Appendix 2: Landscape Evaluation Attributes

9.1 Biophysical

Biophysical aspects incorporate a landscape's natural science elements, including its geological, hydrological, ecological and dynamic components and associations.

The natural science aspects considered by the Environment Court were described in the Queenstown decision as "the geological, ecological and dynamic components of the landscape" (C180/1999 – Waikatipu Env. Society v QLDC). In broad terms, this identifies that natural science values can represent both abiotic (including geology and soils) and biotic (in particular native vegetation communities, wildlife and ecosystems) components.

Where biophysical aspects are relevant, the key components of the landscape will be present in a way that more generally defines the character of the place. Natural features in a good state of preservation are representative and characteristic of the natural geological processes and diversity of the region. Natural features are unique or rare in the region or nationally, if few comparable examples exist. Natural features may also form a landscape feature or an element / component of the landscape.

Where possible, the analysis of biophysical aspects of landscape should use objective and quantifiable data to support a particular decision made. The Department of Conservation is one of the largest landholders in Selwyn, with land areas encompassing major parts of the Southern Alps, including Arthurs Pass National Park and significant parts of the inland hill country.

In summary, the key biophysical aspects of landscape value include the following:

- Abiotic components including the presence of important or recognised geological.
 hydrological or topographical features
- Biotic components including the presence of important native vegetation communities, wildlife or ecosystems

9.2 Sensory

Sensory qualities are landscape phenomena as directly perceived and experienced by humans, such as the view of a scenic landscape or the distinctive smell and sound of the foreshore. Determining sensory and aesthetic aspects of landscape involves judgmental and subjective interpretations of nature and beauty, as well as transient matters contributing to human perception.

While an individual feature may have an aesthetic value when viewed from beyond its boundaries, aesthetic quality of landscape is more likely to relate to a place or an area. The Oxford English Dictionary (2002) defines 'aesthetic' as 'concerned with beauty or the appreciation of beauty; of pleasing appearance'. This appreciation of beauty encompasses not only the visual aspects of a landscape, but also other sensory experiences, such as sound, smell and touch.

The aesthetic value aspects considered by the Environment Court were described in the Queenstown decision as "including memorability and naturalness" (C180/1999 – Waikatipu Env. Society v QLDC). This decision also included some discussion of the adequacy of this description. It was of the view that traditional scenic and visual considerations may be underplayed. It noted that considerations such as pleasantness raised in the RMA amenity definition with reference to RMA section 7(c) will also be relevant.

The memorability of an area of landscape is often closely associated with its vividness or symbolic contribution to an area due to its recognisable and iconic qualities. Vivid or striking landscapes are more typically widely recognised across the community and have the ability to remain clear in the memory. Highly memorable landscapes often comprise a key component of a person's recall or mental map of a region or district. It is not necessary for vivid landscapes to have a high degree of naturalness. A landscape may be vivid or striking through other recognised scenic associations.

By contrast, the perception of naturalness is where landscapes appear largely uncompromised by modification and appear to comprise of natural systems that are functional and healthy. Naturalness describes the perception of the predominance of nature in the landscape. A landscape may retain a high degree of aesthetic naturalness even though its natural systems may be modified. Similarly, landscapes that have high ecological values may not display high qualities of visual naturalness.

In accordance with the above, the Courts have indicated that 'natural' in the context of landscape identification under RMA section 6(b) does not signify ecological intactness (eg EC C387/2011 – PC13 Mackenzie Basin). It is therefore important to make a distinction between ecological naturalness (indigenous nature) and landscape naturalness (perceptions of nature). Parts of the landscape can appear highly natural but are ecologically degraded. Other landscape elements require prior knowledge in order to appreciate whether they are native or exotic, despite being perceived as highly natural.

To further assist an assessment of the level of naturalness of a landscape, the Environment Court has determined four criteria for assessing naturalness (A78/2008, Long Bay – Okura Great Park Society v North Shore City Council):

- Relatively unmodified and legible physical landform and relief;
- The landscape being uncluttered by structures and /or obvious human influences;
- The presence of water (lake, river, sea); and
- The presence of vegetation (especially native vegetation) and other ecological patterns.

The first two criteria of naturalness are necessary components of a natural landscape as they are indicators of human induced modification. However, the last two criteria are not essential as highly natural landscapes may have little or no water and vegetation cover in the absence of human modification, such as parts of the Main Divide. Notwithstanding this, it is accepted that the last two criteria may enhance naturalness in landscape terms, however their absence does not necessarily detract from naturalness.

In combination with the above, legibility forms a key aspect or criteria for assessing the sensory or aesthetic value. The Environment Court described this criterion as "how obviously

the landscape demonstrates the formative processes leading to it" (C180/99 – WESI vs QLDC), in other words the degree to which the processes (geomorphological, hydrological, climate, vegetation, coastal and cultural) are actively displayed in the landscape. Some landscapes (or natural features) clearly express past natural and cultural processes.

