



Afforestation Opportunities in the Rotorua catchment; use of the dNitro online tool. The carbon opportunity.

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Forestry – pine - pluses

- Reduces nitrogen outflows (from grazing and gorse)
- Situated in a region where market opportunities and infrastructure are the best in NZ
- Incentives Scheme is the most attractive in NZ – “free establishment” of an asset
 - \$4,000/ha, dystock
 - \$12,000/ha, dairy
- Logistics and management well understood
- Carbon introduces cashflow sooner than traditional forest resource
- The prospect for increased carbon value and enhancement of NZETS are high



Forestry – pine - minuses

- An investment rather than a lifestyle/income land-use
- Economics not well understood by farmers (and most other landowners)
- A non-indigenous species, monoculture
- Harvesting period creates some environmental and landscape risk



Forestry – mānuka - pluses

- Reduces nitrogen outflows (from grazing and gorse)
- Based on an indigenous species
- Incentives Scheme is the most attractive in NZ – “free establishment” of an asset
 - \$4,000/ha, dystock
 - \$12,000/ha, dairy
- New, exciting
- Cashflow business. Potential for oil and honey income.
- Rapidly developing infrastructure
- The prospect for increased carbon value and enhancement of NZETS are high



Forestry – mānuka - minuses

- A new industry where economics of plantations not well understood. As case-study develops some of the initial projections (for BOP) seem optimistic
- Not as robust/rapid as pine in the important early years when site capture critical
- Two species biological risk (bees and trees)
- Not a permanent income without replacement



Current carbon opportunity

Carbon income at different unit prices - (\$/NZU) - generated over the ten years from planting

	Area	\$ 15.00	\$ 20.00	\$ 25.00	\$ 30.00
Big pine block	10.9	\$ 27,631.50	\$ 36,842.00	\$ 46,052.50	\$ 55,263.00
Small pine block	4.0	\$ 10,140.00	\$ 13,520.00	\$ 16,900.00	\$ 20,280.00
	14.9	\$ 37,771.50	\$ 50,362.00	\$ 62,952.50	\$ 75,543.00
	\$/ha	\$ 2,535.00	\$ 3,380.00	\$ 4,225.00	\$ 5,070.00



Potential carbon upside

- Removal of \$25/NZU cap
- Inclusion of agriculture (will lead to increased demand for forestry generated NZUs)
- Averaging

Age	Carbon (NZU)
10	169
11	188
12	212
13	239
14	269
15	300
16	333
17	367
18	401



dNITRO

- Supported and funded by BOPRC
- Accessible and able to be used by landowners
- Demystify the economics of trees
- Real time, real areas
- Includes mānuka and radiata

www.dNITRO.co.nz



Engagement

- Land use change is not urgent for many landowners and from a sample of 4 landowners;
 - One land owner does not have email/internet
 - Three landowners have multiple-owners with consensus decision making the main form of governance
 - Two landowners have non-BOP based Directors
 - None of the land owners have experience with forest growing
 - One property owner has very restricted access to their property



Engagement

Even though the Incentives offer is substantial, land use change is not urgent for many landowners

So,

Council need to be proactive with constant communication and messaging required, and Council's offers needs to be compelling and consistent.

