Submission on Plan Change 1 to the Natural Resources Plan

Supporting Document

Submitter S17 John Easther

The proposed plan change is complex, carrying forward objectives and policies into multiple rules for the different whaitua. In my submission I have identified a number of clauses that illustrate the amendments that I seek to the plan, focussed on the Makara / Ohariu whaitua where I own property. These amendments should be carried through to other objectives, policies and rules that deal with the same subject matter within the other whaitua.

In this supporting document I provide the context for my submission and cover matters that should have been included in the plan change, but are not.

Statutory Provisions for Funding
The plan change must be amended to include statutory provision for 100% central government and local government funding of retirement of land, land-use changes, certification costs and mitigation measures required to achieve the objectives of the national policy statement on freshwater and the regional objectives promulgates under the NPS.

Mandated reforestation into permanent forest
Effective mandated retirement of erosion prone pastural land into permanent forest must be a regional / national responsibility planned and funded in accordance with a risk based regional plan.

Compensation
Compensation for retirement of pastural land into afforestation must be in accordance with a compensation mechanism which must be included within the plan change or within a complementary regulation that must be established before the plan change can take effect . Compensation must cover the loss of production and income associated with retirement. Compensation must include the option for the property to be purchased at uplifted market value (market value plus compensation for disruption) if retirement will affect the viability of the current use of the property, the purchase option to be entirely at the discretion of the property owner. As compensation will be a regional or national cost, the regional and national programmes for retirement and afforestation will need to be scheduled within available national and regional budgets.

Time frames referred to within the Plan Change
Time frames to achieve target outcomes for forest cover must be reflective of the Makara Catchment and determined through evidence of recent and current reforestation projects. The generic figures used in the proposed plan change must be removed and replaced with guidance notes.

Silt generation, transport and deposition
Generic assumptions on the generation, transport and deposition of silt leading to afforestation or mandated retirement of pastural land must be replaced with evidence from subcatchments and tributaries.

Absence of tools to manage effects of flooding and transportation of silt
The proposed plan is silent on the increased effects of flooding that can be expected from climate change. Flood peaks from the high intensity rainfall which will characterize climate change are directly correlate with land use as is the bedload carried in peak flows. Production of peak runoff is likely to be a greater risk to the community that potential production of silt and is likely to be the major driver of native forest reforestation.

Rationale
The Makara Catchment was deforested in the late 19th century to provide the timber which built Wellington City. The entire regional community benefited from deforestation. The entire community must fund the remediation of the adverse affected of deforestation. Land owners will pay their share of costs through rates and taxes, the same as all other member of the regional community.

The Rivers Control Act of 1941 is a precedent. The Act was promulgated to address the adverse effects of widespread deforestation throughout NZ, specifically movement of silt from eroding deforested catchments leading to heavy river bedloads and diversion of flood flows into riparian communities. The overriding purpose of the Act is to make provision for the conservation of soil resources, the prevention of damage by erosion and make better provision for the protection of property from damage by floods. The Act led to the establishment of the Soil Council, a statutory body which advised Cabinet on annual programmes for soil conservation and rivers control. The Soil Council was supported by the National Water and Soil Conservation Authority (NWASCA), responsible for governance, and the National Water and Soil Conservation Organisation (NWASCO), responsible for detailed implementation in consultation with Catchment and River Boards. NWASCO developed and managed a national programme of works, largely funded by the government with small local contributions (up to 15:1 government to local funding). Works were localised to regional and district authorities once completed. Both NWASCA and NWASCO were within the umbrella of the Ministry of Works and were disestablished along with MoW in the mid 1980s.

The forests of the Makara Catchment had taken hundreds of years to reach maturity within the unique environment conditioned by proximity to Cook Strait and steep, faulted rock and rotten rock strata. The forest was removed over a 50 year period and replaced with pasture which established on the thin fertile forest debris but became marginal as the initial forest fertility was lost over the next 50 years. By the 1960's pastural use became marginal with

scrub taking over. Reforestation through retirement can be expected to take hundreds of years, passing through establishment species before mature forest develops. The main economic use is now as wind farms, with returns from windmill leases supporting the remaining economic pastural units. Exceptions are small blocks and lifestyle units where other earnings support small grazing units and reforestation of the units supported by regional subsidies.

