

**BEFORE THE HEARING PANEL**

**IN THE MATTER** of the Resource Management Act  
1991

**AND**

**IN THE MATTER** of an application for a proposed  
Private Plan Change (Private Plan Change 28) by CCKV  
Maitai Dev Co LP and Bayview Nelson Limited to the  
Nelson City Council associated with the rezoning of  
approximately 287-hectares of land located within  
Kākā Valley, along Botanical Hill and Malvern Hill on  
land at 7 Ralphine Way, Maitai Valley and Bayview  
Road as detailed within the application.

---

**S42A SUMMARY REPORT TO THE COMMISSIONERS**

**MR GREG HILL (CHAIR), MS SHEENA TEPANIA, MS GILLIAN WRATT, AND MR NIGEL MARK-BROWN**  
**SECTION 42A SUMMARY REPORT OF DR PAUL FISHER – WATER QUALITY SPECIALIST, NELSON CITY**  
**COUNCIL**

---

21<sup>st</sup> July 2022

## Introduction

1. This summary provides a quick reference to the key outstanding matters of concern and water quality matters raised by the applicant regarding catchment hydrology and sediment discharges to the receiving environment. This summary should be read in association with:
  - Appendix I - S42A Report of Paul Fisher dated 24<sup>th</sup> May 2022
  - Appendix B - S42A Addendum Report of Paul Fisher dated 24<sup>th</sup> June 2022
2. My conclusions from these reports remain valid as follows.
3. The applicant's expert advice for improving the water quality and ecological outcomes has been based on the premise that Kākā Stream will be 'realigned' and that part of the flood plain will also be infilled, requiring extensive earthworks.
4. The current approach has therefore not provided an assessment of alternative options at the Plan stage, and I find no compelling evidence to demonstrate that the preferred option provides the optimal environmental outcome if this is desired.
5. Given that realigning the stream and partial infill of the flood plain is critical for the existing proposed development, I would expect a more comprehensive assessment than what is provided, including an assessment of the subdivision design with the stream *in situ*, including some consideration of the catchment hydrology and connectivity of freshwater habitat and species.
6. The Council led Groom creek constructed wetland project has been mentioned as a project demonstrating a good example of a stream realignment. The focus of this project was to primarily improve water quality, by reinstating an ephemeral wetland along the bank of the Maitai. I note that there were significant challenges at the site with liquefaction, which resulted in issues maintaining water levels and technical constraints moving heavy machinery over land. Overall, the project has been a great success for enhancing biodiversity and amenity in this popular recreation area by the Maitai camp. I do not consider it directly comparable to what is proposed through PPC28.

7. It is still my opinion that the existing provisions in the Nelson Resource Management Plan, national policy and standards will not be sufficient to address all the water quality issues of concern at the time of subdivision or for the proposed scale of development.

#### **Matters raised during the hearing**

8. The applicants' experts have provided assurances that the permeability and flow paths can be constructed and designed in the realigned stream and the remaining flood plain will meet the functional ecological requirements, which will be considered further at the consent stage.
9. It is unclear from the provisions to what extent the network of smaller ephemeral streams within the catchment will be protected. In my opinion the experts' assurances need to be supported by an assessment of what the "naturalised" flow regime is, including the extent of groundwater to surfacewater recharge, to reflect the complexity of the site and to consider the hydrology in the broader catchment.
10. There is a risk of losing important pool refuge habitat and connectivity of freshwater habitat at a catchment scale if the stream network is confined to the current assessment, which could result in a loss of freshwater habitat and biodiversity, particularly in the upper catchment where stormwater treatment devices such as wetlands will be more difficult to construct and maintain.
11. There have been various mentions of the existing Bayview earthworks from the applicant and submitters with respect to the success of erosion and sediment control, and discharges that have resulted in breaches of their discharge consent.
12. Based on my experience at council of the current earthwork and sediment control practices and the localised rainfall events that we have experienced over the last decade, I do consider that there will be sediment discharges for this proposed catchment scale development, even with best practice measures and that these cannot be avoided; particularly with steep contours, the proposed works to the flood plain and the Kākā stream and the bulk earthworks.
13. In my opinion the only way to minimise these discharges and effects is to take a precautionary approach by staging and limiting open areas to allow for quick stabilisation if necessary.
14. The applicant has compared sediment discharges and yields from the proposed development with respect to the Maitai catchment and concluded that they will be relatively minor. In my opinion this assessment has not fully considered the sensitivity of the downstream environment

or where point source discharges will potentially impact within the Haven, which is subject to tides creating sediment wedges and different flushing regimes.

15. I am still unclear whether water sensitive design and stormwater treatment will be included on-site for the proposed Bayview development discharging to Nelson Haven estuary, which would be expected as best practice to minimise stormwater contaminants during and post development.



Dr Paul Richard Fisher

21 July 2022