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# BEST PRACTICE NOTE

## LANDSCAPE ASSESSMENT AND SUSTAINABLE MANAGEMENT 10.1



Members Documentation



NEW ZEALAND INSTITUTE  
OF LANDSCAPE ARCHITECTS

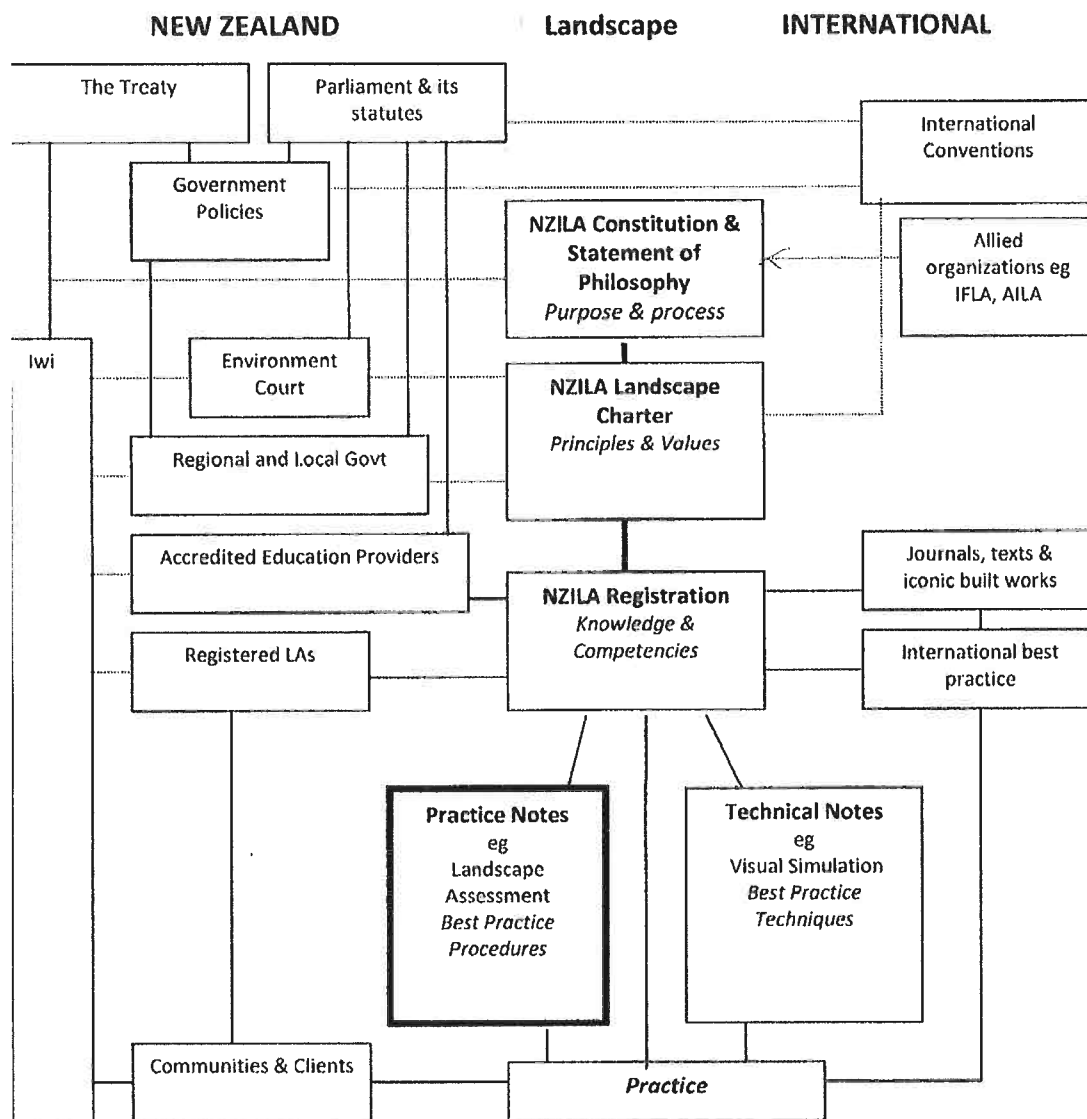
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# Background

