SLIDE 1 – Name and Photo

INTRODUCTION:

Kia Ora and good afternoon.

Thank you for giving me this opportunity to speak at this hearing.

My name is Daniel Levy, I am a beekeeper and for many years I have lived **rurally** further upstream in the Maitai with my family. We all love the Maitai Valley and enjoy the **peaceful** recreation reserves as well as the hiking and biking trails and playing in the **tranquil** swimming holes (with their friends has always been a highlight of Nelson Summers for my Children).

Every day we see the many and varied people of Nelson **relaxing or exercising** in the reserves and enjoying the serenity of the River and its Valley.

Generally, Joggers and cyclists can still **safely** use the quiet main road whilst sporting events see the recreation reserves filled with happy participants and spectators. We are given written notice when the Large events in Branford Park require the closing of the road.

This is a special **Rural** place for Nelson and this Plan Change threatens to negatively impact all of this.

I grew up and spent many years in Hong Kong. There, I witnessed some Rural areas environmentally destroyed by Urbanization. I also witnessed the enormous benefits of environmental protection with Hong Kong's clearly defined Green Belts, where opportunities for **rural** living and **rural** recreational amenity exist in close proximity to Urban centres. We can learn from others' mistakes and triumphs.

And I believe **urbanization** of the Maitai would be a big mistake.

I have a deep respect for the natural world, and a strong sense of responsibility to protect the vulnerable fauna and flora and the delicate remnants of habitat they survive in.

In an effort to improve indigenous biodiversity in the Maitai Valley I have planted thousands of native plants and battle continuously with the weeds that threaten them. I have been inspired by so many others who do the same. I am particularly impressed with Friends of The Maitai and the more recent restoration by Ngati Koata and NCC with project Mahitahi. Improvements to the native flora and fauna are already visible.

This proposed Plan Change threatens to undermine this good work by opening the flood gates of Urbanization into Rural Maitai Valley.

PPC28 threatens the Maitai's treasured rural amenity and tranquillity. The loss of this would be tragic for Nelson.

SLIDE 2 – The wrong place for a new Suburb

I will not repeat all of my main objections to PPC28 as they are detailed in my written Submission.

I support the objections already expressed by Save The Maitai and by others.

The common theme is to request the decision makers to respect the land, respect the river, to respect the people and to ensure that this land is kept **Rural**.

The Applicants argue that Greenfield development is required and yet ignore that so much greenfield development is already at the planning and construction phases in other parts of Nelson, without the high level of public opposition.

The NPS UD does not ask for development anywhere or at any cost.

PPC28 comes at much too high a cost.

Kākā Valley is a very poor site for new greenfield development. It is not contiguous with existing suburbs and infrastructure is lacking.

The unavoidable effects of urbanization will irreversibly negatively impact the **rural** recreational amenity and the **potential** health of the river and biodiversity. I stress potential, as with urbanization this potential becomes forever capped by the realities of a degraded urban environment whilst Rural land retains most facets of a natural landscape without such limits to future potential restoration.

More consideration needs to be given for the people and entities that lack a voice.

The proximity of urbanization presents the greatest **permanent** insult to the natural state of every river and stream I have ever explored. I seek recreation beyond the urban environment if given a choice. This is why now, less of us choose to swim at Girlie's hole and I expect this development would force most to crowd into Sunday hole. This overcrowding plus the increased noise and traffic threatens to destroy that experience too.

Future generations would not know what they lost.

No other New Zealand city has a better or more accessible RURAL 'green belt'. This Taonga now needs our protection.

The PPC is not consistent with NRMP rural greenbelt policy (DO15.1.3) that states, 'Adverse effects on existing rural character and amenity values should be avoided, remedied or mitigated in the Maitai Valley... in order to maintain a greenbelt...'.

As other have stated, adverse effects on existing rural character and amenity would not only be unavoidable but effective remedies and adequate mitigation would not be possible.

