Underground



Sea Bed



Coastal

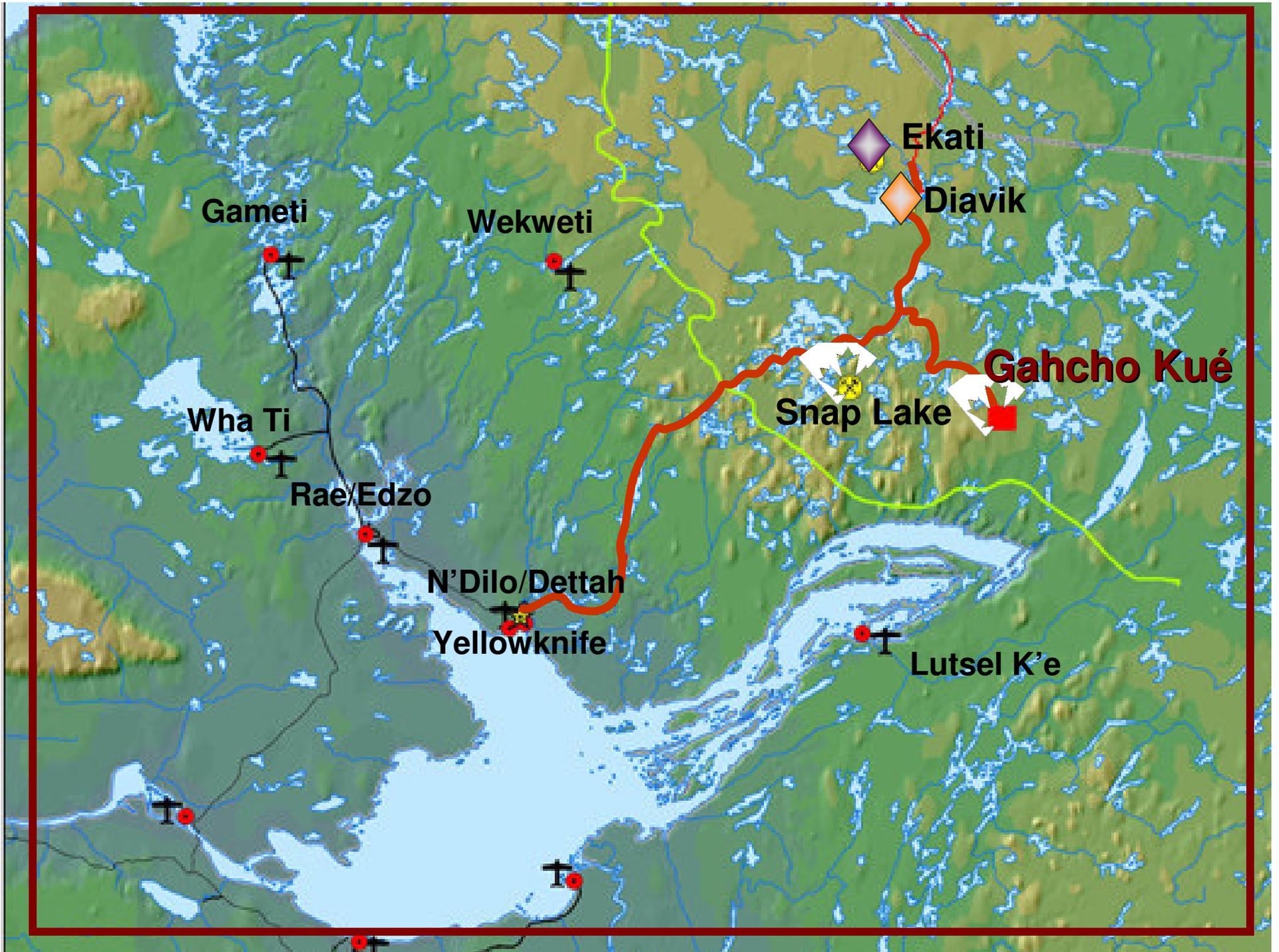


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Experience in the NWT

