

BEFORE THE MINISTER FOR THE ENVIRONMENT SPECIAL TRIBUNAL

IN THE MATTER of the Resource Management Act
1991

AND

IN THE MATTER of an Application to amend the
Water Conservation (Kawarau
River) Order under Section 216
of the Act

BY **NEW ZEALAND FISH & GAME
COUNCIL AND OTAGO FISH &
GAME COUNCIL**

Applicants

**STATEMENT OF EVIDENCE IN REPLY OF KELVIN MICHAEL LLOYD ON
BEHALF OF THE ROYAL FOREST AND BIRD PROTECTION SOCIETY
INC.**

Dated this 7th day of April 2010

Introduction

1. My name is Kelvin Michael Lloyd. My qualifications and experience are detailed in my evidence in chief.
2. I confirm I have read and agree to apply with the Code of Conduct of Expert Witnesses (July 2006). This evidence in reply is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Rebuttal of evidence in chief of Neill Simpson

3. In paragraph 17 of his evidence, Mr Simpson notes the presence of *Myosotis pygmaea* var *glauca* in “eroding upper edge of a river terrace” habitat and states that this is indicative of where the plant may have occurred naturally before mining activity modified the area. In my opinion, the natural Nevis Valley distribution of *Myosotis pygmaea* var *glauca* would have mostly occurred on irregularly-flooded, dry, stony river terraces. Tailings mounds currently provide analogous habitats to these former river terrace habitats, and support a similar vegetation community, typified by mats of *Muehlenbeckia axillaris* which is a characteristic species of free-draining, stony, river terraces.
4. In paragraph 26 of his evidence, Mr Simpson states that the prehuman vegetation cover of the valley floor probably included shrubland as well as grassland and herbs. I do not disagree with these statements, but in paragraphs 24-28 of my evidence in chief I discuss the presence of a concentration of light-demanding threatened species in the valley, and conclude that open habitats must have been consistently present in the valley for a long period of time.
5. In paragraph 29 of his evidence, Mr Simpson states that none of the rare and threatened plants in the lower Nevis Valley are in their natural communities, being either isolated remnants, or opportunists that have found sites with similar characteristics to their natural habitats. I do not entirely agree with these statements. In its tailings habitat, *Myosotis pygmaea* var *glauca* occurs within a community of species, including *Muehlenbeckia axillaris*, *Coprosma petriei*, *Acaena saccaticupula*, and bryophytes, which are typical of its natural stony

river terrace habitats. This assemblage of species represents a natural community that has been displaced from stony terrace habitats now dominated by exotic grasses and herbs, to similar habitat on stony tailings mounds.

6. In paragraph 32 of his evidence, Mr Simpson states that LENZ and the Threatened Environment Classification are only broadly relevant. In paragraphs 34-39 of my evidence in chief, I discuss the relevance of these databases. I used them because they provide an independent, objective, national-scale context for the lower Nevis Valley. In my opinion these databases have sufficient resolution to provide meaningful information at this site, as can be seen in Figures 3 and 4 of my evidence in chief. I consider that my analyses using these databases revealed useful information on the national and regional context of the lower Nevis Valley.