Deforestation lead to deposition of clayey sandy silt and gravels within the valley floors. The layers of deposition are visible in all stream banks. The streams flow within the silty gravel and floodplains. During high flows silt is mobilized from the stream banks and stream bed in addition to new silt load from the hillsides. Any disturbance of the stream bed, including recreational use, yields high levels of discoloration which will exceed the generic requirements of the proposed plan change for discoloration within and downstream of a mixing zone. The provisions of the proposed plan change are completely unrealistic and are clearly not based on evidence. As for reforestation of the hillsides, revegetation of stable stream channels and adjacent floodplains will take many years, moving through establishment species to permanent native vegetation.

Other aspects of the district plan discourage subdivision into lifestyle or small blocks which by their nature bring the finance that enables the retirement of pastural activity into reforestation. The most sustainable land use for the Makara/Ohariu whaitua not occupied by windfarms may be small blocks compatible with the periurban outer green space environment.

Our farm at 910 Makara Road is an example. We are not directly affected by the plan change as we have already made the changes that would be imposed by the plan change. Our statistics, likely replicated in other lifestyle blocks in the whaitua, are:

- Total property area 35.4ha
- Area of erosion prone land not suitable for pastural use and retired into permanent forest 18.5ha.
- Retired land includes 2 wetlands established to take hill runoff before it discharges to the Makara Stream; 0.85ha and 0.48ha.
- No stock access to Makara Stream, main drains or ephemeral streams; total 1250lm fencing.
- Approx 19,000 plants in waterways and hill retired areas between 2007 and 2023.
- The property is a lifestyle block, not dependent on farm earning. Very low stock numbers - 7-10 cattle and 7-10 horses on c17ha.

The plan changes long-term goals will take a number of generations of land owners to achieve. The timeframes proposed in the Plan Change are completely unrealistic with unrealistic expectations placed on the current generation of landowners.

A significant area of the catchment is occupied by windfarms. The lease arrangements for windfarms are intentional mechanisms by windfarm developers to avoid land ownerships issues with the overseas investment authority, defer initial capital costs for access, and avoid responsibility for the management of land use within and adjacent to turbines. To

achieve the objectives of the plan change, provisions are required to address this anomoly whereby landowners are restricted on the the use of the land by lease agreements and generators can avoid liability for diverting revenue into reforestation.

Runoff from pastural land use compared to forested land use is greater (100% runoff can be expected from pastural land during peak rainfall intensity periods of larger storms) and occurs faster, leading to shorter times of concentration when runoff combines within the stream channels to create peak flows. Land use changes that retard runoff within the long thin Makara / Ohariu catchments will have a significant effect on reducing flood peaks. Land use changes focused on reducing flood peaks will also deliver the Plan Change's objectives of reducing silt loads and movement of silt, most of which occurs during higher flood flows. Determining priority areas for reforestation must focus of retardatiion of flood flows. The plan changes' proposal to identify high risk areas on the basis of grade and cover will not reduce flood flows and hence will not optimally reduce transportation of silt.

John Easther

11/12/23

View Submitter Details

Submitter No.	S17
Submitter Name	John Easther
Online submitter	Yes
Raw submission lodged	Yes

Raw submission points

These are submission points that were lodged as part of an online submission. They have not been summarised.

