



<b>Significant Natural Area Assessment</b>			
Project No: <i>11001/011</i>	Property Name: <i>Minaret Station</i> Site Name: <i>Bay Burn SNA C</i>	Ecologist: <i>Glenn Davis</i> Date: <i>12 May 2011</i>	
Survey Undertaken By: <i>Glenn Davis and Ralph Henderson</i>		Waypoint No (mid-point of survey area): 1. E: 2200720 N: 5639300 2. E: 2200400 N: 5638900	
LENZ Units: <i>M2.2b</i> Ecological District: <i>Wanaka Ecological District</i>		Photo No.(s): <i>No photos.</i>	
Topography: <i>Lake shore and river terrace</i>	Slope: <i>&gt;5°</i>	Altitude: <i>300 masl</i>	Aspect: <i>E</i>
Threatened Environment Status: <i>At Risk</i>		Area Size (ha): <i>48.44</i>	
Representativeness: Historically the vegetation on the Bay Burn alluvial fan and lakeshore is likely to have comprised a beech-podocarp forest on the more stable areas, with broadleaved indigenous hardwoods and manuka/kanuka woodland occupying areas that were exposed to more regular disturbance events (mainly floods). The kanuka woodland is considered to be representative of areas prone to regular disturbance events.			
Are there threatened species expected/identified in the survey area? If so, list species and threat status.			
Threatened Species		Threat Status	
<i>None observed.</i>			
Provide onsite description of vegetation:  Vegetation type: Kanuka dominated woodland with a minor component of matagouri and mingimingi and regenerating broadleaved species.  Degree of Modification: The area has experienced extensive disturbance. Jonathan Wallace indicated historical aerial photos show woodland was largely removed 40-50 years ago. The vegetation is moving toward a closed canopy woodland but is interspersed with open areas of pasture grass.			
Provide onsite description of fauna habitat: The shrubland is expected to provide habitat for an abundant and diverse invertebrate fauna that supports insectivorous birds such as tomtit, fantail, grey warbler and a range of introduced bird species. The woodland is also expected to provide habitat for skinks and gecko.			

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

Key threats include grazing of regenerating shrubland and the risk of inadvertent events such as fire given the proximity to the lakeshore and use by public for boating etc.

Rarity:

The threatened environment classification identifies the M2.2a environment to be at risk with 22.1% indigenous vegetation cover remaining and 8% protected.

Area Size and Shape (degree to which the area may be or is becoming self-sustaining):

The kanuka woodland is of sufficient size to be self-sustaining and the vegetation community is expected to develop over time with halls totara, kowhai, pittosporum, wineberry and other broadleaved species expected to establish given populations of these species located in close proximity to the woodland.

Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?):

Kanuka woodlands at this stage of development tend to have relatively low diversity. However, over time this woodland is expected to provide the conditions for the establishment of podocarps, and indigenous broadleaved species.

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

Kanuka woodland on Minaret Station and the neighbouring Albert Burn is at its western distributional limit.

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

The woodland is connected to other lakeshore kanuka stands in addition to indigenous broadleaved hardwood stands and beech forest in the Albert Burn and Mt Albert Station.

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

The kanuka woodland has a closed canopy and is of a sufficient size to be self-sustaining and has the potential to develop further with increasing diversity as the canopy opens up over time providing the conditions for podocarps, kowhai and other indigenous broadleaved species to successfully establish.

Recommendation (Accept/Decline):

The woodland is a good example of vegetation that is representative of mid successional development of vegetation in this at risk environment. Although this area is not listed to be in an acutely or chronically threatened environment we consider the environment to be very similar to the acutely threatened environments in the Estuary Burn and should be reviewed on this basis. The community is expected to provide the conditions for the establishment of podocarps, kowhai and other hardwood species, therefore the floral and faunal diversity of this community is expected to increase over time.

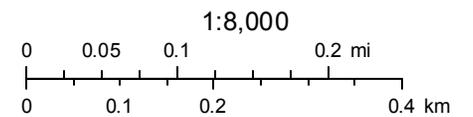
Based on the above considerations we recommend this area for inclusion as an area of Significant Indigenous Vegetation and Fauna Habitat.

Figure 1a: The area of potential significance - Bay Burn SNA C - B11C\_1-4.



September 29, 2014

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



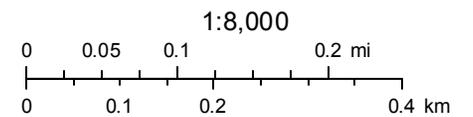
Please note the area shown is indicative and only for discussion purposes.

Figure 1b: The area of potential significance - Bay Burn SNA C - B11C\_5-6.



September 29, 2014

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



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