

**Submission to  
Environment Canterbury  
2021 Draft Long Term Plan**

**Submitted by  
Banks Peninsula Native Forest/Climate Change  
group**

**Comprised of representatives from  
Banks Peninsula Conservation Trust  
Christchurch City Council  
Environment Canterbury  
Lucas Associates  
Manaaki Whenua / Landcare Research  
Maurice White Native Forest Trust (Hinewai Reserve)  
QEII National Trust  
Rod Donald Banks Peninsula Trust  
Orion New Zealand Ltd**

11 April 2021

## Preface

The Banks Peninsula Native Forest/Climate Change group is an informal inter-agency alliance seeking to improve opportunities for biodiversity through native forest restoration on Banks Peninsula.

Group members jointly responsible for drafting this submission are:

Organisation	Representative	Role/Qualifications
Banks Peninsula Conservation Trust	Maree Burnett	General Manager
Lucas Associates	Di Lucas	Director, Landscape Planner
Manaaki Whenua / Landcare Research	Larry Burrows	Forest Ecologist
Maurice White Native Forest Trust (Hinewai Reserve)	Bruce Hansen Hugh Wilson	Trustee Trustee and Manager
QEII National Trust	Alice Shanks	Central Canterbury Representative
Rod Donald Banks Peninsula Trust	Suky Thompson Bob Webster Bryan Storey	Trust Manager Trustee – Landowner participating in ETS/1BT Trustee – Geologist
Orion New Zealand Limited	Clayton Wallwork	Forest and Biodiversity Lead

**We wish to make an oral submission in support of our written submission.**

### Address for service

Banks Peninsula Native Forest/Climate Change group  
c/o Suky Thompson  
Rod Donald Banks Peninsula Trust Manager  
PO Box 5, Little River, 7546  
Email: [suky@roddonaldtrust.co.nz](mailto:suky@roddonaldtrust.co.nz)  
Tel: 03-3047733

Local scientists/experts who have been consulted and involved in the group include Nick Head, Christchurch City Council Senior Ecologist and Helen Greenep, Environment Canterbury Biodiversity Officer for Banks Peninsula.

## 1 Introduction

The Banks Peninsula Native Forest/Climate Change group is a collaboration of experts from organisations and agencies with knowledge of, an interest in, and/or responsibility for the protection and enhancement of native biodiversity and landscapes on Banks Peninsula.

The group formed in 2019 to explore the interface between native forest regeneration and carbon sequestration and to find ways to incentivise a change in marginal land use from farming to native forest, in particular through improvements to the Emissions Trading Scheme, so that setting land aside for sequestering carbon in permanent native forests becomes a financially viable alternative to pastoral farming and rotational forestry.

We have since made substantial submissions to the Climate Change Response (Emissions Trading Scheme) Amendment Bill, the Climate Change (Forestry Sector) Regulations 2008, the associated Select Committee process and more recently to the Climate Change Commission's draft advice.

We have also met with MPI and hosted a visit to Banks Peninsula to demonstrate the degree of natural regeneration occurring on the Peninsula and discuss the current issues and barriers to registering naturally regenerating forests to register in the Emissions Trading Scheme.

Our submission to Environment Canterbury is based on our work to date and:

- Supports Option 1 of the LTP with the full Transformational Opportunities
- Requests greater recognition of the co-benefits of native forest for both biodiversity and climate change mitigation.
- Supports accelerating the regeneration of the natural environment, including the new Me Uru Rākau program.
  - We request that this is substantially extended and focusses on natural regeneration for Banks Peninsula to harness the opportunities here.

## 2 Support for Option 1

We support Option 1 because the world now has less than 10 years to make transformative changes toward minimising global warming and the restoration of natural environments, and we agree with Environment Canterbury that the transformative projects it has identified in Option 1 are essential, and despite the rate increases required, must go ahead.

We go further and suggest that more action than identified in Option 1 is needed and that this will also need to be funded.

We would like to see greater funding for biodiversity through greater incentives to private landowners to protect biodiversity, more assistance with pest control, more rigorous enforcement when native biodiversity is cleared, and land purchase for conservation.

We would like to see a greater recognition of the role of native biodiversity in both mitigating and assisting adaptation to climate change

We thank Environment Canterbury for funding the recently released Environmental Defense Society case study *Restoring Te Pātaka o Rākahautū/Banks Peninsula*. This is an excellent report and identifies that the current regulatory and financial incentives encourage landowners to establish new exotic forestry plantations on Banks Peninsula and the threat this poses to native biodiversity and the landscape.

