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Significant Natural Area Assessment					
Project No:	Property Name: Alphaburn Station		Ecologist: Simon Beale		
			Date: 11 May 2015		
11001/034	Site Name: Alphaburn SNA B				
Survey Undertaken By: Simon Beale and		Waypoint No (mid-point of survey area):			
Rebecca Teele		NZTM: 1285240E 5044590N			
Survey undertaken by helicopter.					
LENZ Unit: Q2.2a, Q2.2b		Photo No.(s):			
		See below.			
Ecological District: Wanaka Ecological District					
Topography: Gully	Slope: (Generally	Altitude: 600	0 – 800 m	Aspect: Variable	
that forms part of	>10°)	asl			
Alpha Burn					
catchment.					
Threatened Environment Status:		Area Size (ha): 14.9			
Critically underprotected					
Representativeness:					

Montane shrubland - high 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 Falcon)	At Risk - Recovering		

Provide onsite description of vegetation:

Vegetation types:

Kohuhu (*Pittosporum tenuifolium*)-broadleaf (*Griselinia littoralis*) shrubland merging with mingimingi (*Coprosma propinqua*)-matagouri/bracken shrubland higher up the gully. Sub-dominant shrubs in the kohuhu-broadleaf shrubland are likely to include wineberry (*Aristotelia serrata*), lancewood (*Pseudopanax crassifolius*), karamu (*Copromsa lucida*), koromiko (*Hebe salicifolia*) and mountain ribbonwood (*Hoheria lyalli*).

Sub-dominant shrubs in the mingimingi shrubland are likely to include *Coprosma rugosa*, *Olearia odorata*, and koromiko (*Hebe salicifolia*).

Structural Classes: Shrubland.

Shrubland Canopy: Kohuhu-broadleaf & mingimingi-matagouri.

Degree of Modification: The area would have experienced historical disturbance (fire) but does not appear to have not been disturbed in recent times due to presence of advanced successional shrubland vegetation.

Degree of Recruitment: Broadleaf species (kohuhu, broadleaf and lancewood) dominant shrubland at lower elevations.

Overall Health: The shrubland appears to be in good health by virtue of the relatively dense nature of the cover and closed canopies especially within the gully proper.

Provide onsite description fauna habitat – species recorded or expected to be present: Shrubland provides suitable habitat for fructivorous birds (tui, bellbird) and insectivorous birds (tomtit, fantail, grey warbler) and predatory Australasian harrier and Eastern falcon.

The shrublands provide high quality feeding habitat for NZ (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 shrubland is not uncommon in the Wanaka Ecological District. The vegetation and steep terrain likely to provide suitable habitat for threatened avifauna (NZ Falcon).

## Area Shape and Area/Edge Ratio:

The location of the shrublands within a confined gully ensures self-sustaining/successional processes despite the high area/edge ratios.

Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?): The shrubland occurs over wide altitudinal range and contains a diversity of species and shrubland mosaics that contribute to the vegetation pattern.

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

Highly distinctive in terms of the varied vegetation types associated with gully system encompassing a gully and some bluffs and rocky outcrops.

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

The shrubland exhibits low to moderate degree of connectivity with other gully systems due to intervening areas of semi-improved pasture and bracken. There is a high degree of connectivity with the conservation estate that encompasses the upper part of the catchment.

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

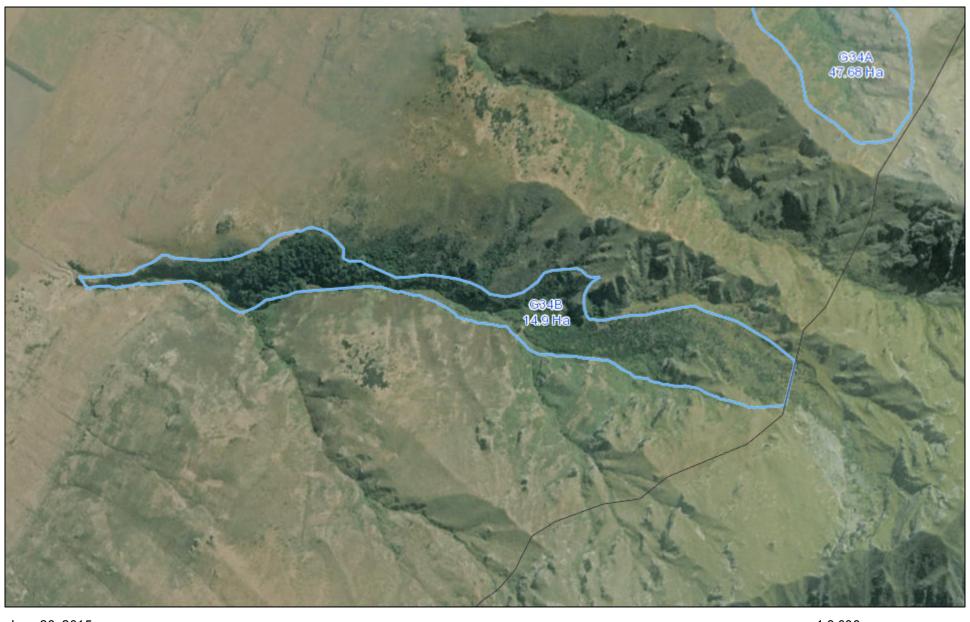
The shrubland appears to be in good condition. Regeneration and succession is evident in the shrublands with broadleaved trees such mature kohuhu and broadleaf prevalent in the gully.

## Recommendation (Accept/Decline):

We consider these areas should be designated as SNAs in view of the following ecological attributes:

- The diversity of vegetation types and landform features;
- The floristic diversity of the shrublands;
- The altitudinal range and vegetation sequences;
- The variety of habitats the area affords to indigenous fauna, providing suitable habitat for one threatened species of native bird;
- The good condition of the shrubland vegetation with closed canopies and regeneration and succession processes evident.

Figure 1: The area of potential significance - Alphaburn SNA B - G34B







**Figure 2:** Extensive shrubland cover within broad gully and amongst bordering bluffs.