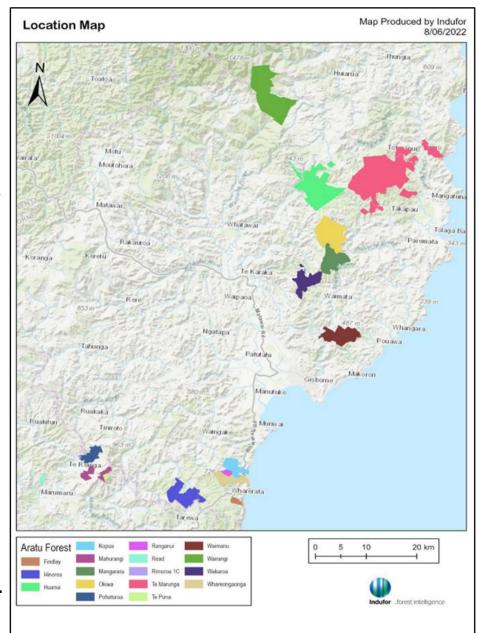


NZIF Conference Presentation – 11 September 2022
CPD Workshop 2 Environmental Risks, Adverse Weather Events
& Catchment Management
Neil Woods

Aratu – An Overview

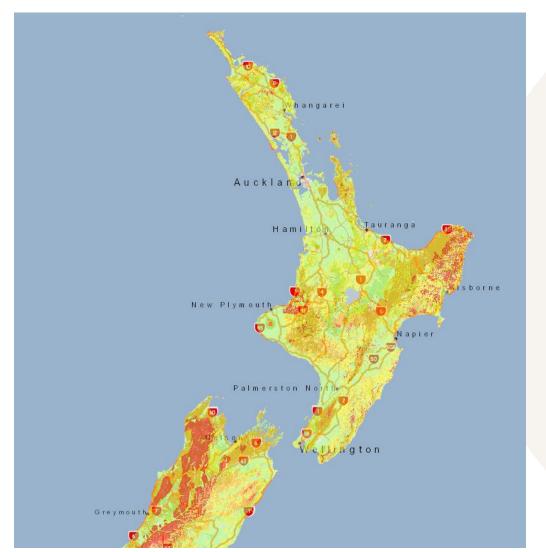
- Previously Hikurangi Forest Farms, FCF/Samling
- Purchased by New Forests' Fund ANZFF3 and associated coinvestors July 2019.
- Gross Area 35,198 hectares (17 Forests), 25,500 stocked,
 91% Freehold.
- Resource supports annual harvest of approx. 700,000 -800,000m³ per annum. 1R.
- Previously pruned regime, now unpruned.
- 28 Staff incl W/Thin crew plus ~250 contracted workers.
- PEFC & FSC certified.
- · Constrained ageclass distribution.
- Steep highly erodible soils.
- Challenges with local infrastructure, port, roads, processing.

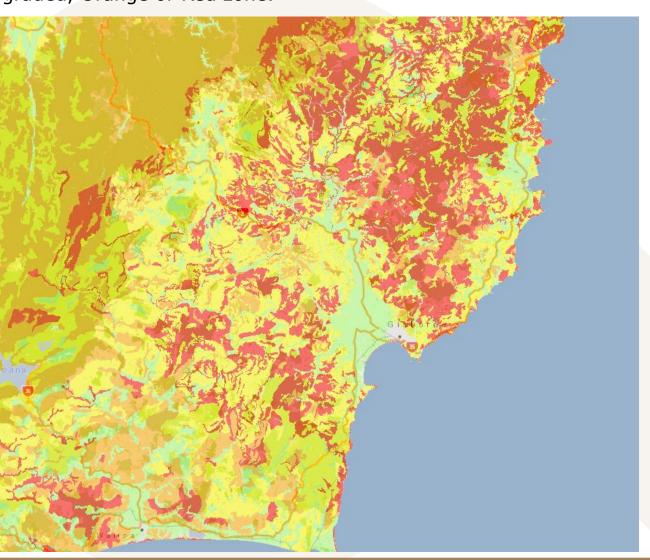




What are we dealing with? - RED ZONE: Very High erosion susceptibility

Most of the Aratu estate is graded, Orange or Red zone.





