

National Policy Statement for Freshwater Management (NPSFM) Consultation Submission

Climate Karanga Marlborough (CKM) are pleased to be able to contribute to this community process of consultation regarding freshwater management in Marlborough and the specific issues of boundaries, visions and values.

Climate Karanga Marlborough is a local activist environmental group with approximately 120 members with a mission *“To bring to the people of Marlborough the realities of climate breakdown and educate how best to respond.”* We have an interest in how continuing climate and biodiversity degradation might impact the Marlborough community and how we can best prepare for the changing environment we all live in.

The NPSFM has identified the four compulsory values, which are required to apply to freshwater management in Marlborough; **ecosystem health, human contact, threatened species and mahinga kai**. We agree with these values.

Our main concern and focus is on and around “vision and values”. For us this relates primarily to ecosystem health, as we perceive the three other values to be secondary and totally reliant on the prioritising of that ecosystem health. Human contact and mahinga kai gathering need to be subservient so that the magnitude of these activities is governed by the needs of the ecosystem as a whole. Threatened species clearly have their threats reduced in a healthy ecosystem.

We would now like to address some of the specific questions you have asked in the submission document.

1) What concerns do you have about the state and/or management of freshwater in the region?

Concern 1. Vision and values.

In general our views expressed here apply to all of the proposed Freshwater Management Units (FMU) though we have a particular interest in the Wairau FMU and the issues arising from the complexities inherent in this FMU that are associated with the identified declining trend in the aquifer.

We are encouraged by the vision expressed in Te Mana o te Wai and fully support the “Hierarchy of Obligations” laid out in Clause 1.3 (5) of the “Guidance on the National Objectives Framework of the National Policy Statement for Freshwater Management (NOF)”. This Hierarchy is so important that we wish to repeat its priorities here:

- first, the health and well-being of water bodies and freshwater ecosystems;
- second, the health needs of people (such as drinking water);
- third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

It is astounding to us to realise that such a hierarchy of obligations was not clearly stated many decades ago. Would we have ended up with the unacceptable impacts on freshwater resources from dairying and irrigation, if this had been our priority 30, 40 or 50

years ago? The hierarchy of obligations aligns very well with the vision and values that motivate Climate Karanga Marlborough members. We believe in the principle of respecting the natural world, in all its manifestations, as our ally, not simply regarding nature as a resource, as we believe that unconsidered exploitation of natural resources has led to the disruption of the climate and of many other natural processes that we all now face. The simplest way of doing this from our viewpoint is to recognise that people are not separate from nature and that we are just one part of nature's biodiversity. Thus, any infrastructure in which we may wish to invest must be in agreement with nature and nature's biodiversity. Without a considerable and well-considered world-wide transition in values from the economic to the ethical, from wealth to well-being, from 'me' to 'we' and from human-first to planet-first, we face the very real risk of compromising Mother Nature's integrity to the point where She can no longer provide us with what we require to sustainably live on our beautiful planet.

Concern 2. The Wairau Aquifer.

CKM has a specific interest in the health and *mauri* of the Wairau Aquifer, as we are very aware of its critical importance to a large proportion of the Marlborough community. It not only supplies clean water for domestic, agricultural and industrial use but also provides us all with the spiritual and life-giving sustenance manifesting in the different springs emanating from it. They are a clear reminder of what *Papatūānuku*, Mother Nature gives us every day that we must never take for granted.

We recognise that due to some good and possibly fortuitous decision-making in the past we have largely avoided some of the major impacts affecting several other regions in New Zealand due to animal farming, in particular dairying. The obvious consequences of too many cows in particular, resulting in excess nitrates in groundwater and other polluting impacts affecting freshwater supplies, is evident for all to see. Once that genie is out of the bottle the obvious way of trying to put it back, by reducing and restricting animal numbers, is clearly beyond our decision makers in most cases. The dairy lobby has too much clout. Viticulture generally has lesser impacts on fresh water but still demands significant volumes of water for irrigating and processing the grapes.

The Wairau aquifer is a precious *taonga* for Marlborough. The viability of a significant proportion of the local economy is dependent on water from the aquifer for its survival.

CKM believes that we must do everything possible to ensure our freshwater management is sound and long-sighted and not compromised by demands from water users motivated by shorter term economic perspectives.

Concern 3. Present lack of adequate information.

