# ENVIRONMENT POLICY PROPOSAL

## The implementation of a nationwide riparian management scheme

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OFFICIAL POLICY OF THE NEW ZEALAND YOUNG NATS.

NOT NATIONAL PARTY POLICY.

## ISSUE

The Young Nats believe that one of the biggest issues affecting New Zealand's natural environment is freshwater quality. One of the largest contributors to freshwater pollution is runoff from farms, which is water leaving farms into waterways that may contain fertilisers, animal excrement, soil or pesticides. Freshwater pollution poses a risk to the health of our to our freshwater ecosystems, native species, and reduces the recreation value that our rivers and waterways provide to New Zealanders.

## PROPOSAL

1.1 The Young Nat's propose the implementation of a nationwide riparian management scheme, require territorial authorities to meet riparian planting and fencing requirements within their regions. Central government would set the specified level of planting required in each territory, the timeframe for completion, as well as information, support and guidance for councils to reach their targets. However, it would be up each territorial authority to choose how to meet those targets and the mechanism for implementation.

## BACKGROUND

2.1 Current agricultural practices are unsustainable and contribute to the decline in aquatic species, economic productivity, and human health due to runoff into waterways.

2.2 When farm runoff from fertilisers and nitrogen-rich excrement enter our waterways, they are affected in a number of ways. High nitrogen concentration in the water can lead to bacteria and algal blooms, which use up oxygen and threatens fish and other fresh water species. Of New Zealand's remaining 39 known native freshwater fish species, 72 percent are threatened with extinction (12 species) or at risk of extinction (16 species) in 2013.[1]

2.3 Certain strains of E. coli bacteria can also be deadly for humans and therefore poses a threat to human health.

2.4 With increasing stock numbers, better practices need to be implemented in order to preserve our freshwater aquatic environment.

2.5 Riparian planting involves the planting of streambanks and variety of vegetation. Riparian vegetation and the soils it grows on acts like a kidney, filtering harmful materials, as well as a sponge, soaking up overflow from the stream during heavy rains and releasing the water later. The vegetation also acts as a solar radiation absorber, lowering the temperature of the waterways and helping to oxygenate them. This provides a vital role in providing suitable habitats for our endangered fresh water species.

2.6 Riparian vegetation also plays a key role in mitigating the erosion of streambanks, providing stability and a more fixed stream channel shape and structure. This reduces chances of flooding and reduces the need to move agricultural herds when storms occur.

## DETAILED PROPOSAL

3.1 The Young Nats propose the implementation of a nationwide riparian management scheme.

3.2 The scheme would require territorial authorities to meet riparian planting and fencing requirements within their regions. Central government would set the specified level of planting required in each territory, the timeframe for completion, as well as information, support and guidance for councils to reach their targets. However, it would be up each territorial authority to choose how to meet those targets and the mechanism for implementation. This will allow the schemes to be specified to the needs of each particular region.

3.3 Although eco-effective, the cost of riparian planting is high. In order to help offset this burden for farmers, it is likely central government will need to provide some level of financial support, such as a subsidy, in implementing this policy.

3.4 This scheme is modelled on that of the Taranaki Regional Council's riparian management scheme. Under the Taranaki scheme, the local council provides the logistical and informational support for the activities as well as setting deadlines for implementation. One of the key features of that scheme was that council contracted nurseries to supply seedlings to farmers at cost, reducing the cost burden for farmers.

## SUPPORTING INFORMATION

4.1 There is strong evidence that shows riparian planting has positive effects on freshwater water quality.

4.2 An international review has found grass filters of five metres can reduce nitrogen, phosphorus, and sediment loss by 51-74 per cent, while a study in the Bay of Plenty reported grass filters of three metres can reduce nitrogen, phosphorus, and sediment loads by 35-87 per cent. {9} Twelve out of the fourteen invertebrate metrics including in the modelling analysis were found to have a detectable relationship with restoration at the region-wide scale (restoration as a fixed effect across all sites). {7}

4.3 The Taranaki Regional Council has also successfully implemented a regional riparian management programme that has had beneficial effects on stream ecosystem health and water quality. The modelling analysis found positive relationships between macroinvertebrate metric scores and restoration, and negative relationships between E. coli concentrations and restoration. {6}

4.4 However, the effectiveness of riparian planting only becomes apparent when a large proportion of a waterway is protected. For example, negative upstream practices can offset

positive practices further downstream. Therefore it is important that riparian planting occurs along large proportions water catchments, and that water catchments that cross regional boundaries are equally protected. Mandating participation by territorial authorities will ensure maximum effectiveness of riparian planting, and ensure an even playing field. However, giving territorial authorities the freedom to work towards meeting regional targets as they see fit will allow them to tailor their schemes to their particular regions.

## NEW ZEALAND CASE STUDIES: RIPARIAN MANAGEMENT

### Taranaki Regional Council

5.1 Farms are issued a Certificate of Completion when their riparian planting requirements have been completed. If they don't receive a certificate by 2020, farmers then require a resource consent which requires riparian fencing and planting to continue intensive farming. Farmers must meet the cost of the consent and the additional monitoring. {8}

### Waikato Regional Council

5.2 From July 2013, riparian plantings by Waikato farmers are tax deductible as an operational expense instead of being classified as capital expenditure. {10}

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