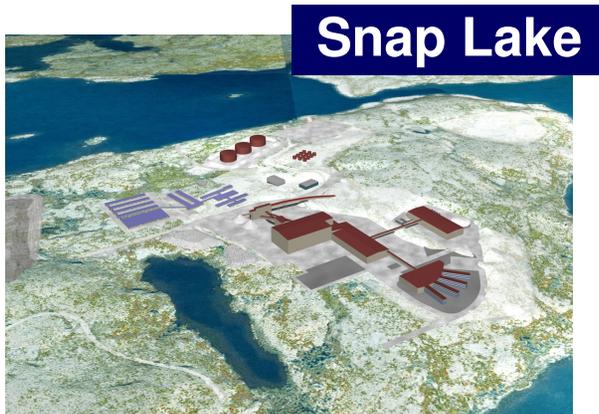
- Snap Lake



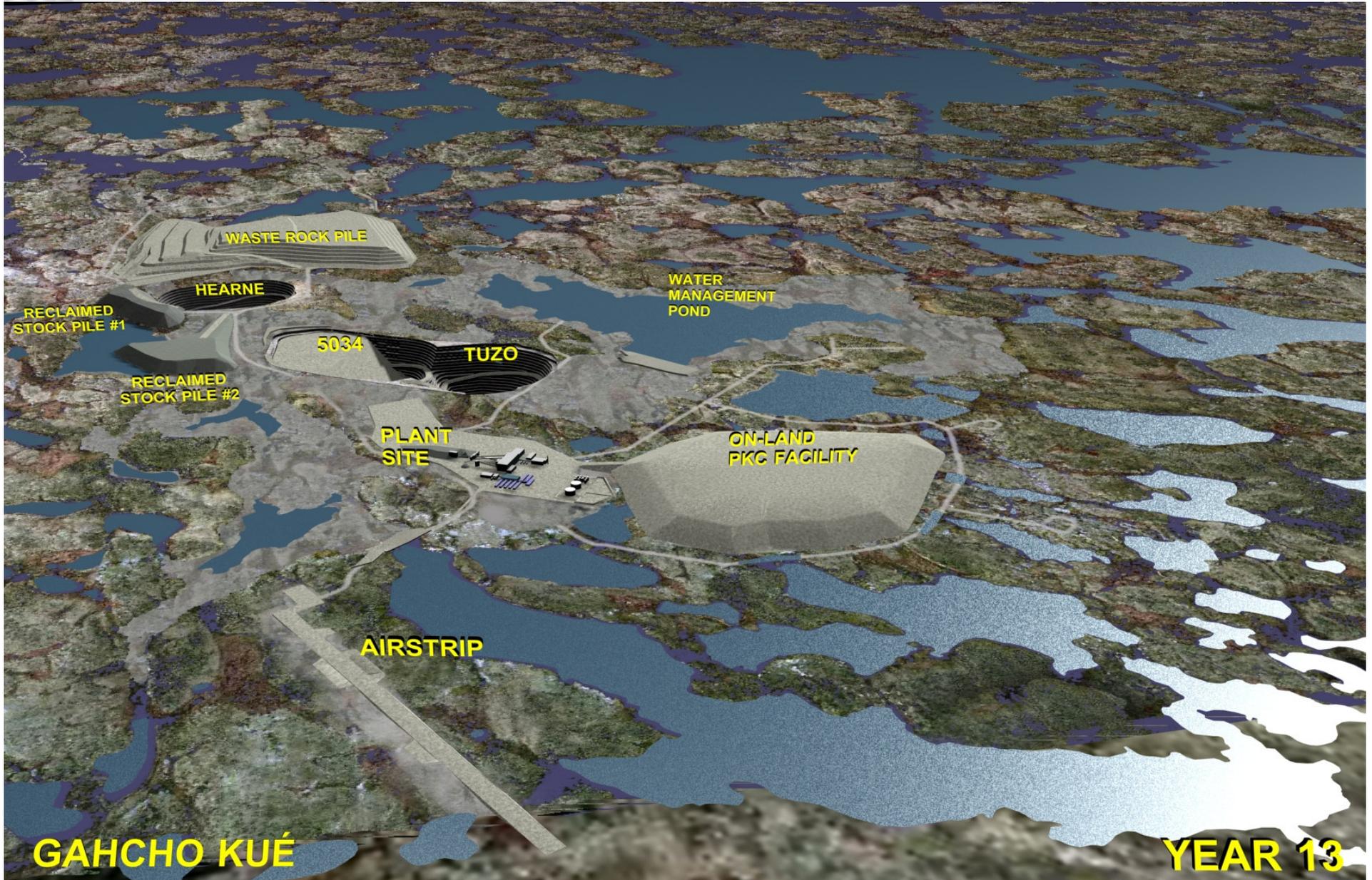


Gahcho Kué design.....

