### **Presentation to**

# Kaw Tay Whee School Dettah

### September 23, 2005

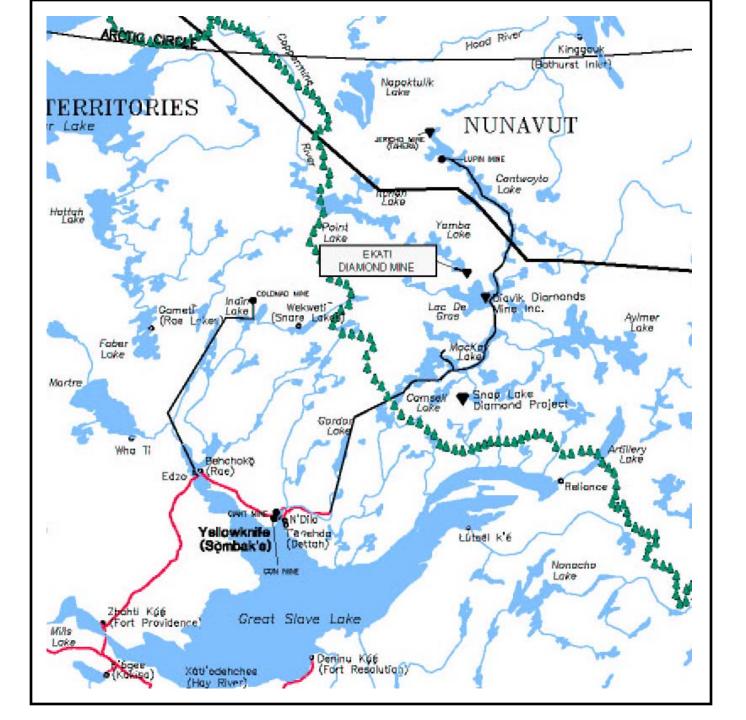
#### **Independent Environmental Monitoring Agency**



### Independent Environmental Monitoring Agency

- Watchdog of environmental management at Ekati diamond mine
- 7 members: Akaitcho, BHPB, GNWT, Canada, Inuit, Dogrib, Metis
- Tim Byers

Director for Akaitcho (Yellowknives Dene First Nation and Lutsel K'e First Nation)



### **Ekati Mine**

- Opened in 1998
- 2 pits have finished digging, 4 more pits are being mined
- Underground mining has begun



#### Panda Pit – a few years ago



Photo

BHP Diamonds

### Panda Pit – June 2003



### Misery Waste Rock Pile



The Misery fuel storage tank and camp

### **Diamond Production**

### 140,000 Tonnes/ day of rock

# <u>2 L</u> diamonds

Monitoring Focuses on:

















