

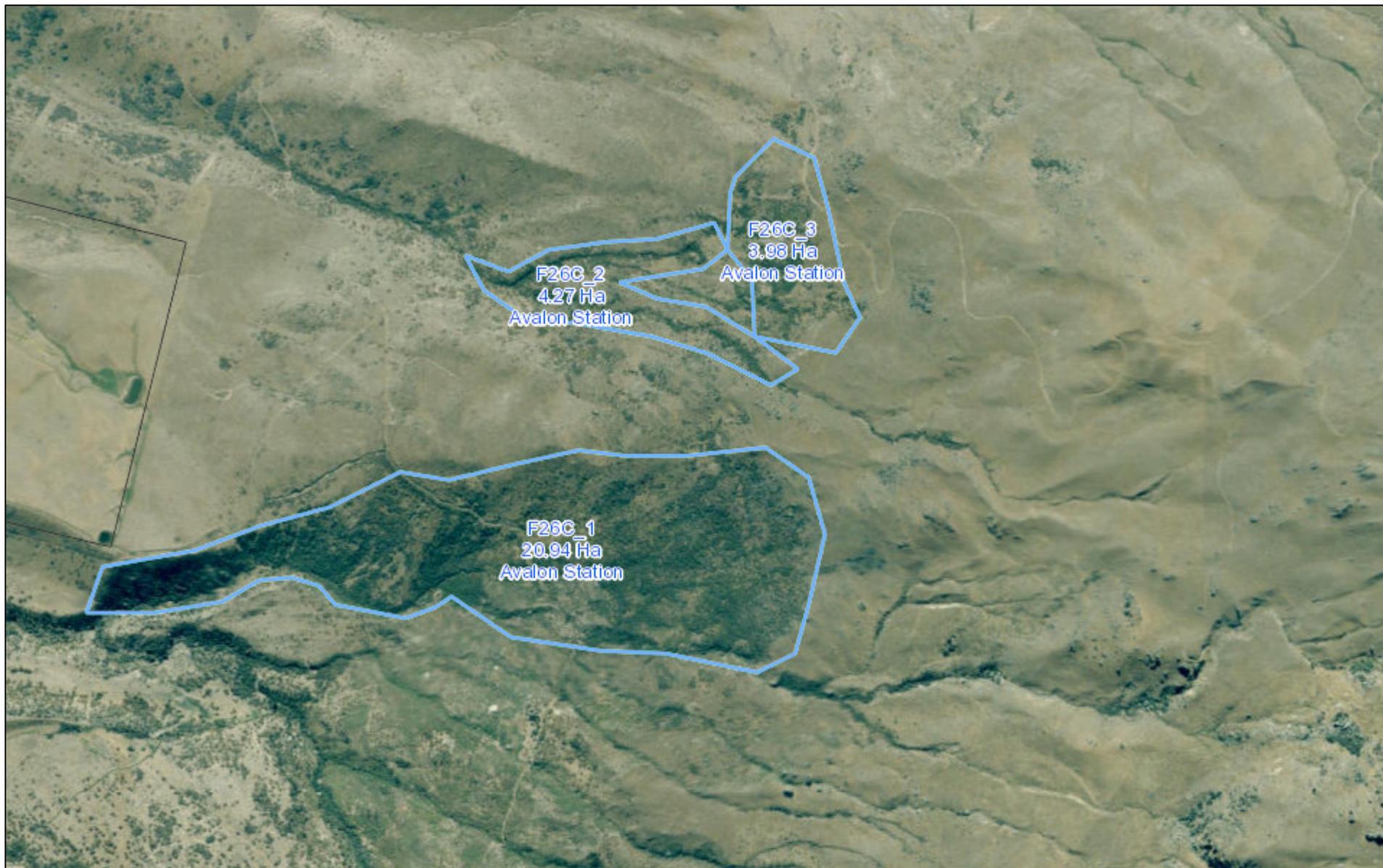


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Significant Natural Area Assessment			
Project No: <i>11001/026</i>	Property Name: <i>Avalon Station</i> Site Name: <i>Avalon Station SNA C</i>	Ecologist: <i>Glenn Davis and Neill Simpson</i> Date: <i>29 March 2012</i>	
Survey Undertaken By: <i>Glenn Davis, Neill Simpson and Ralph Henderson</i>		Waypoint No (mid-point of survey area): <i>See attached plans for location.</i>	
LENZ Unit: <i>Q2.2a</i> Ecological District: <i>Wanaka Ecological District</i>		Photo No.(s): <i>See attached.</i>	
Topography: <i>Mid hill slope of the Criffel Range</i>	Slope: <i>Varies</i>	Altitude: <i>approx. 630 masl</i>	Aspect: <i>South</i>
Threatened Environment Status: <i>Critically underprotected</i>		Area Size (ha): <i>29.19</i>	
Representativeness: <i>Grey shrubland – dominant indigenous vegetation cover in the drier areas of the Wanaka Ecological District and Lakes Ecological Region.</i>			
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	
<i>Olearia lineata</i> (Tree Daisy)		At risk - Declining	
<i>Carmichaelia kirkii</i>		Threatened - Nationally Vulnerable	
Provide onsite description of vegetation:			
Vegetation type: The vegetation was only viewed from the air, but the vegetation composition is dominated by the good populations of <i>Olearia lineata</i> , <i>Coprosma propinqua</i> , matagouri, <i>Hebe salicifolia</i> and <i>Carmichaelia kirkii</i> , with the following species also expected to be present: <i>Carmichaelia petriei</i> , <i>Melicytus alpinus</i> , <i>Rubus schmidelioides</i> , <i>Meuhlenbeckia australis</i> in addition to other coprosma species			
Degree of Modification: The area has experienced historical disturbance (e.g. fire), but has not been disturbed for a long period. Briar is also present but does not dominant the vegetation cover compared to the neighbouring slopes.			
Overall Health: The shrubland is largely intact and is dominated by mature indigenous species.			
Provide onsite description of fauna habitat: The shrubland provides habitat for a variety of passerines that are prey for the eastern falcon that was seen in the area during the flight. The population of mature olearia is expected to support a unique, diverse and abundant invertebrate fauna.			

