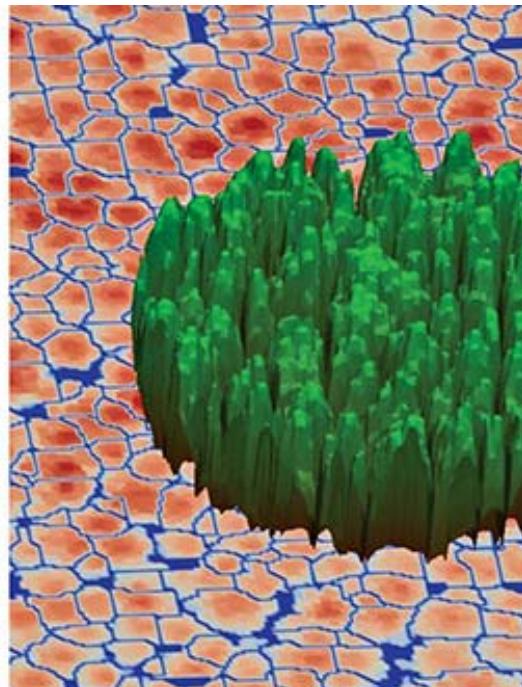
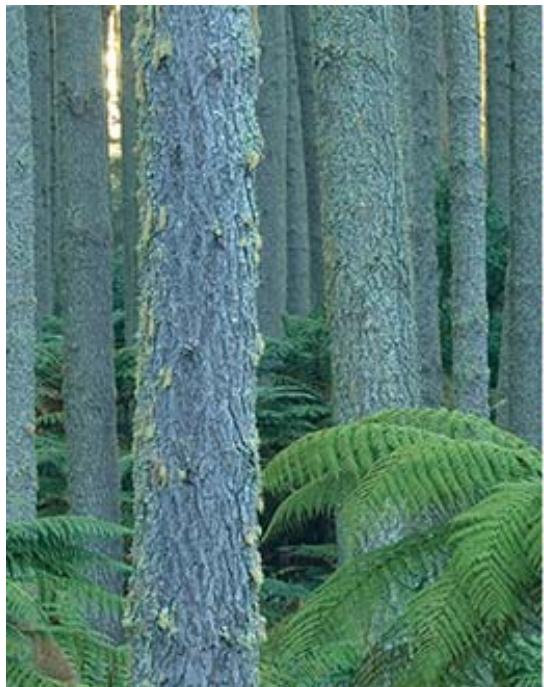


