



To:Brandon Baillie, Senior Consents PlannerFrom:Annabel Beattie, Scientist- Terrestrial EcologyDate:16 May 2023Subject:RESOURCE CONSENT APPLICATION- WAIKARE GORGEFile Ref:CC:

Hi Brandon

Thank you for the opportunity to comment on the terrestrial ecology aspects of the application by Waka Kotahi to realign State Highway 2 at Waikare Gorge.

In making my comments I have reviewed the following documents:

- Resource Consent Application Waka Kotahi NZ Transport Agency: State Highway 2 Waikare Gorge Realignment Project
- Volume 1 Assessment of Effects on the Environment
- Appendix B Ecological Assessment

In terms of acceptability of the project in lines with best practice, I would commend the applicant on including Resource Management Act Section 6 matters and the project's ability to avoid adverse ecological impacts in the weighting system for options analysis.

I support the commitment of the project to achieve no net loss in the ecological value of terrestrial vegetation. Although only a small area of indigenous shrubs and trees are planned for clearance, I would emphasise that the kanuka shrubland also has significant ecological value due to its regeneration potential. The area impacted by the project has been mapped as having the potential ecosystem WF3 (tawa, titoki, podocarp forest) described as being "podocarp, broadleaved forest with emergent kahikatea, totara and matai, abundant tawa and titoki and occasional rewarewa and hinau" (Singers & Rogers, 2014). This is supported by the presence of remnant tawa forest downstream as described in the ecological assessment. This is a chronically threatened ecosystem type in Hawke's Bay as only 11.6% of its original extent now remains, as well as being the Chronically Threatened Environment as described in the ecological assessment. I would therefore agree there will be a moderate adverse effect associated with clearing areas that are likely to regenerate into this forest type and emphasise that replanting will not replace the ecological function these remnants currently provide. It is essential recommendations on a minimum area of 5.0 hectares for replanting using indigenous eco-sourced vegetation in places which facilitate connection with existing habitats are included in the final ecology management plan.

Amendments to the National Policy Statement for Freshwater Management (NPS-FM) at the end of 2022 included changes to the definition of a 'natural inland wetland.' This definition now reads: **natural inland wetland** means a wetland (as defined in the Act) that is not:

(a) in the coastal marine area; or

(b) a deliberately constructed wetland, other than a wetland constructed to offset impacts on, or to restore, an existing or former natural inland wetland; or

(c) a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body; or

(d) a geothermal wetland; or

(e) a wetland that:

(i) is within an area of pasture used for grazing; and

(ii) has vegetation cover comprising more than 50% exotic pasture species (as identified in the National List of Exotic Pasture Species using the Pasture Exclusion Assessment Methodology (see clause 1.8)); unless

(iii) the wetland is a location of a habitat of a threatened species identified under clause 3.8 of this National Policy Statement, in which case the exclusion in (e) does not apply.

The wetlands assessed as bring impacted by the project were not deliberately constructed, and therefore despite being induced through changes in drainage or stock access, are still subject to the NPS-FM and National Environmental Standard for Freshwater. Although it is encouraging that options to avoid impacts to wetlands were considered, it is disappointing there will still be 1600 m2 of natural inland wetland lost. These wetlands may have little (or in some cases, no) native vegetation cover but will still be performing other ecosystem services. Wetlands constructed for stormwater treatment purposes will not necessarily lead to a net gain in both wetland area and ecological function if this is not factored into planning stages. I would recommend the consent condition (15) related to the Ecological Management Plan is amended to "methods to mitigate or offset the loss of **the extent and ecological function** of natural wetlands" to better incorporate biodiversity outcomes into the final design.

I recommend the other consent conditions around lizards, avifauna and bats are included.