



Significant Natural Area Assessment			
Project No: <i>11001/001</i>	Property Name: <i>Loche Linnhe</i> Site Name: <i>Loche Linnhe SNA A</i>	Ecologist: <i>Glenn Davis and Neill Simpson</i> Date: <i>September 2010</i>	
Survey Undertaken By: <i>Glenn Davis and Neill Simpson and Ralph Henderson</i>		Waypoint No (mid-point of survey area): <i>E:217 6787</i> <i>N:555 1774</i>	
LENZ Unit: <i>Q2.2a</i> Ecological District: <i>Lakes Ecological District</i>		Photo No.(s): <i>See below.</i>	
Topography: <i>Hillslope</i>	Slope: <i>40°</i>	Altitude: <i>715 masl</i>	Aspect: <i>Westerly</i>
Threatened Environment Status: <i>Critically underprotected</i>		Area Size (ha): <i>38.02</i>	
Representativeness: <i>Grey shrubland</i> – whilst the environment is understood to have supported a pre-settlement vegetation dominated beech forest (Leathwick <i>et. al.</i> 2003), grey shrubland is a representative community in the dryland areas of the Lakes District and has extended its distribution where farming practices have allowed this to occur.			
Are there threatened species expected/identified in the survey area? If so, list species and threat status.			
Threatened Species		Threat Status	
<i>Olearia fimbriata</i>		Threatened - Nationally Vulnerable	
<i>Falco novaezealandiae</i> “eastern” (eastern NZ Falcon)		At Risk - Recovering	
Provide onsite description of vegetation: Vegetation type: Grey shrubland consisting of <i>Olearia odorata</i> , <i>Olearia fimbriata</i> , <i>Discaria toumatou</i> , <i>Coprosma propinqua</i> , <i>Coprosma rugosa</i> , <i>Melicytus alpinus</i> , <i>Muehlenbeckia complexa</i> , <i>Rubus schmidelioides</i> . The understorey is dominated by introduced grasses. Degree of Modification: The area has experienced considerable historical disturbance predominantly through burning and grazing however the area has not been disturbed for some time, possibly not for more than 40 years. Overall Health: The shrubland within the proposed area is intact, impenetrable and has a closed canopy.			
Provide onsite description fauna habitat – species recorded or expected to be present: Shrubland provides habitat for both introduced and indigenous passerines which provide a food source for the eastern falcon which has been recorded in the vicinity of the shrubland. The DoC CRR report notes the lake faces support the common skink (<i>Oligosoma n. polychroma</i>), McCanns skink (<i>Oligosoma maccanni</i>) and common gecko (<i>Hoplodactylus maculatus</i>). The			

shrubland will also support a range of invertebrate species, with the *Olearia* species in particular known to be a host specific species for a diverse range of moth species.

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

The key threat is from pastoral management practices and from inadvertent events associated with the public activity along the Kingston Road. Most of the area has been identified and excluded from disturbance through the vegetation clearing consent process, however, the risk of inadvertent disturbance from burning will be ongoing.

Briar is the main weed present but in low numbers.

Rarity:

The threatened environment classification identifies the environment to have 39.92% indigenous vegetation cover remaining with 5.07% protected. The remaining cover is considered sufficient to maintain the biodiversity of the indigenous vegetation and habitats. Notwithstanding the above, the level of protection is low, therefore there is a risk of further loss of indigenous vegetation cover.

Area Shape and Area/Edge Ratio:

The proposed SNA A is a reasonable area of grey shrubland, with a moderate edge to area ratio.

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

The shrubland contains a good range of shrubland species and covers a range of substrates including rock outcrops, hillslope and drainage lines.

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

The shrubland contains multiple stands of *Olearia odorata*, with a number of more isolated mature *Olearia fimbriata* trees. The size of the *Olearia* populations is a special ecological characteristic of the area.

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

The proposed area is connected to nearby adjacent shrubland communities and indigenous broadleaved hardwood communities and beech forest in the Wye Creek and the unnamed stream to the south of the area.