It makes key recommendations<sup>1</sup> relevant to the Environment Canterbury LTP and we ask that Environment Canterbury now implement these recommendations and outline in further detail ways in which this can be achieved.

---

<sup>1</sup> Peart, Raewyn and Woodhouse, Cordelia, Environmental Defence Society, *Restoring Te Pātaka o Rākahautū/Banks Peninsula*, February 2021 p72

We now focus on ways in which Environment Canterbury can capitalise on the natural environment of Banks Peninsula and the initiatives already underway to give greater effect to the transformative changes envisaged in the LTP in a cost-effective way.

### 3 Focus on natural regeneration for Banks Peninsula

We seek greater recognition in the LTP for the unique role that Banks Peninsula can play for the Canterbury region as a biodiversity hotspot and vessel for carbon sequestration through natural regeneration.

Banks Peninsula is approximately 115,000ha much of which is steep marginal land. Prior to European settlement, most of this land was covered in a dense native forest, and wherever the touch of humans is light, this native forest is rapidly and naturally returning. The combination of the terrain climate, existing seed sources and the birds to spread them, creates a haven for the natural regeneration. 15% of the Peninsula is now dominated by regenerating indigenous vegetation, naturally recovering from its low point of less than 1%.

The Peninsula therefore provides “low-hanging fruit” for Environment Canterbury to achieve its goal of accelerating regeneration of the natural environment – ***through harnessing the natural process of regeneration.***

We urge Environment Canterbury to make a clear distinction between the activity of planting and the natural process of regeneration in its biodiversity and climate work. Having clarity between these two different activities will be critical to getting the new incentives right.

#### 3.1 Planting

- Planting a native forest means that humans are in charge.
- Seedlings are grown in nurseries, certain species selected for planting and then planted out.
- Planting a native forest is not in this sense different from planting an exotic forest. It is a human construct with defined and documented parameters that can be easily measured by human tools.

#### 3.2 Natural regeneration

- Natural regeneration, also known as rewilding or reversion means that nature is in charge.
- This is a completely different construct and not so easily measured by human tools.
- Seeds are spread by birds in an apparently random way, meaning the species mix can be much more complex and diverse.
- Regeneration happens gradually as the conditions become right for seed germination and survival.
- Regenerating forests gradually spread out from their existing margins rather than happening all at once, and typically follow a succession pattern.
  - Species such as bracken, bush lawyer, muehlenbeckia may appear first in grasslands, and once they have broken the sward, then sub-canopy tree species such as mahoe or kanuka follow.
- The role of humans is to assist nature, not to control the process

#### 3.3 Natural regeneration more cost effective

Planting natives is much more labour intensive and expensive than exotics, such as pines or eucalypts. The seedlings are more expensive to grow and will generally not be a monoculture. The area to be planted must be well fenced to exclude grazing stock. Prior to planting competing vegetation such as grass must be completely removed or sprayed in advance. Then good holes need to be dug, the trees planted gently and with care, and mulches or weed mats applied to reduce grass and weed competition, and hare guards staked in place as most natives are highly palatable.

The planted natives then require quite extensive aftercare to ensure ongoing releasing from competing grasses and weeds for two to three years until a canopy is established. Even once the canopy is established, pest control to deal with browsers such as deer may be needed, and to achieve the full biodiversity benefits. Fences must be maintained to dissuade neighboring grazing stock from entering and damaging the forest.

All of these costs and issues are exacerbated on steep marginal land which is hard to work on and often hard to get labour too.

Care must be taken to use eco-sourced native plants to avoid pollution of local genetic variations through the introduction of non-endemic varieties.

As we have already described, on Banks Peninsula natural regeneration occurs rapidly wherever nature is given a chance, once human action to remove it (such as spraying, cutting or grazing with goats) ceases. Regeneration of non-palatable species that can tolerate some grass competition happens even in pasture provided that it is near to seed sources and not subjected to human clearance.

Natural regeneration is therefore much more cost effective than planting (estimated at \$1,500 per hectare for natural regeneration compared to \$15,000 (or more) per hectare for planted native forest), as nature does the bulk of the work – growing the seeds and planting them – obviating the need for expensive human labour. Seedlings that thrive in any particular environment are those best suited to that environment, and a highly diverse species mix is likely to eventuate through natural regeneration, once grazing stock have been removed.