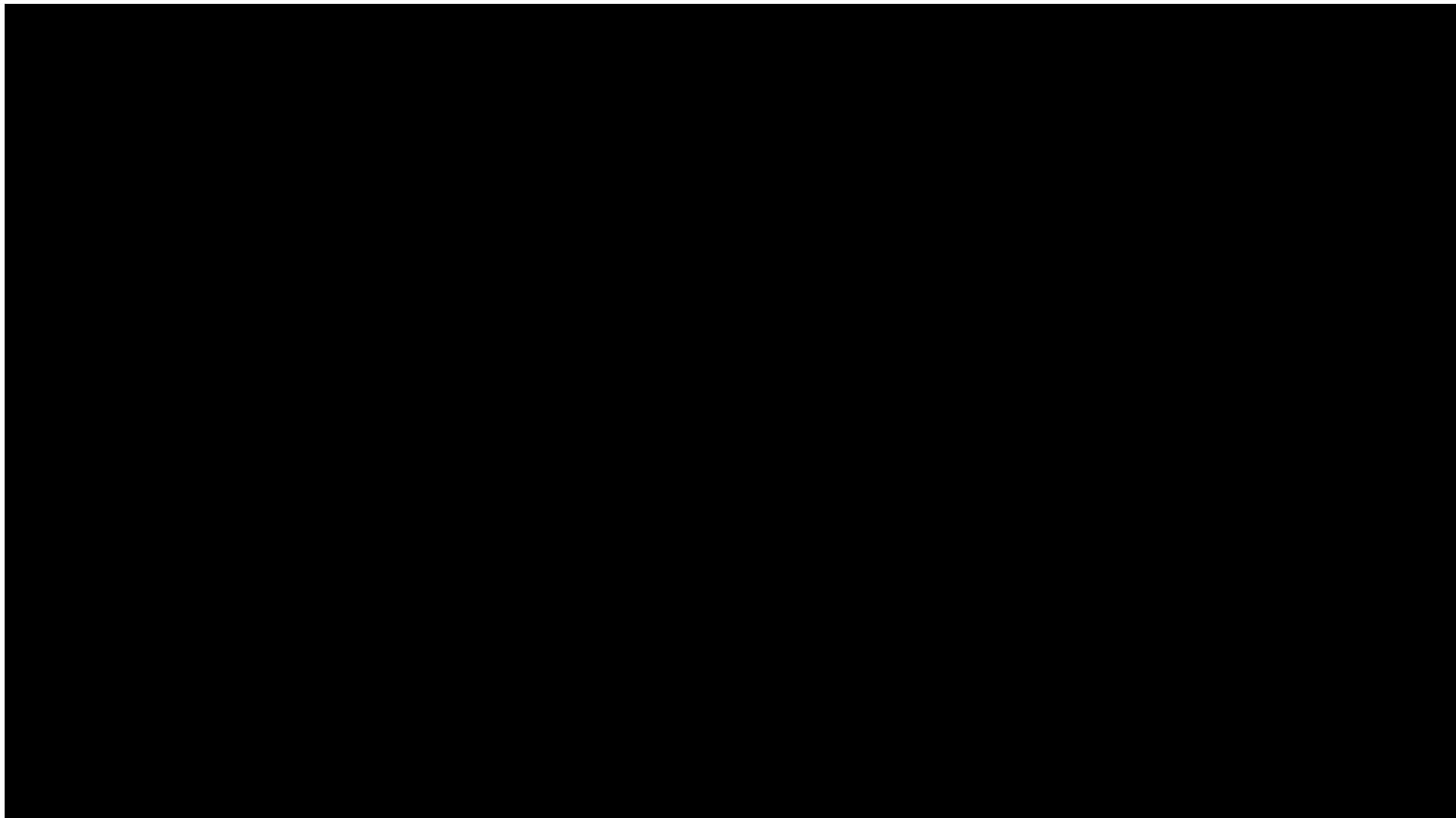
Perceptions of Erosion

Authors:

Duncan Harrison, Chris Phillips, Les Basher, Marie Heaphy



Why do this? Everybody knows that erosion and debris flows are a big problem in Planted Forests



Problem Statement

- "...I've heard it has happened in other areas..."
- **What is the true scale of the problem?**
- "...How can we make sure that everybody upstream is doing their job..."
- **What is being done?**
- "...How can we stop this from happening again..."
- **What could be improved?**

Methodology

- Semi structured interview process – leading on from pilot project completed through FFR/SLMACC

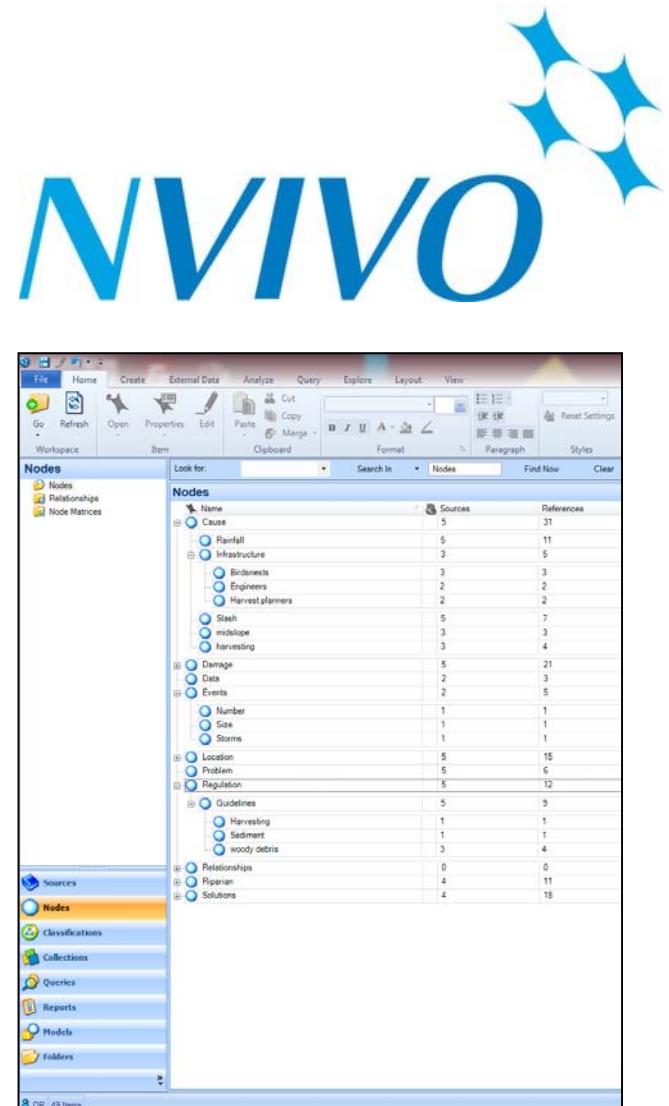
Collect nationwide data:

- Landslides and debris flows
- Rainfall conditions
- Affects
- Compliance issues
- Availability of information
- Current approaches

- Analysed interviews through Nvivo

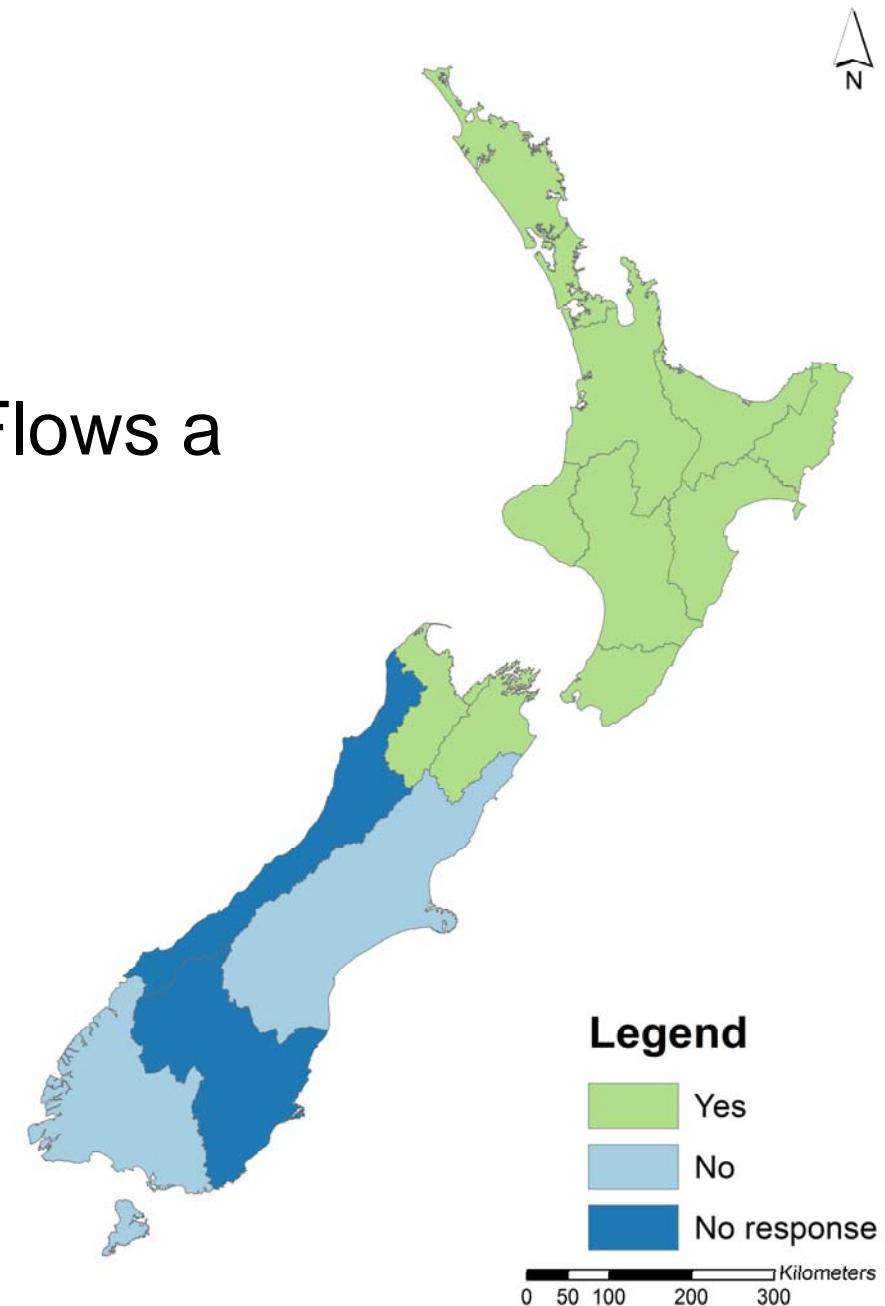
- Themes :

Problem
Location
Cause
Effect
Controls
Management
Regulation



Preliminary Results

- Are Erosion and Debris Flows a problem in your area?
- Where is it happening?