SLIDE 3 – Issues I will address today

I now wish to expand on a few of the concerns I raised in my written submission. I will start with Flood Risk.

SLIDE 4 – Any Increased FLOOD risk for Downstream properties is UNACCEPTABLE

The Maitai River is prone to flooding, especially when heavy rain coincides with a high tide. There are many historical records of the Maitai river breaching its banks, occasionally with disastrous consequences. Climate Change will increase this flood hazard (particularly with an increase in rainfall intensity and frequency as well as sea level rise). Any additional avoidable flood risk is not acceptable.

This photo which I find quite impressive is from Maitai Valley road near Nile St in 1970.

The next slide shows the December 2011 flooding, taken a few hundred metres further downstream.

SLIDE 5 – FLOOD December 2011

In this event, I came to town to collect my 2 eldest children from school and we couldn't return home up the Maitai until late the next day.

SLIDE 6 – INCREASED FLOOD RISK

I believe that the evidence and modelling presented is insufficient to properly assess the potential increased flood hazard on downstream properties.

Increased frequency and intensity of rainfall as well as sea level rise are factors expected to increase with climate change. So are severe Low Pressure storms that are accompanied by extraordinary high tides. These higher than predicted tides could aggravate the Lower Maitai's flooding risk significantly – making the existing unmodified Maitai/Kākā Floodplain even more important as a flood offset. It does not appear that this tidal risk has been considered in the modelling.

Experts flooding concerns should not be ignored and should be thoroughly assessed with 'a whole Catchment approach' at The Plan Change Stage.

Even the applicants latest Stormwater Management report acknowledges that, 'The loss of flood plain storage could displace and redirect floodwaters during an extreme event causing adverse flooding effects on adjacent and/or downstream properties.'

Previously there was an implied intention to maintain Neutral Floodplain Storage Capacity but now it is no longer clear if or how floodplain storage capacity neutrality will be maintained. Landfilling on the floodplain is still prescribed yet excavation is no longer mentioned as an offset. Such uncertainty does not give confidence in the flood risk assessments.

SLIDE 7 - Preservation of the Maitai/Kaka floodplain:

The drastic irreversible proposed changes to the rich alluvial floodplain should not be allowed.

It is one of Nelsons last remaining undeveloped floodplains and areas within it would previously have been wetland, one of the most reduced and biodiverse habitat types in NZ.

The fertile river terraces should be preserved either for food production or for possible future restoration with bonus improvements such as its potential to offset increasing flood risks downstream.

In light of the climate change emergency, all Green field developments on alluvial floodplains now crosses a critical red line.

Kākā stream would have naturally been a braided stream with multiple dynamic channels, so to remove the existing channel, to maximize land available for development, is indefensible within the context of Te Mana o Te Wai.

It is worth noting that revegetation proceeds much more quickly in undisturbed land. To achieve effective shading of an engineered artificial ditch would take many years longer than on the fertile banks of the existing channel.

Regardless, there should be comprehensive riparian plantings on both the existing channel and along the ephemeral overland channel on the west side of the floodplain.

SLIDE 8 -Te Mana o Te Wai?

Extensive earthworks on the active floodplain and on the hydrologically complex hillsides, diverting Kākā Stream plus the threat of sedimentation and future urban water contaminants polluting the sensitive receiving environment....for a housing development....**Cannot** give effect to Te Mana o te Wai.

The NPS-FM (2020) clearly identifies – the Te Mana o te Wai hierarchy of obligations that unequivocally Prioritizes the health and well-being of water first. The proposals in this PPC clearly fail to prioritize the health of the river over the desire for profit and urban sprawl.

Revegetation of hill slopes and Riparian plantings are positive measures but it should not be claimed that these will be sufficient to adequately mitigate the drastic hydrological and landscape modifications that are proposed.

Expert evidence indicates that even the delicate wetlands that have already been identified for protection may not survive the planned or accidental alterations in hydrology.

