

Dominion Diamond's Jay-Cardinal Project

Presentation for:
Mackenzie Valley Review Board Community Scoping Session
Yellowknife
January 7, 2014



Dominion Diamond is the NWT's Largest Mining Company



We are a Canadian owned Company.
We are Northern-Based.

Dominion owns:

Most of the
Ekati Diamond
Mine (80%)

Part of the
Diavik Diamond
Mine (40%)

Dominion employs more Northern
Aboriginal people than any other
mining company in the NWT.

Dominion's Jay-Cardinal Project is the Future

The Jay-Cardinal Project can keep Ekati Mine open for 10 – 20 years and will mean continued benefits for Northern Communities:

- Jobs and contracts;
- Training, apprenticeships and scholarships for youth;
- IBA benefits and development projects.



Without the Jay-Cardinal Project, these benefits will stop when the Ekati Mine closes in 2019.

We have started on the Jay-Cardinal Project

Environmental Studies:

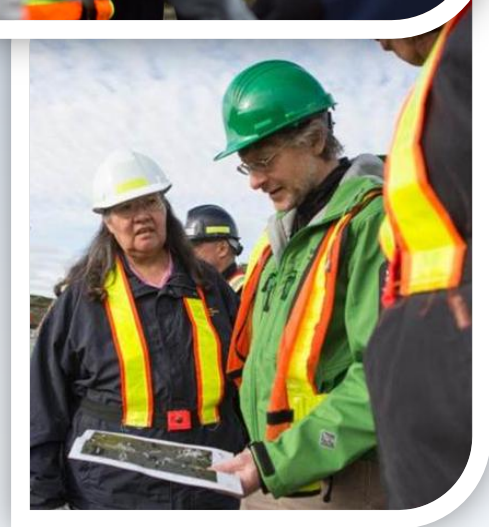
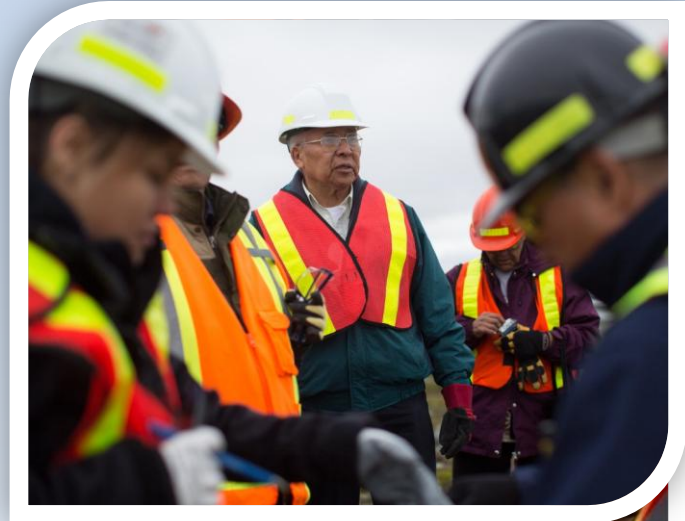
- Wildlife
- Fish
- Water
- Traditional Land Use

Sharing with Regulators:

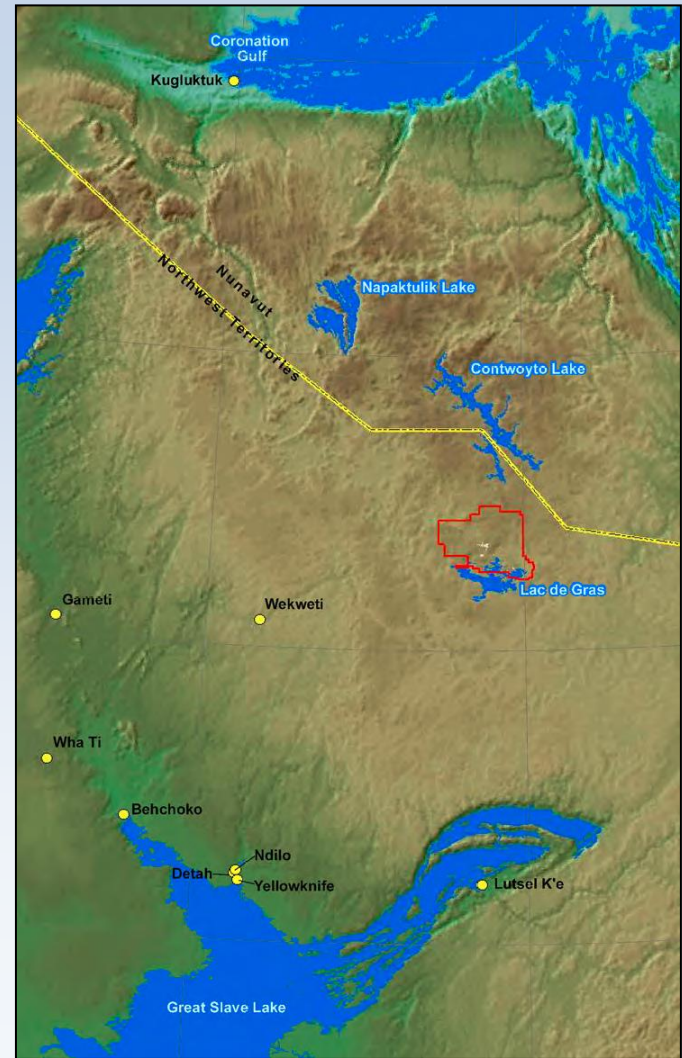
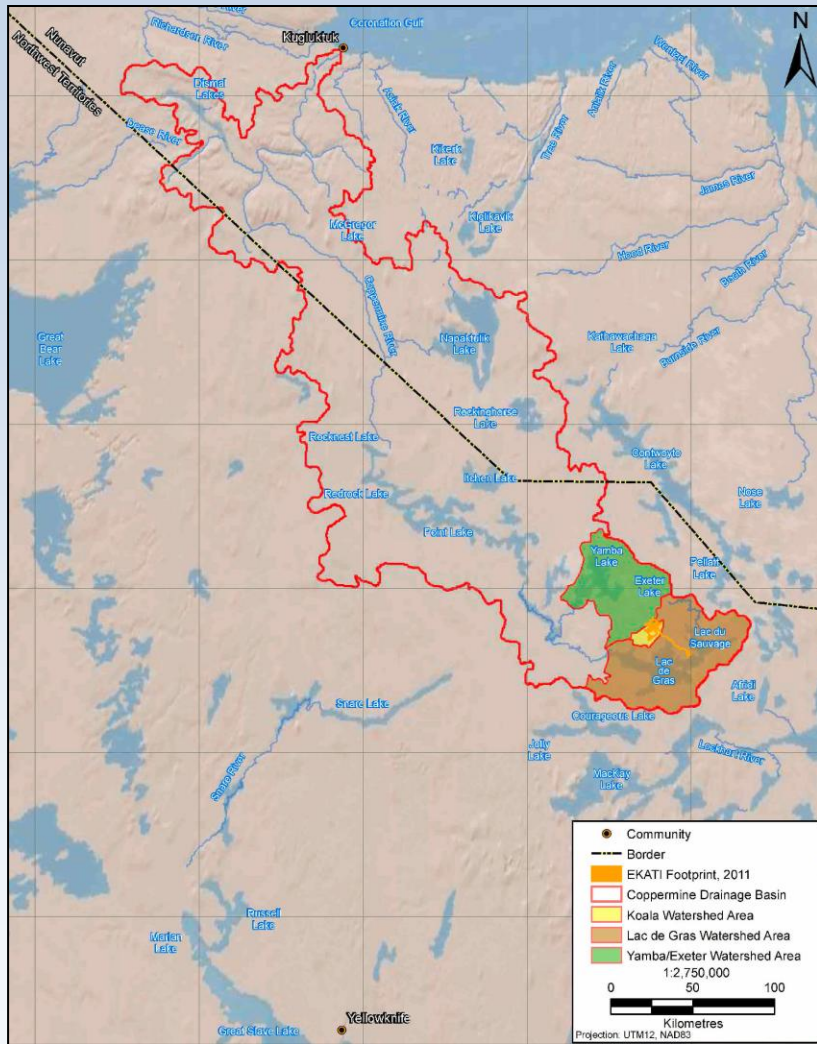
- Project Description
- Draft Terms of Reference

