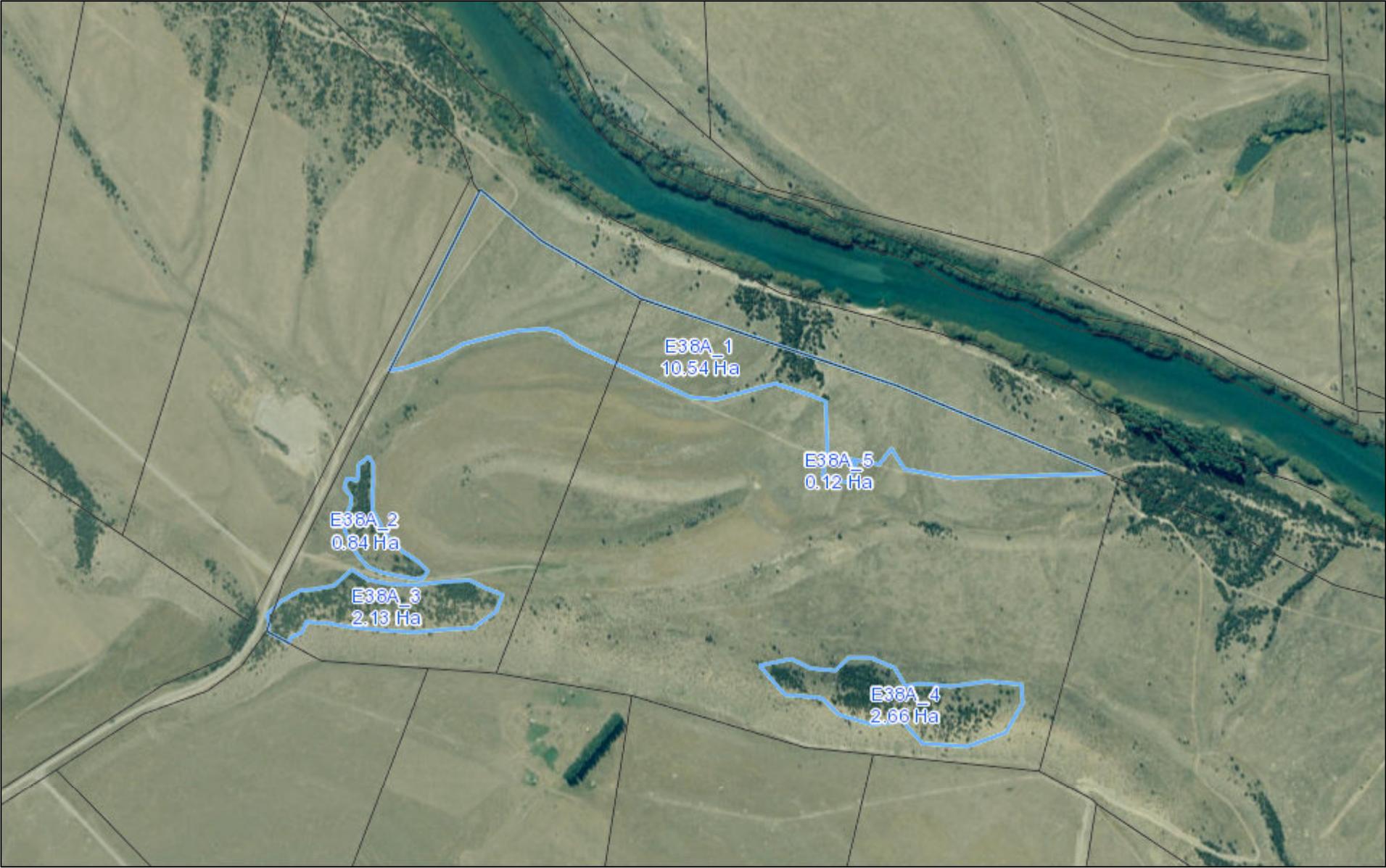




Significant Natural Area Assessment			
Project No: 11001/038	Property Name: <i>Congreve</i> . Site Name: <i>Congreve SNA A</i>	Ecologist: <i>Neill Simpson & Rebecca Lawrence</i> . Date: 2 nd October 2012 & 18 February 2015	
Survey Undertaken By: <i>Neill Simpson & Rebecca Lawrence</i> .		Waypoint No (midpoint of survey area): <i>See attached plan for location.</i>	
LENZ Unit: <i>N5.1c</i> Ecological District: <i>Lindis Ecological District</i>		Photo No.(s): <i>See attached.</i>	
Topography: <i>River terraces.</i>	Slope: <i>Flat to steep.</i>	Altitude: <i>280 masl.</i>	Aspect: <i>North-east.</i>
Threatened Environment Status: <i>Acutely Threatened</i>		Area Size (ha): <i>16.29</i>	
Representativeness: Pre-European settlement vegetation within the potential area of interest is understood to have consisted of a kanuka and kowhai dominated woodland (Walker <i>et al.</i> , 2003). The vegetation on the site lacks the diversity of the original woodlands, but provides a good representation of native cushion fields with some remaining woodland species, and with native vegetation being the dominant cover.			
Are there threatened species expected/identified in the survey area? If so, list species and threat status.			
Threatened Species		Threat Status	
Banded dotterel/turiwhatu (<i>Charadrius bicinctus bicinctus</i>) (seen nesting adjacent to property)		Threatened - Nationally vulnerable	
<i>Pimelea sericeovillosa</i> subsp. <i>pulvinaris</i>		At Risk - Declining	
Provide onsite description of vegetation: Vegetation type: Cushion field with <i>Pimelea sericeovillosa</i> subsp. <i>pulvinaris</i> , <i>Rytidosperma maculata</i> , <i>Luzula ulophylla</i> , <i>Raoulia australis</i> , <i>R. parkii</i> , <i>R. apicinigra</i> , lichen species, <i>Luzula rufa</i> var. <i>rufa</i> , <i>Carex breviculmis</i> , <i>Leucopogon fraseri</i> , <i>Muehlenbeckia axillaris</i> and <i>Melycytus alpinus</i> . There are also kanuka stands (<i>Kunzea ericoides</i>). An individual <i>Coprosma propinqua</i> was recorded. Some exotic species are present, however, the native vegetation coverage is dominant. The exotic species include: <i>Anthoxanthum odoratum</i> , <i>Rumex acetosella</i> , <i>Hypericum perforatum</i> , <i>Agrostis capillaris</i> , <i>Verbascum thapsus</i> and <i>Aira caryophyllea</i> subsp. <i>caryophyllea</i> .			
Degree of Modification: The lack of woodland species is a clear indication species have been lost through multiple disturbance events. However, the cushion fields and kanuka stands do provide a good remaining representation, and cover, of native species.			
Overall Health: Despite disturbance events, the vegetation on the alluvial river fan remains one of the few examples of a native cushion field community where the vegetation cover is dominated by native species.			

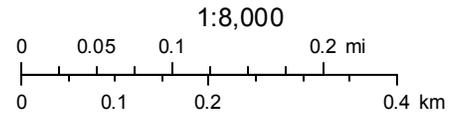
<p>Provide onsite description of fauna habitat: The cushion fields are likely to provide nesting habitat for the banded dotterel and the New Zealand pied oystercatcher. The kanuka stands, as well as the cushion field, are also likely to provide habitat for the southern alps gecko, McCann's skink and Common skink.</p>
