#### **Presentation to**

### **Alexis Arrowmaker School**

### Wekweti

#### September 21, 2006

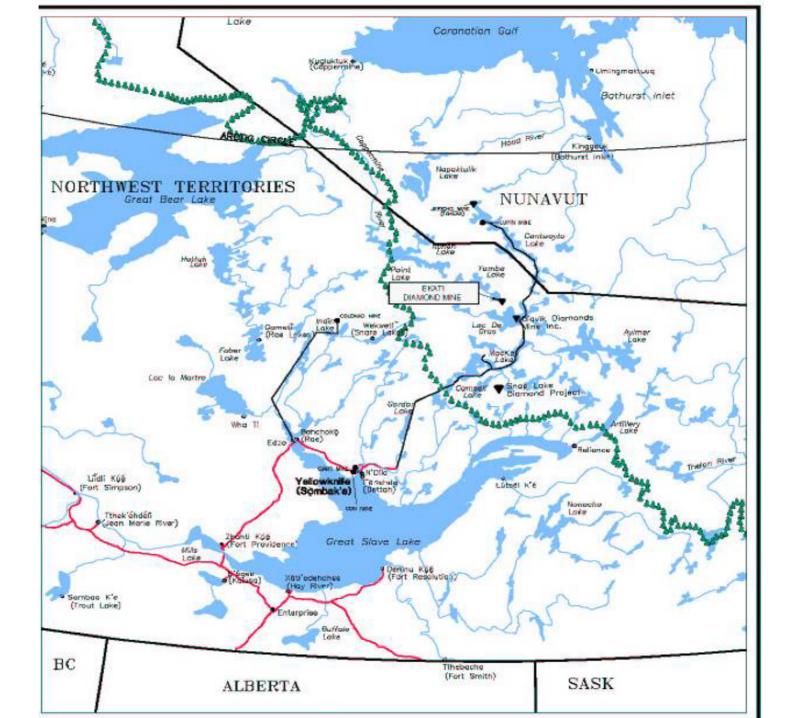
#### **Independent Environmental Monitoring Agency**



### Independent Environmental Monitoring Agency

- Watchdog of the environment at Ekati diamond mine
- 7 members: Tlicho, Akaitcho, Inuit, Metis, BHPB, GNWT, Canada
- Tony Pearse

Director appointed by Tlicho Government



### **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



#### Waste Rock Pile



### **Diamond Production**

### 140,000 tonnes/day of rock

### □□ 2 litres diamonds

Monitoring Focuses on:















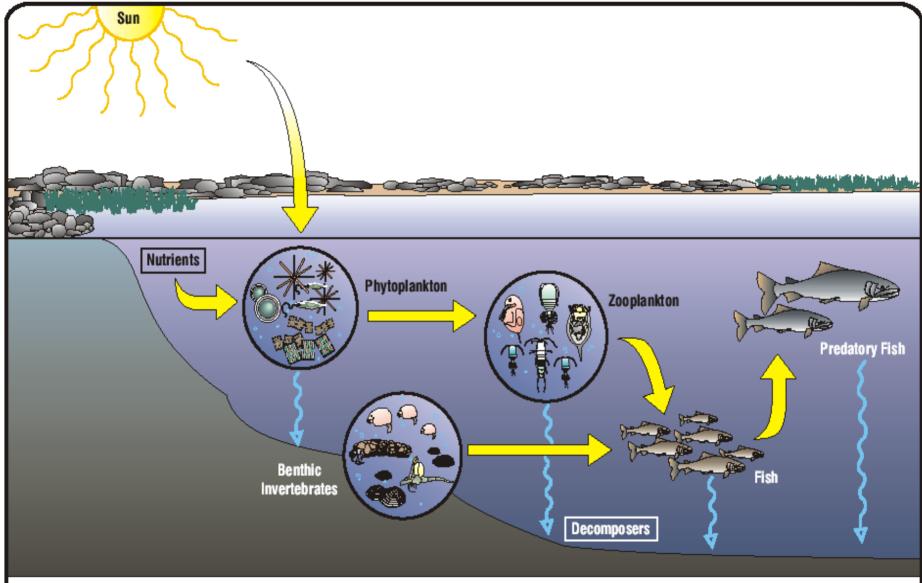


# CONTAMINANTS in PLANTS ?





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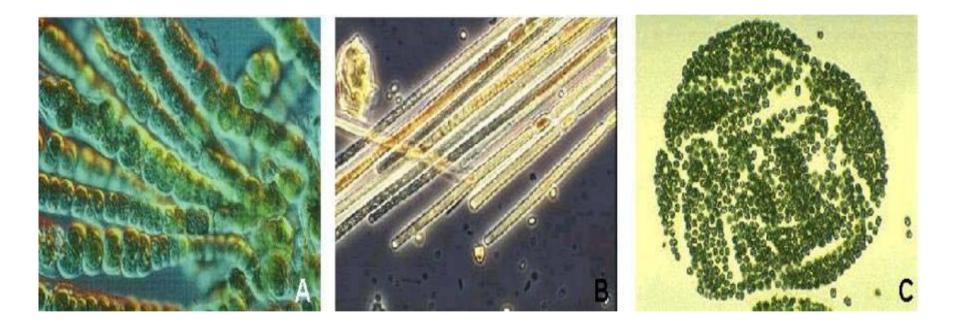




Conceptual Model of Lake Aquatic Ecosystem in the Koala Watershed



### **Plant Plankton**



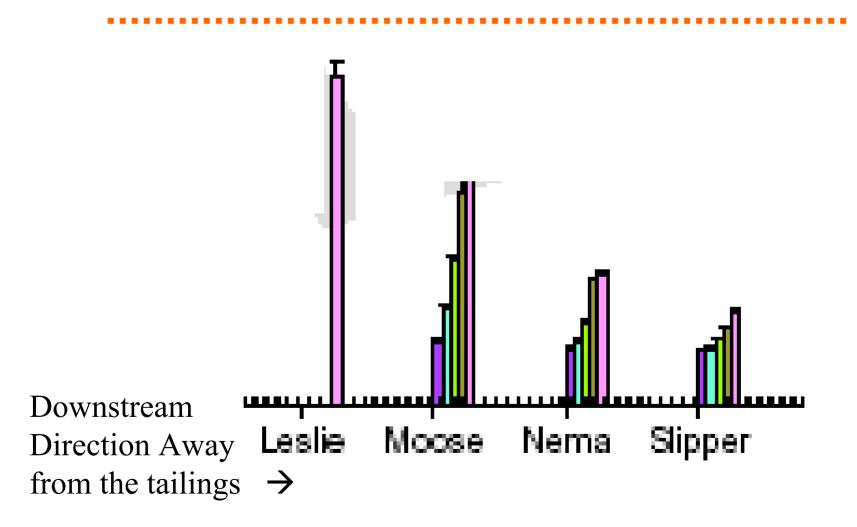
### **Animal Plankton**



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

• Dene and Inuit set up Inuksuit locations





## Dene doing wolverine studies





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