Sharing with Aboriginal Government & Community People:

- Public Meeting
- Site Visits
- Meetings with Chiefs

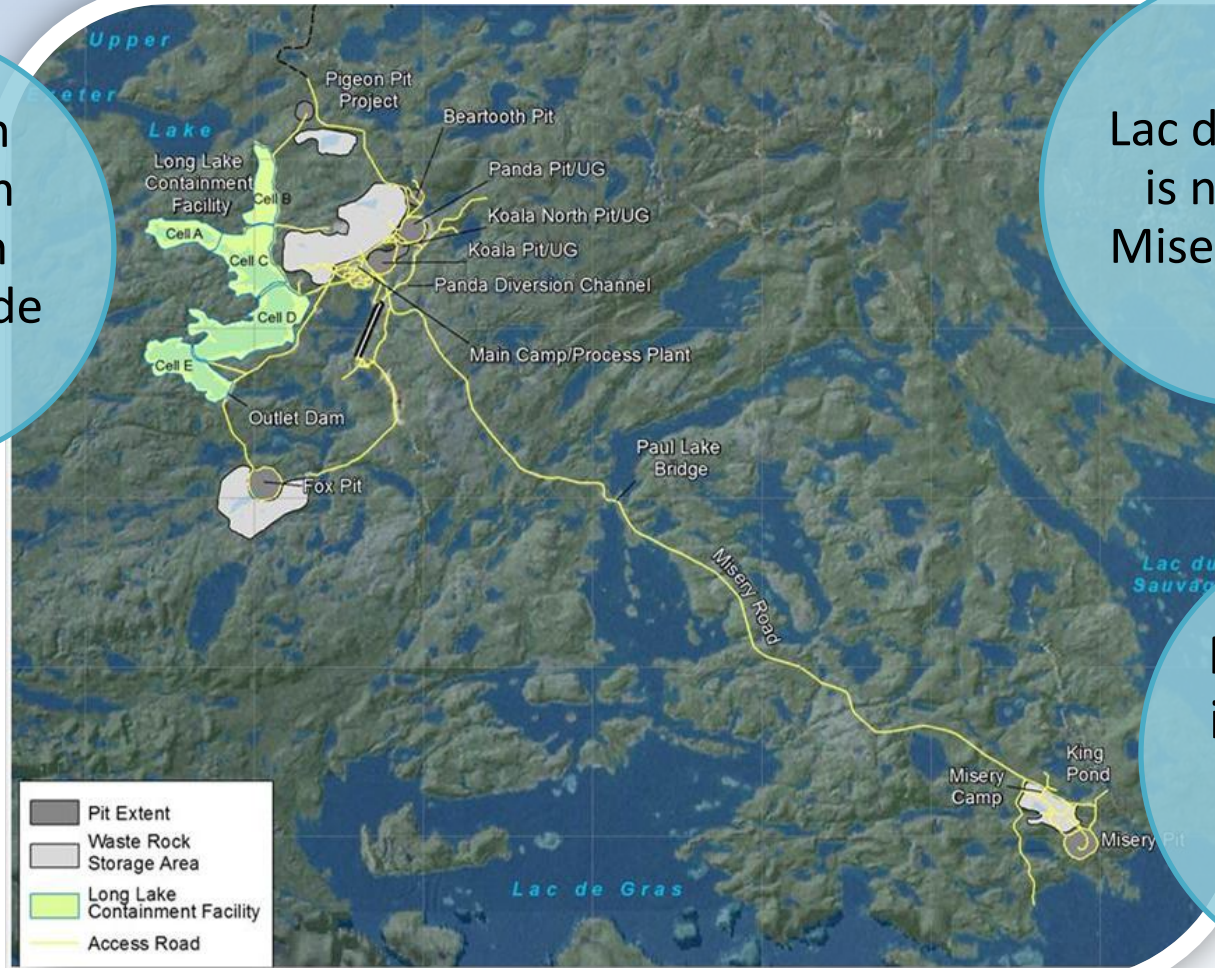


Where Is Dominion's Ekati Diamond Mine?