The criterion of legibility is closely linked to geological values. However, landscapes or features which are significant in terms of their geomorphological values, may not be expressive of these processes, whilst those which are highly expressive may not have a specific geomorphological value. Natural features and landscapes that exemplify the particular processes that formed them may also have strong historical connotations and a distinctive sense of place. Legibility need not necessarily relate to 'attractiveness', but clarity of natural and cultural processes is important.

Coherence forms a related aesthetic criterion which can contribute to the value of a landscape. Coherence describes the way in which the visual elements or components of any landscape come together. People generally respond positively to a landscape they can read and understand. The patterns of land cover and land use are largely in harmony with the underlying natural pattern of the landform of the area and there are no apparent random or significant discordant elements of land cover or land use.

Landscapes with high levels of coherence will have their visual elements in harmony and reinforcing each other. They will have unity, whilst they may be either visually diverse or relatively simple in terms of their elements. They 'hang together' in terms of their composition.

Transient values describe the contribution which wildlife, climate and hydrological processes make to landscape. A landscape may gain significance due to the way in which wildlife seasonally (or at times in the day) gathers or occupies a specific area. Similarly, locations that benefit from the rising or setting sun, time of day and seasons of the year may be elevated in value due to this 'transient characteristic'. This criterion is linked to those of the ecological values set and provide for the recognition of the contribution to wildlife – which may or may not have intrinsic scientific value – to the perception of landscape.

The consistent occurrence of transient features (for example the seasonal changes in the mountains or particular weather patterns and cloud formations) contribute to the character, qualities and values of the landscape. Some landscapes are widely recognised for their transient features and the contribution these make to the landscape. Where these characteristics occur regularly they become a recognised and integral part of the landscape.

In summary, the key sensory and aesthetic aspects of landscape value include the following:

- Legibility how obviously the feature or landscape demonstrates its formative processes
- Naturalness the perception of the predominance of nature in the landscape
- Vividness how striking or memorable an area of landscape is, including its role in the mental maps of a district or region
- Coherence where land cover and land use are largely in harmony with the underlying landform and there are no significant discordant elements

 Transient values - including presence of wildlife or other values at certain times of the day or year

9.3 Associative

Certain natural features and landscapes are widely known and valued by the immediate and wider community for their contribution to a sense of place leading to a strong community association with or high public esteem for the place. There should be a substantial measure of agreement between professional and public opinion as to the value of natural features and landscapes, for example as reflected through writings and paintings or through favourite locations for visitors. The presence of existing protected sites is also likely to reflect shared and recognised values.

Research has shown that many professional landscape assessments frequently reflect the views of the general public. Nonetheless, it is fully accepted that in some circumstances the expert's perceptions may be different and the findings of this assessment should be validated through community engagement. Some of the main tourist attractions in the district are often considered to be 'iconic landscapes' such as mountain ranges or coastal areas. Certain types of recreation destinations reflect the landscape resource. Conservation areas and popular recreation opportunities within them have been considered under this set of values. Scenic reserves and a number of other protected areas reflect community recognition of an area's landscape quality affording them a high level of protection.

Cultural legibility is a vital component of landscapes where many centuries of human endeavour can be unravelled through study of the present landscape. In New Zealand this aspect of landscape has received only limited and belated attention and has led to increasing contemporary recognition of how modified our 'natural' landscapes really are.

Some natural features and landscapes are clearly special or widely known and influenced by their connection to Maori values. These landscapes (or parts of them) have been identified as having particular regional importance to tangata whenua. The developing awareness of complexity of the 'cultural landscape' of the tangata whenua is covered under the cultural and spiritual values for tangata whenua evaluation criterion.

Consultation with iwi has yet to be undertaken through the landscape evaluation process which will inevitably enrich the associative values which contribute to the understanding of landscape value. Where such values are recognised, this will inevitably add to increasing the significance attached to the sensory associations and legibility of our landscapes.

Cultural and historical values are based on traditional land uses such as gathering food and materials, traditional settlement patterns, architectural periods, or notable landmarks, events or figures. Some of them are specific sites of significance, others are wider areas that reflect a high degree of unity or integrity as a setting for historic sites or activities. Individuals and communities leave their different marks on the landscape. From our choices of architecture and land use to our memories of events, landscapes can tell stories of from where and from whom we came and why we have responded to the physical environment in the ways we have. All landscapes are inextricably linked to historic processes.

In summary, the key associative aspects of landscape value include the following:

- Whether the values are shared and recognised
- Cultural and spiritual values for tangata whenua
- Historic and heritage associations