



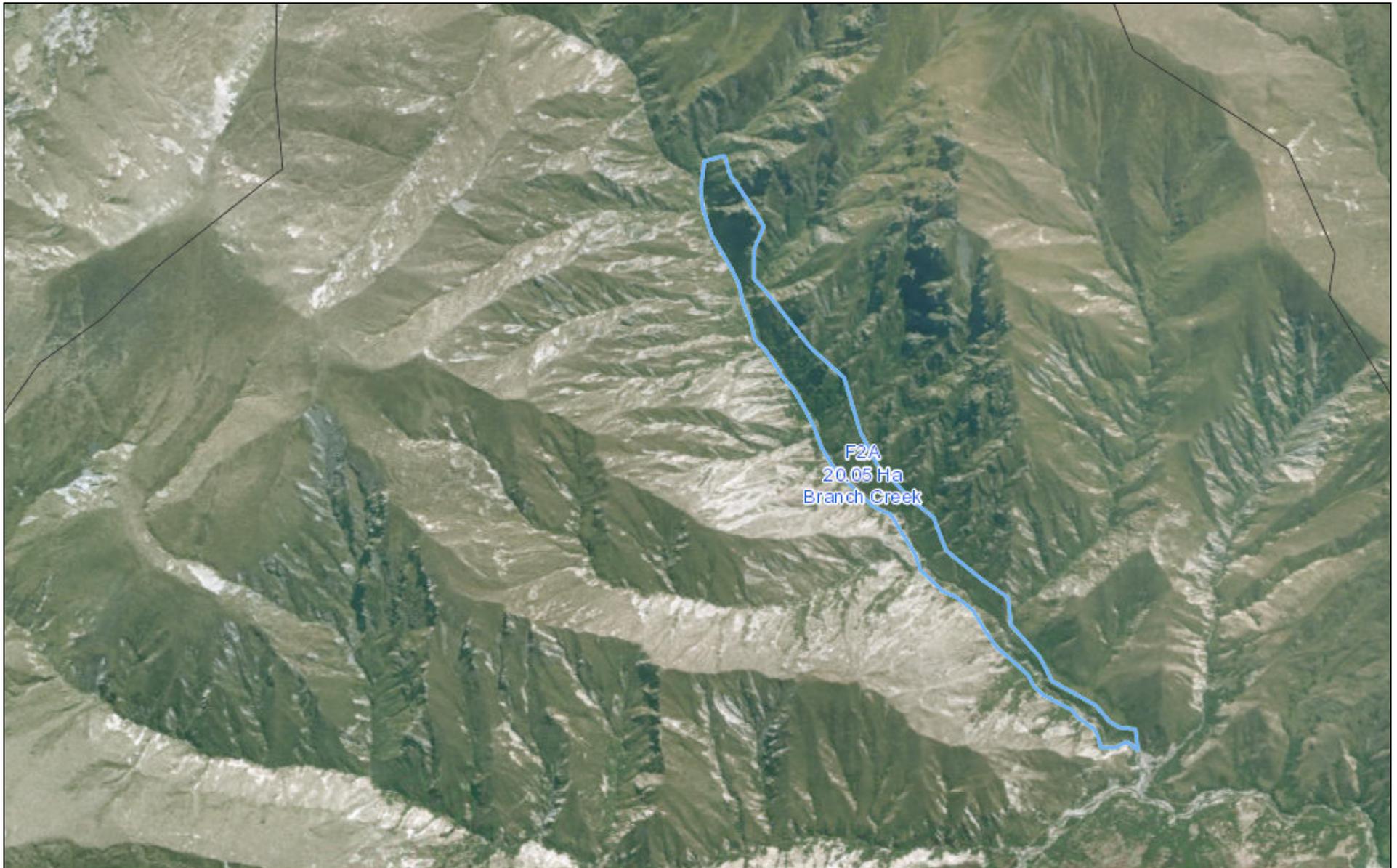
Significant Natural Area Assessment			
Project No: 11001/002	Property Name: <i>Branch Creek</i>	Ecologist: <i>Glenn Davis</i>	
	Site Name: <i>Branch Creek SNA A</i>	Date: <i>3 November 2010</i>	
Survey Undertaken By: <i>Glenn Davis and Ralph Henderson</i>		<u>Waypoint No (mid-point of survey area):</u> <i>E: 219 1850</i> <i>N: 559 4000</i>	
LENZ Unit: <i>Q2.2a and Q1.1c</i>		Photo No.(s): <i>See attached.</i>	
Ecological District: <i>Wanaka Ecological District</i>			
Topography: <i>Hillslope</i>	Slope: <i>Very steep (>35°)</i>	Altitude: <i>650 - 1000 masl</i>	Aspect: <i>SW</i>
Threatened Environment Status: <i>Critically underprotected and Underprotected</i>		Area Size (ha): <i>20.05</i>	
Representativeness: <i>Shrubland and Beech Forest</i> – Beech forest is highly representative of the environment and would have been the dominant cover in the area prior to settlement. The shrubland community is rare in the context of the Cardrona Valley with the assemblage more consistent with shrublands to the west of the district.			
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”.		At Risk - Recovering	
Provide onsite description of vegetation Vegetation type: Dominated by shrubland with a small pocket of silver beech forest. The shrubland is dominated by <i>Dracophyllum longifolium</i> , <i>Dracophyllum uniflorum</i> , <i>Olearia avicennifolia</i> , <i>Olearia arborscens</i> , <i>Olearia nummularifolia</i> , <i>Olearia odorata</i> , mountain ribbonwood (<i>Hoheria lyallii</i>), koromiko (<i>Hebe salicifolia</i>), <i>Coprosma rugosa</i> , <i>Coprosma propinqua</i> , <i>Carmichaelia petriei</i> , <i>Discaria toumatou</i> , <i>Melicytus alpinus</i> , <i>Aristotelia fruiticosa</i> , <i>Phormium cookianum</i> . Understorey - Prickly shield fern (<i>Polystichum vestitum</i>), <i>Chionochloa conspicua</i> , blue tussock (<i>Poa colensoi</i>), tussock hawkweed (<i>Hieracium lepidulum</i>). Degree of Modification: The area has experienced historical disturbance (fire) but has not been disturbed for a long period. Overall Health: The shrubland within the proposed area is intact, impenetrable, has a closed canopy and is largely free of introduced weedy species.			