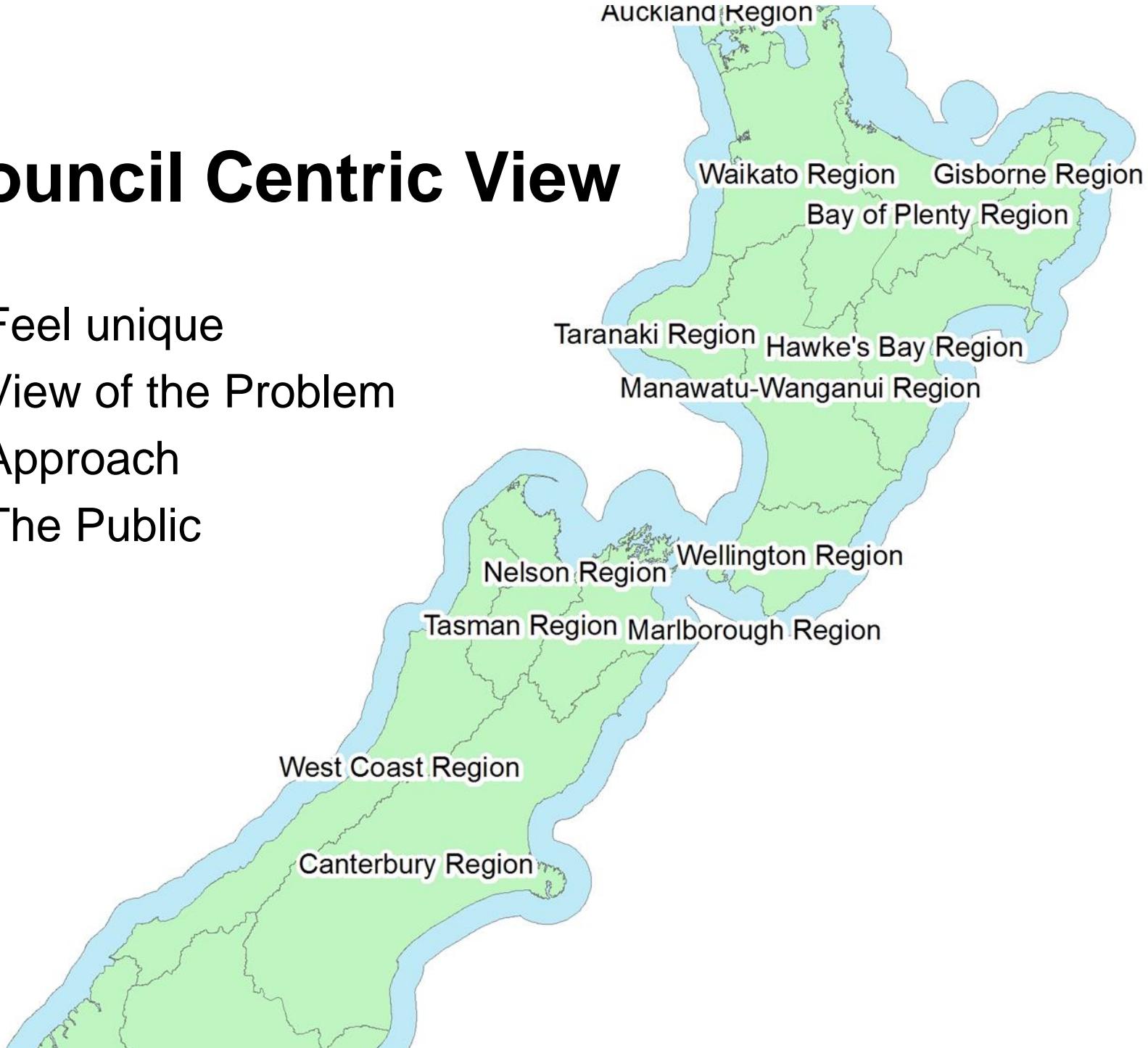


Common elements contributing to the problem:

- High intensity rainfall
- Slope
 - Mid-slope failure
 - Slash in water ways
- Not Earth Works!