Raw sub point number	Provision	Support/oppose	Decision sought	Reasons
S17.1	Highest erosion risk land (plantation forestry)	Oppose	Erosion potential of all land must be based on evidence from site investigation. Map 92 is not fit for purpose other than as a tool to indicate where specific site investigation should be undertaken.	The Makara and Ohariu catchment are highly faulted with highly variable aspects and topography. Substrata varies from upthrust basement rock through to crush and shatter zones. Potential for erosion varies greatly within subcatchments. Potential cannot be determined through aerial scanning data.
S17.2	Highest erosion risk land (pasture)	Amend	Erosion potential of all land must be based on evidence from site investigation. The maps are not fit for purpose other than as tools to indicate where specific site investigation should be undertaken.	The Makara and Ohariu catchment are highly faulted with highly variable aspects and topography. Substrata varies from upthrust basement rock through to crush and shatter zones. Potential for erosion varies greatly within subcatchments. Potential cannot be determined through aerial scanning data.
S17.3	High erosion risk land (pasture)	Amend	Erosion potential of all land must be based on evidence from site investigation. The maps are not fit for purpose other than as a tool to indicate where specific site investigation should be undertaken.	The Makara and Ohariu catchment are highly faulted with highly variable aspects and topography. Substrata varies from upthrust basement rock through to crush and shatter zones. Potential for erosion varies greatly within subcatchments. Potential cannot be determined through aerial scanning data.
S17.4	Highest erosion risk land (woody vegetation)	Amend	Erosion potential of all land must be based on evidence from site investigation. The maps are not fit for purpose other than as tools to indicate where specific site investigation should be undertaken.	The Makara and Ohariu catchment are highly faulted with highly variable aspects and topography. Substrata varies from upthrust basement rock through to crush and shatter zones. Potential for erosion varies greatly within subcatchments. Potential cannot be determined through aerial scanning data.
S17.5	Hydrological control	Amend	Interpretation needs to be extended to include flood risk management including the mechanisms that determine peak flood flows, sediment transport and deposition and the times of concentration within the Makara and Ohariu stream networks. Hydrological control must also consider the effects of Makara Stream mouth opening / closure on deposition that occurs in the estuary during floods, and oxygen depletion that occurs during dry periods within inadequate flushing during each tidal cycle.	It is not possible to consider hydrological control without considering the formative effects of extremes (floods and droughts)
S17.6	Stormwater	Amend	The term in this clause and subsequent clause referring to Stormwater should be replaced with "Runoff" to include runoff from all tributaries including natural and manmade channels and diversions and should include sheet runoff in high intensity events which is most affected by landuse and landuse changes to mitigate sediment transport. Alternative is to introduce an interpretation of Runoff appropraite to rural catchments.	Current interpretation is an urban concept not relevant to rural catchments where most runoff follows natural topography, not manmade divesrions.
S17.7	Whaitua	Amend	A separate Whaitua is required for the Makara / Ohariu Catchment	The Makara / Ohariu catchments is completely physically isolated from the adjoining Wellington urban catchments and cannot be managed as an integrated system, (being the definition of a Whaitua).
S17.8	Amendments to Chapter 3 - Objectives	Amend	The "reasonable timeframe" default of 2050 referred to in many objective statements is not achievable within the Makara / Owhariu whaitua. For rural areas the objectives should be described as aspirational to be achieved over a number of generations of landowners.	The forests of the Makara/Ohariu whaitua had taken hundreds of years to reach maturity within the unique environment conditioned by proximity to Cook Strait and steep, faulted rock and rotten rock strata. The forest was removed over a 50 year period and replaced with pasture which established on the thin fertile forest debris but became marginal as the initial forest fertility was lost over the next 50 years. By the 1960's pastural use became marginal with scrub taking over. Reforestation through retirement can be expected to take hundreds of years, passing through establishment species before mature forest develops. Deforestation lead to deposition of clayey sandy silt and gravels within the valley floors. The layers of deposition are visible in all stream banks. The streams flow within the silty gravel and floodplains. During high flows silt is mobilized from the stream banks and stream bed in addition to new silt load from the hillsides. Any disturbance of the stream bed, including recreational use, yields high levels of discoloration which will exceed the generic requirements of the proposed plan change for discoloration within and downstream of a mixing zone. The provisions of the proposed plan change are completely unrealistic and are clearly not based on evidence. As for reforestation of the hillsides, revegetation of stable stream channels and adjacent floodplains will take many years, moving through establishment species to permanent native vegetation.
S17.9	Policy P45: Protecting trout habitat.	Oppose	Delete policy or amend to make clear this policy applies only to indigenous trout, not to introduced species.	Protection of the interests of the fishers of introduced species s not relevant to fresh water policy.
S17.10	5.2 and 5.3 Discharges to land and water and land use rules	Amend	Many of the provisions regarding the practical aspects of working within the bed of streams cannot be complied with within the Makara / Ohariu whaitua due to the physical constraints of the narrow channels. Separate provisions are required for operations within this whaitua.	Achieving the objectives to reestablish stable bank vegetation and revegetation of the adjoining floodplain restricts machinery access to the stream bed to fords established for access, with tracking instream required to areas of bank or stream bed requiring necessary remediation. Machinery must work in water. Any bed disturbance, including foot access mobilises silt within the stream bed gravels so the entire stream is discoloured downstream. Common sense provisions to mitigate adverse effects may include limiting access to remediation or prevention of flood damage, limiting access to outside spawning periods, minimising disturbance to weekdays to avoid disturbance of others recreational use.

