

Proposed Porirua District Plan

Briefing Summary for Review Panel

Submission 138 Significant Natural Areas. Rules for vegetation management

Name: Ryan, Raymond; Janet Ryan; John Fokerd (Land owners)

Address: 298B Paekakariki Hill Road, RD 1 Porirua 5381

Properties effected: All those covered by the SNA

Feedback: post Council and Consultant's Report (section 42a)

Concerns: Balance between Idealism and Practicality
Exotic plants for rehabilitation of Slips, Subsidence and land scars
Use of Council resources.

My concerns arise from: Personal experience of "Wild Fires"
60 years as a Civil Engineer many of those years associated with land stability and environmental management
84 years in close association with an ESA area
8 years as a Senior Executive Manager with the role of Safety, Risk Management and quality systems in a large State-Owned Corporation and a Private Company.
Ownership of a rural property one of which is within an ESA the other which has a portion to be designated as an SNA
Management of our property with appreciation of environmental values of conservation and regeneration.

Vegetation Control in SNA: Wild Fire Issues

Both the Council and Consultant's report agree to better protect property and personal safety from wild fire damage that the issue of vegetation control within an SNA needs to be modified **IN PART** It is not defined which **PART is supported**.

My recommendation is that setbacks distance from structures for defensible spaces in accordance with the Fire Service guidelines defined in my original submission be a permitted activity in SNAs

Suggested modifications are as a permitted activity are:-

Rule ECO-S1

Trimming, pruning or removal where there is the imminent¹ threat to the safety of people or property

1. The works are essential due to the **imminent¹** threat to the safety of people or property and Council is advised of this threat as soon as practicable;

2. All trimming or pruning must be undertaken to a growth point or branch union and in accordance with the New Zealand Arboricultural Association Incorporated Best Practice

Matters of discretion are restricted to:

1. The extent to which the trimming or removal causes damage or disruption to the ecological values of the Significant Natural Area; and
2. The effect of the vegetation removal on the [Significant Natural Areas](#).

Guideline 'Amenity Tree Pruning' Version 3 dated April 2011 to avoid irreversible damage to the health of the tree;

3. Any removal is undertaken or supervised by a suitably qualified arboricultural expert.

Reason:

- 1 Delete **Imminent**. To safeguard against possible damage to property and life, trimming and removal **needs to be carried out well prior to the advent of a wild fire**. If carried out in accordance with the Fire and Emergency guidelines for defensible areas, there is **no need to advise the Council**. *Add to permitted activities*

ECO-R1:

para a (i) delete **Imminent** (as above)

para a(iii) replace **"buildings"** with **"structures"**

Reason:

Other structures such as bridges, alternative power facilities, sewage, water systems and communications equipment need protecting.

Comment: Wild Fire Experiences.

In 1948 I was involved in fighting a wild fire on the West Coast of Auckland. In addition, I also helped with another one in the vicinity in 1970. In the early stages of my Civil Engineering career with NZR, I saw the consequences of wild fires created by steam locomotives and/or irresponsible disposal of cigarette butts from the trains by people. These days, graphic pictures and reporting in the news media not only show the veracity of the flames but also portray the personal trauma that people suffer as the consequence of wild fire damage.

My experience directly and indirectly would suggest that the management of vegetation within defensible spaces is critical for the protection of property and people. When fires get going, they create their own draft and can be supplemented by wind. Topography, particularly steepness is also risk factors for specific locations.

See Appendix 1 Defensible spaces management: *(in addition to example noted in my original submission)*

Article in the Dompost in December 2020 (attached) gives good advice on this subject.

"The Complete Bushfire Safety Book" by Joan Webster. *Although this is primarily focused on the Australian situation, it has principles that could be followed for the NZ situation to form a formal "Guide" as described in the above article.*

Planting of Exotic trees in SNA's

I made the recommendation that planting of exotic trees within an SNA to repair slips, subsidences and scars caused by erosion be a permitted activity.

The consultant rejected my recommendation on the grounds: -

there are native species *(not specified)* that would be suitable alternatives.

