

Vision Kerikeri

Growth with Vision

5 Manako Place, RD 3

KERIKERI 0230

visionkerikeri@gmail.com

www.visionkerikeri.org.nz

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Proposed Regional Plan for Northland - Vision Kerikeri submission on riparian planting

Trade competition. Vision Kerikeri will not gain an advantage in trade competition from this submission.

Hearings. We wish to speak in support of our submission. If others make a similar submission, we will consider presenting a joint case to the hearing panel.

1. Riparian planting

We are making this submission in response to the Hearing Panel's request for further information on matters that were not included in the notified Plan.¹

In this submission we use the term 'riparian planting' to mean the planting of native trees and other native plant species on the margins of water bodies such as rivers, lakes, drains, wetlands and coastal margins.

Although riparian planting is often regarded as a non-regulatory activity, it is also desirable to include riparian planting in relevant rules and policies of the Regional Plan.

2. Decisions sought

We request the council to amend the proposed Regional Plan so that the resource consent process will actively promote riparian planting when activities include or affect the margins of water bodies and coastal margins.

Riparian planting should be added as a new condition in relevant rules, so that riparian planting will be required in situations where it will help to protect water quality, ecosystem health, or enhance biodiversity, or improve community recreation amenities, and/or provide other benefits to the environment or communities.

2.1. Section B Definitions

Add definitions:

Riparian planting: Planting, including on-going maintenance, of indigenous tree species and other indigenous plant species on the margins (normally 20 metre width) of water bodies,

¹ Minute and directions of the hearing panel, Proposed Regional Plan for Northland, Appendix 1 of Minute 1, <https://www.nrc.govt.nz/contentassets/506f48db06744ab782c65e56acd19dde/minute-1---hearing-panel-for-the-proposed-regional-plan-for-northland-web.pdf>

including rivers, lakes, wetlands, drains, estuaries, coastal margins. Planting density should be sufficient to provide environmental benefits and suppress unwanted weed species.

Margins of water bodies: Land (normally 20 metres wide) along the edges of water bodies, including rivers, lakes, wetlands, drains, estuaries, coastal margins.

2.2. Section C Rules

We request the council to add conditions in rules that cover works or activities that affect the margins of water bodies and coastal margins – so that riparian planting will be required in situations where it will help to protect water quality, ecosystem health, or enhance biodiversity, or improve community recreation amenities, and/or provide other benefits to the environment or communities or farms.

- C.1.8 Coastal works general conditions. Add new condition: Require revegetation and/or planting of indigenous plant species in coastal margins where works or disturbance occur, especially in areas at risk of erosion or sediment runoff or other issues.
- C.2.1.11 Minor river bank protection works. Add new condition: Require indigenous plant species to be planted on margins after the works are carried out.
- C.2.2.1 Wetland management and enhancement. Add clause at end of condition (2): ... and planting is normally limited to indigenous species, preferably sourced locally.
- C.2.3 General conditions for activities in rivers, lakes and wetlands. Add new condition: Activities, works or disturbance in the margins of water bodies will be followed by planting of indigenous species in the margins.
- C.3.6 River channel diversion, C.3.7 Damming or diverting water, and C.3.9 Damming or diversion of water in significant wetland or significant area. Add new condition: Activities, works or disturbance in the margins of water bodies will be followed by planting of indigenous species in the margins.
- C.4.8 Land drainage and flood control general conditions. Add new condition: Activities, works or disturbance in the margins of water bodies will be followed by planting of indigenous species in the margins.
- C.6 Discharges. Require resource consent for diffuse discharges, as proposed by Forest & Bird, and add condition requiring riparian planting in the margins of water bodies.
- C.8.1.1 Table 7 Dates when livestock must be effectively excluded from water bodies and permanently flowing drains. Add new condition: The dates set out in Table 7 (taking account of the revisions requested in our submission) will also be the deadlines for implementing riparian planting.
- C.8.1.2 Access of livestock to rivers, lakes and wetlands. Add new condition: Require riparian planting on the 20m margins of water bodies.
- C.8.3 Earthworks. Add new condition: Disturbed or exposed soil within 20m of a water body will be planted with indigenous plant species.
- C.8.4 Vegetation clearance. We support the rules suggested by Forest & Bird for C.8.4.1 – C.4.8.x. Additional new conditions: Clearance of indigenous vegetation is not normally permitted in the margins of water bodies. If non-indigenous vegetation is cleared in the margins of water bodies, the margins will be replanted with indigenous species.
- And add similar conditions in any other rules where riparian planting can be implemented.