<p>Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices): Inadvertent fire events.</p>
<p>Rarity: The threatened environment classification identifies the Q2.2a environment to have 39.92% indigenous vegetation cover remaining with 5.07% protected. The better grey shrubland communities in the district that were historically abundant at lower elevations now tend to be found at slightly higher elevations in environments that supported beech forest.</p>
<p>Area Size and Shape (degree to which the area may be or is becoming self-sustaining): The vegetation has been regenerating in this area for some time indicating it is self-sustaining providing it does not affect the management of pastoral activities.</p>
<p>Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?): The shrubland contains a diverse range of grey shrubland species and is notable for the presence of a good population of mature tree daisys.</p>
<p>Distinctiveness/special ecological characteristics (unusual veg. & landform features, distribution limits?): The shrubland is distinctive within the ecological district for the population of olearia. Many of these shrublands are dominated by matagouri and briar.</p>
<p>Connectivity (how is the site connected to surrounding communities/areas?): The site is part of a mosaic of grassland/shrubland that extends through the lower to mid hill slopes in the Cardrona Valley.</p>
<p>Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?): The shrubland is to be in good condition with a diverse range of mature shrubs and creepers and is developing a closed canopy. The shrubland is expected to be sustainable providing it remains free from inadvertent fire events.</p>
<p>Recommendation (Accept/Decline): The shrubland is a good example of vegetation that is representative of this LENZ unit and has become rare, particularly within the drier areas of the Lakes District. It is also important as habitat for a diverse and abundant invertebrate fauna, and passerines that are critical for the maintenance of the eastern falcon population. Given the high level of representativeness and rarity of quality grey shrubland in these LENZ environments we consider the area should be considered further through the SIV process.</p>

Figure 1: The area of potential significance - Avalon Station SNA C - F26C_1-3.