If he is thinking of the smaller quicker growing species such as Mahoe, Karamu, Pittosporum, Kawakawa, Kumarahou, then these are relatively shallow rooted. If he is thinking of the larger tree types endemic to the region such as Kahikatea, Kohekohe, Kowhai and Kanuka, then these have much slower growing rates in comparison to poplars, willows, pines, tree lucerne, banksia.

The reasons for me making this recommendation:-

The steep topography of the Porirua rural environs is prone to damage from heavy rain storms be they covered with native, exotic or grass types of vegetation.

Rapid action subsequent to the damage occurrence to minimise sediment runoff is critical to the health of the precious marine environment of the Pauatahanui Inlet.

The damaged areas will be very small in relation to the area of the SNA

Exotic trees that grow quicker than natives in addition to helping sedimentation retention, also transpire ground water leading to soil stability and provide a larger carbon sink.

Exotic tree flowers are more prolific than natives. Consequently, they are better at supporting bee and bird life

See Appendix 2: Examples of bird feeding on exotic plant flowers

My wife and I are members of the Guardians of the Pauatahanui Inlet group. Minimisation of siltation of the inlet and its effects on the marine biology of the inlet is a key objective for the group. My experience has shown that the establishment of silt traps in various forms, control of water flows and hydroseeding are an immediate action strategy to minimise erosion at scars. This can be followed by the exotic/native mix varieties of vegetation to ensure the quicker sediment control than natives alone.

An additional attribute of exotic vegetation is that their flowers provide support for bird and bee life. Tree lucerne for example (shorter life span), flowers at a time when there is little or no native vegetation in flower. Kereru in particular thrive on this tree and bees gather both nectar and pollen at a time when they are brood rearing for the summer season. Banksias, grevilia's, bottle brush are examples of quick growing and prolific flowering vegetation that tuis, bellbirds, wax eyes, grey warblers thrive on. Bees are vital in agriculture production

So.... under the heading of **permitted activities** within an SNA the following should be included: -

Planting of appropriate exotic species in landscape scars that arise from storm damage to enhance erosion control and soil stability.

Note the word "appropriate" the objective being that earlier control of erosion can be achieved by planting short lived exotics while the native mix element gets established.

See Appendix 3: photos of erosion control

Removal of Exotic trees from an SNA

Following on from the above point, here is an example of a Rule solution proposed by the Consultant: - (interalia)

In dealing to the removal of exotic trees from within an SNA, the consultant suggests restricted areas to be address at any one time and that trees over a certain diameter be ring-barked/poisoned(?) instead of felled.

This rule raises two issues:

Firstly: in safety management one has to be sure that a proposed solution to a problem does not introduce hazards that increase the safety risk. A dead tree trunk poses a safety risk to person who are entering the area for maintenance of the SNA. Or it may be to passer byes on an adjacent accessway or structure. The collapse process of the trunk is entirely unpredictable both in time and effect. In particular high winds can cause the weakened tree to fall. While the thought of the proposed rule no doubt is that dead trees gradually disintegrate and collapse to a heap of debris in the vicinity of the trunk thus causing least disturbance to the environment, this is not necessarily the

case in reality. So, the difference in environmental destruction between an “immediate” felling of the tree versus the dead tree collapse is problematical. (*We have family experience where 4 pines were ringbarked that were blown over in high winds fortunately without injury to persons. I have also been alerted to the fact by my neighbour that a person was killed by falling tree limb from a dead tree*)

Secondly: a dead tree trunk or groups of trunks pose an unsightly feature in the landscape. One only has to think back to the public outcry about the intrusional visual effects in the landscape of putting the windfarm on the Puketiro hills to show the regard public have for the quality of landscape aesthetics.

So...

Permitted activities within an SNA should include the following: -

Removal of exotic tree should be carried out with due regard to the safety of persons in the removal process and to affected parties including those entering the SNA for the maintenance of the area.