S17.11	Method M41: Identifying and responding to degradation in freshwater bodies within Whaitua Te Whanganui-a-Tara and Te Awarua-o-Porirua Whaitua.	Amend	The single site site for identifying water quality in the Makara / Owhariu whaitua must be replicated in the subcatchments to the extent necessary to produce evidence that can identify causes of degradation. Sites must include recording equipment that measure turbidy and other parameters with alarm thresholds that can be responded to by council's environmental staff within the timeframe required to determine cause of adverse effects.	Spot recording from a single site within the whaitua cannot provide the evidence required to support the provisions in the plan change. Sites are required on Mill Creek and Ohariu Stream prior to their confluence, on Makara Stream prior to confluence with Ohariu Stream and reloaction of the existing site at the head of the estuarine reach to a site within the estuary to measure water quality within the estuary to permit management of the mouth.
S17.12	Method M42: Small farm property registration within Whaitua Te Whanganui-a-Tara and Te Awarua-o-Porirua Whaitua.	Amend	Council must be responsible for the preparation and registration of small farm plans in consultation with the property owner.	Refer to attached document is support of this submission.
S17.13	8.2.4 Rural land use and earthworks	Amend	Clarification that the implementation and costs of implementation of the policies under 8.2.4 are fully funded by the Council.	The requirements for, and benefits from, the implementation of policies WH.P21, WH.P22, WH.P23 and WH.P24 are regional , national and intergeneration and must be funded by the regional and national communities. Land owners will carry the real and intangible costs for changes in land use, as otherwise incurred through implementation of the policies and through their rates and income tax.
S17.14	Policy WH.P22: Capping, minimising and reducing diffuse discharges of nitrogen from farming activities.	Amend	Requires clarification in clause (c) that the 20ha and 5ha measure refers to contiguous parcels in the specified landuse and not to the area of the titles that the areas are within.	A 35ha block might contain three 7ha pastural areas separated and surrounded by retired land in vegetation. Pastural land use would measure 7ha for the purpose of the policy, not 21ha and not 35ha.
S17.15	Policy WH.P23: Achieving reductions in sediment discharges from farming activities on land with high risk of erosion.	Amend	Erosion risk is to be identified by site investigation not by reference to the plans attached to the proposed plan change 9 which are to be labelled "indicative information to assist in the interpretation of Proposed Plan Change 1 and not part of the plan change"	The plans identify areas that should be subject to site investigation but are not fit for the purpose of identifying erosion potential and the contingent application of policies and rules.
S17.16	Table 8.4: Target attribute states for rivers.	Amend	Targets for Makara Stream in table 8.4 should be tagged as indicative and non operational until such time as targets can be determined for a number of monitoring sites that are established to be representative of the major subcatchments at the confluences of the major tributaries. Timeframe will be determined by the implementation of landuse changes which are intergeneration. The specified timeframe of 2040 should be replaced with an indicative figure. 2100 may be achievable.	A single monitoring site cannot provide evidence of water quality for a whaitua that is made up of a number of catchments with significantly different landuse, occupation, exposure and potential for erosion. The time frame used in table 8.4 and the water quality target are not based on evidence and are unrealistic aspiration targets given the extent of erosion prone land indicated by the maps.

Raw submission documents

These are files that were uploaded as part of an online submission.

Document name	File	Description	Upload date
Supporting Document Submitter S17 John Easther	s17johneasthersupportingdocument.docx	Provides context for S17 online submission	11/12/2023 08:30