The Gravel Bed Rivers (GBR) research has helped us to identify and understand better the complex factors resulting in the aquifer having a declining trend over the last few decades. The information provided in the report to the Environment Committee on June 15th, 2022 provides evidence that this decline is directly linked to the containment of the river. The resulting reduction in "*thickness of the river gravels*" and "*scouring along the armoured floodway margins due to floods downcutting in the current single Wairau River braid*" has resulted in the reduced aquifer recharge compared to the historic period before the river was contained.

We are aware that this public consultation is being undertaken as a part of The National Policy Statement for Freshwater Management requirements and timelines. We are also

aware that the results of modelling work by the GBR team “to test the sensitivity of the river-groundwater water balance to riverbed elevation, scouring, and floodway width” “will be used as a basis for a cost-benefit analysis to see how changes to current river management would impact the local economy.”

This lack of availability of important information complicates the ability for fully informed input by the public in this submission process.

Concern 4. Applying the Precautionary Principle is critical.

CKM therefore believes it is critical for the Precautionary Principle in environmental management to be applied stringently and that all options for returning the aquifer to its previous state of health are kept open during this period of information gathering by the GBR research team and others.

Taking a precautionary approach includes holistic considerations, integrating management and the associated recognition of how waters are interconnected.

We note that, on page 83 of the National Objectives Framework (NOF) under the heading “**Holistic approach to setting flows and levels**”, it states - *Setting flows and levels requires a more holistic consideration of the ‘suite of flows’ (beyond minimum flows and allocation) to protect ecosystem health and other values. Under the NPSFM, a flow can be considered the quantity, variability, flow, duration and timing of flows or water levels to give effect to Te Mana o te Wai, the long-term visions and outcomes set by the community and tangata whenua.*”

AND on page 84 under the heading “**Integrated management**”, it states - “Councils must take a holistic approach (ki uta ki tai) to managing flows throughout the FMU. Decisions must recognise the interconnectedness of the whole environment. There will be a connection between flows and levels and achieving TAsS (Target Attribute States); these must be developed in tandem.

One of several examples of interconnectedness given is “the interconnectedness of groundwater and surface water and impacts on aquifer recharge”. This speaks directly to the issues we face in the Wairau FMU.

We support these statements from the NOF, which are consistent with our values. Concern 5. Balance between water takes, flows and volumes.

We note that on page 93 of the National Objectives Framework it states -

“Take limits must:

- be expressed as a rule in the regional plan, and be set for every FMU, • achieve the flows and levels for an FMU. They should not allow flows or levels of water to fall below these;
- be expressed as a volume or rate of take, or both. For example: ‘No more than xx m³/s can be taken from this river from 1 November to 31 March’. Groundwater may be expressed as ‘maximum annual volume taken’.

Take limits must also:

- provide for flow or level variability that meets the needs of the water body from which the

water is taken or diverted, and the needs of connected water bodies, and their associated ecosystems (eg, a groundwater take limit would not cause a permanent lowering of the groundwater levels, or reduce connected river flows below their environmental flow)"

In our communications with Council staff regarding issues associated with the aquifer we are aware that consideration is being given to how best to manage the allocation of water from the groundwater and that *"alternative approaches to managing seasonal and boundary effects"* are being considered. We understand an annual extraction limit of 73,006,000 M3 was set in Appendix 6 when the proposed Marlborough Environmental Plan (pMEP) was released in 2016. Subsequent information coming from the GBR research (in particular the isotopic research) has provided evidence that the reservoir volume is smaller than initially believed.

To quote from the report to the Environment Committee on Aug 29th, 2019. *"A new method has for the first time verified the age of Wairau Aquifer groundwater at less than 1 year meaning the reservoir volume is small.*

This means that for the critical well levels and associated groundwater-fed spring flows, the aquifer is never more than several months away from receding to MEP environmental thresholds."

CKM believes that the need for an accurate assessment of the total volume of the aquifer is critical if we are considering having a regime where there are no level limits set in the aquifer and we rely on an annual volume limit as our only control on extraction.

It would be very helpful to know what proportion 76,000,000 m3 constitutes of the total available. We understand the concept of imagining the aquifer like a bucket where the level goes up and down. So, is it 5% of the bucket or 40% for instance? We realise this total will vary considerably for different times of the flood/drought cycle and that water is constantly flowing through the aquifer.

Our primary concern is in regard to what impacts there might be on the aquifer and its associated river and spring flows when we have aquifer water users taking their full allocations during an extended multi-year drought that climate change projections indicate is becoming more likely. The emptier the bucket becomes the greater the impact will be from extracting 76,000,000 m3 annually.

We accept that the full allocation is not normally extracted each year, but presumably we do need to imagine worse case scenarios.