The Ekati Diamond Mine

Ekati Main Camp is on the North side of Lac de Gras



Lac du Savage is near the Misery Camp.

Misery Camp is 29km from Ekati Main Camp.

Where Are the Jay and Cardinal Kimberlite Pipes?



The Jay-Cardinal Project is an Opportunity

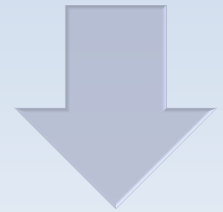
The Ekati Mine is **set to close in 2019.**



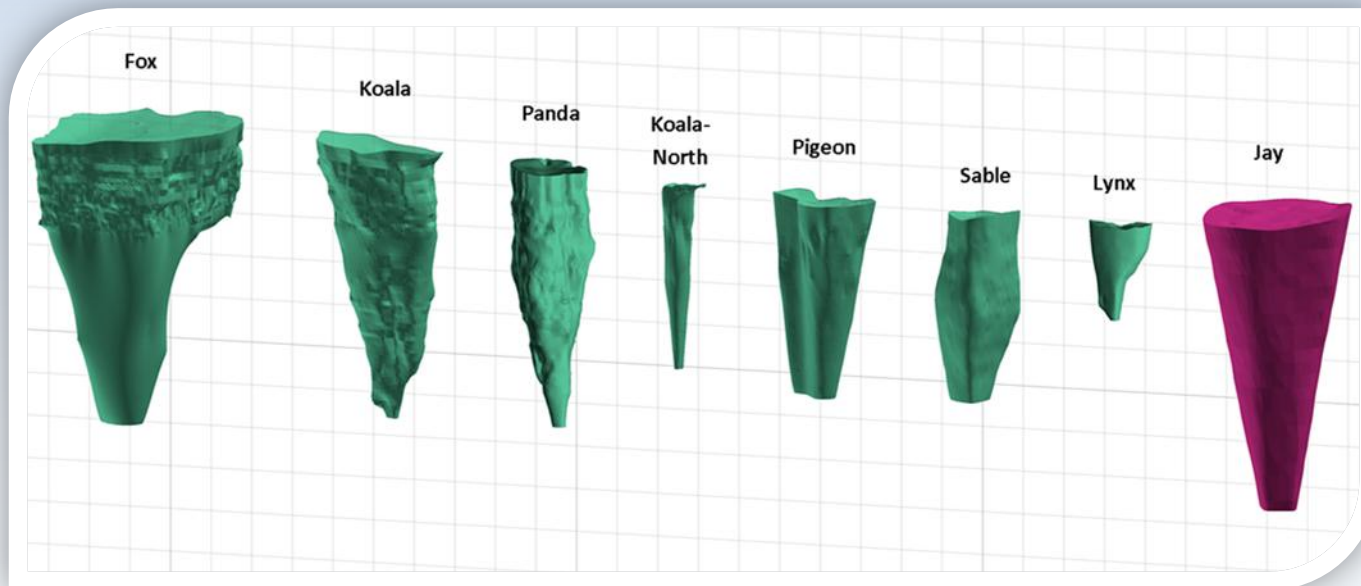
Opportunity to mine Jay-Cardinal Pipes.



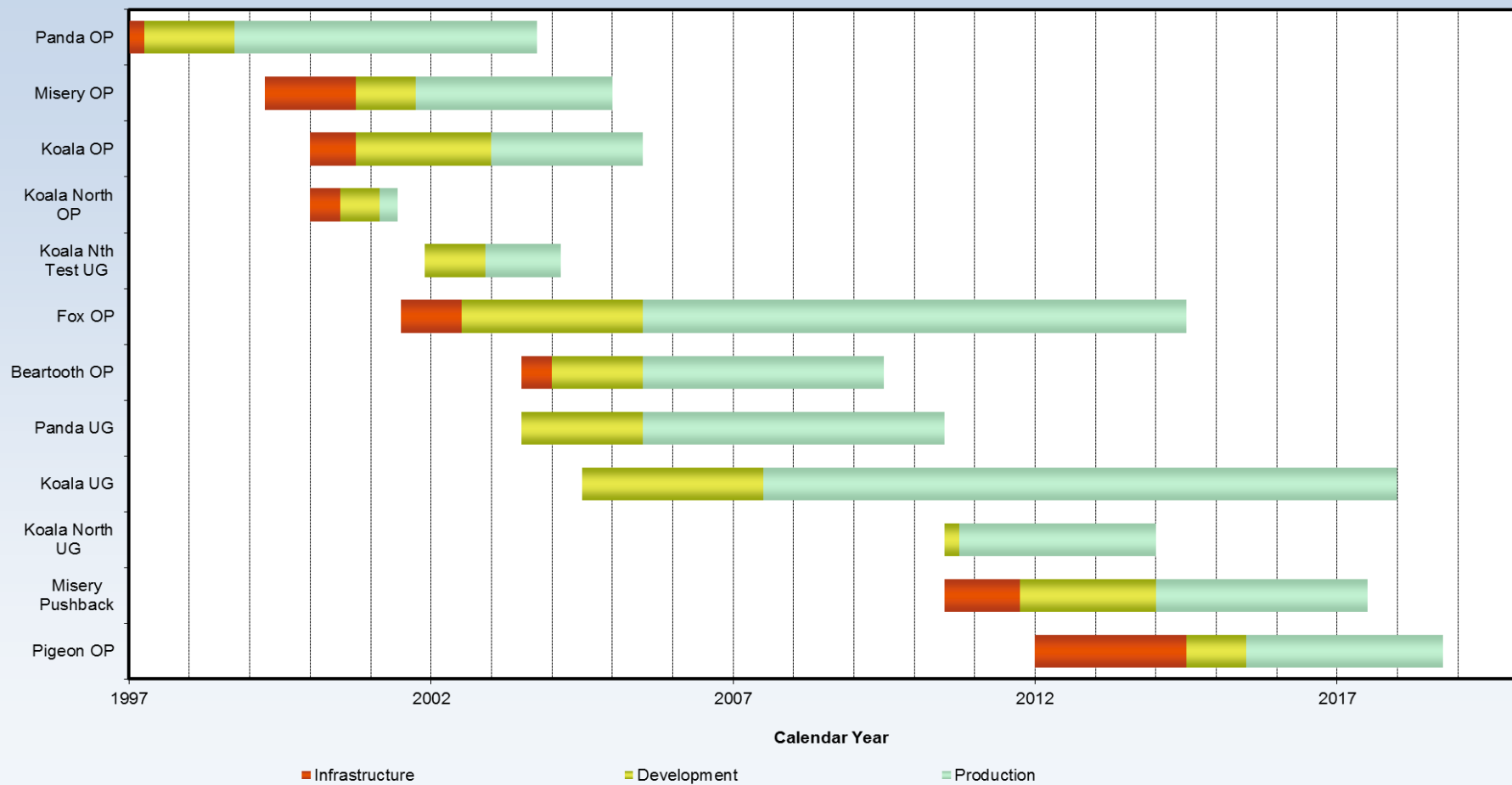
Jay is one of the **largest pipes** at the mine site.