Aiming to afforest marginal land further tips the balance in favour of natural regeneration.

Pest and weed control and fencing are needed regardless of whether native afforestation occurs as a result of planting or natural regeneration, so these ongoing costs are similar for both methods.

For these reasons, we consider that natural regeneration should be the principal method by which programs such as Me Uru Rākau aim to regenerate the natural environment.

Planting native forest should be principally seen as a tool to engage people and communities on easy front country projects.

There may be also be some situations where limited enrichment planting could speed the process of natural regeneration, and further research on this would be useful.

This is a link to a successful natural regeneration approach by the Maurice White Native Restoration Trust as an example of how this can be achieved - <https://www.youtube.com/watch?v=3VZSJKbzyMc>

#### **4 Add mitigation to the Climate Change Transformational Opportunities**

The Climate Change Commission has identified that reduction of emissions is vital for New Zealand to reach net zero emissions of long-lived gases by 2050, and to reducing biogenic methane emissions by between 24-47% by 2050. It has identified the urgency of taking action now with the focus principally on emissions reduction.<sup>2</sup>

We submit that Environment Canterbury supports the Climate Change Commission by adding a mitigation workstream to its Climate Change portfolio and takes a leadership role in Canterbury to introduce and support measures that will reduce emissions and sequester carbon. This should be in addition to what is already proposed in the LTP Option 1 for increasing resilience and adaptation and transforming public transport.

The Climate Change Commission describes the role of native forests as creating: *a long-term carbon sink while providing a range of other benefits, like improving biodiversity and erosion control* and states that incentives are needed to get more native trees in the ground.

---

<sup>2</sup> He Pou a Rangi Climate Change Commission 2021 Draft Advice for Consultation, p10

For the reasons we have outlined above, Banks Peninsula Native Forest Climate Change Group has submitted to the Climate Change Commission that natural regeneration is the most effective and practical way to achieve the additional amount of native forest the Commission has identified as necessary.

We submit here that a role for the additional mitigation workstream is also for Environment Canterbury to devise incentives making it financially attractive and easy for landowners to change their marginal land use from pastoral farming to regenerating native forest. Any current perverse incentives that encourage either native clearance or exotic rotational forestry on such land should be identified and cease to apply to such marginal land.

We see this workstream as overlapping with the Biodiversity and Biosecurity portfolio.

## 5 Increase funding for biodiversity on Banks Peninsula

The LTP expects Environment Canterbury to *promote and support landscape-scale biodiversity and biosecurity partnerships, including Pest-Free Banks Peninsula*<sup>3</sup>

We seek an increase in funding for biodiversity and a recognition that biodiversity initiatives also support climate change mitigation and adaptation.

Three channels for additional funding to increase public and private conservation biodiversity areas are:

- Increasing funding for the Me Uru Rākau workstream
- Purchase land for conservation through setting up a land acquisition fund
- Extending funding for Pest Free Banks Peninsula

### 5.1 Increase in funding for Me Uru Rākau

We support the concept of the Me Uru Rākau initiative to support landowners and community groups to protect and regenerate ecological catchments by providing practical advice and support but submit that the programme needs to be:

- backed by a best-practise revegetation, from seed-collection to nursery management to planting and management. No planting should go ahead without a plan for ongoing pest animal control and shade tolerant “ecosystem-disrupting” weed (such as Old Mans Beard) control. Sites should be assessed for their ability to naturally regenerate before there is any investment in human planting
- much bolder with increased funding if it is to effectively *promote and support landscape-scale biodiversity partnerships*
- focus on natural regeneration as the optimum method to achieve biodiversity goals on Banks Peninsula.

Below we list a number of ways to achieve landscape scale biodiversity partnerships.

#### 5.1.1 Support private landowners through Banks Peninsula Conservation Trust

The best and cheapest way to increase the area under conservation management is to partner with private landowners and covenanting agencies. The support they require is funding for fencing and weed control.

The size of projects is limited by the funding available. With more funding landowners will have confidence of funding for larger (transformational) areas with marginal farming value. The co-benefit is the natural regeneration of forest for carbon sequestration.

On Banks Peninsula, much of the work of supporting landowners and community groups falls to the covenanting authorities, particularly Banks Peninsula Conservation Trust. We would like to see greater

---

<sup>3</sup> Environment Canterbury, Draft Long-Term Plan 2021–31 Te Pae Tawhiti 2021–31 Supplementary Information for the consultation document Approved 25 February 2021

support for the Banks Peninsula Conservation Trust with an increase in operational grant funding through Environment Canterbury.

