Climate Karanga Marlborough - Submission to MDC Long Term Plan 2024 – 34.

In our submission we wish to focus on the "Long Term" aspect of the Plan.

INFRASTRUCTURE STRATEGY –

We know the Plan is for the next ten year period but we note that in the Infrastructure Strategy you project expenditure for the next 30 years (page 54). Rather than attempting to project expenditure for 3 decades, which we believe is an impossible and pointless task, we propose the following –

- **Focus resources into anticipating what we might expect in terms of environmental and climatic impacts and disruptions over the next three decades.**

We believe this would be of much more value to our community that attempting to project infrastructure spending. We don't need to remind you that there have been, and will no doubt continue to be, multiple warnings issued by bodies such as the UN, International Energy Agency, international and national environmental NGO's, climate and environmental scientists etc regarding the major challenges and disruptions we will all have to face together in the decades ahead.

We note the following statement from the Stantec report done as a part of the Sounds Access Study.

4.2.3 Cause: Storm Frequency and Intensity Change

Scientists globally agree that climate change is increasing the frequency and intensity of extreme weather events, and that those impacts will continue to worsen in the future. The Ministry for the Environment's summary of resent research into the impacts of climate change on severe weather in Aotearoa found[45]:

- *Floods will continue to become more frequent between now and 2050*
- *Severe thunderstorms will carry more rain in a warming world*
- *More intense regional cyclonic storms are projected by 2100, as is an increase in the frequency and extent of atmospheric rivers affecting Aotearoa New Zealand, which could bring more rain.*

The effects of climate change are already being experienced in Marlborough. The Ministry for the Environment's climate change projections for Marlborough are that infrastructure may face increased risk from increased storminess. Anecdotally the duration and frequency of storms affecting the region has been increasing. Data demonstrating that such events are increasing in intensity is more readily available. Figure 4-4 shows a comparison of the August rainfall at Tunakino and Rai Falls. It shows that the August 2022 rainfall was:

Tunakino (data from 1979 to 2022):

- *Two and a half times larger than the previous August maximum recorded in 2017*
- *36% greater than the previous monthly maximum recorded in October 1998*
- *Five times larger than the historic August average*

Rai at Rai Falls (data from 2000 to 2022):

- *Two times larger than the previous August maximum recorded in 2010*
- *53% greater than the previous monthly maximum recorded in December 2010*
- *Four times larger than the historic August average*

45 "The science linking extreme weather and climate change," Ministry for the Environment, last updated: 3 February 2023, https://environment.govt.nz/news/the-science-linking-extreme-weather-and-climate-change/

We believe the overwhelming factors impacting the future of Marlborough and our planet as a whole will be environmental and climatic and it appears that the weighting of these factors in the graphs in the LTP document (pg 54) have been excluded or at the least minimalised. Why would we project infrastructure expenditure for 3 decades with the apparent assumption that life will continue as usual and that disasters such as the 2021 and 2022 extreme rainfall events were somehow unusual. It seems to us heroic or maybe wishful thinking to be projecting spending in the 2030's to be trending downwards from the relative highs of the next five years. Likewise projecting five yearly expenditures from 2029 – 2054 as being less than the next 5 year period fascinates us. Is no one listening to the warnings of what we are to expect in the decades ahead? All those warnings tell us to expect more extreme events and that the time of living in a relatively benign climate has now passed. We do not comprehend how anyone can make financial projections about the next 10 years, let alone 30 years, without at least acknowledging the impacts of further disruptive events. Presumably Council is expected or required to produce such financial projections as a part of the LTP exercise? From our perspective they are effectively meaningless. There are far too many unknowns in our future and we believe it is important to be honest with ourselves about the predicament we all face.

On a positive note we are encouraged to see recognition of the importance of maintaining flexibility wherever possible regarding management of our collective assets and we strongly support this approach. (pg 51)

"Our overall approach to asset management is to maintain flexibility wherever possible, enabling us to take action when circumstances change, as our knowledge improves and as technology develops."

We believe this flexibility and an ability to adapt and change our priorities will be a critical factor in determining how well, we as a community, respond to the challenges ahead.

