Mackenzie District Plan Change 18 Hearing – Fairlie - Tuesday 9 March 2021

Submitter: Mackenzie Guardians Inc.

The evidence of the Department of Conservation, Forest and Bird, and the Environmental Society is supported by Mackenzie Guardians. In response to reading the evidence circulated since 12 February 2021 Mackenzie Guardians wish to make the following comments:

Intensive stock grazing

Mr Harding makes several references to grazing in the s42A Ecology report including *Intensive* grazing (such as mob-stocking) can completely remove indigenous vegetation and is intentionally used for this purpose. Para 91.

Mr Head states in the evidence for Forest and Bird that *intensive stock grazing and edge effects* should be considered as a form of clearance. Para 13.8.

This issue is also raised in the DoC planning evidence at paras 70-74. Ms Ching recommends including the word *mob-stocking* instead of intensive grazing in the definition of vegetation clearance. This aligns with the definition in the draft NPSIB of indigenous vegetation clearance. Mackenzie Guardians support the DoC recommendation.

Edge effects

Mr Head (F&B evidence) suggests *Edge effects are among the most pervasive threats to remnant ecosystems and associated indigenous biodiversity.* Para 7.3.

Dr Walker (EDS evidence) makes several references to edge effects including edge effects from the land uses that are already established in the basin are now progressively modifying and shrinking the area of indigenous vegetation that remains. Para 28.2.

In 2015 Mackenzie Guardians mediated two Dryland Recovery areas as mitigation for irrigation, as part of ENV Court appeals. At that time edge effects were not well understood.

Edge effects were raised at the PC 13 hearing in DoC evidence (Nicholas Head) in September 2016, and later in evidence for the Rosehips hearing (Dr Walker) October 2017.

After reading the expert evidence for the PC 18 hearing on this issue the Guardians have come to realise that edge effects can occur at distances much greater than previously known. It leads us to the conclusion that the hard-won dryland recovery mitigation might not be as effective as envisaged. It may take several years for the edge effects to show. Mackenzie Guardians support the inclusion of edge effects in the definition of vegetation clearance.

Ongoing loss

Mackenzie Guardians note the number of threatened or at-risk plant species from basin floor habitats has increased from 81 in 2012 (Mr Head's PC 13 evidence for DoC para 15.1) to the latest classification of 91 in 2017 (Mr Harding PC 18 report para 31). Is it correct that these figures indicate a further 10 indigenous plant species from the basin floor were added to the threatened or at-risk categories in approx. 5 years?

Mackenzie Guardians consider it urgent that Mackenzie District Council addresses the continuing indigenous biodiversity loss in the Mackenzie Basin subzone through robust and enforceable rules in the District Plan.

Thank you for the opportunity to be heard today.

Rosalie Snoyink and Liz Weir on behalf of Mackenzie Guardians Inc.