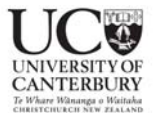


Framework for predicting and managing the environmental impacts of mining on streams

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

Our aims

- Provide science information to end-users in a useful manner
- Facilitate consistency in decision-making, including information required
- Assist with meeting regulatory requirements

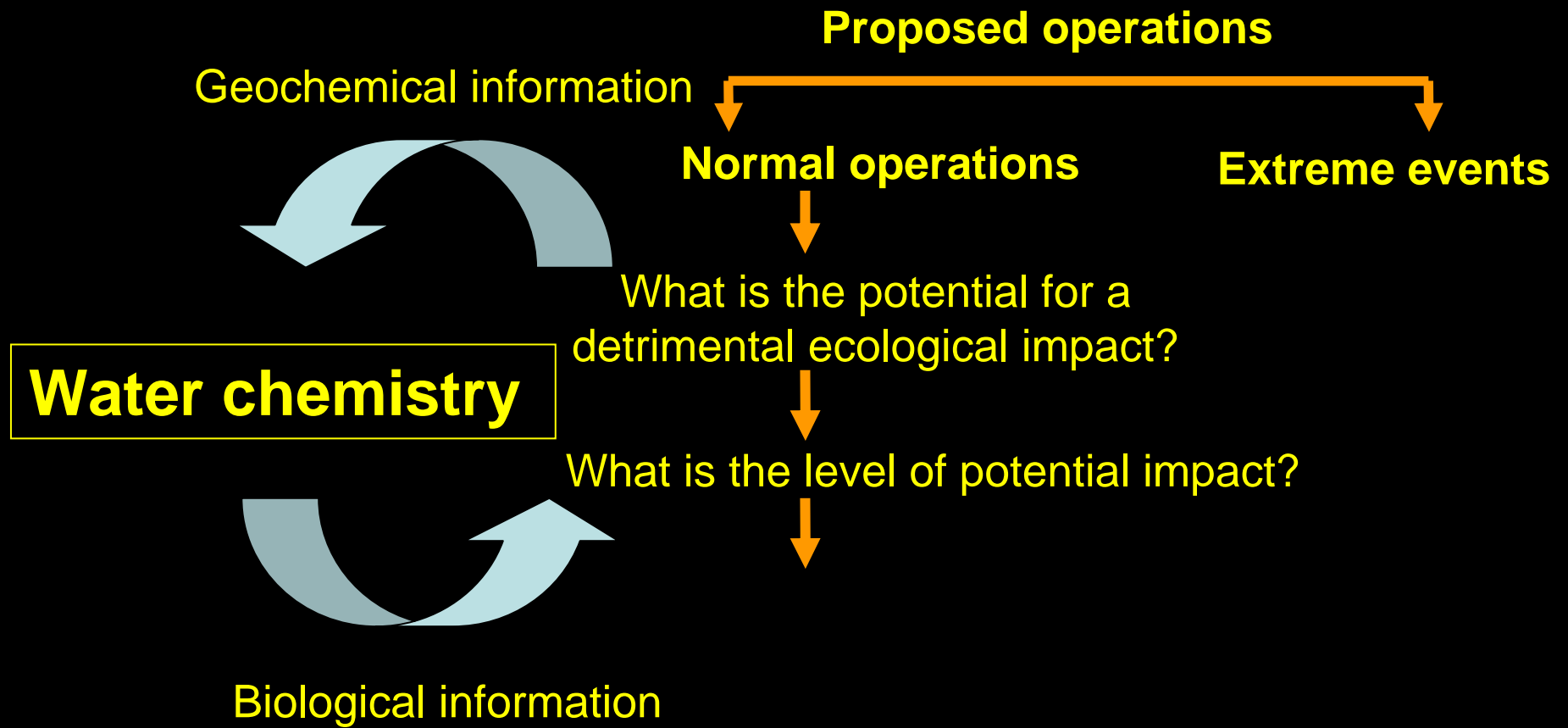
End-user feedback is critical to ensure a useful framework is developed

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

Normal operations

Extreme events

What is the potential for a detrimental ecological impact?

What is the level of potential impact?

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

Decision-making step →

‘Framework does not specify what is “acceptable”, rather it allows for

- **Site-specific considerations**
- **Other social and economic considerations**

‘Acceptable’ level of impact determined through consultation processes

- **applicant and regulatory agencies**
- **wider consultation**



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

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

- General text
- Appendices with detailed technical information



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Coal potentially acid-forming

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

**If interested in providing comments please
leave your contact details with us**