



## CLIMATE CHANGE AND EFFICIENT RESOURCE USE: CASE STUDY 5

# PROJECT RAMEKA

# A local response to the changing climate

### THE PROPERTY

- A 50-hectare block in the Rameka Valley, near Takaka in Golden Bay.
- Existing land cover includes about 22.7 hectares in regenerating scrub, 12.5 hectares in radiata pine and 11.8 hectares in pasture.
- Managed as a carbon sink focusing on forest restoration, biodiversity and mountain biking.
- Contains part of the historic Rameka pack trail that originally linked Takaka and Motueka, which will be restored and developed into a mountain bike track.
- Estimated to have absorbed 513 tonnes of CO<sub>2</sub> in the last year.

### THE OWNERS

- Jonathan Kennett and Bronwen Wall bought the land in 2008 as their personal response to changing climatic conditions.
- The land is now owned by the Rameka Trust and managed by an incorporated society.



*This project is about two individuals feeling compelled to make a personal response to changing climatic conditions. With community support, they are quietly and determinedly planting trees.*

The seeds of Project Rameka were sown in 2007 when Jonathan Kennett and his partner Bronwen Wall were making a submission on the Wellington Regional Council's draft transport policy. In search of information about human powered transport, they searched the Internet for "climate change". They read the *Intergovernmental Panel on Climate Change Fourth Assessment Report*, then the *Stern Review on the Economics of Climate Change*.

"That was a tipping point for me – the realisation that this is actually incredibly serious," Jonathan says. "I really wanted to make a personal response, other than just being stunned into doing nothing."

The concept to establish a carbon sink took shape. The search for suitable land led them to a 50-hectare block in the Rameka Valley at Golden Bay.

"We wanted to be close enough to Wellington, where we live and work, so that we could minimise travel costs and the use of carbon-emitting transport to get to the land. We also knew there were good people, good land, several existing conservation projects and fantastic recreational opportunities in the Nelson/Tasman region. We also wanted to encourage awareness and respect for the natural environment," says Jonathan.

Two years later, plantings cover a range of species that are released regularly. Almost everything including planting, weed and pest control and track work, is undertaken by local volunteers, mountain bikers and friends from Wellington and Nelson who travel and work for the pleasure of being involved.

### LAND AND VEGETATION

The land was cleared under the government's land development scheme in the 1980s, but is now described by Jonathan as "pretty well thrashed".

An eco-survey carried out in May 2008 revealed a diverse range of more than 100 native and exotic species. The valley, within 50 metres of Rameka Creek, holds the greatest biodiversity. Scrub ranges in height from one or two metres, up to five or six metres, and established podocarps are being discovered as work progresses on mountain bike tracks.

### SPECIES SELECTION AND PLANTING

Plants are sourced from three small Golden Bay suppliers, supporting local business and reducing freight. In their first year, volunteers planted 350 trees. In the year to

# Key points

- 1 The long-term goal of Project Rameka is to cover almost the entire property with native forest to maximise its long-term carbon absorption (this is also known as carbon sequestration).**
- 2 Naturally regenerating scrub is allowed to evolve, and a narrow range of species is being regenerated in the pasture.**
- 3 Maintenance is vital. It's a waste of time to plant trees that aren't released regularly.**
- 4 The historic Rameka pack trail is being restored and developed into a track for mountain bikers and walkers.**

April 2010, they planted 1250 trees.

Regenerating scrub will be left to evolve naturally, but a narrow range of species is planted in the pasture. Flaxes and pittosporums are favoured because they grow fast enough to look after themselves and outstrip the competing grass. Totara will also be on the planting list but will be surrounded with sleeves made from old real estate signs to prevent them being smothered by the grass.

They are also trying to reintroduce some species that were originally found in the area, including nikau and beech.

## WEED CLEARING AND MAINTENANCE

Jonathan says it's a waste of time to plant trees if weeds aren't cleared regularly. Plants at the ex-pasture site are weeded in spring, autumn and summer.

Plants established in winter 2008, protected by wire net cages and old real estate signs, have achieved a 99 percent survival rate.

Similarly, more than 90 percent of the plants marked with bamboo stakes survived because they were easy to find and weed. Those planted in a 10m x 10m wire net cage didn't do so well, simply because they were difficult to spot amongst the grass.

Weed clearance is a matter of resources. Some weeds are top priority

– for example, Old Man's Beard. Meanwhile, barberry is being controlled but not as a high priority because it is not spreading very quickly.

Other pests include the local wildlife such as possums, hares and pigs. A stoat and rat trapping programme is also underway.

## PESKY PINES?

Radiata pine that was planted on the property in 1993/94 as a Kyoto forest has posed a challenge. Although the stand is quite tall, its economic value is low and many tops are blowing out, although it is not known why.

Most of the trees will be kept for another 70 years as a carbon store and only those planted next to the native trees will be removed. The plan is to run some trials by cutting light wells into plots to see if re-growth consists of natives or weeds.

## ON THE TRAIL

The growing network of tracks on the property will eventually become a paradise for mountain bikers.

The property contains part of the historic Rameka pack trail that linked Takaka and Motueka more than 100 years ago. The trail will be restored with a new lease of life as a 3.5km track for mountain biking or walking.

## INTO THE FUTURE

Project Rameka is an incorporated society and most funds, to date, have been donated. Jonathan and Bronwen are adamant that Project Rameka is a team effort and it needs community support.

The Rameka Trust owns the land and is registered with the New Zealand Emission Unit Register, as part of the Emissions Trading Scheme to meet New Zealand's commitment and obligations under the Kyoto Protocol.

The Trust is also part of the Permanent Forest Sink Initiative and is working to apply a QEII open space covenant to protect the land as a carbon sink in perpetuity.

Once the covenant is applied and trustees are sure the land will permanently meet the objectives of a carbon sink, Jonathan believes there may be potential to sell the property with a provision to build one house. Then, the Trust could buy another property to develop as a carbon sink to continue the process.

"We wouldn't sell the land until it was guaranteed that it would carry on absorbing carbon into the future," he says.

## FOR MORE INFORMATION

- Keep up to date with the work of Project Rameka: [projectrameka.carbonsink.org.nz](http://projectrameka.carbonsink.org.nz)
- Read about the Permanent Forest Sink Initiative and the Emissions Trading Scheme at the Ministry of Agriculture and Forestry's website: [www.maf.govt.nz](http://www.maf.govt.nz)
- Register or open an account with the New Zealand Emission Unit Register managed by the Ministry of Economic Development: [www.eur.govt.nz](http://www.eur.govt.nz)

### THIS IS ONE IN A SERIES OF CASE STUDIES CALLED CLIMATE CHANGE AND EFFICIENT RESOURCE USE

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