- Based upon experience
 - Working in northern environments
 - As Proponent for Snap Lake and Victor projects
- Lessons learned from Snap Lake and other diamond mines have been incorporated into this project
- Synergies and opportunities identified from other projects and ongoing experiences will be incorporated



What we are proposing to do....



As with other northern diamond mines...

- Remove overlying water to access Kimberlite
- Open pit & possible underground workings
- Waste rock piles
- Processed Kimberlite storage facilities
- Roads on site
- Process plant
- Vehicles
- Blasting
- Air strip
- Power plant
- Fuel storage
- Process plant
- Accommodations & Offices

As with other northern diamond mines...

- Workshops
- Incinerator
- Sewage Treatment Plant
- Water Treatment Plant
- Potable water treatment
- Explosive storage
- Economic opportunities
 - Direct and indirect employment
 - Business opportunities
- Hiring priorities
- Recruitment, training and employment
- Education and training
- Literacy programs
- Career development
- Safety, Health & Environmental Management Systems



Examples of mitigation included in the design...

- Pit backfilling
 - reduces time for Kennady Lake to refill
 - reduces footprint
 - can create additional fisheries habitat
 - disposal of elevated TDS pit water
- Processed Kimberlite Facilities
 - submerged deposition avoids ice build-up and will minimize dust
 - closure with very thick rock cap
 - storage of elevated TDS pit water
 - lined facility controls seepage
- Progressive reclamation during operation
 - Closure of major project elements starts early in mine life (Year 10)

Management and Monitoring

Monitoring Plans

- Aquatic Effects Monitoring Program
- Air Quality & Emissions Management and Monitoring Plan
- Wildlife Management and Monitoring Plan
- ARD and Geochemical Characterization Plan

Management Plans

- Habitat Compensation Design Plan
- Spill Contingency Plan
- Emergency Response Plan
- Domestic Waste and Sewage Management Plan
- Hazardous Materials Management Plan
- Quarry Management Plan
- Waste Rock and Processed Kimberlite Management Plan
- Water Management Plan
- Closure & Reclamation Plan



Environmental Assessment Priorities

Human Environment Issues

- What will the contribution of the project to long term economic sustainability in the north be?
- What will the contribution of the project be to northern and aboriginal businesses?
- Will the North benefit from employment opportunities from the project?
- How will the project impact the sustainability of smaller and larger communities?
- Will the project contribute to a decrease in labour availability and what will the effects of that be?
- What are the effects of the project on community wellness?

Biophysical Environment Issues

- How will the project affect Kennady Lake ecosystem in the long term?
- How can the site be successfully reclaimed?
- How will waste rock be managed to mitigate release of contaminants to the ecosystem?
- How do we manage groundwater flows with confidence?
- What will be the effect of reduced downstream water flows while the Kennady Lake level is being restored?
- How will the project affect the sustainability of the Bathurst caribou herd?
- Will there be project-related mortality of carnivores and how would it impact those populations?
- How will sensory disturbances from the project impact wildlife?

