

# Northland Regional Council Perspective



On afforestation to control hill country erosion

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# Impacts of afforestation on catchment water balance

## Envirolink project (\$40k Desktop exercise)

- Major afforestation expected
- Impacts on water cycle, groundwater recharge, surface water flows (water quantity)
- Water allocation (groundwater) information gap
- Case studies, monitoring data, estimates of changes
- Allocation limits adjusted?

## Forest Flows project (Scion/NIWA \$13+ million)

- Water quality and quantity
- Te Hiku forest to be a primary site?

# Regional afforestation on erodible land

- Historical conversion of forested land to pasture has led to very high levels of sediment in streams, lakes, harbours and coastal systems
- Major erosion issues (over 60% of the region and 40% of the region's pastoral land is classified as highly erodible).
- Partnered with MPI and delivering planting grants.
- A focus on all three pillars of our regional mission: creating a healthy environment, a strong economy and resilient communities.

# Flagship projects

Plantings that showcase innovative solutions to the environmental issues that arise from clearfell plantations

Clearfell harvesting:

- Generates large quantities of sediment
- Surface, landslide and slip erosion (window of vulnerability)

Continuous cover harvesting regimes offer a much higher level of environmental sustainability.

But...

To justify the higher costs of continuous cover harvesting, logs need to be worth more and therefore high-value timber products are required.

# Window of vulnerability



# The regional challenges

**To justify the higher costs of continuous cover harvesting, logs need to be worth more and therefore high-value timber products are required.**

1. To showcase species that produce high-value timber, with qualities such as natural durability, strength and appearance properties
2. To demonstrate that these species are suitable for continuous cover production forestry
3. To address growers perception of risk
4. To generate a sufficient scale of production

**Goal = a region that leads the way in sustainable production forestry**