We also support the review of the Wairau Floodway Management Scheme and look forward to seeing the outcome of this review. (pg 52)

"Council will soon begin a review of the core Wairau River Floodway Management Scheme. The review will examine the current level of service, customer expectations and land use changes. It will also model flood flows under different conditions so that the range of effects that may result from climate change and sea level rise can be more accurately predicted and mitigated."

Over the last few years we have had various communications with Council and its staff regarding the ongoing decline in the Wairau aquifer. We encourage you to look seriously at any opportunities for giving more room to the river, as this will have the duel benefits of improving aquifer recharge and flood management.

CLIMATE ACTION PLAN –

We recognise the work being done by Council with it's Climate Action Plan and note the Climate Change sub-committee formed after the last local body election finally met this January. There is one clause in that Plan which we wish to again focus your attention on, as we have done in the past.

Clause 4(c)(i) of the Climate Action Plan states - *"Include assumptions for climate change in the Long Term Plan, including provision for uncertainty, based on latest scientific evidence from the Intergovernmental Panel on Climate Change (IPCC)."*

- **We ask that all adequate funding required to continue implementing the Action Plan be allocated in the LTP, as stated in clause 4(c)(ii) of the Plan.**

SUSTAINABILITY OFFICER –

- **We propose that Council allocate the necessary resources and appoint a Sustainability Officer.**

Their remit should include reducing Council's energy and water use, emissions and waste, plus investigating its supply chains to ensure the goods and services it uses are sourced in a sustainable way. Having a dedicated staff member with the responsibility of having an overview of all of Council activities, with a sustainability focus, could help avoid siloed thinking and foster cooperation between different people and departments.

THE PRECAUTIONARY APPROACH –

- **We urge councillors to always take the "precautionary approach" when making decisions. We believe it is very important that all planning and decision making associated with the current LTP process be done with a knowledge and an awareness of the likely impacts on our climate and environment in general.**

We note the recent presentation given by NIWA scientists Paul White and Martin Crundwell at the Marlborough Research Centre and also separately to some people at MDC. Their research shows the existing coastline between Blenheim and Tuamarina about 7,000 years ago was roughly where SH1 now runs. Sea levels were about one metre higher than today at that time. With the certainty of continuing sea level rise over the coming decades we believe it would be prudent to at least start thinking about and planning for the impacts throughout Marlborough that will eventuate.