Land Use change in Tairāwhiti

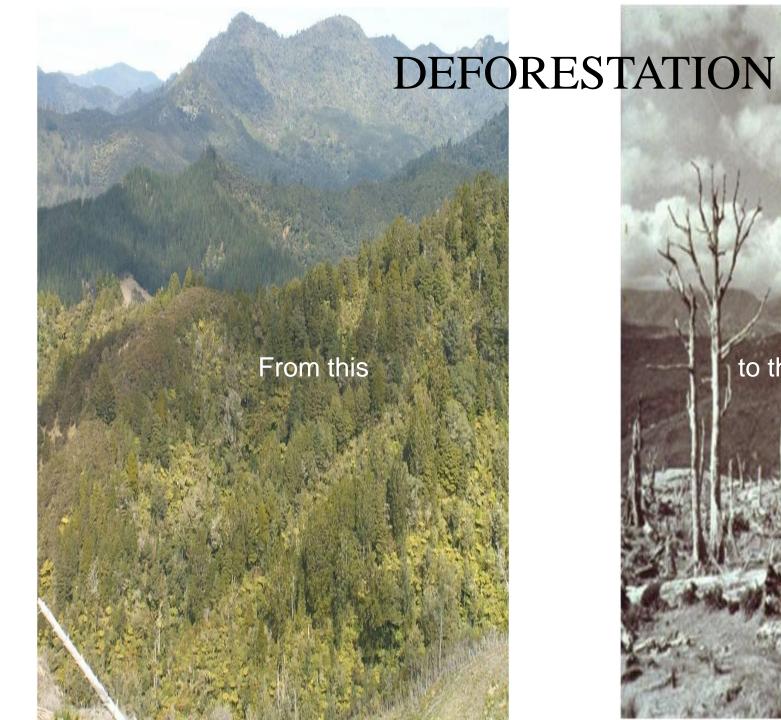
Four major periods of land use change:

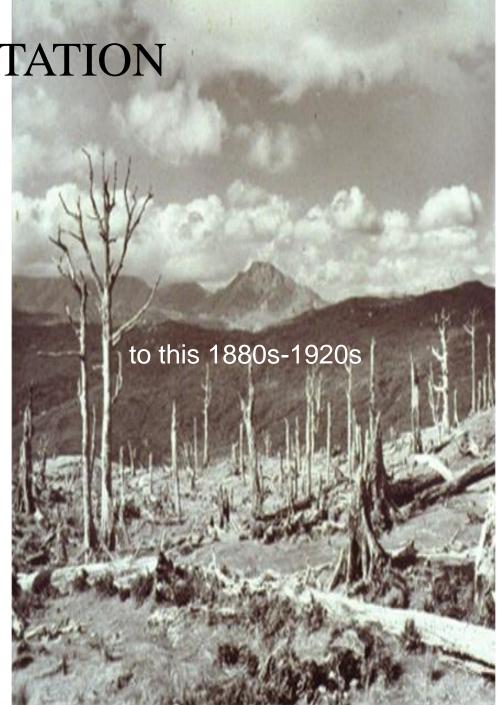
ARATU FORESTS LIMITED

- 1. Conversion of indigenous forest to pasture.
- 2. The reforestation of some pastoral hill country (1960-1985).
- 3. Further afforestation of pastoral land in the 1990s following Cyclone Bola (1988).
- 4. Now harvesting of plantations established in 2 and 3 above.

Scale and severity of erosion has severely impacted river quality in the region.









When combined with extreme weather events became this:





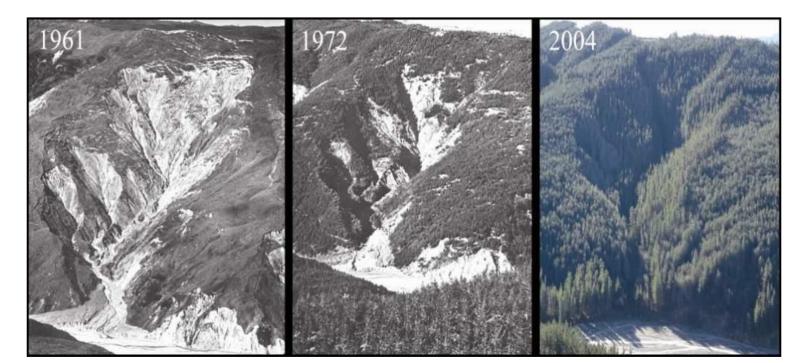
Plantings can have a positive impact:











