

## Landscape Sustainability: Guiding and Managing Change – an holistic approach

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### Background

Lucas Associates' practice established in Canterbury in 1979 with a focus on rural design. Initially primarily working for rural landowners re farm design. Produced guideline booklets at the request of landowner groups, some still available, such as "*Landscape Guidelines for Rural South Canterbury*" (1981), the first rural guideline in New Zealand and reprinted many times, and a model for a number of rural planning documents. Also, "*Woodlots in the Landscape*" (1987) – still applicable and available.

Di appointed to Land Settlement Committee administering Pastoral Leases in South Canterbury through the '80s, also appointed a member of the NZ Environmental Council from 1981. Then a member of the NZ Conservation Authority, and chaired the Nature Heritage Fund since 1990. For a decade, an appointed member of the government's Nga Whenua Rahui, assisting Maori landowners in protecting their indigenous ecosystems.

Landscape planning masters research including iterative survey of vegetation change in the high country to explore shared values and aspirations in the community and potential limits of acceptable landscape change. Rather than a divided community as portrayed by interest group stances, surveys identified the wide sharing of what is and is not desired in terms of landscape change. Studies for landscape assessment methods resulted in land systems analyses as a useful basis that are widely understood as making sense.

Immediate past-President of the New Zealand Institute of Landscape Architects, Fellow member since 1987 and Registered NZILA Landscape Architect. Councils are encouraged to utilise fully professionally recognised landscape architects, that is, Registered NZILA Landscape Architects [www.nzila.co.nz](http://www.nzila.co.nz).

**"The landscape reflects  
the cumulative effects of physical  
and cultural processes"**

NZILA Statement of Philosophy



Landscape is the expression of our identity, for landscape is an expression of cultural and natural processes.

#### TYPICAL v. SPECIAL

Landscapes typical of one district / region / country, may however be special elsewhere. Careful management to retain landscape character typical of an area may be necessary.

#### LANDSCAPE v. VISUAL

“Landscape” is more than the scenic. Landscapes involve expressions of meanings and associations, and not just physical dimensions. The 4<sup>th</sup> Schedule requires consideration of “landscape and visual effects” in an AEE. Note that ‘landscape’ is not synonymous with ‘visual’ (refer Campbell & ors v. Southland District Council W 114/94).

#### REGIONAL ASSESSMENT

The Canterbury Regional Landscape Study (2 volumes, 1993) was a rapid 6-week assessment of the whole of Canterbury undertaken for ECan. Lucas Associates developed the methodology and undertook the study jointly with Boffa Miskell.

The physical character of the region was analysed and characterised through land systems analyses. For such a large area and brief study, community input was of necessity limited to professional desktop analyses of the arts and literature, tourism and recreation data, tangata whenua data (Volume 2, Ch. 4 – 7) and, planning process histories. These were input to the land type areas, types of country, both lowland and high country (Volume 2, Ch.2).

Definitions and interpretations developed in this early study under RMA have been found to be largely robust. e.g. for “outstanding” “landscape” “feature” “natural” and “inappropriate” (Volume 2, Ch.1). The study addressed the physical as well as the perceived landscape. “Aesthetic” was recognised to involve all senses – sight, sound, smell, etc.

Recognising both the physical and the perceptual landscape, the landscape criteria developed were: natural science; legibility; transient; aesthetic; shared and recognised; and, tangata whenua values (see Volume 1, pages 28 - 35).

Scale differences between regional and district assessments were addressed. We identified that at a local level, outstanding landscapes may be spatially greater or lesser than is identified in the bigger regional or national picture. That is, a landscape or feature that registers as outstanding at a regional scale may be recognised as a bigger or smaller area at the local scale (Vol.2, Ch.1 page 19). Subsequently, the Court has recognised that “landscape” does not equal part of a landscape, nor a landscape unit (Env Court C3/2002, WESI v. QLDC (Arthur’s Point to Dalefield landscape lines) para 23.).