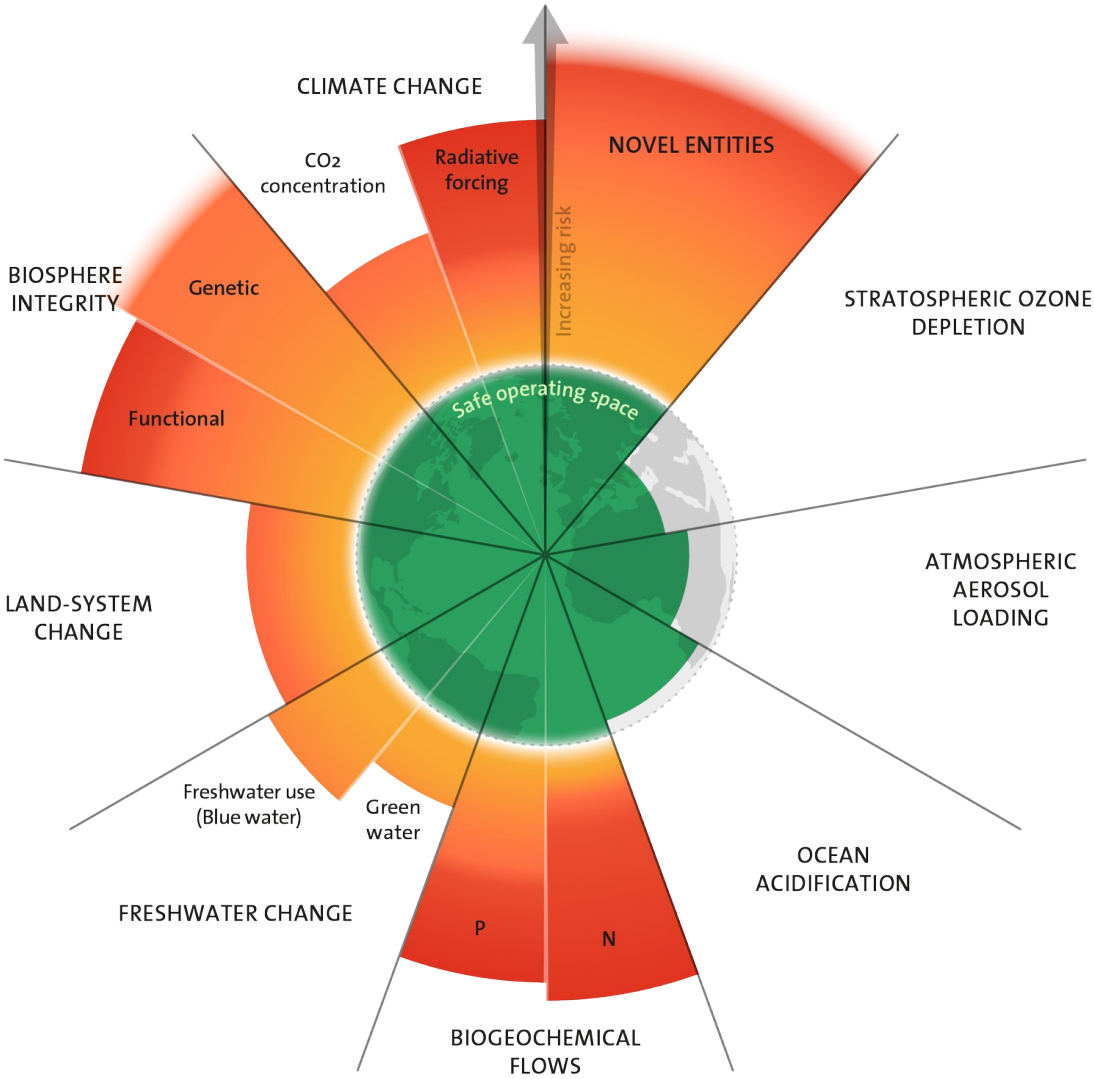
- **For example, do we need to put some resources into researching the timing and nature of impacts on the Blenheim sewerage plant and start thinking about what possible alternatives there might be for an alternative sewerage treatment system?**

We strongly encourage Councillors and staff to keep themselves informed, as more research and evidence of the impacts of environmental degradation, global heating and biodiversity loss become available.

SUPPLEMENTARY INFORMATION.

We wish to include here the following information, hopefully to help raise awareness of the predicament we all face.

The increase in extreme climatic events and unprecedented atmospheric and ocean temperature increases over the last 12 months have been shocking, and even experts who have been working for years on the climate crisis did not expect the magnitude of changes. This trend is deeply concerning. The diagram below is an attempt by an international team of scientists from the Stockholm Resilience Centre to provide a detailed outline of planetary resilience by mapping out all nine boundary processes that define a safe operating space for humanity. The green circle shows the safe operating space and the red shows that six of the nine planetary boundaries have now been crossed.



- We are exceeding 6 out of the 9 planetary boundaries as defined by the Stockholm Resilience Centre. To quote from two of the authors of their 2023 update assessing planetary resilience.

  "We don't know how long we can keep transgressing these key boundaries before combined pressures lead to irreversible change and harm." Johan Rockström.

  "Earth is a living planet, so the consequences are impossible to predict." Sarah Cornell.

  See HERE AND HERE for further info.

- Global Heating is only a symptom of a much bigger dilemma facing humanity: that is our diseased relationship with Planet Earth. We wish to point out there is a big difference between a problem and a dilemma. Calling global heating a problem suggests there are solutions that can fix it. What are the consequences if we can't fix it?

- We must find ways to reduce our energy use. The concept of energy descent needs to be better understood. It is our excessive energy use that is the main reason we are exceeding planetary boundaries.