2.3. Section D Policies

We request council to add policy statements that will actively promote and/or require riparian planting as part of the resource consent process, in order to establish broad corridors and substantial networks of indigenous vegetation across Northland (wildlife corridors). Examples below, for illustration:

- Policy D.2.7 Managing adverse effects on indigenous biodiversity. We support Forest & Bird's request for a new policy for the protection and maintenance of indigenous biodiversity, and in addition we ask the council to support the 'enhancement' of indigenous biodiversity.

Add new policies for: The protection, maintenance and enhancement of indigenous biodiversity, and adopt measures that will require and/or strongly promote the planting of indigenous plant species in the margins of water bodies and other areas to create large continuous networks of broad wildlife corridors throughout Northland.

- D.4.5 Maintaining overall water quality, and related policies under D.4. The policy should promote measures that actively improve water quality, and require or strongly promote riparian planting using the resource consent process as well as non-regulatory methods.

3. Role of riparian planting in meeting functions under RMA

Riparian planting is a cost-effective activity that can assist the regional council towards meeting key functions of regional councils identified in the RMA (s30), particularly the following:

(1)(a) ... to achieve integrated management of the natural and physical resources of the region ...

(c) the control of the use of land for the purpose of —

(i) soil conservation

(ii) the maintenance and enhancement of the quality of water in water bodies and coastal water

(iii) the maintenance and enhancement of ecosystems in water bodies and coastal water

(iv) the avoidance or mitigation of natural hazards ...

(f) the control of discharges of contaminants into or onto land, air, or water and discharges of water into water ...

(ga) the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity

MfE has summarised the role of Regional Plans with respect to discharges, as follows:

'Section 15 [of the RMA] provides, amongst other things, that no person may discharge any contaminant into water or onto or into land in circumstances which may result in that contaminant entering water unless the discharge is expressly allowed by a resource consent or a rule in a regional plan.

Where land use results in diffuse discharges by farming livestock, the Ministry considers that regional councils should ensure their regional plans regulate the effects of livestock farming as a land use (under s9 of the RMA), and as a discharge (under s15 of the RMA).

Regional councils can adopt (and have adopted) land use rules, discharge rules, or a combination of both to control diffuse discharges to water originating from stock excreta...

Consistent with regional council requirements under section 32 of the RMA, and their functions under section 30 of the RMA, the Government supports councils using the range of tools available to them to manage the impact of land use activities on water quality.’²

Riparian planting, combined with stock exclusion in agricultural areas, is a useful tool that can make a significant contribution to the improvement of water quality in Northland.

4. Riparian planting will benefit farms – as well as the environment and communities

The benefits of riparian planting for the community and the environment are clear – they include, for example, reduced erosion and sediment, reduced water pollution, improved biodiversity, improved ecosystem health, improved community amenities, and climate change mitigation.

The Regional Plan should also recognise that riparian planting will benefit farmers.

Taranaki Regional Council (TRC) and others have reported the following benefits for farms that carry out riparian planting with stock fencing:

- Cleaner water creates fewer blockages in the pipes that carry water for stock, irrigation or dairy sheds
- Reduced wear and tear on pumps and spray lines (due to cleaner water)
- Improved milk grades are obtained when dairy sheds no longer draw water from contaminated streams³
- Cattle are not exposed to liver fluke (because they no longer drink directly from streams)
- Sheep and beef stock have better health and faster weight gain because their water sources are no longer contaminated by pathogens⁴
- Fences prevent stock falling down steep banks or getting trapped in bogs, and reduce stock deaths from drowning
- Streambank fences enable easier stock control while mustering
- Downstream farms have cleaner water
- Reduced erosion of stream banks; and reduced problems of flooding
- Riparian trees can provide shade and shelter for stock. Studies have indicated that shade and shelter reduce stress from heat or cold, and can contribute to greater weight gain of stock⁵
- Improved water quality and ecosystem health provide better recreation facilities for farming families when fishing, swimming, etc.