<p>Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices): Key threats include conversion to dairy, housing developments and the risk of wilding pine establishment.</p>
<p>Rarity: The threatened environment classification identifies the N5.1c environment to have 2.7 % indigenous vegetation cover remaining, with 0.8 % formally protected.</p>
<p>Area Size and Shape (degree to which the area may be or is becoming self-sustaining): The cushion fields are of a relatively large size for this type of habitat, with good native ground cover.</p>
<p>Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?): The presence and abundance of the threatened <i>Pimelea sericeovillosa</i> subsp. <i>pulvinaris</i> and the potential use of the area for nesting by the banded dotterel, shows that the area of interest has the potential to sustain an ecologically important community. Furthermore, this area of cushion field habitat is one of the few remaining remnants within the Upper Clutha, and distinctive in that native vegetation is dominant, with only a minor exotic component.</p>
<p>Distinctiveness/special ecological characteristics (unusual veg. & landform features, distribution limits?): This cushion field is one of the few remaining remnants along the Upper Clutha River, and one of the best examples of <i>Pimelea sericeovillosa</i> subsp. <i>pulvinaris</i> in terms of size and abundance.</p>
<p>Connectivity (how is the site connected to surrounding communities/areas?): The cushion fields and kanuka stands are connected to similar vegetation communities along the alluvial fans of the Upper Clutha River.</p>
<p>Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?): The cushion fields have maintained a moderate degree of ecological integrity with good vegetation cover of native species, in particular <i>Raoulia</i> species, <i>Rytidosperma maculate</i>, <i>Luzula ulophylla</i> and <i>Pimelea sericeovillosa</i> subsp. <i>pulvinaris</i>.</p>
<p>Recommendation (Accept/Decline): While the cushion fields and kanuka stands lack the diversity of the original vegetation cover along the Upper Clutha River, given the dominant native vegetation cover, the abundance and size of the threatened <i>Pimelea sericeovillosa</i> subsp. <i>pulvinaris</i>, and the potential use of the area as a nesting ground for the banded dotterel, the area provides a sustainable area of indigenous vegetation that is representative of this acutely threatened environment. Based on the above considerations we recommend the area should be taken forward for further consideration as Significant Indigenous Vegetation and Fauna Habitat.</p>

Figure 1a: The area of potential significance - 'Congreve SNA A' - E38A_1-5.



June 22, 2015

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



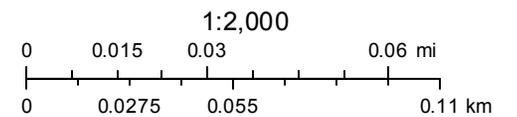
Please note the area shown is indicative and only for discussion purposes.

Figure 1b: The area of potential significance - 'Congreve SNA A' - E38A_5.



June 22, 2015

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



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



Figure 2: A photographic representation of the cushion fields.



Figure 3: A photographic representation of the areas of *Pimelea sericeovillosa* subsp. *pulvinaris* within the cushion fields.



Figure 4: A photographic representation of the kanuka stands.