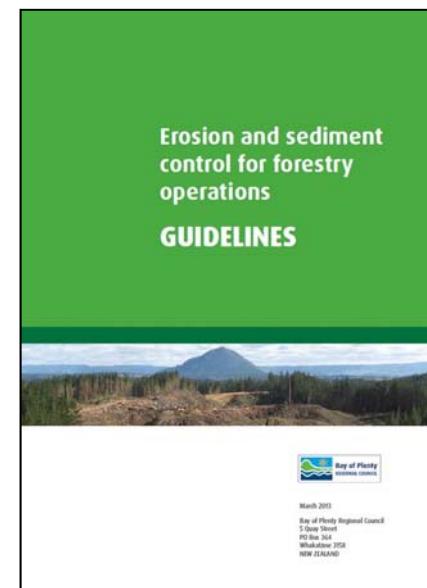
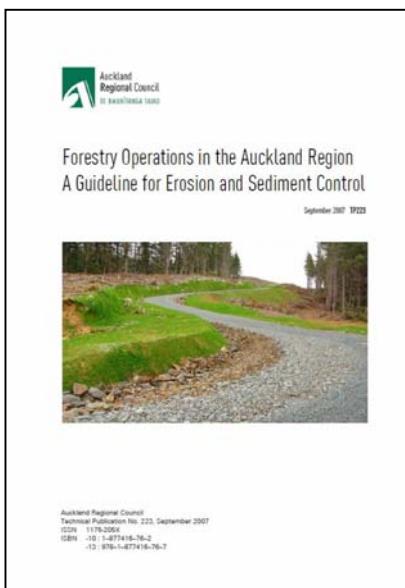
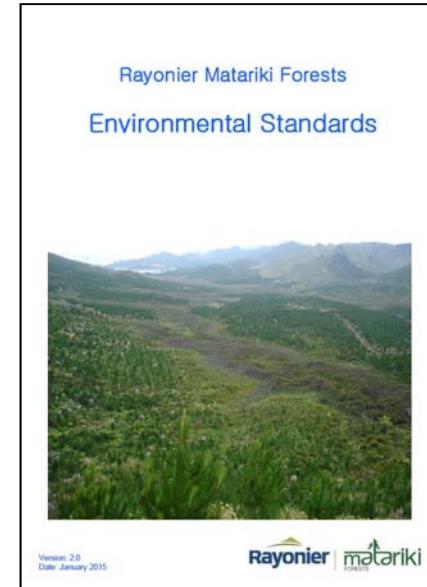
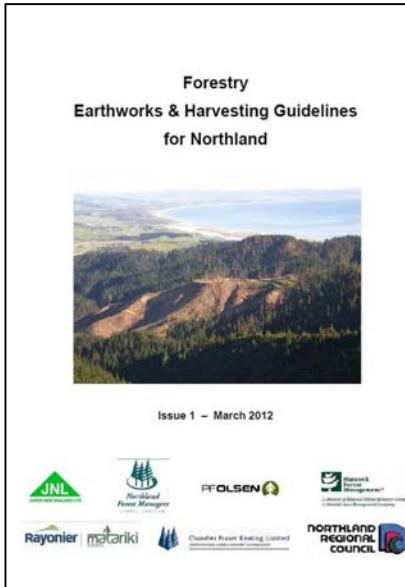
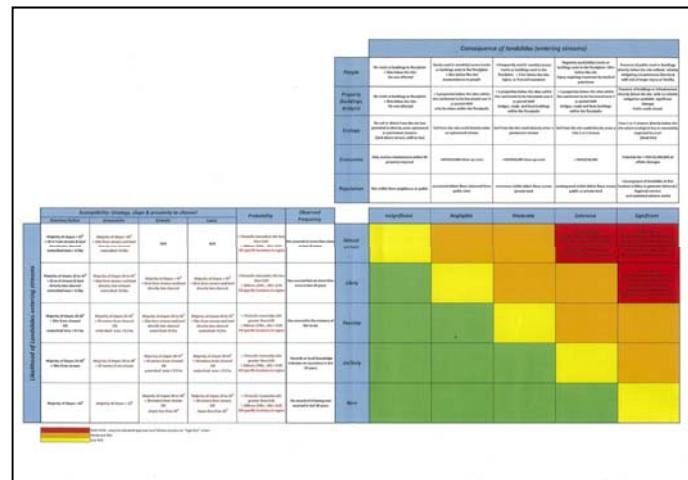
Council Centric View

- Feel unique
- View of the Problem
- Approach
- The Public



What is being done to manage the issue?

