



<b>Significant Natural Area Assessment</b>			
Project No:  <i>11001/034</i>	Property Name: <i>Alphaburn Station</i>  Site Name: <i>Alphaburn SNA C</i>	Ecologist: <i>Simon Beale</i> Date: <i>11 May 2015</i>	
Survey Undertaken By: <i>Simon Beale and Rebecca Teele</i> Survey undertaken by helicopter.		<u>Waypoint No (mid-point of survey area):</u> <i>NZTM: 1284870E 5044070N</i>	
LENZ Unit: <i>Q2.2a, Q2.2b</i>  Ecological District: <i>Wanaka Ecological District</i>		Photo No.(s): <i>See below.</i>	
Topography: <i>Partially incised, steep sided gully in the mid reaches of the Alpha Burn.</i>	Slope: <i>(Generally &gt;20°)</i>	Altitude: <i>450 – 800 m asl</i>	Aspect: <i>Variable</i>
Threatened Environment Status: <i>Critically underprotected</i>		Area Size (ha): <i>10.15</i>	
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	
<i>Falco novaezealandiae</i> "eastern" (eastern NZ Falcon)		At Risk - Recovering	
<p>Provide onsite description of vegetation: Vegetation types: Mixed broadleaf (<i>Griselinia littoralis</i>)–kohuhu (<i>Pittosporum tenuifolium</i>)–mingimingi (<i>Coprosma propinqua</i>)–matagouri–bracken shrubland. Sub-dominant shrubs likely to include wineberry (<i>Aristotelia serrata</i>), lancewood (<i>Pseudopanax crassifolius</i>), mountain ribbonwood (<i>Hoheria lyalli</i>), <i>Coprosma rugosa</i>, <i>Olearia odorata</i>, karamu (<i>Coprosma lucida</i>) and koromiko (<i>Hebe salicifolia</i>).</p> <p>Structural Classes: Shrubland. Shrubland Canopy: Broadleaf–kohuhu–mingimingi–matagouri/bracken shrubland</p> <p>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.</p> <p>Degree of Recruitment: Broadleaf species (kohuhu and broadleaf) are a major component of the shrubland.</p>			

<p>Overall Health: The shrubland appears to be in good health by virtue of the relatively dense nature of the cover and closed canopies in many areas.</p>
<p>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.</p> <p>The shrublands provide high quality feeding habitat for NZ (Eastern) falcon.</p>
<p>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.</p>
<p>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.</p> <p>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).</p>
<p>Area Shape and Area/Edge Ratio:  The location of the shrublands within confined a confined steep sided gully ensures self-sustaining/successional processes despite the high area/edge ratios.</p>
<p>Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?):  The shrubland occurs over wide altitudinal range with varying aspects and moisture gradients. The area contains diverse assemblages of shrubland mosaics that contribute to the vegetation pattern.</p>
<p>Distinctiveness/special ecological characteristics (unusual veg. &amp; landform features, distribution limits?):  Highly distinctive in terms of the varied vegetation types associated with gully system encompassing incised main gully, steep hill slopes and numerous bluffs and rocky outcrops.</p>
<p>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 Alpha Burn catchment.</p>
<p>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 occurring in the gully proper and across adjacent bluffs and hillslopes.</p>

**Recommendation (Accept/Decline):**

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

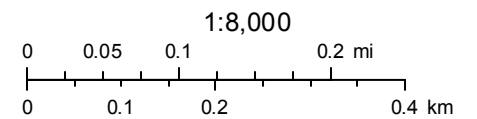
- The diversity of vegetation types and landform features;
- The floristic diversity of the shrublands;
- The altitudinal range and vegetation sequences;
- The variety of habitats the area affords to indigenous fauna, providing suitable habitat for one threatened species of native bird;
- The good condition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