In August 2008, the New Zealand Institute of Landscape Architects (NZILA) Education Foundation hosted a Landscape Planning Initiative (LPI) in Christchurch. The purpose of the initiative, which was attended by over fifty practising landscape planners and landscape architects, was to discuss a range of Resource Management Act (RMA) matters relative to the preparation and presentation of expert landscape evidence at Council Hearings and the Environment Court.

The major outcome from the Landscape Planning Initiative was the directive that a series of best practice notes be prepared, and that these should be aimed at landscape practitioners and decision makers involved in the planning, design and management of our diverse and distinctive landscapes. The Landscape Assessment and Sustainable Management Practice Note is the first in a series of Practice and Technical Advice notes which will be progressively published by the NZILA.

The following diagram outlines key relationships between this Practice Note and other types of professional guidance and related institutions and sources.



# INTRODUCTION

## Purpose and Focus

This Practice Note is aimed at decision makers, environmental professionals, and landscape practitioners involved in the planning, design and management of New Zealand's diverse cultural and natural landscapes. It sets out principles for an integrated approach to landscape assessment as the basis for the sustainable management of landscape as a natural, physical and cultural resource.

The Practice Note is focused upon the matters recognised as being the expertise of professional landscape architects. It acknowledges that there are others who have complementary expertise over different realms of landscape, including those holding mana whenua and/or mana moana, and those with particular knowledge of natural science or cultural values.

## Scope and structure

This Practice Note sets out a landscape assessment protocol for both natural and cultural settings. Whilst the primary focus is upon sustainable management under the RMA, the guidelines also have relevance to related statutes, such as the Conservation, Reserves and Local Government Acts. The emphasis is upon a generic process rather than upon specific techniques. The Practice Note also includes a suggested set of definitions.

### The Practice Note is in two parts:

1. An outline of the landscape assessment process and definitions, and
2. Guidance on practice applications.

It is intended to be complemented by a series of Technical Notes on specific techniques and aspects of landscape assessment. These will be prepared and published progressively. The Practice Notes are published as 'live' documents that will be regularly reviewed and revised over time in the light of evolving understandings and protocol.

# THE LANDSCAPE ASSESSMENT PROCESS

This assessment process is presented as a guide rather than a prescription. The detailed programme of work for any particular assessment will be specific to the issue being considered and the decision making context. The most significant distinction in everyday practice is between landscape assessment undertaken as part of policy and plan making, and assessment associated with a specific project. However, such differences are in emphasis rather than fundamental process. Different types of assessment are treated below as variations within a common framework.

The detail of an assessment process always reflects to some degree the expertise and style of the assessor. Landscape assessment is an expert skill, not an exact science. Nonetheless, there are a number of common stages of assessment that are widely recognised, which in combination should ensure the integrity of an assessment. Not all stages will be required in every situation.

**Scope:** Identification of:-

- The purpose and focus of the assessment
- The landscape issues being considered
- Those holding mana whenua and mana moana
- Key stakeholders
- The policy context
- The terms of reference of the study

**Description:** A systematic account of *landscape attributes* in the assessment area. These will include:-

- Biophysical elements, patterns, and processes
- Sensory qualities
- Spiritual, cultural and social associations, including both activities and meanings.

Where relevant, a description of a proposed project will be undertaken. The description phase may involve collaboration with tangata whenua, stakeholders, communities, and other experts, utilising a range of sources of information.

**Characterisation:** Expert interpretation of *landscape character* based on *classification* of different types of landscape, through:-

- Identification of patterns of natural and cultural features, processes and influences.
- Analysis of their characteristics and spatial location, and the extent to which they are distinctive, representative or typical at the different scales.