- Regulation
- Risk assessment
- Monitoring
- Data collection



Current Mitigation

- Debris traps
- Slash management
- Trees as barriers
- Retirement



What does this mean

- What is the true scale of the problem?
- What is being done?
- What could be improved?



<http://research.nzfoa.org.nz/>
www.gcff.nz

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Date: 09/02/2015

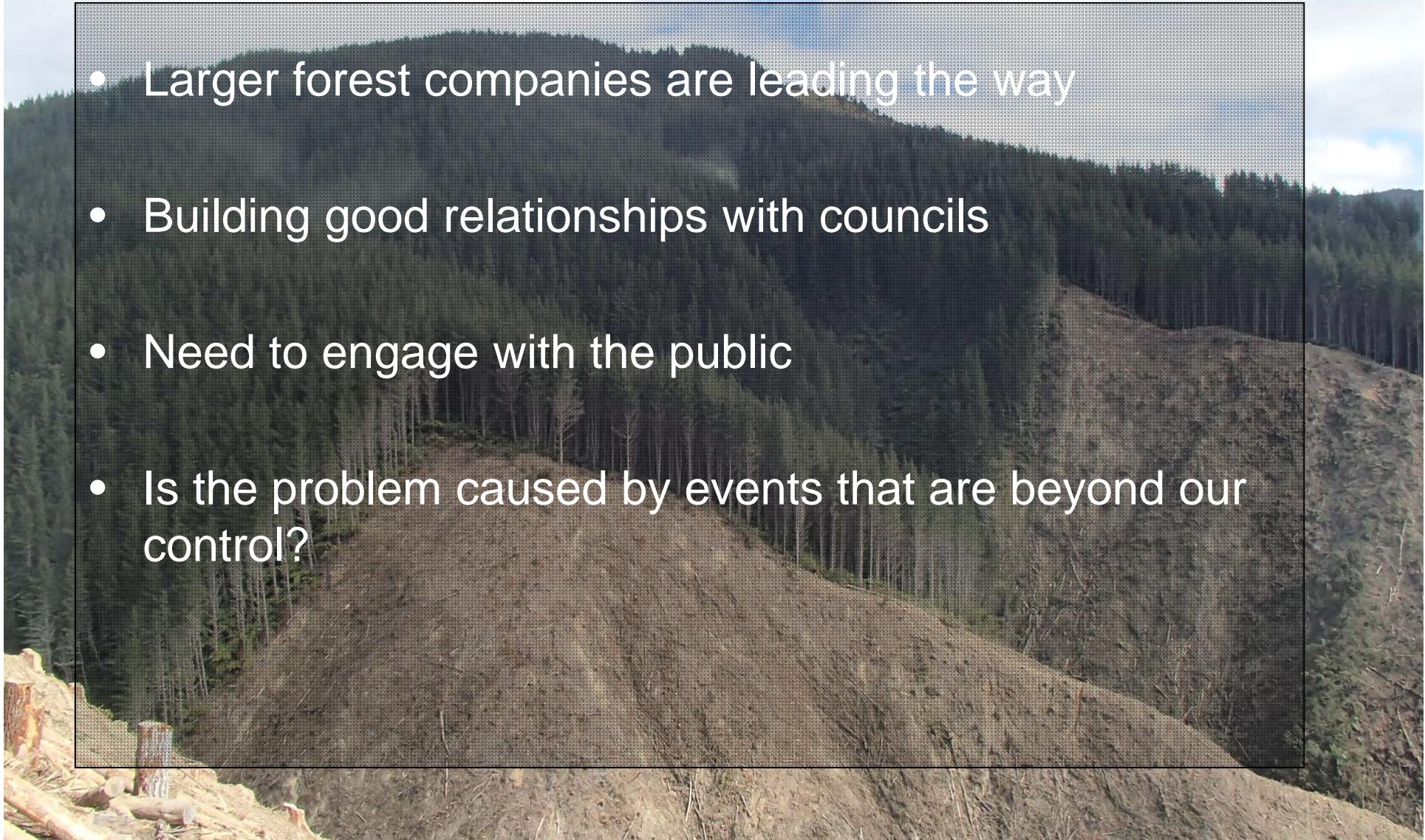


Funding Support Provided by the Forest Growers Levy Trust



What does this mean for the industry?

- Larger forest companies are leading the way
- Building good relationships with councils
- Need to engage with the public
- Is the problem caused by events that are beyond our control?



What do we still need to know?

- Where and how many
- Intensity of rainfall that triggers landslides



Growing Confidence in Forestry's Future

