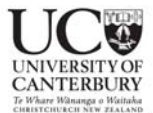


Framework for predicting and managing the environmental impacts of mining on streams

Mine drainage framework



Why have a framework?

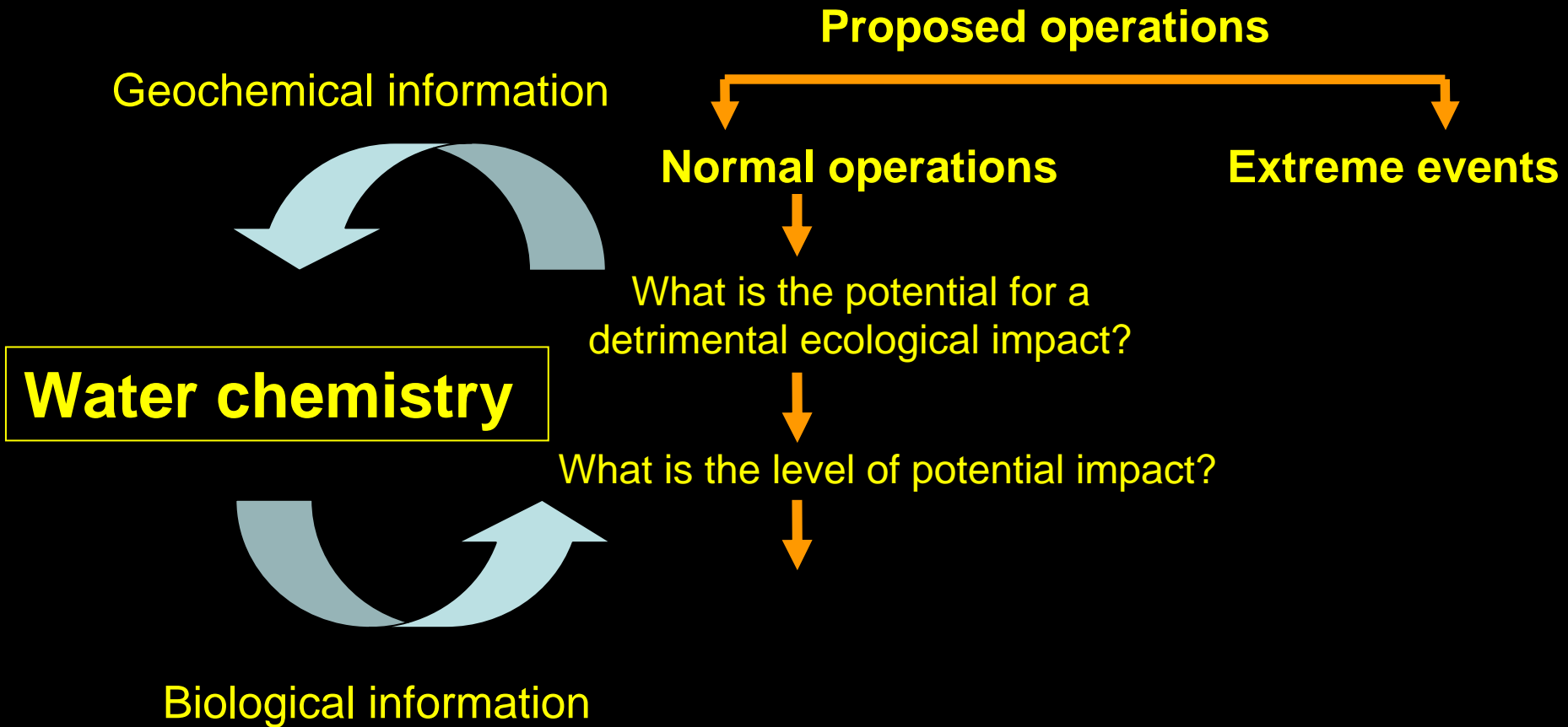
- Existing widely-used water quality guidelines (ANZECC) not necessarily applicable to West Coast in particular
- Recognition of improvement in existing regulatory process for mining applications
- Improvement in public perception of mining and decision-making around mining applications

Intended application

- Internal for mining company
- Access arrangements
 - DOC – AEE
- Resource consents –
 - Discharge permits – water (storm, process water), waste rock
 - AEE

What is the framework?

- A flow chart outlining a decision-making process
- Supporting information:
 - Data requirements
 - Guidance for on-going monitoring
 - Databases
- Format
 - Downloadable PDF



Proposed operations

Geochemical information

Normal operations

Extreme events

Water chemistry

What is the potential for a detrimental ecological impact?

What is the level of potential impact?

Biological information

Proposed operations

Normal operations

Extreme events

What is the potential for a detrimental ecological impact?

What is the level of potential impact?

Decision-making step

Is this an 'acceptable' level of impact for this system?

Proposed operations

Normal operations

Extreme events

What is the potential for a detrimental ecological impact?

What is the level of potential impact?

Decision-making step

Is this an 'acceptable' level of impact for this system?

Yes

Proceed
(with ongoing monitoring)

No

How do we reduce impact to an 'acceptable' level?

Operational Management

Remediation during operation

Proposed operations

Normal operations



Extreme events

- Earthquakes
- Tailings dam failure
- Landslide
- Brief discussion on likelihood, and likely impact

Framework document

- General text
- Appendices with detailed technical information

Framework document

A framework for predicting and
managing
the environmental impacts of
mining on streams



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End-user feedback critical to
ensure a relevant and robust
document

If interested in providing comments please
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