See Appendix 4 for photographs

Balance between Idealism and Practicality

I say “Rules are constrictive, policies/guidelines allow innovation”

In a briefing by the Wellington Whaitua Committee to the PRA membership when they were part way through their investigations a significant point, they made was that in their visits to private property sites that had riparian boundaries on parts of their property, they were impressed by two things;

- Firstly, they found land owners on the whole were committed to the concept of improving water quality.
- Secondly, they found that each site had almost unique peculiarities and that in general, solutions to enhance the water quality need to be tailor made for each site with input from the owner. Topography, soil type, vegetation habit, property activities etc

As a consequence of their findings the Whaitua in their final report (quote extracted)

*“When developing and implementing the action plan, Greater Wellington should: –
work with landowners, councils, sectors and community groups –
incorporate traditional and local knowledge”*

My experience in implementing Quality systems, is that it is paramount to recognise inputs for an issue from ALL levels of the process. As experts we don’t know everything. The grass-roots parties can contribute ideas, alternatives for effective solutions. For a policy to be successfully implemented all parties need to be on board.

This philosophy can be implemented by making “policy/guidelines” associated with outcomes instead of “rules” specifying specific action to be taken.

See Appendix 5 for an example of excessive control measures

Effective use of Council Resources.

My submission suggests more effective use of council resources could be achieved by prioritising effort for environmental matters by focusing on pest control rather than detailed monitoring/management of issues associated with SNAs. Council report rejects this concept.

See appendix 6 attached

Public consciousness of the need for environmental management has grown significantly over the last 20 years (or more). Simple examples of this are the establishment of community groups such as GOPI, and pest control groups throughout both urban and rural communities.

In this day and age, finding suitably qualified staff/contractual resources and funding allocation to fulfil perceived responsibilities, is a time-consuming job and therefore costly in itself. Prioritisation of effort and efficient procedures are the key.

As rate payers we need to be assured that the council's strategies, while fulfilling environmental legal obligations effectively, should prioritize addressing the health and wellbeing of citizens as first priority and that we are getting "the best bang for the buck"

In the case of environmental management, I see opportunities promulgating "policies/guidelines" instead of "rules" as a way of more efficiently managing the RMA

Concluding Remarks

I joined Railways in 1955 as an engineering cadet. I retired from that organisation in 1996 after serving 40 years in various roles the last being an executive with responsibility for safety, risk management and quality systems. I came through the regimes of Government Department, State Owned Enterprise and finally as a Private Company.

The latter two regimes really brought into sharp focus the need for effective use of resources. I see no difference between the responsibilities of Council Officers reporting to the Chief Executive who reports to the Council who are guardians of the ratepayer interests than those in a private company where officers report to the Chief Executive who reports to the Board who have the shareholder's interests to fulfil.

A strategy to address this across an organisation is to capitalise on the ground swell of environmental consciousness and develop a culture of **trust and respect**.

A sample Audit regime can be instituted to assess if environmental outcomes are being achieved. We will always have to accept that there will be some renegades but their influence on achieving the overall objective will be minimal. However, an inclusive approach hopefully will minimise that.

I see opportunities in the issues I have raised for the adoption of these style of management across a wider section of environment management in the Council.

Raymond Ryan BE(Civil) FEngNZ

Appendix 1

Dompost December 2020

SPONSORED CONTENT

Protect your home from fire this summer

As we've seen in wildfire prone areas across the world, and more recently at Lake Ōhau in the South Island, wildfires can be devastating.

An excellent community evacuation plan ensured there was no loss of life at Lake Ōhau last October, but 48 structures were destroyed, and 5040 hectares burnt through.

It's not just people this scorching beast affects - last summer wildfires destroyed over 10,000 hectares of native bird habitat in our beautiful country.

Thankfully there's plenty you can do to prevent wildfire destroying your little piece of Aotearoa - wherever that might be.

Wildfire Specialist Graeme Still has been fighting fires in New Zealand since the nineties.

He and the team at Fire and Emergency New Zealand urge rural and semi-rural people to take fire prevention action to protect their homes.

"We're also talking about people living on the edges of towns where trees or scrub are close to housing. All these properties are at greater risk of fire because they are surrounded by a lot more vegetation and the local fire station is further away," Graeme Still says.

The team at Fire and Emergency NZ urge Kiwis to take fire prevention action to protect their homes this summer. IMAGE CREDIT: SUPPLIED

“People need to take this risk seriously and take steps to make their property fire safe.”