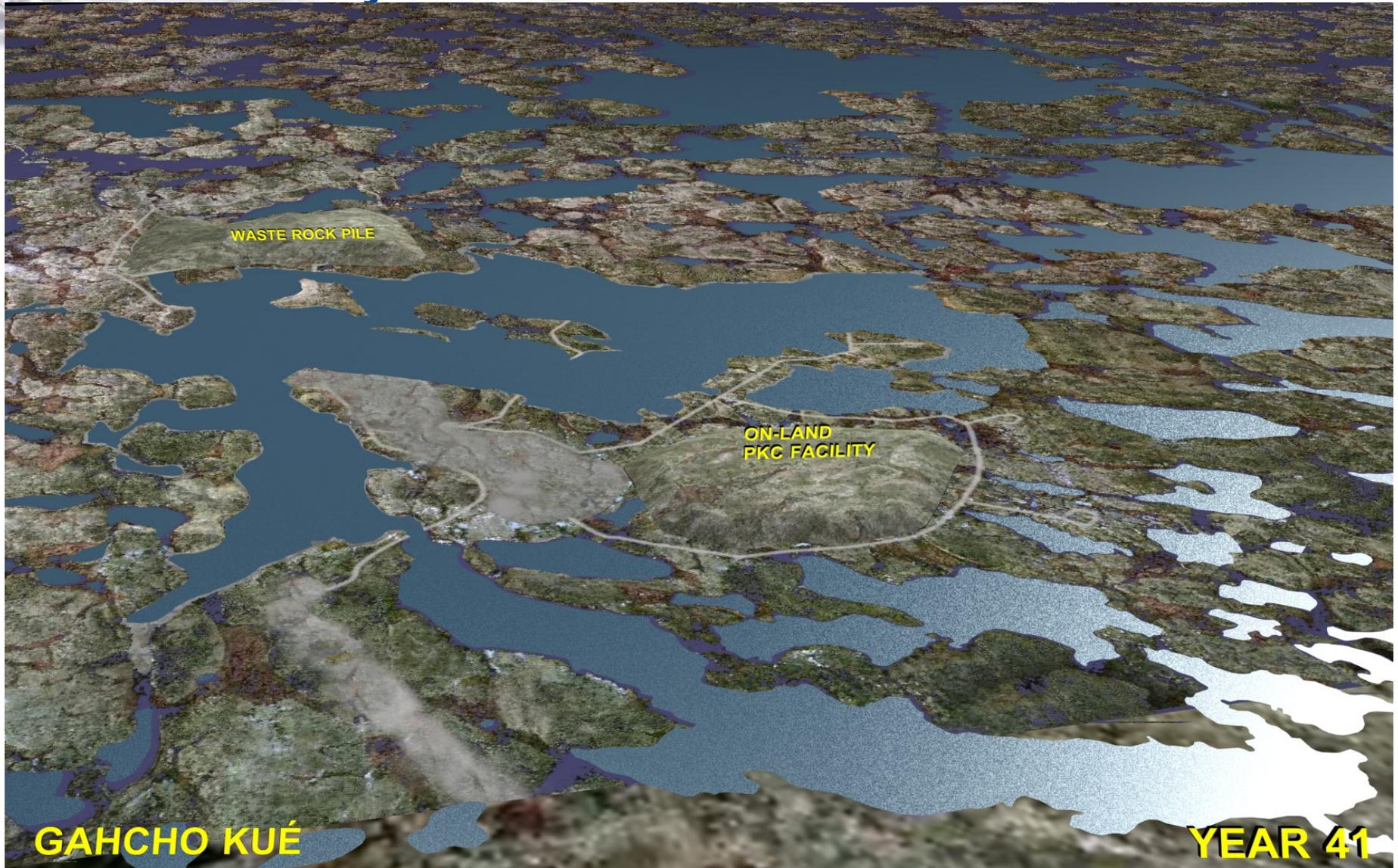
Prioritized Issues List

Area	Topic	Issue	Points
Water	3. Groundwater / Hydrology	3.5 Management of groundwater flows by DeBeers	3
	5. Water Quality	5.2 Pits as long term contamination sources	7
	6. Surface Water/Watershed	6.5 Extent of downstream effects	4
Fish	1. Watershed impacts beyond Kennady Lake	1.4 Water chemistry alterations from deep ground water	2
	3. Operations and Construction	3.4 Habitat destruction and creation	4
	5. Long term effects	5.1 Feasibility of recovery	10
		5.3 Addition of deep water habitat post-mine and impacts on the rest of the lake	2
Wildlife	1. Carnivores	1.3 Increased carnivore mortality	3
	2. Caribou	2.2 Impacts to already vulnerable populations	10
Regional Socio-Ec	2. Labour Force	2.2 Lack of adequate Northern labour pool to staff mine	5
Total			50

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Kennady Lake at Closure





Closing Remarks

Thank you