² MfE *Key messages for managing discharges: The National Policy Statement for Freshwater Management*, 2015, http://www.mfe.govt.nz/sites/default/files/media/Fresh%20water/key-messages-managing-discharges_0.pdf

³ Taranaki Regional Council, factsheet No. 22, *Why manage stream banks? The benefits of riparian management*, <https://www.trc.govt.nz/assets/Documents/Guidelines/Land-infosheets/LM22benefits-of-ri-man09.pdf>

⁴ Taranaki Regional Council, factsheet No. 22 (above), <https://www.trc.govt.nz/environment/freshwater/riparian-management/>

⁵ For example: MPI & Beef & Lamb New Zealand, *Shelter*, fact sheet, May 2017. Bloomberg & Bywater, *Estimating the effect of shade on heat stress*, Lincoln University, https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/3633/Effect_of_Shade.pdf?sequence=1

- Enhanced farm landscapes and well managed waterways raise the real estate value of farms
- In future, processing plants (for dairy products etc.) are likely to pay a premium for products from farms that demonstrate they are managed in ways that avoid damage to the environment.

5. Feasibility of large-scale riparian planting

Large scale riparian planting is technically and economically feasible. This has been demonstrated in many areas of New Zealand.

For example, MfE reports that farmers in the Taranaki region have planted 390,000 plants per annum in riparian zones, even during the downturn in milk prices. About 4.3 million plants have been supplied to landowners in Taranaki, and almost 100% of dairy farms have a riparian plan for fencing and riparian planting, covering 14,500 kilometres of streambank in Taranaki. MfE concluded that fencing/planting has delivered clear benefits for water quality.⁶ Taranaki Regional Council aims to ensure that most of the region's streambanks are protected by riparian fencing and planting by 2020.⁷

A substantial amount of planting has also been carried out in riparian and coastal areas of Northland to date. Volunteers at the Shadehouse nursery in Kerikeri currently grow about 25,000 native trees/plants per year for planting by community groups across Northland. In the past decade or so the Shadehouse has produced a total of 280,000 native trees/plants, mainly for riparian and coastal areas. Many additional native trees have been provided by commercial nurseries at low cost for riparian planting in Northland.

6. Cost-benefit of riparian planting

A study of the economics of riparian restoration on farmland has shown that the benefits (greenhouse gas emissions, nitrogen leaching, phosphorus loss, sedimentation and biodiversity gain) and relevant costs (fencing, alternative stock water supplies, restoration planting and opportunity costs) generate benefit cost ratios of restoring riparian margins (5 to 50 metres) are very great with benefit/cost ratio between 1.4 to 22.4. While a 50 metre margin has high opportunity costs from loss of farmland and costs of restoration especially if fully planted, benefit cost ratio depends on the land use, location and degree that planting is undertaken or left to nature. The study shows that a marginal strip of 20 metres overall has a cost benefit ratio of 3 to 1 (excluding non-monetising the increase in biodiversity or components of stream eco-system health), and the benefits to climate change and freshwater are significantly greater than the implementation costs of riparian restoration.⁸

It is accepted that some farmers may need additional assistance to undertake riparian planting/fencing, and Vision Kerikeri would support that. Some assistance has been available to landowners – NRC offers free technical advice and some grant assistance and it is suggested that NRC increase this funding. The government \$1 billion fund for regional development and a commitment to plant trees may also provide a useful contribution.

⁶ MfE & MPI, *National Policy Statement for Freshwater Management Implementation Review: Taranaki*, 2017, p.8, <https://www.mfe.govt.nz/sites/default/files/media/npsfw-implementation-review-regional-chapter-taranaki.pdf>

⁷ This goal applies to all streambanks on the Taranaki ring plain and coastal terraces.

⁸ Daignault et al, A national riparian restoration programme in NZ: Is it value for money? *J. Environ. Management*, 2017; 187: 166-177