If the land is kept Rural, any restoration will manifest as real improvements. If the zoning is changed to Residential, the ribbons of Riparian plantings would be much appreciated, but would be forever constrained and compromised by the proximity of a growing suburb.

Rather than making comparisons with the currently degraded state, we should be comparing the future **potential** for water quality and aquatic ecology with or without a plan change.

SLIDE 9 – Earthworks

The scale of earthworks required by PPC28 would have an adverse impact on the Maitai river's water quality and ecology as well as the amenity of all who enjoy the nearby recreational facilities.

Within the development site, bulk earthworks would be environmentally catastrophic, not dissimilar to open cast mining, permanently relegating the natural character of the valley, to history.

I grew up observing earthworks at a massive scale. It rips the life and heart out of the land.

Dust in the air and sedimentation in the waterways is never avoidable with large scale earthworks and fine sediment is one of the most significant stressors on freshwater, estuary and nearshore coastal environments.

SLIDE 10 - Save The Maitai from this style of destructive greenfield subdivision

These photos illustrate the impact of earthworks in greenfield subdivisions. This is not appropriate for the Sensitive environment and hydrology of Kākā Valley or the Sensitive Receiving environment of the Maitai River.

The photo on the left illustrates sedimentation control measures being breached on a Nelson subdivision. Such sediment smothers biodiversity downstream.

This is what earthworks in greenfield subdivisions looks like.

Please save the Maitai from this.

The right hand photo was taken by a neighbour of the Bayview subdivision. I have videos of sedimentation breaches from this site too. However with this short clip I wish to illustrate both the scale of impact on landforms and subdivision noise pollution.

Contrast the clip that Wendy Barker played last Friday of the peaceful bird song by the river near Kākā Valley with the incessant stressful cacophony of construction here.play clip

Does anybody want to hear that again.? No, neither do I.

With the plan change this would be the reality in the Maitai Valley for years to come.

Please Save the Maitai from this.

SLIDE 11 – Stages of a Development - Planning , Vegetation Clearance, Earthworks

This again is the Bayview development – Google Earth Images - Here I wish to highlight the Environmentally destructive stages of Greenfield Subdivision that would be inappropriate for The Maitai Valley.

Top Left - 2017 - Stage 1 – predevelopment.

Top right - 2020 - STAGE 2 - Vegetation clearance.

Bottom right - 2022 - STAGE 3 – Earthworks.

Bare Earth, Mud, Dust, Sediment and Noise are the immediate impacts of the earthworks .Biodiversity has been devastated. Long-term, landforms and drainage patterns will have been permanently changed.

This should be avoided by not permitting a change of the current rural zoning.

Please Save the Maitai from this.

SLIDE 12 – Kaka Valley – At Stage 2 of Development – Vegetation Cleared

The Google Earth images here indicate quite worryingly that PPC 28 development is essentially already at STAGE 2 – **Vegetation clearance** is already advanced reversing decades of regeneration.

I measured Clearance of about 76ha of the hillsides from 2019 to January 2022. In several large areas increasingly rich indigenous flora was already winning the day.

Aside from the obvious destruction of habitat, this large clearance of vegetation represents a significant **disruption** to the 8km **biodiversity corridor** that stretches from Hira to the Botanics.

The following images show that the cleared vegetation included large and ecologically significant areas of indigenous vegetation as well as some apparently mature nationally vulnerable Kanuka – the preferred habitat of many elusive native animals including the threatened Nelson Green Gecko.

SLIDE 13 - Kaka Stream – Biodiversity Lost

The Terrestrial Values Assessment field survey work was compromised because it was carried out this April **after** the land clearance. This is particularly significant as the assessment of fauna is heavily based on the 'vegetation community' observed.

Pre-clearance assessment would have been more appropriate to assess the PPC impacts and it would have been very different. Clearly if most of the vegetation has already been removed, the assessment is compromised.

Resource consent is required to clear Indigenous forest, indigenous vegetation within a Biodiversity corridor, and any vegetation within 5m of a river. These images suggest that vegetation clearance rules may already have been broken.