**Evaluation:** An explicit account and weighing up of the *landscape values* of the existing landscape including those expressed within the statutory context of the assessment. This stage will include engagement as appropriate with tangata whenua, communities, stakeholders and interest groups.

**Condition and effects:** An analysis of the way the landscape(s) are likely to respond to change, including:

- Landscape *resilience*, and *capacity*
- Landscape *sensitivity* and *vulnerability*
- Opportunities, risks and threats

**Change management:** Identification of ways and opportunities to ensure and enable *sustainable landscape management* in response to the existing trends and any proposed or anticipated change. This may include:

- Statutory and non statutory plan objectives, policies and methods
- Consideration of alternatives, and their costs and benefits
- Identification of ways to enhance or create values
- Actions to avoid, remedy or mitigate adverse landscape effects

**Presentation:** Reporting of the relevant findings from the assessment in a suitable format, for example as a report to a council, developer, iwi or community, or as evidence to a Council Hearing or the Environmental Court. This may include a process of critique, such as peer review of the draft report or evidence, and appropriate acknowledgements.



# THE LANGUAGE OF ASSESSMENT

This section explains the technical terms [in italics] used in the guide

**Landscape** is the cumulative expression of natural and cultural features, patterns and processes in a geographical area, including human perceptions and associations.

**Landscape attributes** comprise biophysical features, patterns and processes; sensory qualities; and spiritual, cultural, and social associations, including both activities and meanings.

**Landscape character** is a distinctive combination of landscape attributes that give an area its identity.

**Landscape classification** is the placing of landscapes into different categories based on their character or type.

**Landscape amenity** is the natural and physical quality and character of an area (landscape) that contributes to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes (RMA 1991).

**Landscape value** derives from the importance that people and communities, including tangata whenua, attach to particular landscapes and landscape attributes.

**Landscape evaluation** is the process of identifying and/or comparing landscape values.

**Landscape resilience** is the *ability* of a landscape to *adapt* to change whilst retaining its particular character and values.

**Landscape capacity** is the *amount* of change that a landscape can accommodate without substantially altering or compromising its existing character or values

**Landscape sensitivity** is the degree to which the character and values of a particular landscape are susceptible to the scale of external change.

**Landscape vulnerability** is the extent to which landscape character and values are at *risk from a particular type* of change.

**Sustainable landscape management** recognises and protects the distinctive, representative or typical attributes that define landscape character and values, through a process of integrated assessment, planning and design to meet the needs of both present and future generations.

**Natural Character** is the expression of natural elements, patterns and processes in a landscape.

**Outstanding Natural Landscape** is a natural landscape that is particularly notable at a local, district, regional or national scale.

# PRACTICE APPLICATIONS

This section describes best practice for the assessment stages outlined above.

**Scope:** The essential feature of landscape assessment in New Zealand is its focus upon sustainable management and sustainable development of the landscape. The three core activities of landscape architecture to which landscape assessment contributes - landscape planning, design, and management - are all aimed at directing and shaping landscape change in order to achieve the purpose of relevant statutes and related community goals - broadly defined as sustaining environmental integrity and enhancing human wellbeing.

Landscape assessment can contribute in two ways. Its traditional role has frequently been to identify the landscape attributes and values that need to be protected in the public interest, as part of a process of environmental conservation and sustainable management of resources. These aspects are largely covered by various provisions of Part II and III of the RMA, in plans and strategies prepared under a number of other statutes such as the Reserves Act, the National Parks Act, The QEII National Trust Act, The Historic Places Act, The Crown Pastoral Land Act, the Conservation Act, and in Resource Management Plans prepared by Iwi authorities.

An equally important role of landscape assessment is to identify ways in which landscape can be managed to better achieve wider goals of sustainability, sustainable management, and sustainable development. Landscape assessment supports the identification of environmental issues, opportunities and management options, and with appropriate expertise and collaboration can provide the knowledge and skills needed to integrate different values, functions and activities within a particular landscape setting. This role addresses the overall purpose of the RMA, and the implementation of other statutes with broad goals of sustainable development, such as the Local Government Act.