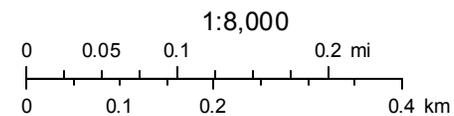


October 3, 2014

Proposed Significant Natural Area

Parcels

Proposed Significant Natural Area



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



Figure 2: Photo showing strong indigenous shrubland cover in SNA C including *Hebe salicifolia*, matagouri, mingimingi, *Olearia lineata* and *Muehlenbeckia australis*. Woody weeds, such as briar, are also present.

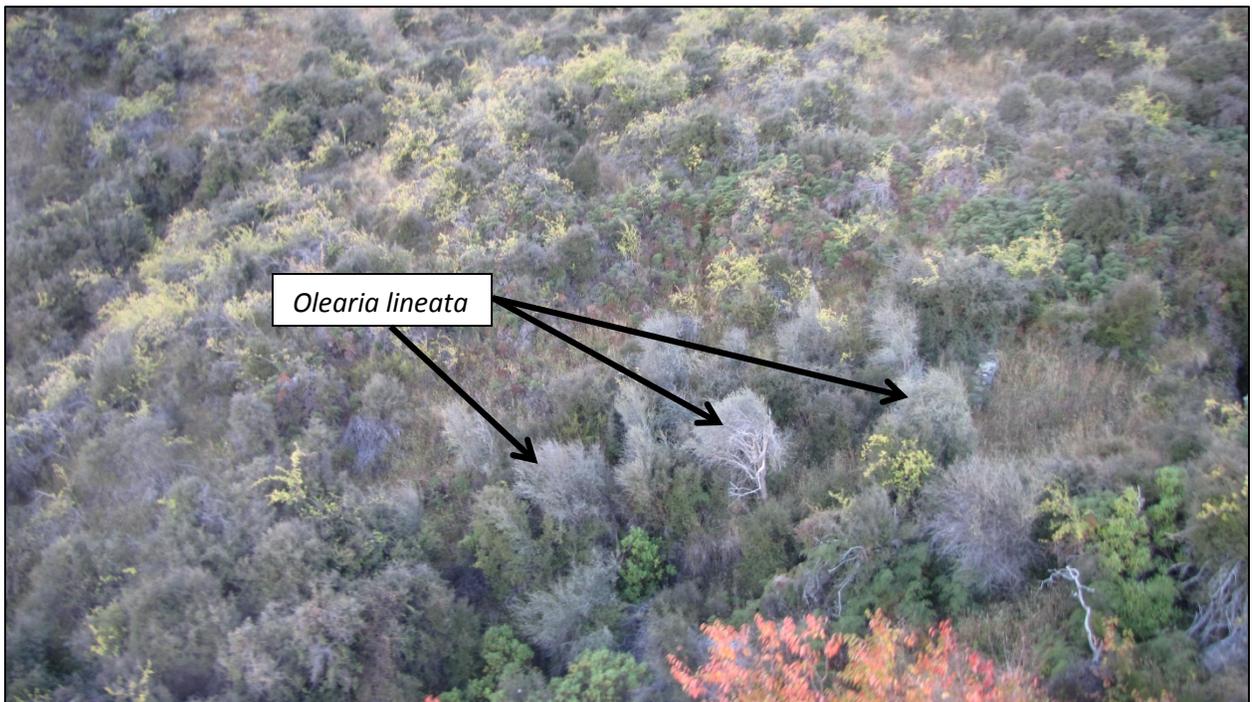


Figure 3: Photo showing the presence of *Olearia lineata* in SNA C.



Figure 4: Photo showing a representation of the vegetation present in SNA C.