- We can't simply replace fossil fuels with renewable energy and expect to carry on our current high energy lifestyles. Papatuanuku/Mother Nature cannot continue to provide us with all the resources we require to do that and cannot continue to absorb the levels of waste that arise from our activities.

- Issues such as ocean heating and ocean acidification are not something that have just appeared in the last couple of decades. It has taken us many, many decades to reach this point and the inertia of this process is so large that it will take many, many decades to stop the heating and acidification and to help Nature to turn it around. With the oceans absorbing 93% of the excess heat caused by GHG emissions and 30% of the CO2 we have to plan and prepare for things to get worse before they get better. The marine heatwaves highlighted in the November report to Council last year were not rare, unexpected events but rather inevitable consequences of our way of living on planet Earth.

- We are dealing with a long-term and ongoing predicament, not a series of problems for which all we have to do is find a series of more or less technological fixes.

We understand that Councils throughout the country are faced with the awkward situation of having to deal with the impacts of climate crises while still waiting for guidelines from central government regarding roles and responsibilities and resource allocations.
We note that LGNZ openly regrets the lack of leadership from central government and calls on them to take up the reins of leadership regarding climate change and adaptation to change. We think such calls are in vain. Internationally and nationally governments have shown themselves too much beholden financially and otherwise to industry lobbies and large companies, who depend on fossil fuel consumption (successive IPCC COP conferences have demonstrated that.) We believe

leadership is going to come from grass roots, and that is what the Council and its committees should be fostering.

Our hope is that our Council adopts the requisite leadership with bravery. We believe it is important for Councillors and staff to keep abreast of the implications of the planetary limits, referred to earlier, being exceeded. In that regard we encourage MDC to take a long-term view of its activity, knowing that we all have to put our long-term hats on and work towards not only adaptation but still also mitigation.
We believe there is value in our collective view being well beyond the designated 10 years of this Plan because of the big challenges we have referred to in this submission. We don't know how best to meet these challenges but we do consider it our responsibility to raise them with you at this time.
We would like to remind you of something Gregor Macara from NIWA stated in his presentation to Council in 2021. He said - *"The possibility of passing currently unknown tipping points in the climate system (that may be irreversible) can not be included in their projections."*

- **We have to be smarter with our decision making and think and plan ahead, for our grandchildren's sake please!**

TIWAIWAKA.

Finally we would like to bring your attention to a very useful small publication called Tiwaiwaka, written by Rob McGowan. We believe this view of our world needs to be given much more priority if Papatuanuku is to be able to thrive and continue to support the myriad lifeforms that make up life on Planet Earth. The next LTP needs to reflect this thinking.

The critical matter we need to address especially in these challenging times is defined very well by Rob with the following statement and principles -

We have to begin by changing the order of priorities we work to. New Zealand's greatest priority is not economic development but caring for the Earth.

By following the Principles of Tiwaiwaka set out below we have a way forwards that gives us hope for the future. Keeping the whenua well is always the first priority. That is what will ensure our long-term future, especially for the generations that follow us.

1. ***Te Whenua, Papatūānuku, is the source of all life. She is the Mother. Ka ora te Whenua, ka ora te tangata.***
   Caring for the whenua is the first priority. Everything else must be measured against this.

2. ***We are not the centre of the Universe but we are part of it.***
   All living creatures are our brothers and sisters, and we are the potiki, the last born. Papatūānuku is our mother. We must care for them.

3. ***The mauri is the web of connections that sustains life.***
   If any of those connections is weakened or broken the mauri is less able to sustain life. The integrity of the mauri and its web of connections has greater priority than the rights and needs of any individual or species.

4. ***Te tangata, people, are not the masters of the mauri; we are part of the mauri and embraced by it.***
   Our role is to care for the mauri. In doing so we are cared for by it. We find peace. We are at home.

5. ***No individual person is more important than any other.***
   Each must contribute what they have to offer, and receive what they need to be well. We are most well when we are sustained by the mauri, the web of connections that makes us who we are.

6. ***We give special care to the tiniest living creatures.***
   Even though they are too small to be seen they are the foundation that keeps and sustains all life. Caring for them is caring for the mauri. This is the source of wellness, of sustainability.

Climate Karanga Marlborough