# CONTAMINANTS in PLANTS?



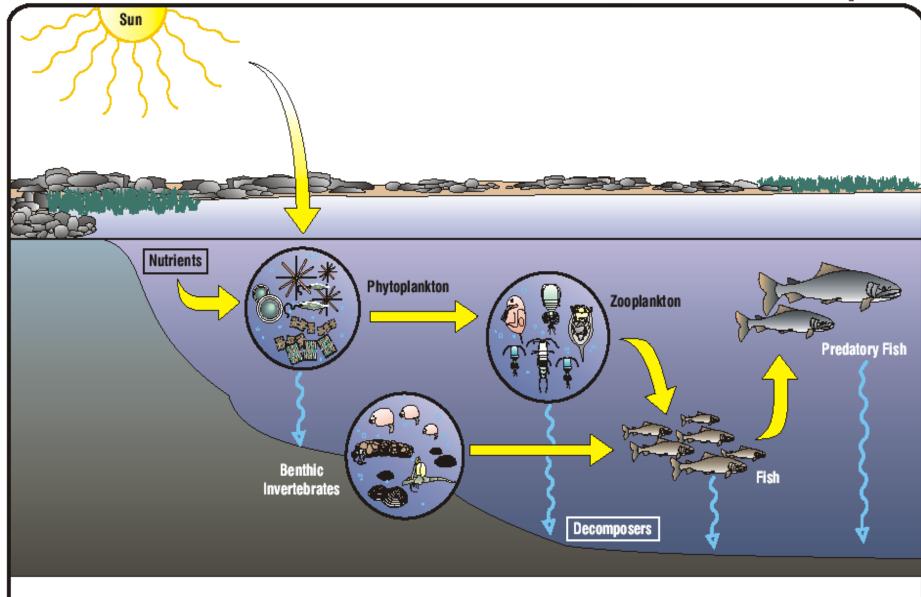




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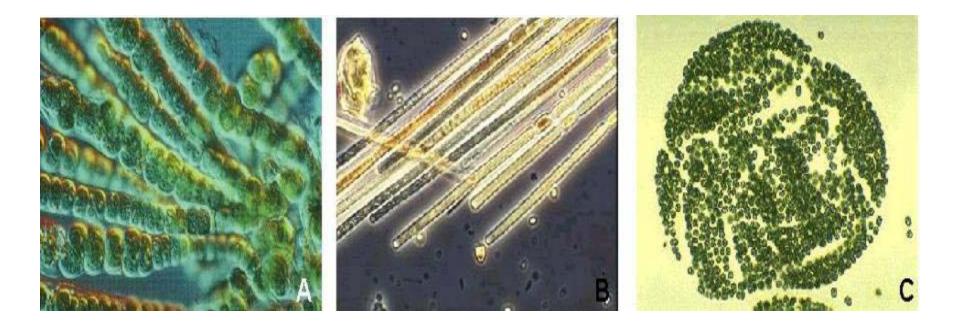




Conceptual Model of Lake Aquatic Ecosystem in the Koala Watershed



### **Plant Plankton**



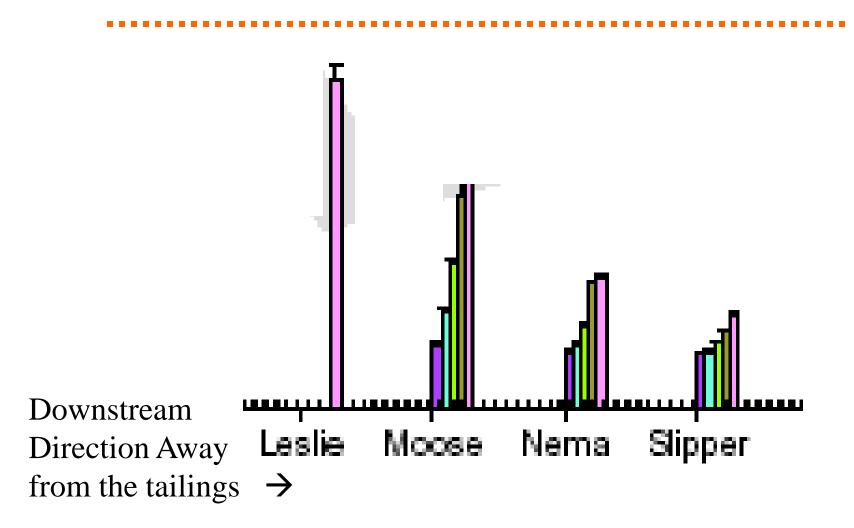
### **Animal Plankton**



Photo: A magnified picture of Daphnia



### Amount of contaminants decreases downstream of Ekati but increases every year



# What has been found in past years?

- Small changes have been found in water quality and the fish
- Most of these changes were predicted before the mine was built

## Dene Knowledge and Science

• Both are important for monitoring the environment



- Similarities : Dene Knowledge and Science
  - Both have experts
  - Both have their own languages
  - Both require education
- Better decisions when both are used.

### Caribou

• Yellowknives Dene and Inuit set up Inuksuit locations





# Yellowknives doing wolverine studies



## Stay in school, listen to elders, go out on the land!!