The six landscape criteria identified by Boffa Miskell and Lucas Associates (sometimes referred to as the Pigeon Bay criteria) have since been expanded through further analysis (C 180/99 Wakatipu Environment Society Inc. vs. Queenstown Lakes District Council, paragraph 80) to add ecological dimensions to the natural science values, and to add historic values as a separate criterion. The seven aspects or criteria for assessing a landscape are thus:

- the **natural science** factors - the geological, topographical, ecological and dynamic components of the landscape;
- its **aesthetic** values including memorability and naturalness;
- its **expressiveness (legibility)**: how obviously the landscape demonstrates the formative processes leading to it;

- **transient** values: occasional presence of wildlife; or its values at certain times of the day or of the year;
- whether the values are **shared and recognised**;
- its value to **tangata whenua**;
- its **historical** associations.

To be identified as “outstanding”, the natural feature or landscape needs to be exceptional in terms of at least one of these criteria. The approach supports that taken in the Canterbury study, and confirms that “double counting” is not an issue. For example, the same ecological values may register in section 6(a), 6 (b) and 6(c) analyses.

The study also identified second tier “significant” landscapes, either specifically or as types of significant regional features.

Our liberal interpretation of “natural landscape” as those having a predominant expression of nature rather than culture, has also been endorsed. The Court (C 180/99) found that the “naturalness” of a natural landscape or natural feature, can be considered in terms of:

- the physical landform and relief;
- the landscape being uncluttered by structures and/or obvious human influence;
- the presence of water (lakes, rivers, sea);
- vegetation (especially native vegetation) and other ecological patterns.

The absence or compromised presence of one or more of these criteria does not mean that the landscape is non-natural, just that it is less natural. There is a continuum of “naturalness” from a pristine natural landscape to a cityscape.

Whilst referenced in the RPS, the 1993 regional study has not as yet been presented to the Regional Council. The Regional Council has as yet to consult with the community regarding the information identified, the analysis and conclusions.

As found in W81/2001, King-Turner v. Marlborough District Council, and Chance Bay Marine Farms v. Marlborough District Council W (and confirmed by the High Court), whilst certain landscapes had been identified as outstanding in the District Plan, additional features and landscapes could later be identified as outstanding through case by case assessment.

*As the Court stated in the first Queenstown landscape decision [fn22 [2000] NZRMA 59 at para (105)]: “When considering the issue of outstanding natural landscapes we must bear in mind that some hillsides, faces and foregrounds are not in themselves outstanding natural features or landscapes, but looked at as a whole together with other features that are, they become part of*

*a whole that is greater than the sum of its parts. To individual landowners who look at their house, pasture, shelterbelts and sheds and cannot believe that their land is an outstanding natural landscape we point out that the land is part of an outstanding natural landscape and questions of the wider context and of scale need to be considered. The answer to the question where the outstanding natural landscapes and features end is not a technical one. It is a robust practical decision based on the importance of foregrounds in (views of) landscape. We do not consider this over-emphasises the pictorial aspects of landscape, merely uses them as a determinative tool.” [my emphasis]*

## DISTRICT ASSESSMENT

*Landscapes of the Hurunui District* was a rapid study undertaken by Lucas Associates in 1994-5. The study began with a characterisation process, identifying types of country and took these to a public workshop. Participants reviewed the typology and proposed further refinement to 10 Hurunui Landscape Types.

Through public consultation (including the “Tea Cosy Questionnaire”) along with a review of literature, arts, previous public comment and desktop analysis of other materials, the distinctiveness of each landscape type was sought to be teased out. At a public workshop and through a newspaper questionnaire, people reviewed each landscape type and sought to describe its character – “*What is its essence and what makes it distinctive?*”

Workshop participants identified landscape change that has occurred in each landscape type, what is occurring currently, and the change they anticipate. They identified what effects were expected from each change, and whether such changes or effects should be controlled. They also identified whether such changes or effects should be encouraged. They were also asked to identify appropriate management methods.