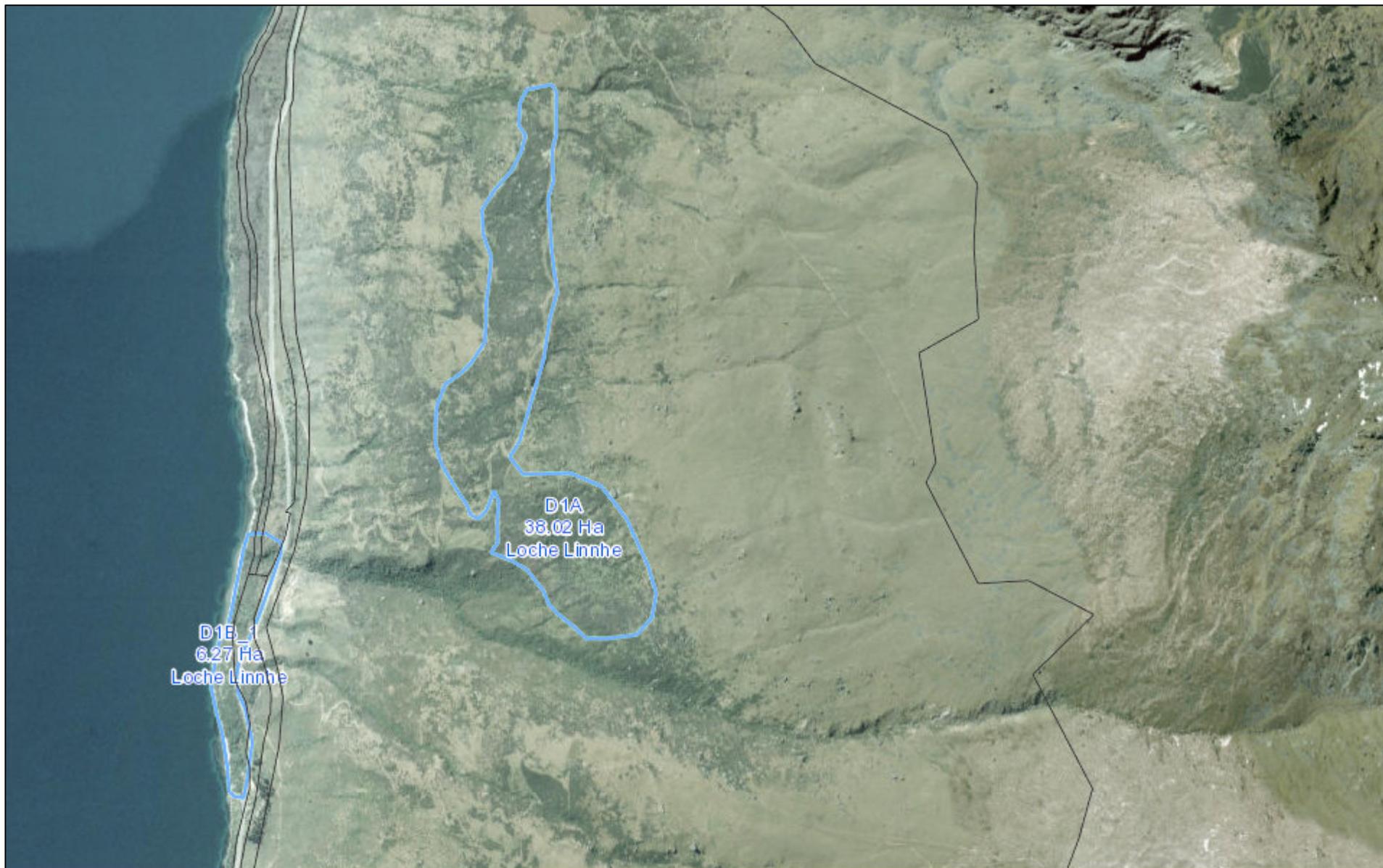
Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?):

The shrubland is currently in good ecological condition with a diverse range of mature shrubs and creepers and a predominantly closed canopy. Providing disturbance due to pastoral activities or other sources are minimal the shrubland will continue to persist and improve and provide valuable habitat for native birds, invertebrates and lizards. Regeneration will occur in this stand as the canopy opens up and gaps in the canopy occur providing a dense sward of introduced grasses does not develop.

Recommendation (Accept/Decline)

The shrubland is a good example of vegetation that is representative of this environment. Indigenous vegetation cover in these environments is severely reduced from its original extent and less than 6% has any formal protection. 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 present on the lake faces of Loch Linnhe. Given the high level of representativeness, rarity of quality grey shrubland in these LENZ environments, the presence of threatened tree species and the habitat it provides for falcon, we recommend the area should be considered for designation as a SNA.

Figure 1: The area of potential significance - Loche Linnhe SNA A - D1A

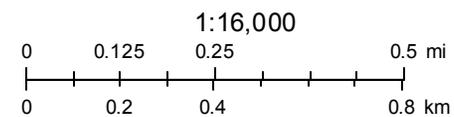


November 3, 2014

Proposed Significant Natural Area

Parcels

Proposed Significant Natural Area



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



Figure 2: Above are representative photos of the vegetation under consideration for the proposed '*Loche Linnhe SNA A*' area.