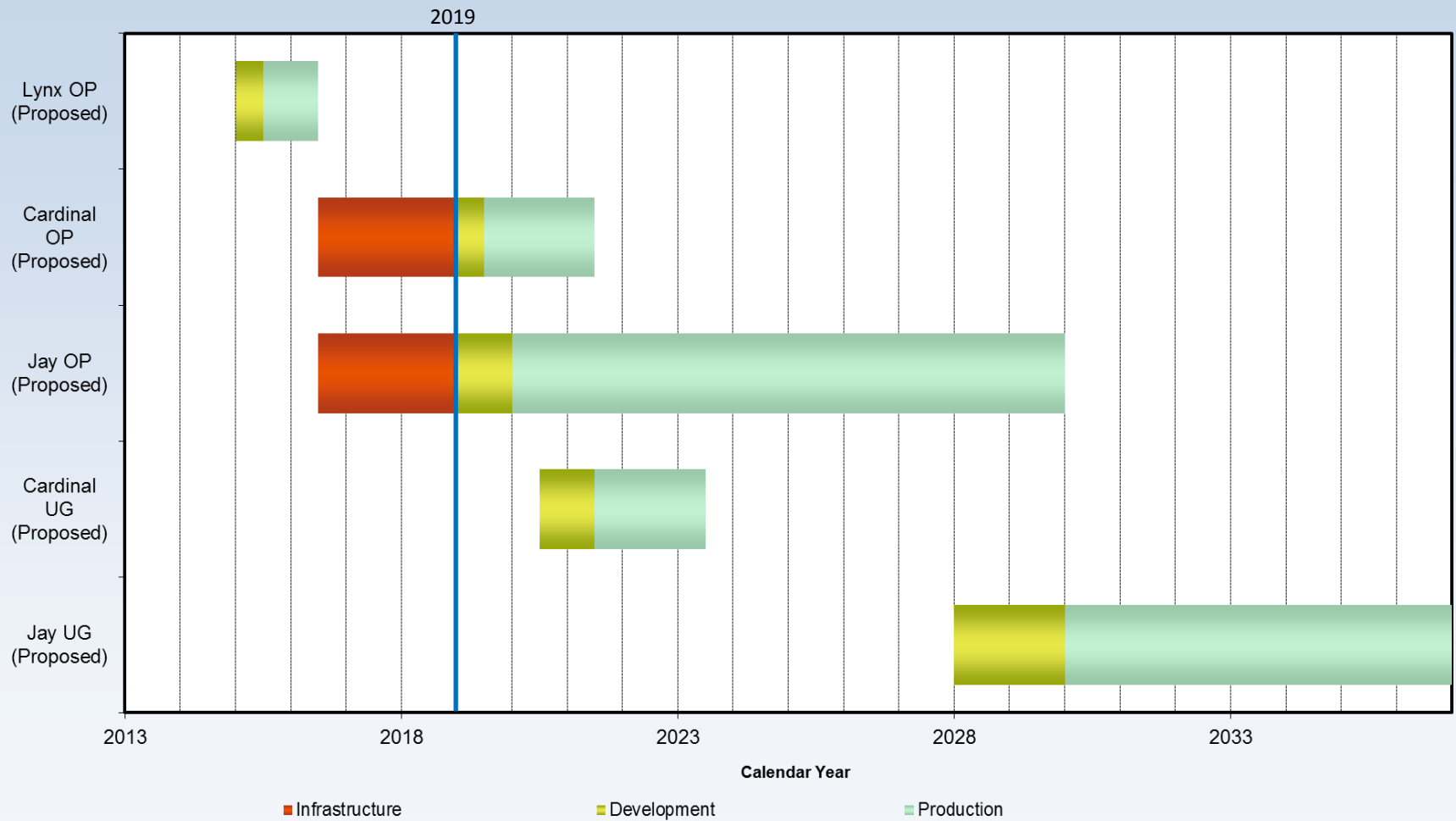
If approved **10 to 20 more years** of mine life.



Ekati Mine Scheduled to Close in 2019



Timing of Jay-Cardinal Project is Critical



The Jay-Cardinal Project is a Mine Life Extension Project



Expanding on the existing mine, using existing equipment.