### **5.1.2 Increase funding for fencing support**

Fencing to exclude grazing stock is the biggest single up-front cost facing landowners wishing to set aside land as permanent native forest. The current grants available for this are minimal and hotly contested, with covenanting agencies having long waiting lists to fence areas that landowners have already agreed to covenant.

On Banks Peninsula fencing is difficult and expensive due to the steep rock hillside with numerous springs and streams, with a median cost of \$28-\$30 per metre. Most covenants protect waterways and bush in linear gullies. The \$104,000 per annum only pays for 50%-60% of 7 km of fencing. That is 2-3 covenants per year.

The funds are efficiently distributed with the Environment Canterbury co-operating with Christchurch City Council and the two covenanting authorities, BPCT and QEII Trust. However, the funds available are insufficient and fail to cope with the current demand of voluntary covenanting. Both covenanting agencies have waiting lists.

Achieving the Climate Change Commission target to ramp up permanent native forest per year will therefore require much more generous fencing grants to be made, particularly for Banks Peninsula, where conditions are ideal for the natural regeneration of native forest.

To this end the amount of funding through Water Zones and regional Biodiversity committee needs to be at least doubled.

## **5.2 Purchase land for conservation**

We understand that Environment Canterbury does not currently purchase land for conservation. To reduce the land-owning risk and costs we wish to see a land-acquisition fund as part of Environment Canterbury's support for biodiversity protection. A fund would be available for land purchases by conservation organizations for the benefit of biodiversity, landscape and recreation. The Nature Heritage Fund has not been open for applications from Canterbury for 2 years (the next funding round has not been advised). This has left landowners who wish to sell conservation land on their farms for conservation with no option but to sell for continued farming.

There are known opportunities Banks Peninsula that require the catalyst of funding from Environment Canterbury and District Councils to enable local Trusts to acquire land for the public good, and landowners to exit from land knowing that conservation and carbon sequestration is the best landuse.

We would like Environment Canterbury to contribute to the purchase of land on Banks Peninsula for the purpose of conservation parks – places where native biodiversity flourishes and regenerates and where the public are allowed and enabled to visit in a way that respects the biodiversity and other values – but not necessarily to own such parks. One way would be to make a capital grant to the Rod Donald Banks Peninsula Trust.

## **5.3 Extended funding for Pest Free Banks Peninsula to deal with new pests**

Improved pest control support will also enhance biodiversity and sequestration on both private and public land.

We support the funding for Regional Pest Management and Pest Free Banks Peninsula.

We also seek an extension to the funding for Pest Free Banks Peninsula to enable it able to carry out early intervention and risk management of pests to protect economic production, biodiversity and mahinga kai. Recently pigs have invaded the south-western side of Banks Peninsula from Gebbies Pass round to Little River, but Pest Free Banks Peninsula has its funding entirely committed to its Strategic Plan and does not have sufficient to cope with a new invasion such as this.

Controlling plant pests and the 4 species of invasive wasps are also outside the brief of Pest Free Banks Peninsula. Research shows these to have as much impact as animal pests on undermining native ecosystem health and thus diminishing food sources for native fauna. We likewise seek extension of pest funding to address these.

## **6 Better monitoring and compliance around native biodiversity**

Earlier we stated that native forest is rapidly and naturally returning. The changes we have described above are those that support people to work with nature to support this regeneration.

The changes we request under the monitoring and compliance workstream are for Environment Canterbury to ensure its regulations adequately protect native vegetation and that deliberate destruction of established native vegetation contrary to the regulations is followed up and penalties imposed.

Recently there has been a disturbing trend of spraying large stands of native vegetation to improve pasture. This is counter-productive to the goals set out in the LTP.

## **7 Conclusion**

The Climate and Ecological emergency has been recognized at both the national and Canterbury level.

The Banks Peninsula Native Forest Climate Change Group asks Environment Canterbury to recognize the role that Banks Peninsula can play as it shifts the regulatory and incentive framework toward one of accelerating regeneration and building community engagement. The only thing stopping Banks Peninsula becoming cloaked once again in native forest is human activity. With appropriate support from Environment Canterbury a shift from pastoral farming and exotic forestry to native forest regeneration on marginal land could be rapidly achieved and on a landscape scale, creating massive gains for both biodiversity and climate change mitigation.