Queenstown Lakes District Plan – Summary of evidence: Brian Rance

- 1. There is a huge amount of ecological and biological diversity found within the Queenstown Lakes District (QLD). This ecological and biological diversity is not only characteristic of the area, it is unique and of national importance. The richness of biodiversity includes flora, fauna and ecosystems and is a reflection of ecological diversity particularly climate, soils and landform of the QLD.
- 2. The presence and conservation of ecological sequences is an important consideration. Ecological sequences may reflect gradients in altitude, climate, soils, moisture, regeneration and other ecological factors.
- 3. In my opinion, the Proposed District Plan (PDP) includes criteria and processes for selecting Significant Natural Areas that are appropriate. Further ecological significance should be assessed by reference to both accepted ecological assessment criteria and the National Biodiversity Priorities.
- 4. It is appropriate that these ecological assessment criteria are applied to all sites of indigenous vegetation that are proposed for modification or development.
- 5. Ecological assessments should be undertaken by a skilled a ecologist or other appropriate practitioner. Some threatened plants, other threatened species (notably invertebrates and lizards) and some other values may not be readily apparent to many landowners, land developers or lay people.
- 6. If the proposed QLDP PDP relies on Significant Natural Areas (SNAs) as a mechanism to recognise and protect the extent and significance of the biodiversity remaining in the QLD, a large number of SNAs needs to be included in the plan. In my opinion, the identification of 147 SNAs can be considered a starting point, but it is likely that as additional information becomes available through development proposals further areas that meet the criteria to be SNAs will be identified.
- 7. I have identified two examples of areas that I believe meet the criteria to be considered as SNAs. These two examples are two sites that I have worked on recent years. I have not

undertaken a comprehensive assessment of sites that are likely to meet the SNA criteria, however I believe that there would be several if not many others.

- 8. I note that a number of submissions seek alterations or removal of SNAs from the schedule in Chapter 33. In my opinion, if SNAs are to be reconsidered and to ensure they are identified consistently, they should be identified in accordance with the accepted methods of assessing ecological values, rather than by considering the potential for development of the site.
- 9. Ecological assessments need to be undertaken at the appropriate scale and that may be at each of local, regional and national scales. The local scale should be in the context of the relevant Ecological District (s).
- 10. In my opinion it is appropriate to include a comprehensive schedule of Threatened and At Risk plants for the QLD, as the inclusion of that information will enable informed decisions to be made under the plan. Further the schedules of threatened plant species and other threatened species within Mr Glenn Davis's evidence are extensive and appropriate. Ideally, the threatened species schedules should be updated in accordance with national reviews of the New Zealand Threat Classification System list. This would ensure that any additional species recorded in the future would also be covered by the assessment criteria.
- 11. In order to manage effects on threatened indigenous ecosystems, communities, habitats, flora and fauna the full range of activities that may affect them need to be identified. The activities that will result in the loss or modification are much wider than direct mechanical, chemical and burning to clear vegetation. Other activities that can adversely affect indigenous ecosystems and habitats include direct drilling, over-sowing of pasture species irrigation and others.
- 12. Wilding trees (particularly conifers) present a major threat to upland and alpine vegetation through much of New Zealand including the QLD. The list of wilding tree species listed and controls proposed on planting of wilding conifers and other wilding tree species are likely to be effective in managing the threat of their spread.

Brian Rance Terrestrial Ecologist Department of Conservation 23 May 2016