Figure 1: The area of potential significance - Alphaburn SNA C - G34C

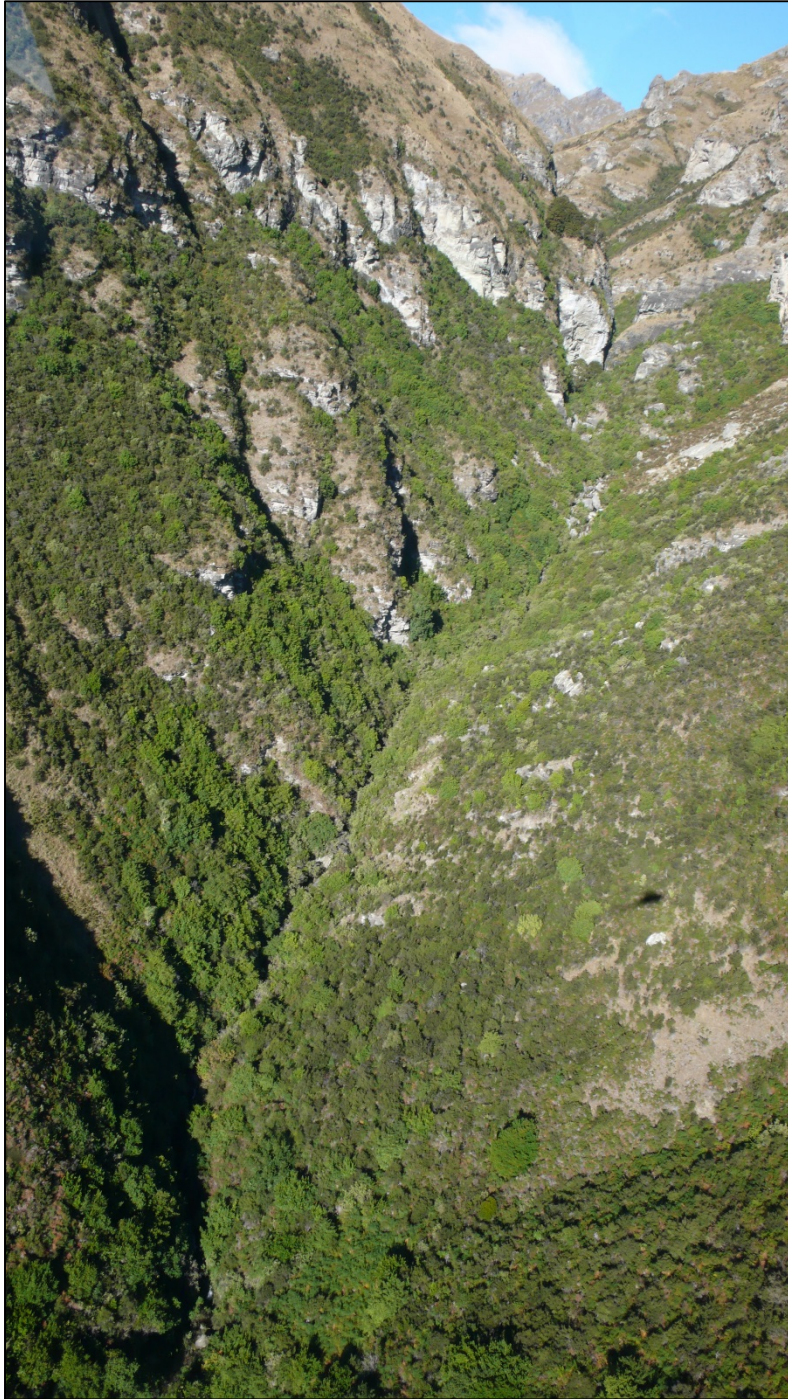


June 22, 2015

- Proposed Significant Natural Area
- Parcels
- Proposed Significant Natural Area



Please note the area shown is indicative and only for discussion purposes.



**Figure 2:** Extensive mixed shrubland cover within the gully and across adjacent moderate to steeply sloping hill slopes featuring numerous bluffs and rocky outcrops.