# Using resilience to offset cumulative impacts

IAIA 2017 - Montreal April 6, 2017



### The challenge:

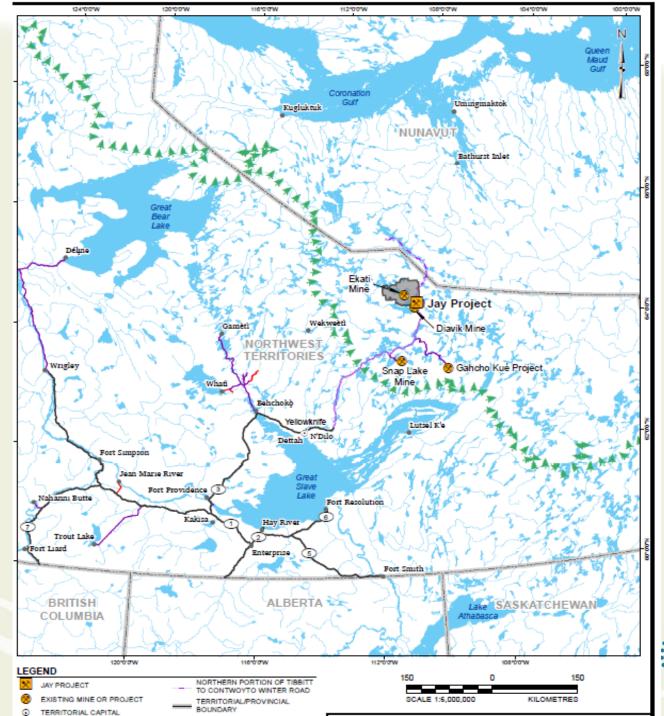
 how to proceed when there's already stress beyond reason?



### Our lesson from a recent case study

 Focus on understanding the drivers of stress; this will help open up pathways for responsible development







### Jay Project – expansion of Ekati mine

 Expansion of area affected by diamond mining and increased duration of effects by 10 years



#### Review Board decision

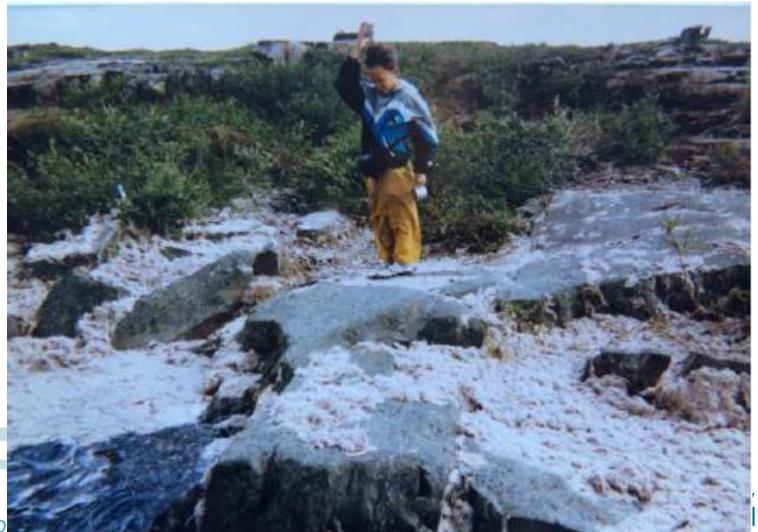
- (placeholder background pdf of Reasons for Decision document)
- Several valued components already significantly adversely affected:
  - Habitat and health of boreal caribou
  - Health and well-being of affected communities
  - Well-being and traditional way of life of affected indigenous groups







### Caribou hair collected on the shores of the Narrows

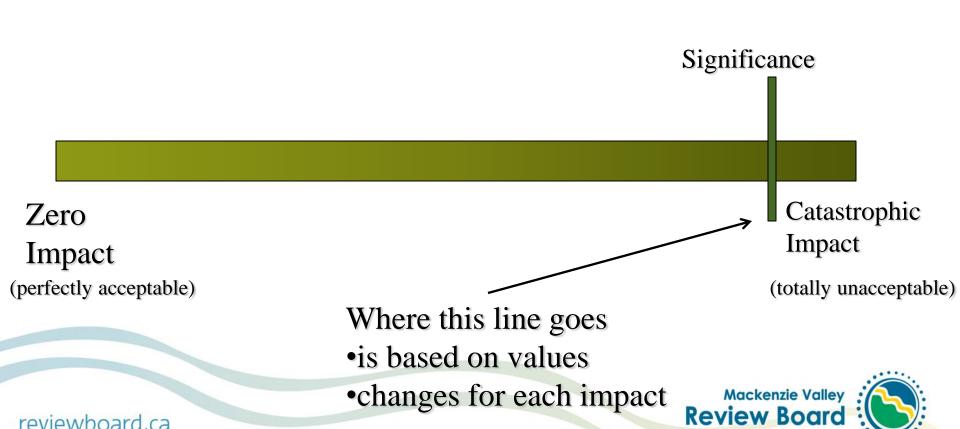


reviewb working together to make wise decisions

 (Placeholder for community picture for brief spiel on community well-being – consider Lutsel K'e)