Following the workshop, I compiled the report which clearly included the community responses and my interpretation as to what would be the appropriate management for each landscape type (pp. 30-63). That is, the study addressed the whole landscape of the district, and not merely an identification of the important bits. The study sought to address guidance for landscape management throughout, both voluntary and directive.

Quite separately (pp. 64-71), the community contributed and using the 6 landscape criteria (natural science, legibility, transience, aesthetic, shared and recognised, and, tangata whenua values) I analysed, mapped and recommended what might appropriately be identified as outstanding natural landscapes. A second tier of landscapes was also identified as “significant landscapes”.

Whilst limited by time and budget, the holistic approach taken in this study continues to be considered professionally robust.

## LANDSCAPE CHANGE

Changes in residential and recreational demands, irrigation techniques and dairy conversion, freeholding of crown leased land, as well as changing power generation interests including for wind and hydro, means landscape expectations are continually changing.

Addressing underlying landscape types, with scientifically robust analysis, provides a good basis to analysis for landscape policy and method drafting as well as effects assessment. Addressing the underlying land means that landscape boundaries can be robust. This is preferable to focussing on current land use patterns and features. Landscape boundaries are preferably legible in the land and rather timeless.

The recent relaxing of the administration of pastoral leases as well as the freeholding of pastoral lease lands, coinciding with a time of development pressure for landuse intensification as well as lifestyle and recreation development demand, is revealing vacuums in landscape planning in a number of district and regional plans. Analysis is needed of landscape values along with

identification of both desirable and inappropriate landscape change, so that pastoral lease management is supported, and tenure review opportunities are maximised for sustaining important landscape values.

Our *Wairau Plain Landscape Concept* work showed how a major landscape change issue of widespread public concern – in this case through viticultural expansion – can be addressed with both landowners and the wider community to achieve a more sustainable landscape. Refer *Wairau Plain Landscape Concept - The Plan, Guidelines, and, The Analysis* (2003). [www.marlborough.govt.nz](http://www.marlborough.govt.nz)

#### ROLE OF THE LANDSCAPE ARCHITECT

Landscape architects are creative problem solvers, and must use these skills in site design in addressing the needs of a client. For landscape assessment, for identifying landscape importance and landscape appropriateness, the landscape architect must first be responsible to landscape values and not to the desires of individuals. In this regard, the landscape architect does not have a balancing role. Our role is as advocates for landscape sustainability.

Whilst values might be considered subjective, the role of the landscape architect is to identify and respect shared values.

#### REALITY CHECKS

Proposals for landscape change are at times not realistic, and are often not realistically portrayed. Reality checks are needed. As identified by the Courts, photographic simulations of proposals frequently downplay visual change and do not represent reality.

Environmental compensation and mitigation works can be overly optimistic as to likely benefits. Care is needed to avoid trading landscape values for ecological enhancement. Measures can be taken to increase the certainty of outcome. For example, in the work we undertook with Rotorua District Council for the 6 Tarawera lakes catchments and the Lakes A Zone (subsequent to *Kaitiaki Tarawera v. Rotorua District Council*, A 7/98), we developed both a Building Design Guide and Revegetation Guide (2004). Endorsed by Judge Bollard, rural residential subdivision is closely confined to Bush Settlement areas, where restoration plantings achieving “canopy closure” are required prior to the issuing of any resource consents. The District Plan requires it, the Guide shows how to do it.

#### HERITAGE LANDSCAPES

Over the last two years I have developed some approaches and analyses for heritage landscapes. This is an important area of work that needs much greater attention and hopefully will be addressed in review of plans and policies.

Lucas Associates have undertaken various regional and district analyses, as well as many site-based assessments, and, whilst the process would now differ somewhat, the approaches developed more than a decade ago in the Canterbury and Hurunui studies are still considered appropriate.

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