The camps, airstrip, process plant and haul road are already there.

The other Ekati Mine areas will be closed when Jay-Cardinal is operating.

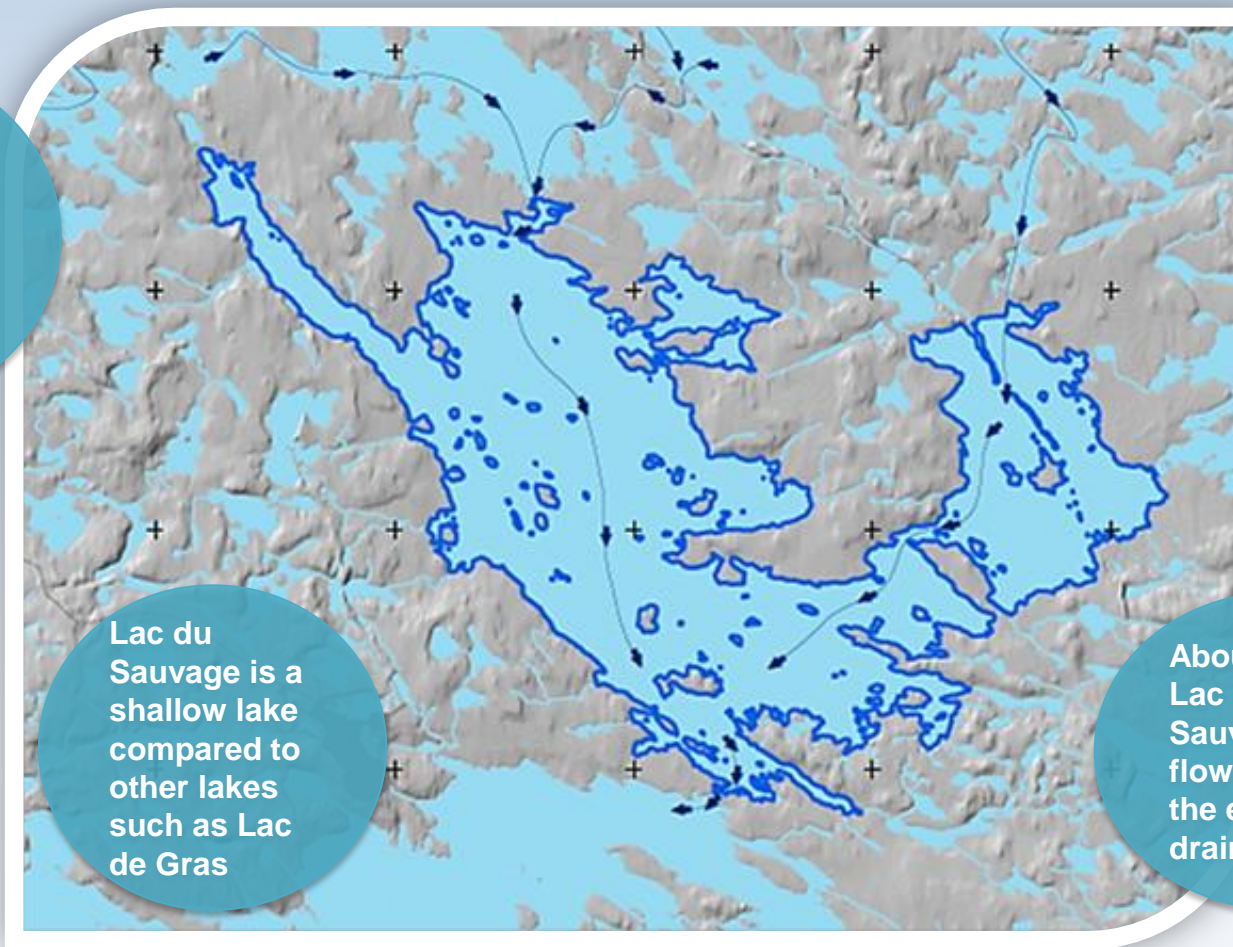
New activities at Lac du Sauvage require Environmental Assessment.

Lac du Sauvage – Natural Water Flow Paths

About 40% of Lac du Sauvage water flows in from the north (Duchess Lake)