The Storm Water Management report also suggests that revegetation will be used as an offset to balance increased flood risks, which is disingenuous in light this large scale clearance which will already have increased our flood risks.

I celebrate every sighting of rare indigenous fauna and flora and it is distressing to observe such careless large scale destruction of their delicate habitat, for the yet unapproved development plan.

SLIDE 14 - Kaka Stream – now denuded and unshaded

These images show the mid-reaches of Kaka Stream. The left is pre clearance in February 2020 and appears to be predominantly successfully regenerating bush.

Typically in the Maitai Valley this is Kanuka scrub with Mahoe and other native species out-competing the nursery gorse. Zooming in further corroborates this as do reports from those who knew this area well.

This is not just clearance of gorse, bracken and noxious weeds as described by the developers, but could be more accurately described as the clearance of regenerating native scrub and trees.

The right image shows the land stripped bare, with most small and larger trees felled by January 2022.

Most concerning is that in this particular area the banks of Kaka Stream have been left denuded and unshaded which would have had a devastating impact on the biodiversity in and around the stream. It will take many, many years to recover, even with the prescribed plantings.

The applicant emphasises one reason for the Kaka Stream realignment is to hasten shading of the stream. Here, retaining existing vegetation would have been a far more effective means of achieving shading, and highlights a confusing approach to environmental mitigation.

Actions speak louder than words and viewing these images leave me with little confidence that good environmental outcomes will be achieved if PPC28 is approved.

SLIDE 15 - RMA - Proposed Policy RE6.3 Sensitive Environmental Design

I felt that this proposed RMA Policy (RE 6.3) is particularly relevant to my view of these issues as it requires that subdivision enhance freshwater and terrestrial ecological values through promotion of land management which minimizes nutrient loss and does not accelerate erosion.

I believe that the vast and careless vegetation clearance that has already been carried out by large machines and helicopter spraying, is already a display of the Applicants recent poor land management.

SLIDE 16 - Landslips, erosion and sediment

Landslips and erosion are already evident in many of the recently cleared areas. The Google Earth image top right contrasts this area in NW Kākā Valley in 2018 with the same area last January – lower right. The left hand photo taken in August 2021 is just one of these large landslip.

The resulting sedimentation will already be negatively impacting the sensitive downstream receiving environment and will continue to do so in future.

SLIDE 17 – Reasons I oppose PPC28

These are some of the reasons I detailed in my written submission for why I I ask that PPC28 be declined.

SLIDE 18 - Keep The Maitai Valley Rural

This is a summary of the relief that I seek. I would like to add that I agree with others that any Resource Consents should be publicly notified.

To conclude:

In my opinion, Rural Maitai Valley is treasured primarily because it is Rural. If the Zoning of parts of Kākā Valley are changed from Rural to Residential we will have forever closed a beautiful chapter of Nelson's history.

The myriad of adverse impacts on the neighbouring recreation reserves, the river ... and beyond, would be unavoidable and irreversible and the proposed mitigation, inadequate.

Since the PPC was first tabled, New Zealand and Nelson have declared a climate emergency. This is not the time for **business as usual**.

The proposed development fails to address the anthropogenic causes of climate change or our emissions reduction targets and obligations.

From a carbon perspective greenfield housing is far less appropriate than brownfield urban intensification and Kākā Valley is particularly inappropriate as it is not contiguous with existing suburbs and supporting infrastructure is totally lacking.

Nelson Plan rules and objectives to maintain a distinct greenbelt and to enhance the water quality of the Maitai River should be respected.

I respect the good intentions to house people in the valley but it is zoned Rural for many good reasons.

I believe it is well suited for Rural housing with the developers still able to profit, with future rural plot owners potentially contributing to enhancing the rural amenity. Perhaps a Green Rural 'Village' where people can truly connect to their land.

Please respect the land, respect the water and respect the people. Please tread lightly in the Maitai and keep it Rural.

Kia Ora and Thank You.