Here are Wildfire Specialist Graeme Still's top tips to protect your home from wildfire:

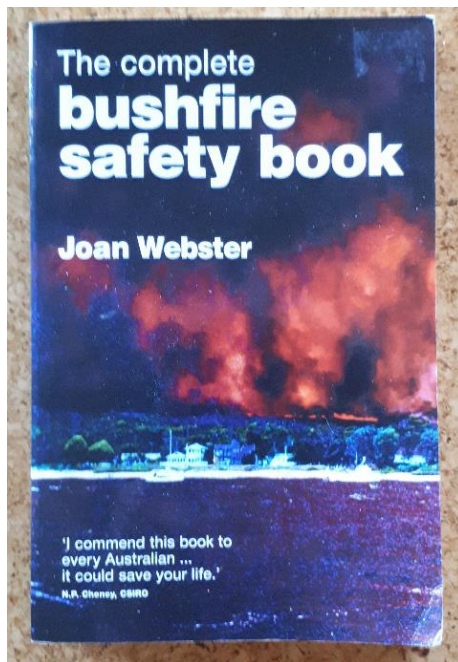
- Have a household escape plan with two escape routes. Do not rely on an official warning to leave. Wildfires can start quickly and threaten lives and homes in minutes.
- Plan what you'll do with your pets and livestock.
- Clear roofs, gutters and spouting of dead leaves, debris and pine needles.
- Move anything that could burn (mulch, flammable plants, leaves, needles and firewood piles) away from wall exteriors, decks or porches.
- Enclose the space under homes and decks with fire-resistant material and reduce the threat of embers passing through vents in the eaves by installing 3mm metal mesh screening.
- Carry out regular maintenance.
- Once you've made your home safe, work your way outwards; keep your lawns watered if possible. The greener the grass, the less likely it is to burn in a fire.
- Remove long grass, shrubs, twigs and other fuels that are within 10 metres of your home. Try to create a 'clear zone' around your house to stop a fire reaching your residence.
- Once the area within ten metres of your home is clear, go wider. Create space between any trees within 30 metres of your home.

(to reduce how far and fast a fire can spread) and prune shrubs/and trees from the ground up to stop fire climbing up trees and burning through the tops. This will help to reduce embers spreading from tree-top to tree-top. Repeat with vegetation and structures up to 60 metres from your house.

• Everything within the 60-metre zone around your house can influence how safe your home will be in a wildfire.

• It is also important to ensure firefighters can access your property in the event of fire and if we can't get to you, we can't help you. Make sure your house or RAPID number is easy for emergency services to see from the road, and that your driveway has enough clearance for emergency vehicles. Fire trucks need at least 4x4 metres.

Contact your local Fire and Emergency Area Office for more advice on safeguarding your property or if you are planning a burn for land management. You can find more tips on how to keep your home fire safe at [checkitsalright.nz/reduce-the-risk/safeguarding-your-property](https://www.checkitsalright.nz/reduce-the-risk/safeguarding-your-property)



Appendix 2



Kereru Feeding in Tree Lucerne



Tui feeding in Bottle Brush

Appendix 3

Erosion Control



Culvert discharge control

Hay bale dam

Manuka brush
for seeding



Willow Poles for slip control

Appendix 4

Examples of the visual intrusion into landscape aesthetics caused by the poisoning of trees.



Near Motuopa (*viewed from SH1*)



If tree was in an SNA and was to be removed by ringbarking, then the Dead tree would post significant safety hazards to Road users.

Other example areas of visual intrusion of skeletal trees can be seen on the hills as you motor between Taupo and Rotorua near Whakarewarewa (Rotorua) and sailing through the Marlborough sounds.

Regrettably, because of access difficulties, I have not been able to get a picture to illustrate the bush destruction of the environment caused by the windblown felling of the poisoned trees.

Appendix 5
An example of excessive (and costly) erosion control measures.

Given the small catchment area above the work site, the small scope of the work and the downstream natural area of grass and bush vegetation that would provide adequate filtration for sediments before reaching a waterway, it seems a costly and overkill requirement to provide a silt fence. *(plastic! that would no doubt end up in the landfill),*



Appendix 6



Giving priority to pest control within an SNA instead of managing vegetation control rules when allocating resources will enhance the overall environmental outcomes.