Lac du Sauvage is a shallow lake compared to other lakes such as Lac de Gras

About 40% of Lac du Sauvage water flows in from the eastern drainage area

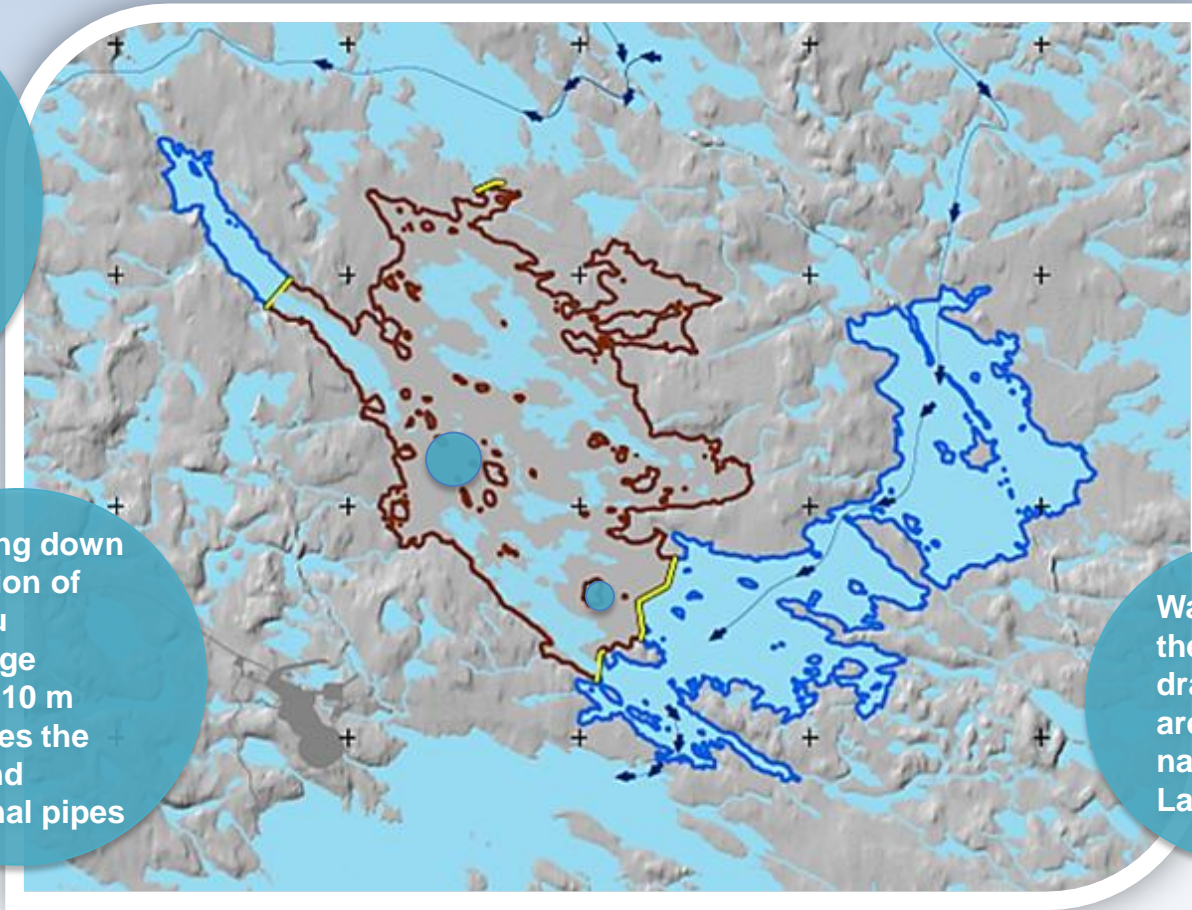


Lac du Sauvage – Lowered Water Level

Raising the water level in Duchess Lake about 2 m causes water to flow to Lac de Gras through Paul Lake

Drawing down a portion of Lac du Sauvage about 10 m exposes the Jay and Cardinal pipes

Water from the Eastern drainage area flows naturally to Lac de Gras



Lac du Sauvage Conceptual Diversion and Drawdown Plan

Over 80% of the natural flow remains unaffected

1. diversion of Duchess Lake to Lac de Gras through to Paul Lake
2. Eastern drainage area flows naturally to Lac de Gras

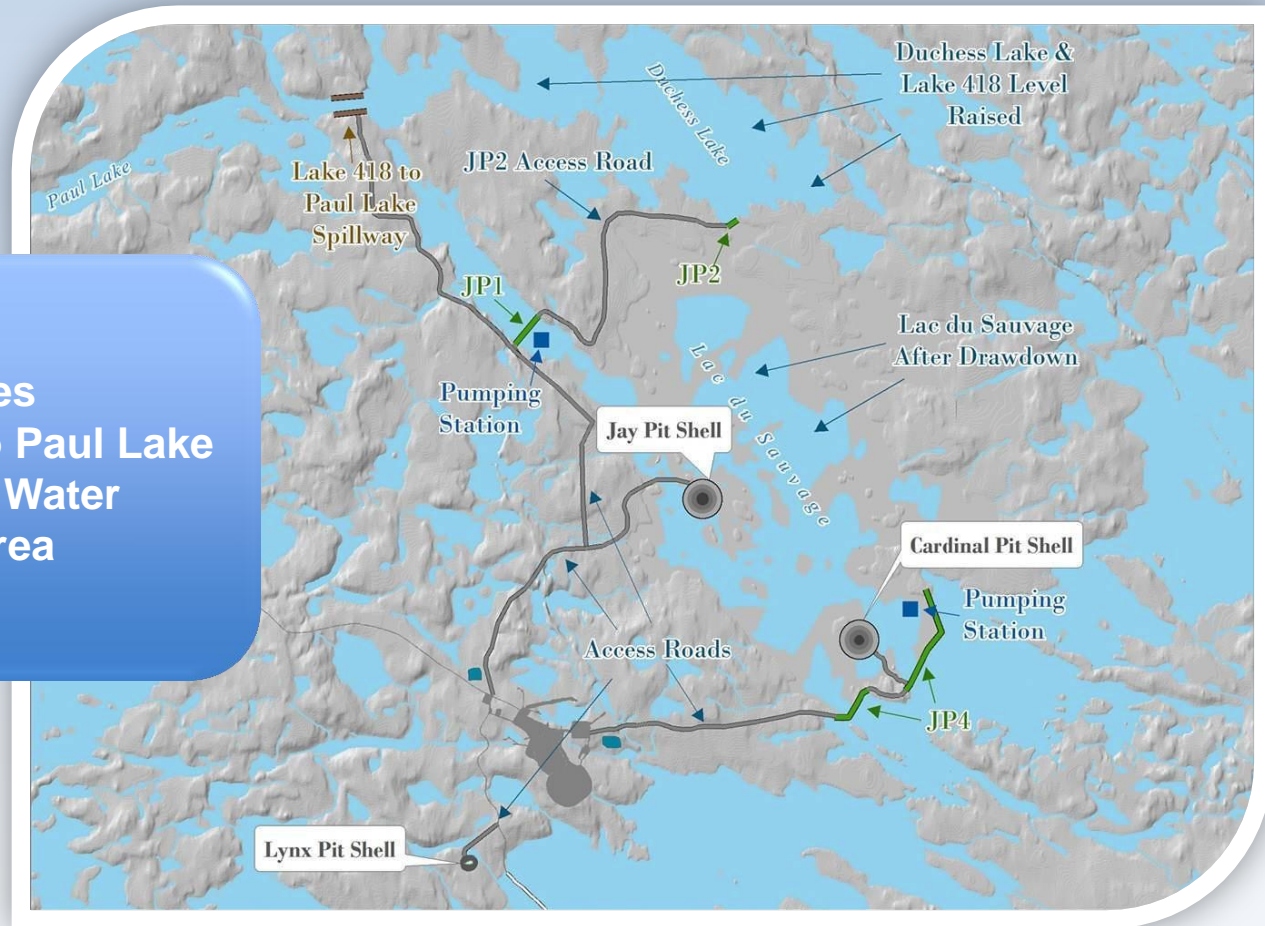
Initial drawdown within diked area is about 10 m