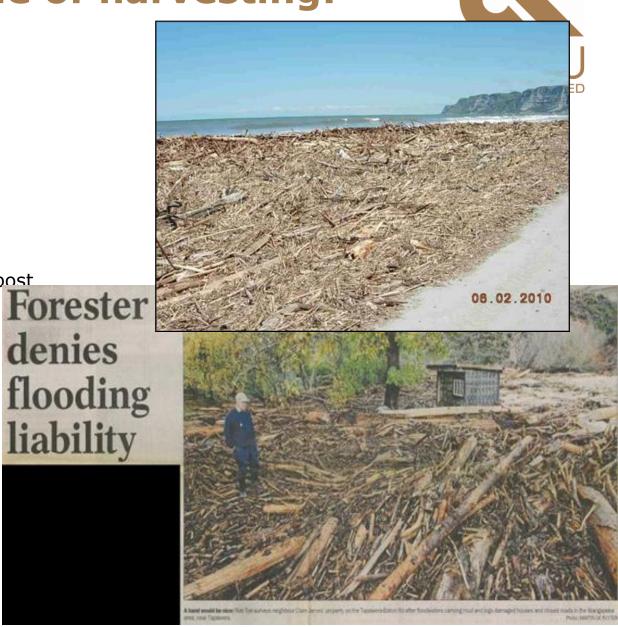
But - issues have arisen at time of harvesting:

- Road and Landing construction exposing bare land
- Harvesting exposes bare land high risk for up to 4 years.
- No residue market
- No large trees left in riparian as "slash catchers".

Severe Storms in 2018 resulted in considerable mobilisation of post harvest debris and slope movement

Local community has had enough and a raft of things needed to happen:

- 1. Changed practices with infrastructure build and harvesting.
- 2. Active management of high risk and Riparian Zones



eLandNZ Project.

ARATU FORESTS LIMITED

Within estate:

- 1. Some areas shouldn't have been planted in Pine,
- 2. some planted areas shouldn't/wont be harvested, and
- 3. some harvested areas wont be replanted in pine.
- eLandNZ are being offered some of categories 2 and most of 3 above





Strong alignment with New Forests' Vision

- A forestry venture between eLandNZ Limited and Aratu Forests Limited
 - In development since 2018 storms
 - Unconditional 5th March 2021
 - 5 year initial term
- A 90-year land management agreement
- Utilises revenue from honey and carbon to facilitate.
- Asset protection via Forestry Right
- Strong set of KPI's incl.
 - Mix of species planted
 - Local Iwi involvement
 - Safety
 - Survival rates
 - Associated research
 - Publicity
- · Silt, Biodiversity, Water quality, debris catchers
- NOT A SILVER BULLET





New Forests' Vision



To see investment in land use and forestry as central to the transition to a sustainable future.

 By 2030 we want to see all capital allocations to forests and other land use invested in strategies that create climate-positive and nature positive landscapes, integrating conservation, restoration, and sustainable production while generating shared prosperity for communities.



Sustainable Landscape Investment



New Forests' SLI framework is an integrated approach to managing material ESG issues in forestry investments.

- New Forests believes this holistic framework enhances investment performance and can help reduce risk, create value, and support beneficial environmental and social outcomes.
- New Forests uses the SLI framework to support investment decision-making, asset management, and investment monitoring.
- SLI reporting is included in operational reporting that flows from property managers through to New Forests for analysis and monitoring.



eLandNZ Project - progress

- Established ~63 ha in 2021, similar in 2022
- Mostly Manuka but KPI's require other species also.
- Initial survival and growth has been encouraging.







Impact on Aratu productive area is likely to be marginal







Improved protection of otherwise fragile ecosystem features.







Benefits to Aratu

Aligns with Aratu's own Strategic Goal regarding Balance Sheet objectives.

- Natural Capital
- Environmental Credits
 - Bio diversity,
 - Water quality,
 - Soil stabilisation
 - Wetlands protection and enhancement
- Improved Social license
- Recreation
- Alternate long term management of challenging areas