### The Significance Spectrum



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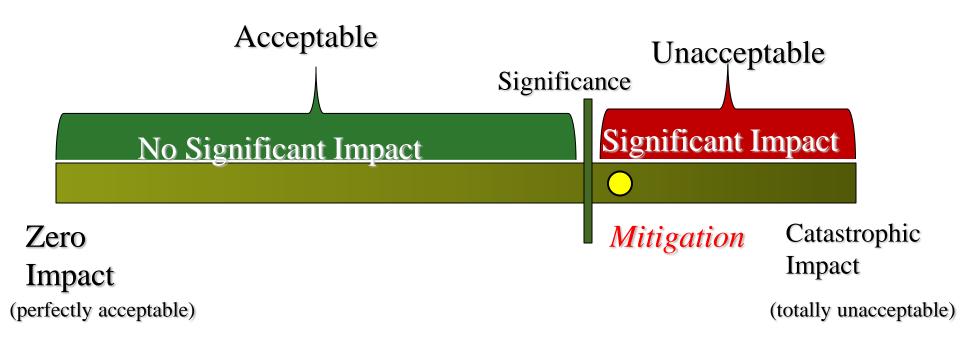
working together to make wise decisions

### Significance determination

 Cumulative impacts have led to a baseline condition that cannot tolerate additional stress



### Cumulative impacts are significant





#### Challenge:

## Can the Project go ahead without worsening the cumulative impacts?



### ...challenge assessment

- What mitigations are in place?
- Are they effective?
- What has already happened?
- In the nearly 20 years of diamond mining, how has this developed and what is the link?



### Findings

- Much uncertainty around link and magnitude of impacts
- Past efforts questionable
- Feedback mechanisms to improve situation not there



### Resolution: build resilience!

- Cumulative impacts dealt with by using the following resilience strategies:
  - addressing uncertainty
  - Strengthening (offsetting) external system components
  - Promoting adaptive management



### 1. Addressing uncertainty

- Incorporating Traditional Knowledge into project design
- Developing a TK management framework for consistency and confidence of TK use in decisionmaking
- Early identification of cultural impacts to inform management actions and mitigations



## 2. Strengthening system components by offsetting

- Enhance mitigation measures off-site
- Creation of a culture camp to actively bring land users back to area and maintain connection with and knowledge of the land
- Reduce vulnerabilities in communities by promoting opportunities for women



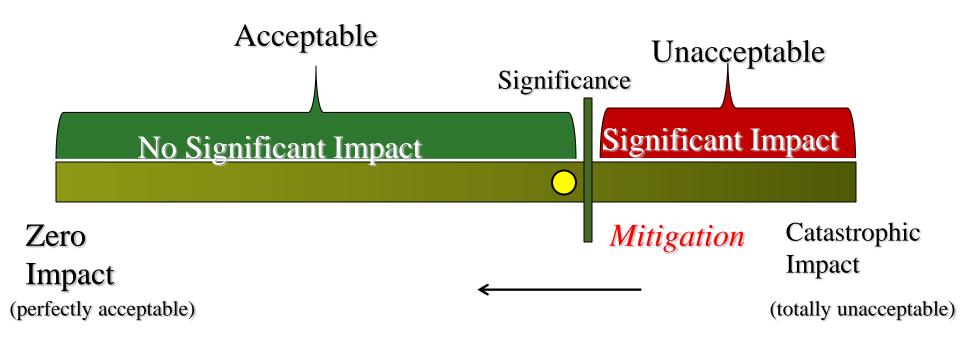
### 3. Improving on adaptive management

- Impose timelines on Government to develop caribou management plans
- Impose requirement on Government to investigate linkages between diamond mining and well-being and engage with communities and public on initiatives and problem-solving
- Establish objectives for monitoring and adaptive management
- Annual reporting by Government and Proponent on implementation of mitigation measures



### **End result**

Taking a resilience perspective enabled a reduction in overall significance & an acceptable Project





#### Conclusion

- Opportunities exist to manage significant baseline cumulative impacts
- Promoting an understanding the drivers of stress creates pathways to build resiliency into the stressed system and buffer against undesirable change



### Mahsi cho!

