

SUBMISSION ON NATIONAL POLICY STATEMENT FOR FRESHWATER FEBRUARY 2014

Contact Details:

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Greetings

New Zealanders generally support the endeavour to strengthen the standards in the National Policy Statement on Freshwater Management. The intention to maintain or improve overall water quality within a region, safeguard the life-supporting capacity, ecosystem processes and indigenous species (including their associated ecosystems) of fresh water are to be commended.

Setting Freshwater objectives and limits for all water bodies and water ecosystems in Aotearoa New Zealand is strongly supported. Several areas in the proposals need to be strengthened to achieve the stated goals. Furthermore, the proposed weakening of Part II of the RMA will prove inimical to any reforms subsumed under it, such as the freshwater reform proposals.

The provision for collaborative engagement at council level for selecting values for freshwater and implementing the National Policy Standards, is essentially an approach to community engagement. However, law-makers and those engaged in collaboration need to keep uppermost in their minds the fact that those seeking to protect the environment, be they iwi or environmentalists or whomever, are acting in defence of waterways already heavily compromised on the lowlands, where further compromises are now being asked of them. Care will be needed to ensure appropriate representation of interested parties, with resourcing for engagement that includes information on the science and on matauranga Maori for ecosystem health and ecological integrity.

We wish to introduce some concepts on values which are supported in international Jurisdictions, such as in the US. These include a proposal for water as a public trust based on water as a *Commons*, and including the value of *ecological integrity*. These are discussed under S. 1. Compulsory Values.

We have serious concerns about the standards for water quality being set too low, and make proposals accordingly. We discuss several matters for attention in the amended National Objectives (S.2), with proposals for additions in the Attribute Tables. We bring matters for further consideration on Tangata Whenua Values and Te Mana o Te Wai (S. 4).

This submission is prepared using information from the Land and Water Forum and professionals with expertise in Freshwater.

1. Compulsory Values

The intention of introducing two compulsory values of ecosystem health and human health is

welcome.

In recognition of Freshwater as a 'commons' we propose consideration to vest water as a Public Trust. Public Trust, as exemplified in Hawaiian constitutional law moves the focus from *use rights* to putting an onus on responsibility for present generations to act as trustees of the Earth's ecological systems to ensure continuity of ecological health for future generations. (There are parallels here with the Government's proposed designation of the Whanganui River as a legal personality.)

Similarly the concept of ecological integrity which we promote as a further value, is an objective with requirements to restore and maintain the chemical, physical and biological integrity of the nation's waters. These approaches move us towards an understanding of humanity as a component of the biosphere and our need to seek a relationship of mutual benefit that is oriented to human responsibility for environmental integrity.

Proposal:

- We request consideration be given to including responsibility for achieving and maintaining ecological integrity of freshwater as a compulsory value
- We request consideration of vesting freshwater as a Public Trust

2. National Objectives Framework

We support the objective to 'improve integrated management of fresh water and the use and development of land in whole catchments, including the interactions between fresh water, land, associated ecosystems and the coastal environment'. (MFE Proposed amendments to NPS, P. 57)

Land use is the key issue for river management and water quality (Parliamentary Commissioner for the Environment. *Water Quality in New Zealand* Nov. 2013 < www.water-quality-in-new-zealand-land-use-and-nutrient-pollution >). Land use is not reflected in the proposed amendments and Attribute Tables. Anyone experiencing our lowland waterways over this summer has a high chance of suddenly experiencing the unpleasant downsides of this policy, eg the Selwyn, the Makarua (a now periphyton-choked stream supposedly under the long-held Water Conservation Order for the Rangitikei) or the Ruamahanga, once a fine trout stream in the Wairarapa. But the list is now sadly nation-wide.)

The Attribute tables are not currently complete. Fish, especially native fish, Macroinvertebrates (insects) are important in river ecosystems and are strong indicators of water and ecosystem health. Good numbers of stonefly and mayfly nymphs mean good water quality.

Biological communities need to be included. Macroinvertebrates are important in river ecosystems and are a strong indicator of water and ecosystem health. Good numbers of stonefly and mayfly nymphs indicate the likelihood of good water quality. The condition of fish, including native fish such as Tuna, is an important indicator of ecosystem health. Indices of biological diversity are able to be measured with protocols for fish and

invertebrates. Assessments of the impact of dams, barriers and stop banks are available from some regions and can be interpreted for the Assessments

Objective A1.

The attributes for ecosystem health currently cover only chemical and biological health and these are not always an effective proxy for habitat quality. It is important that councils are required to recognise the compulsory value of ecosystem health, including physical habitat. This is important for fully achieving Objective A1 in terms of paragraph a. The NPS needs to direct regional plans to explicitly recognise the Compulsory National Values and any Additional National Values as defined in Appendix 1. Merely covering off the attributes will not necessarily achieve

Pine forestry is likely to be associated with erosion and sedimentation. Therefore it is important to include Attributes which include these indicators of water health as well as indicators of negative impacts.

Dissolved oxygen is a strong indicator of pollution in rivers. Under the National Policy Statement it is proposed to measure dissolved oxygen below wastewater plants. Pollution from dissolved phosphorous and nitrogen from dairy farms is the most likely impact on water quality. The proposed measures need to be carried out in dairy farming catchments. Most importantly, as a contribution to the environmental costs, the dairy industry needs to contribute to the full cost of upholding these standards, which most regional councils seem not to be able to afford.

