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Significant Natural Area Assessment					
Project No:	Property Name: Alphaburn Station		Ecologist: Simon Beale		
11001/034	Site Name: Alphaburn SNA D		Date: 9 May 2015		
Survey Undertaken By:				t of survey area).	
Rebecca Teele		NZTM: 1282160E 5041280N			
Survey undertaken by helicopter.					
LENZ Unit: Q2.2a, Q2.2b		Photo No.(s): See below.			
Ecological District: Wanaka Ecological District					
Topography: Steep sided gullies and adjacent terrace.	Slope: (Generally >20°)	Altitude: 450 – 650 m Aspect: Variable asl			
Threatened Environment Status: Critically underprotected		Area Size (ha): 15.03			
Representativeness: Mixed beech forest, manuka forest, montane shrubland – moderate degree of					

Mixed beech forest, manuka forest, montane shrubland – moderate degree of representativeness.

Are there threatened species expected/identified in the survey area? If so, list species and threat status.

Threatened Species	Threat Status		
Falco novaezealandiae "eastern" (eastern NZ	At Risk - Recovering		
Falcon)	Ţ.		

Provide onsite description of vegetation:

Vegetation types:

- Mature mountain-silver-red beech forest;
- Manuka forest, scrub and shrubland;
- Manuka-mingimingi (Coprosma propingua) shrubland.

Structural Classes: Forest and shrubland. Forest Canopy: Mountain-silver-red beech

Shrubland Canopy: Manuka/mingimingi-matagouri or mingimingi-matagouri

Degree of Modification: The remnant forest appears to be a refuge from the Polynesian fires while the adjacent slopes have been modified by pastoral practices including fire and grazing.

Degree of Recruitment: Regeneration of the forest evident around the margins where younger trees exist. Manuka dominated shrubland appears to be re-colonising hill slopes beyond the forest margins.

Overall Health: The forest appears to be in good health by virtue of the degree of canopy closure.

Provide onsite description fauna habitat – species recorded or expected to be present: Beech forest and edges provide suitable habitat for insectivorous birds (rifleman, tomtit, fantail, grey warbler) along with long tailed cuckoo, morepork, Australasian harrier and Eastern falcon.

Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices):

Fire is the greatest threat to the integrity of the indigenous vegetation cover.

Rarity:

The threatened environment classification identifies the Q2.2a and Q2.2b environments to have 39.92% and 44.68% indigenous vegetation cover remaining with 5.07% and 1.96% protected, respectively.

The beech forest and shrubland is not uncommon in the Wanaka Ecological District. Both vegetation types and terrain likely to provide suitable habitat for threatened avifauna (NZ Falcon).

Area Shape and Area/Edge Ratio:

The location of forest and shrublands within confined gullies ensure self-sustaining/successional processes despite the high area/edge ratios.

The shrubland provides a degree of buffering to the margins of the beech forest remnant.

Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?): The forest/shrubland cover contributes to the vegetation pattern of the gullies.

Distinctiveness/special ecological characteristics (unusual veg. & landform features, distribution limits?):

Distinctive in terms of the beech forest remnant and bordering manuka and grey shrubland.

Connectivity (how is the site connected to surrounding communities/areas?):

The remnant area of beech forest and shrubland exhibits a high degree of connectivity with the beech forest in the Fern Burn, the latter lies within the conservation estate.

Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?):

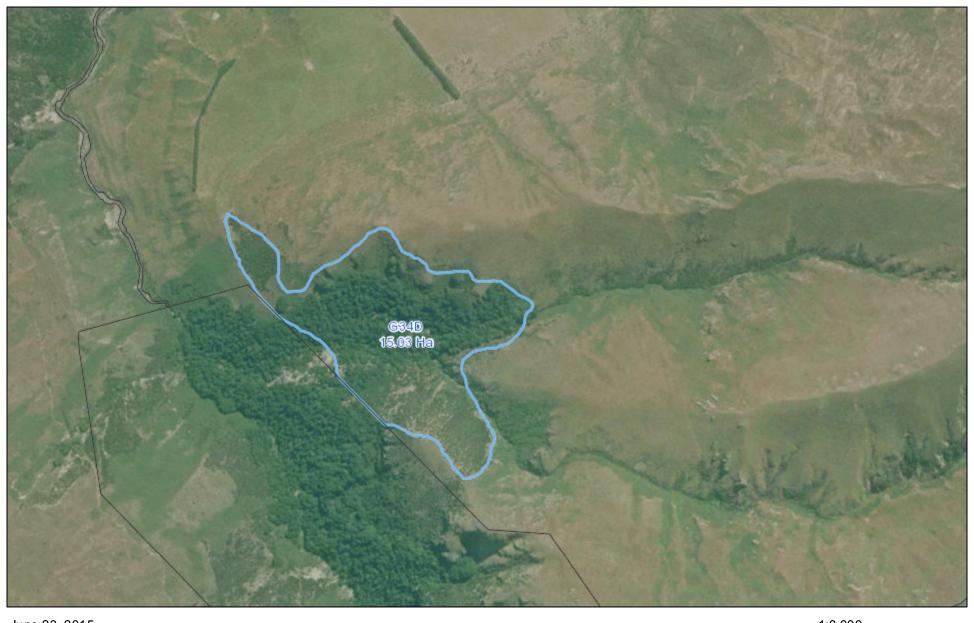
The forest appears to be in good condition due to canopy closure and existence of younger age classes around the margins. Expansion of beech forest into shrubland is taking place.

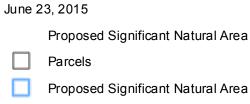
Recommendation (Accept/Decline):

We consider this area should be designated as a SNA in view of the following ecological attributes:

- The habitat the area affords to indigenous fauna, providing suitable habitat for two threatened species of native bird;
- The good condition of the forest vegetation with closed canopy and regeneration processes evident.

Figure 1: The area of potential significance - Alphaburn SNA D - G34D





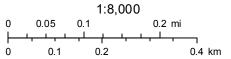




Figure 2: Mature beech forest remnant occupying gully of Fern Burn tributary and manuka forest covering part of an adjacent terrace and hillslopes.