www.qldc.govt.nz

Significant Natural Area Assessment Project No: Property Name: Spotburn Ecologist: Glenn Davis and Neill 11001/022 Simpson Site Name: Back Creek SNA A Date: 30 Jan 2012 Survey Undertaken By: Glenn Davis, Neill Waypoint No (mid-point of survey area): Simpson and Ralph Henderson See attached plan for location. LENZ Unit: Q2.2a Photo No.(s): See attached. Ecological District: Wanaka Ecological District Topography: Valley Slope: Valley bottom Altitude: Aspect: Various 600 - 740 masl bottom Threatened Environment Status: Area Size (ha): 41.84 Critically underprotected

Representativeness:

Grey shrubland – dominant indigenous vegetation cover in the drier areas of the Wanaka Ecological District and Lakes Ecological Region. Pre-settlement the vegetation cover would have been beech forest with relict trees still present in the Back Creek catchment.

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 type: The vegetation was only viewed from the air, but the vegetation composition is dominated by good populations of *Olearia odorata, Coprosma propinqua* and matagouri, with the following species also expected to be present: *Carmichaelia petriei, Melicytus alpinus*, *Rubus schmidelioides, Meuhlenbeckia australis,* in addition to other coprosma species.

Degree of Modification: The area has experienced historical disturbance (i.e. fire), but has not been disturbed for a long time period.

Overall Health: The shrubland is largely intact and 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.

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

The woody weed population appeared to be relatively low in the Back Creek catchment, but briar and other woody weed weeds such as elder may be a threat. Changes to management may also affect the stand such as changing stocking rates.

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.

Area Size and Shape (degree to which the area may be or is becoming self-sustaining): The size and shape of the vegetation is elongated, being situated along the length of a number of branches of Back Creek.

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.

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

The shrubland is distinctive within the ecological district for the population of olearia, as many other shrublands are dominated by matagouri and briar.

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

The site consists of riparian communities adjacent to a number of branches of Back Creek. The vegetation is connected to some manuka and kanuka woodland on adjacent slopes in addition to higher altitude tussock grassland communities in the upper reaches of the Back Creek.

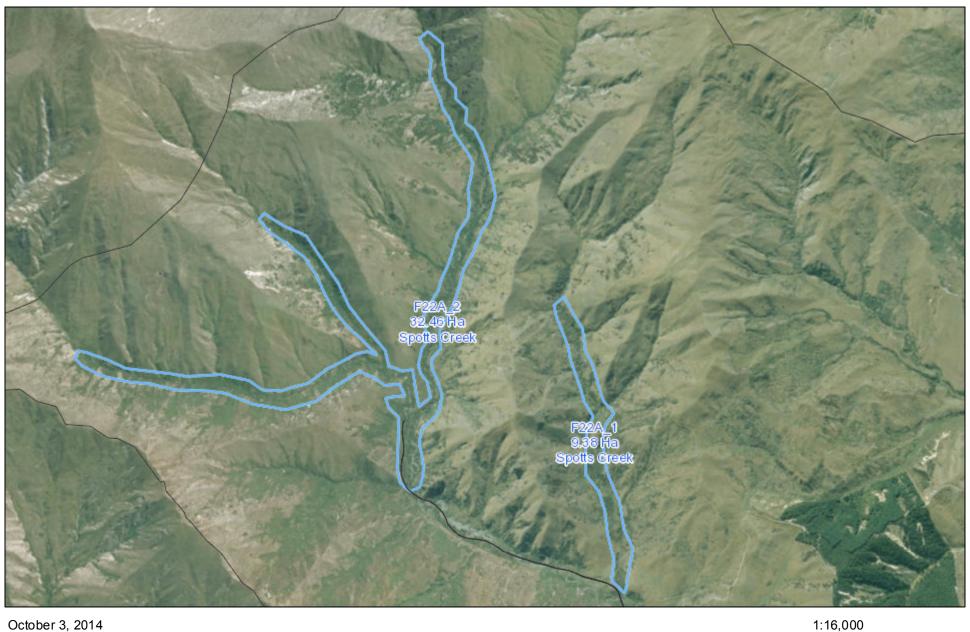
Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?):

The shrubland appears to be in good condition with a diverse range of mature shrubs and creepers and a predominantly closed canopy. The shrubland is expected to be sustainable providing it remains free from inadvertent fire events.

Recommendation (Accept/Decline):

The riparian shrubland is a good example of vegetation that is representative of this environment 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 for designation as a Significant Indigenous Vegetation and Fauna Habitat.

Figure 1: The area of potential significance - Back Creek SNA A - F22A_1-2.





0.25

0.5 mi

0.8 km



Figure 2: Photographs of sections of the area of potential significance.