<p>Provide onsite description of fauna habitat – species recorded or expected to be present: The DoC identified the skink <i>Oligosoma polychroma</i> in the vicinity of the shrubland and indicate that this species is nearing its western most limit in the Otago region. The shrubland provides habitat for a variety of passerines that are prey for the eastern falcon that is present in the Branch Burn catchment. The DoC has noted that a number of functional invertebrate groups are present in the headwaters of the Branch Burn including herbivorous moths, cicadas and grasshoppers, parasitic flies, predatory carabid beetles and spider hunting wasps.</p>
<p>Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices): The area is largely free of woody weeds. The tussock hawkweed is an abundant groundcover, but is unlikely to affect the function of the shrubland.</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 Q1.1c environment has 91.23% indigenous vegetation cover remaining with 19.26% protected. The remaining indigenous cover associated with these environments is considered sufficient to maintain the biodiversity of the indigenous vegetation and habitats. Notwithstanding the above, whilst the shrubland species and silver beech are not rare within the district, they are uncommon this far east.</p>
<p>Area Size and Shape (degree to which the area may be or is becoming self-sustaining): The size and shape of the shrubland is determined by the areas geography and ecological processes and is therefore inherently self-sustaining.</p>
<p>Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?): Notable diversity of species and communities e.g. shrubland, beech forest and Dracophyllum shrubland.</p>
<p>Distinctiveness/special ecological characteristics (unusual veg. & landform features, distribution limits?): An interesting, diverse assemblage of shrubland species that are more common in environments further to the west of the Lakes District.</p>
<p>Connectivity (how is the site connected to surrounding communities/areas?): Continuous with lower altitudinal riparian grey shrubland, subalpine shrubland, tall tussock grassland and alpine communities which are adjacent to the Stack Conservation Area.</p>
<p>Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?): The shrubland is currently in excellent condition with a diverse range of mature shrubs and creepers and a predominantly closed canopy. Expansion of the beech forest can be expected over time.</p>

Recommendation (Accept/Decline):

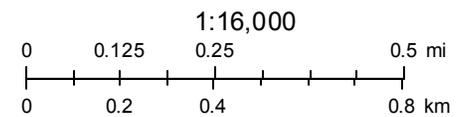
The shrubland consists of a diverse range of species that are typical of shrublands found further to the west in the Lakes District. The shrubland contains a small area of silver beech which would have dominated this environment prior to human settlement. Given the high level of representativeness, rarity in the Cardrona Valley and special ecological character of this community we consider the area should be designated as a SNA.

Figure 1: The area of potential significance - Branch Creek SNA A - F2A.



September 28, 2014

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



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



Figure 2: SNA A (Devils Staircase) – looking southeast – shrubland associated with SNA A is on the lower faces on the true left of the Branch Burn tributary.



Figure 3: SNA A - Devils Staircase shrubland.