- drawdown will take about 1 year
- about 1/3 of total lake volume removed
- About 45% of the lake area remains outside of the dike
- clear water will be pumped to Lac de Gras
- Water with higher sediment will be pumped through North Arm

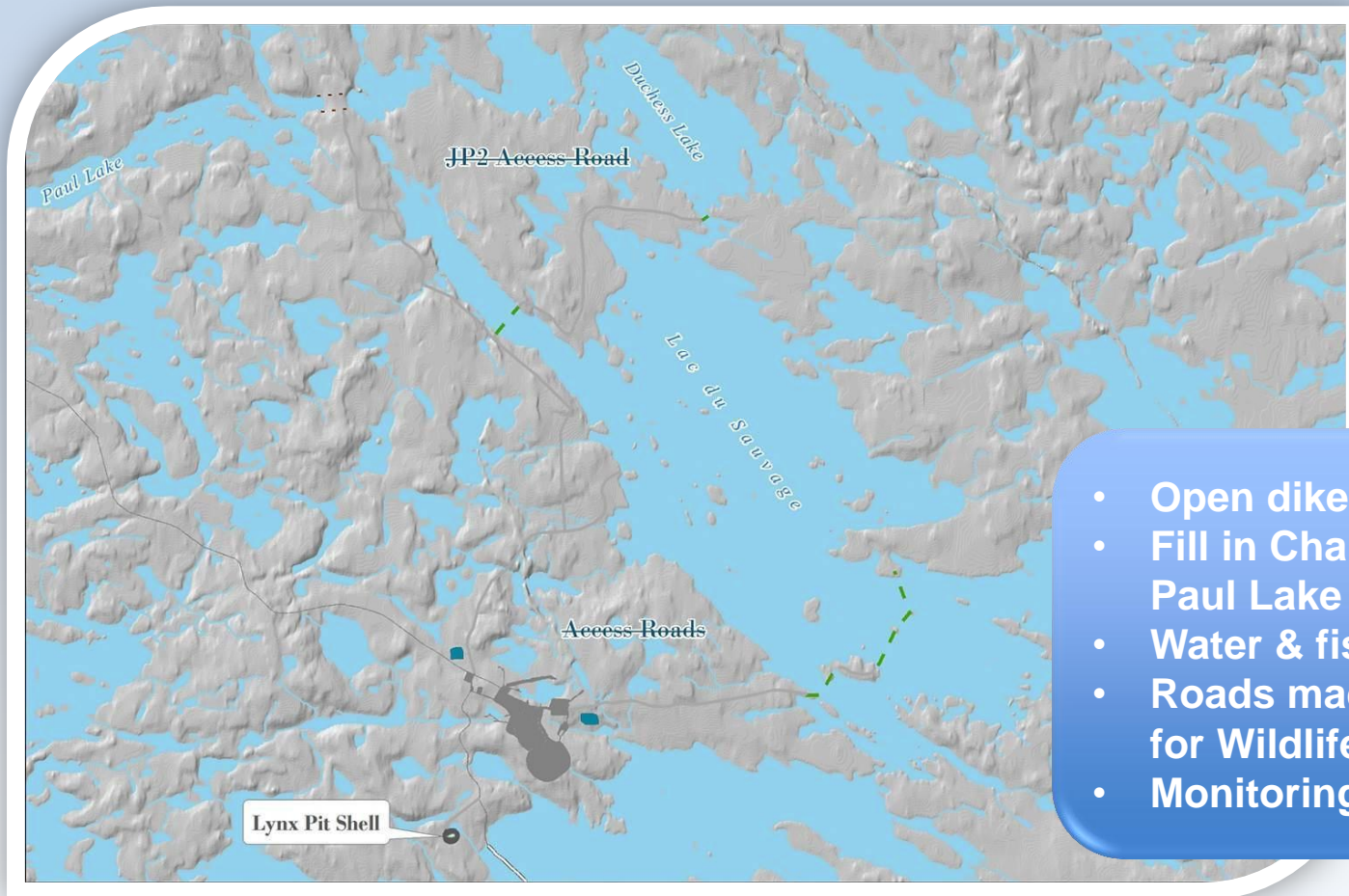
Fish Out provides opportunities for community involvement.

Lac du Sauvage Area After Drawdown

- Roads
- Gravel dikes
- Channel to Paul Lake
- North Arm Water Settling Area
- Powerline



Lac du Sauvage Area After Reclamation



- Open dikes
- Fill in Channel to Paul Lake
- Water & fish return
- Roads made safe for Wildlife
- Monitoring

Processed Kimberlite

- Processed Kimberlite will go in open pits at the Main Camp where mining is completed
- Reclamation of Long Lake Containment Facility can begin

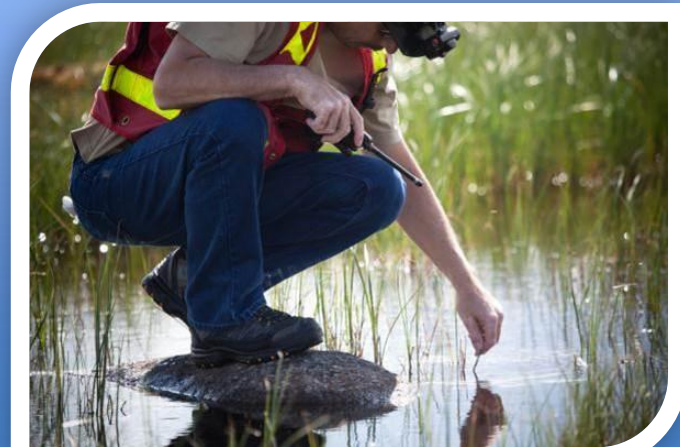


Natural
growth at
Long Lake
Containment
Facility Cell B

Jay-Cardinal Project Environmental Monitoring and Management

The Jay-Cardinal Project will build on the established (15-years) Ekati Mine environmental monitoring and management programs:

- water
- fish
- wildlife
- air
- waste rock
- spill response
- closure and reclamation
- waste management



Questions: Water Quality & Fish



Will Lac du Sauvage be returned to a natural state?