The Macroinvertebrate Community Index, Sediment and Dissolved Oxygen all need to be included in the Attribute Tables

The following aspects of ecosystem health and integrated management need development for the National Policy Statement on Freshwater:

- a. National freshwater management needs to provide an account of the effects of land use on water quality.
- b. The expansion and intensification of dairying is the main cause of nitrogen pollution in groundwater and rivers, and degradation is set to rise.
- c. Urban issues include storm water management with solutions such as rain water collection and cleaning up contaminated industrial sites.
- d. Wetlands and estuaries are mentioned in the MFE narrative proposals (p, 20, 21, 47) , estuaries (p. 47) and groundwater (p.20) – which is specifically excluded from the assessments. There are therefore no Attribute Tables for Wetlands, Estuaries or Groundwater (re p. 20). We urge inclusion of ground water levels as nitrate levels are increasing and the time-lag effect on water must be accounted for and assessed.
- e. Biological communities need to be included. Macroinvertebrates are important in river ecosystems and are a strong indicator of water and ecosystem health. Good numbers of stonefly and mayfly nymphs indicate the likelihood of good water quality.

The condition of fish, including native fish such as Tuna, is an important indicator of ecosystem health. Indices of biological diversity are able to be measured with protocols for fish and invertebrates. Assessments of the impact of dams, barriers and stop banks are available from some regions and can be interpreted for the Assessments.

- f. Water clarity and quality. These are linked to human health attributes of swimability and drinkability.
- g. Pathogens and Periphyton/cyano bacteria: These are significant for human health. Measures for E.Coli, Cyanobacteria and benthic levels should be measured at a level of safety for swimming using Ministry of Health guidelines.
- h. Many Treaty settlements have strong provisions for freshwater management with legislation that takes precedence over National policy. Some Iwi, such as Tainui, have set high standards for water quality, defined as bringing water to a drinkable quality – a much higher standard than that proposed in the National Policy on Freshwater. An account of Iwi Management Plans needs to be included in benchmarks for regional objectives with timeframes.
- i. Water temperature. Water temperature is a poorly recognized aspect of river dynamics. Temperature contributes to the regulation of sediment and shade is therefore a further indicator of river health.

Proposals

- The Attribute Tables include criteria for wetlands , estuaries and groundwater as part of water ecosystems
- That Attribute Tables include specific measures for land use and the effects of these on water
- Attributes and Assessments for ecosystem health include Fish and barriers to fish migration, Macroinvertebrate Community Index, Sediment and Dissolved Oxygen
- Human health indicators of pathogens, periphyton, cyano bacteria and water clarity to a swimmable level be included in the Attribute Tables. Measures include Ministry of Health, Biggs standards and other appropriate guidelines
- Attribute tables include identified indicators of Te Mana o Te Wai (see S. 4 below).

3. National Bottom Lines

The requirement of no further degradation is an important criteria, particularly as a standard of responsibility for future development.

The level of nitrogen proposed for the Bands in the Attribute Tables is of significant

concern. We understand that there is a serious discrepancy between the current guidelines and the proposed levels of nitrogen.

There is discrepancy between the current guideline for Band A, which is .44mg/Litre, whereas the proposed level of nitrogen allowed is 1mg/Litre. This is double the allowance of the current guidelines.

The requirement for 'overall' standards within Council jurisdiction may allow for degradation within a region, by allowing high standards in one river to be offset by low standards in another. We therefore propose that standards be set for each river in a catchment.

The minimum standards are set at the bottom of Band C (fair) in the Attributes table. This is a 'secondary contact' level of water quality (for boating and wading). With 90% of New Zealand Freshwater being below swimmable standards we consider a higher standard is appropriate and propose a minimum standard be set in the B Band (good).

Proposals

- The levels of nitrogen in the Bands be amended to levels that set levels to at least the current guidelines, which correspond to .44mg/L in Band A.
- Standards to a swimming level be set across New Zealand.
- That Objective A2 in the Preamble require that each Freshwater Management Unit within a region be required to be maintained or improved
- The Minimum Standards should be set in the B Band

4. Tangata Whenua Values, Iwi/Māori as Treaty partners

We support inclusion of a statement of tangata whenua values in the Preamble and in the text as proposed. Such a statement needs to include the integrated world view of Te Ao Maori, spiritual values as well as tikanga of Te Mana o Te Wai. Some suggested references include mauri, mahinga kai, food security and irrigation, and the preservation of natural form and character, and spiritual values.

Te Tiriti o Waitangi is important for National Policy on Freshwater. This is to be included in the Preamble, with an explanation of article Two guarantees for protection of rangatiratanga and of water as a taonga.

Some Iwi, such as Tainui, have set very high standards for water quality, defined as bringing water to a drinkable quality. The National Policy Statement needs to include recognition of water standards set by Iwi Management Plans and ensure provision for reconciling Iwi standards with National Standards.

Proposal

- The Preamble include a statement of Te Tiriti o Waitangi

- An explanation of tino rangatiratanga and of water as a taonga be included in the Preamble
- The overall Objectives proposed in A2 include safeguarding Te Mana o Te Wai
- The legal precedence accorded to freshwater standards in Iwi Management Plans need to be recognized in the National Policy Statement on Freshwater

Conclusion

These proposals are in accordance with our interest in raising the standards of freshwater in Aotearoa New Zealand, and in ensuring that future development does not proceed at the cost of freshwater quality and quantity.

These proposals highlight some of the main issues. They align with some of the main points raised by environmental organizations and experts with whom we have consulted.

Thank you for your attention

David Young