

**Assessment against Te Wahipounamu Statement of Universal Value:  
Monorail and mountain bike track, Fiordland link experience, Snowdon  
forest and Fiordland National Park.**

**Biodiversity Advice Request**

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**Summary**

- 1) My advice relates to the proposed monorail and mountain bike track with respect to its potential impacts on biodiversity values of the Te Wahipounamu South West New Zealand World Heritage Area.
- 2) In relation to biodiversity, the area affected by the proposal has outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water communities of plants and animals (World Heritage Criterion No. 9)
- 3) The area affected by the proposal contains examples of the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation (World Heritage Criterion No. 10)
- 4) The area affected by the proposed monorail undoubtedly contributes to on-going ecological and biological processes as well as having high biological diversity that is characteristic of Fiordland National Park and the World Heritage Area, particularly:
  - important representative bird, lizard and bat communities;
  - many threatened bird, lizard, fish and bat species;
  - presence of keystone species that contribute to maintaining ecological processes
  - significant wetlands containing nationally rare and distinct vegetation associations and habitat types;

- braided river communities;
  - representative plant communities, particularly excellent examples of red beech forests, tussock grasslands, indigenous shrublands and successional communities;
  - pristine aquatic environments,
  - rich native invertebrate fauna.
- 5) The proposed 200 m wide habitat clearance corridor is likely to impact on the above values, nationally rare habitats and significant populations of threatened species such as long-tailed bats (nationally critical); the effects would likely be more than “minor” as stated by Mitchell Partnerships, 2010.
  - 6) The proposal affects 6.2 km of red beech forest, 4.6 km of mixed silver beech forest and 12.1 km of mountain beech forest. An estimate of 19,555 trees would need to be removed, which would mean a loss of habitat and foraging areas for a wide range of species particularly bats, kaka, mohua, geckos (and other hole nesting species), and mistletoe species.
  - 7) The impacts of the proposal on any wetland or wetland margins need to be adequately assessed because all wetland habitats affected are significant.
  - 8) The dual corridor (monorail + access track) creates significant edge effects and will cause fragmentation of the habitats and an area of affect larger than that proposed.
  - 9) The presence of rare tall red tussock and short tussock grasslands in this area were a major contributing factor to the inclusion of Snowdon Forest into the World Heritage Area and these habitats should be preserved to maintain the integrity of the area. Rehabilitation of such habitats remains unproven.
  - 10) The main mitigation proposal of allowing flexibility in selection of the route (where the actual route is chosen after the concession is granted) represents significant risk to the integrity of the World Heritage Area as the extent of the adverse effects are not known or quantified at the outset. This means that the effects on biodiversity values cannot be fully and accurately assessed and may be greater than implied by the application.
  - 11) The main proposal for mitigation on bats, to avoid cutting down old large-diameter trees, may seem reasonable but a total of 5479 large trees are likely to be removed and the importance of each of these trees for bats will have to be carefully assessed. If trees are not being used by bats at the time of inspection then it is difficult even for

specialist bat ecologists to assess whether they are used at different times of the year and are preferred roosting or breeding trees.

- 12)** An intensive radio-tracking study of long-tailed bats in the Snowdon Forest must be completed so that the monorail and mountain bike track can avoid core tree roosting areas. Tree removal on the large scale proposed in this application is likely to be catastrophic if it coincides with a roosting area.
- 13)** RHL has offered a small compensation of 200 ha of pest control to be added to the 4800 ha control area in the Eglinton Valley Operation Ark biodiversity protection site in Fiordland National Park. More meaningful compensation would be the protection of additional habitat near to the monorail site and effective pest control along the proposed route at a scale that is likely to contribute to significant improvement in the survival of forest birds.
- 14)** Although pest control could potentially compensate for injuring or killing some wildlife during felling operations, pest control at the scale proposed is too small to have a significant impact on pest numbers. DOC's research on predator control over the last 15 years has indicated that predator control sites need to be very large – in the order of thousands of hectares to have a chance of making a sustained difference to birds and bats.
- 15)** Pest control is not adequate compensation for ongoing loss or modification of foraging habitat or shelter or for the loss or modification of rare and significant ecosystem types.