- Yes, the lake will be re-established after mining.

What will happen to the fish in Lac du Sauvage?

- We will have a fish out of about half of the lake.

How will the water be protected?

- Through the North Arm Water Settling area.
- Clean water stays clean.

Questions: Caribou



Can caribou move safely through the area?

- Yes and we will build more caribou ramps.
- We have asked for ideas about roads.

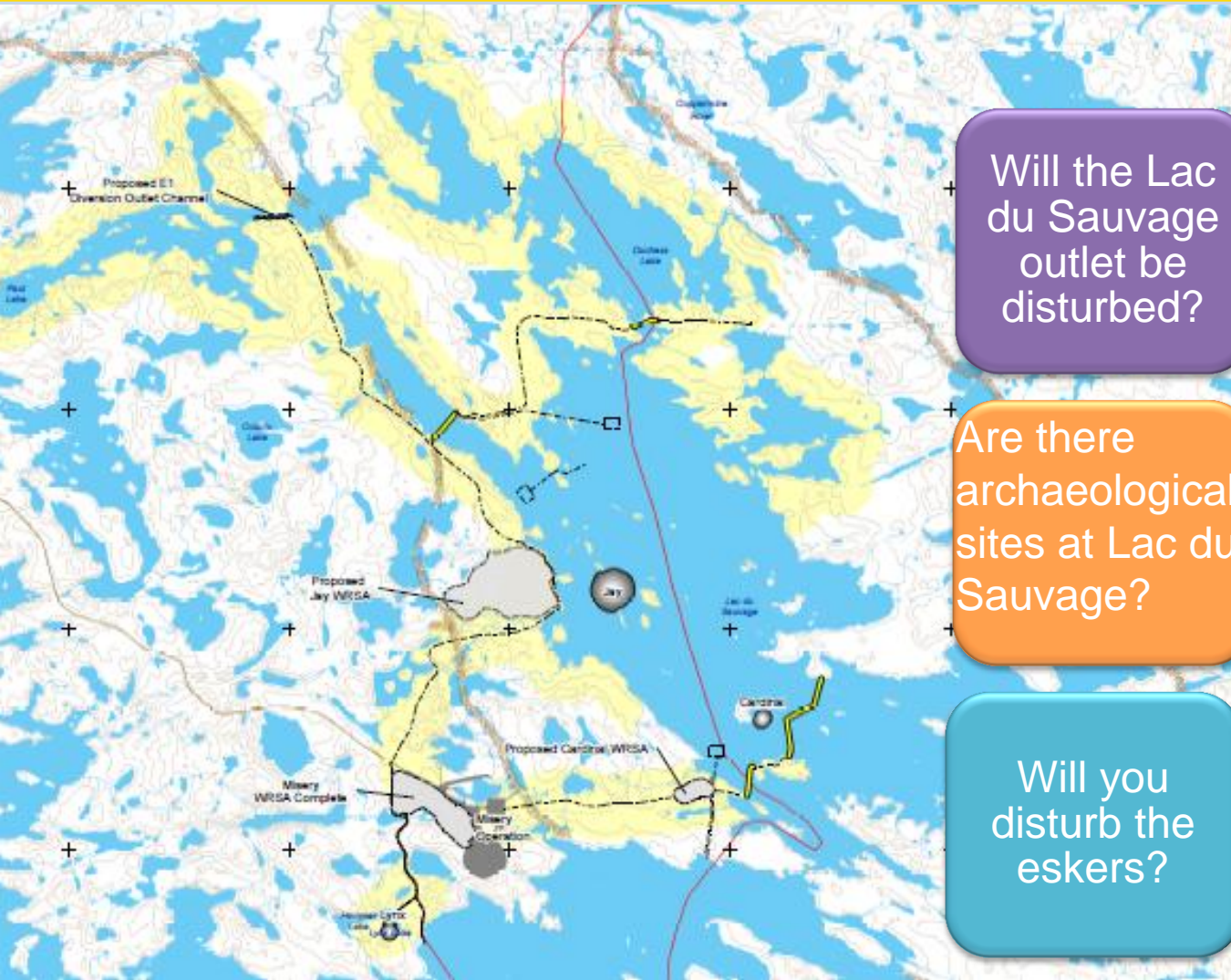
Are there caribou crossing ramps at Ekati Mine?

- Yes, the road to Misery has caribou crossing ramps.
- This is experience gained for Jay/Cardinal roads.

Will noise and dust increase?

- The other mining areas will be closed when we mine Jay and Cardinal.

Questions: Traditional Land Use



Will the Lac du Sauvage outlet be disturbed?

- The project is designed to avoid disturbance of the outlet area.

Are there archaeological sites at Lac du Sauvage?

- The west side of Lac du Sauvage is a high potential area, specific sites have been documented.
- Additional survey work will include Aboriginal elders.

Will you disturb the eskers?

- The mine roads need to cross the esker, and will be designed with community involvement.

What's Next for the Jay Cardinal Project?

We will continue to work with Aboriginal communities and government.

We have submitted our application.

The Mackenzie Valley Review Board will do an environmental assessment.

We need to start construction in 2016.

We hope you want to see Ekati Mine continue into the future.

Mahsi Cho

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