As we are concerned to have a clear definition of how empty the bucket can get before extraction is halted and if we are to meet the requirements of the NOF, it raises for us the following critical questions:

Are we making adequate allowance for the possibility of severe dry El Nino years and climate change-fuelled droughts when setting extraction limits from the Wairau aquifer FMU?

Do we have accurate information at this point in time to inform us how empty the bucket might get in such a multi-year drought scenario?

In other words, would several years of removal of 76,000,000 m3/year, with annual recharge volumes lower than extraction and springs outflows combined, result in unacceptable lowering of the aquifer and recession of the springs?

Concern 6. Target Attribute States (TAS).

We note in Clause 3.19 (page 100) of the NOF under the heading “**Assessing trends**” it states in Subclause 3 - *“If a deteriorating trend that is the result of something other than a naturally occurring process is detected, any part of an FMU to which the attribute applies is degrading and clause 3.20 applies.”*

It seems clear to us that the declining trend in the Wairau aquifer is *“something other than a naturally occurring process”*. The latest GBR report clearly identifies containment of the river as a major contributor to the decline. It is clear the containment was not naturally occurring.

Clause 3.20: (page 102) under the heading “**Responding to degradation**” states in Subclause 2 –

“Any action taken in response to a deteriorating trend must be proportionate to the likelihood and magnitude of the trend, the risk of adverse effects on the environment, and the risk of not achieving TAS.”

This raises the question for CKM: “Is the declining level of the Wairau aquifer a legitimate TAS that MDC must set a limit on and meet?”

SUBMISSION 1.

Climate Karanga Marlborough is aware that MDC owns land adjacent to the Wairau River within the recharge zone. We submit that all such land be considered and assessed for its suitability for being returned to the river to give the river more room to move. It may even be necessary to consider the purchase of suitable land not in council ownership that has the potential to optimise recharge of the aquifer. Giving the river more room will also have the added benefit of it being able to cope better with large flow events with less risk of flooding.

In summary, we look forward with interest to what conclusions are reached as a result of the GBR research and the ongoing pMEP process regarding water allocation. Any such conclusions regarding options for improving aquifer recharge will clearly take some years to show any results. We therefore support very careful and considered use of the groundwater resources during this period of time.

2) What positive comments do you have about the state and/or management of freshwater in the region?

- a) CKM has appreciated how Marlborough District Council staff and committees have been open to challenge and discussion about freshwater management.
- b) As we recognised on page 2 of this submission, good decision-making in the past has helped Marlborough avoid some of the adverse impacts on freshwater resources affecting other areas of Aotearoa.
- c) We applaud efforts at restoring naturally-occurring water management processes, such as the Para Flats Wetlands Management Scheme.

3) What are your hopes / aspirations for freshwater for Marlborough generally?

- a) These accord with the vision and values of *Te Mana o te Wai*.

- b) We would like to see the promotion of naturally-occurring processes underlying freshwater management in Marlborough, for instance giving the rivers more room to move (see **Submission 1**) and restoring wetlands so the wider ecosystem of which we are a part can benefit from the increasing health, water cleansing and storing abilities of wetlands (as above.)
- c) A clear and informed balance amongst water takes, flows and volumes (see **Concern 5**).

4) Do you have any specific hopes/aspirations for this FMU?

- a) That the goal of human freshwater management practice must be to respect the *Mana o te Wai*, to recognise water as having needs beyond just being a resource for human beings, and for us to work with Nature and processes natural to Aotearoa rather than against them.
- b) The ongoing viability of the Wairau aquifer, utilising naturally-occurring water management principles as referenced above.
- c) The ongoing development of adequate information on water volumes, flows and takes to improve our knowledge with the aim of maximising the health of the rivers and aquifers.
- d) Acknowledgement of traditional Māori *tikanga* attaching to freshwater (*wai māori*) as *taonga* and development of close co-operation between the Marlborough District Council and ngā iwi o Te Tau Ihu in the realisation of those *tikanga*.
- e) Continued application of the Precautionary Principle in managing our fresh waters.
- f) Returning more room to all the rivers of Marlborough for movement.

These aspirations apply equally to all freshwater resources within Marlborough. Giving freshwater management our highest priority must always be kept front of mind. The viability of all lifeforms in Marlborough rely on the good health of our freshwater resources.

5) When should these aspirations be achieved by? Please indicate a time period, for example 10, 20, 30 years or beyond?

These aspirations are ongoing from **now onwards** given the urgency of present threats to the health of the ecosystem (*whenua*) and the diversity of all plants and animals, including humans, that depend on it.

Budyong Hill – for Climate Karanga Marlborough.