Landscape assessment can be undertaken at a range of scales, and for a range of purposes, from strategic policy to the effects of a small project. It is frequently undertaken in collaboration with other disciplines, tangata whenua and communities. The scoping stage will include identification of these potential and desirable collaborations, including those holding mana whenua and mana moana. It will identify the relevant statutes and policies, and set out the precise terms of reference of the assessment, including limitations and exclusions.

**Description:** Landscape attributes fall into three broad categories: biophysical features, patterns and processes; sensory qualities; and spiritual, cultural and social associations, including both activities and meanings.

Biophysical features, patterns and processes may be natural and/or cultural in origin, and range from the geology and landform that shape a landscape to the physical artefacts such as roads that mark human settlement and livelihood.

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.

Associative meanings are spiritual, cultural or social associations with particular landscape elements, features, or areas, such as tupuna awa and waahi tapu, and the tikanga appropriate to them, or sites of historic events or heritage. Associative activities are patterns of social activity that occur in particular parts of a landscape, for example, popular walking routes or fishing spots.

Associative meanings and activities engender a sense of attachment and belonging, and in the context of Aotearoa / New Zealand include places and associations of particular importance to tangata whenua.

Where a project description is undertaken, it should include an account of the biophysical, sensory, and associative attributes of the project.

Biophysical, sensory and associative attributes of landscapes and projects should all be described in a systematic way that others can understand, review and critique. This will help ensure the account is both valid and reliable. Validity indicates that the description actually relates to the phenomena it claims to describe. Reliability indicates consistency of approach to description. Appropriate collaboration and peer review by those with specific expertise and/or mana whenua and mana moana, are important in achieving a credible account.

**Characterisation:** Landscape characterisation is a process of interpreting the composite and cumulative character of a landscape - how attributes come together to create a landscape that can be distinguished from other landscapes. International best practice in characterisation has two dimensions of classification: the identification of distinctive types of landscape based on their distinctive patterns of natural and cultural features, processes and influences; and their geographical delineation. There is typically also a spatial ordering or hierarchy of landscape types and areas, classified at different scales. Characterisation does not rank or rate landscapes against each other - all landscapes have character.

While there is not a standard approach to landscape characterisation in New Zealand, attributes that typically shape the character of New Zealand landscapes include: geological origin and geomorphology; natural ecosystems; vegetation cover and land use history; spiritual and cultural associations; and patterns and intensity of current development. In the absence of a standard method of characterisation, it is important to ensure that the sources of data and methods of deriving categories and areas are credible and explicit.

Expert characterisation of landscape can be enhanced and underpinned through appropriate engagement with relevant communities, including those holding mana whenua and mana moana.

**Evaluation:** Evaluation is the systematic process of identifying and comparing landscape values within the assessment. It determines the attributes and characteristics of a landscape to which people and communities including iwi attach particular value, and those in which there is a wider public interest, and weighs them up within the relevant statutory and policy context. Explicit selection of criteria, and use of consistent evaluative terms and measures, is an essential part of the comparative evaluation stage. Appropriate engagement with tangata whenua, communities and interest groups is important to the credibility of the evaluation.

The guiding source of comparative evaluation criteria should be the purpose and provisions of the statute under which the assessment is being undertaken. The RMA and LGA are typically the enabling statutes for landscape assessment, and have broad goals related to the sustainable management of natural and physical resources, including landscape, and the sustainable development of communities, within which there may be provisions specific to landscape or to landscape related values or functions.



Complementary sources of comparative evaluation criteria are the statutory instruments and related non statutory plans relevant to the landscape under assessment- for example, the New Zealand Coastal Policy Statement, relevant National Policy Statements, Regional Policy Statements, Conservation Management Strategies, and District and Regional Plan Objectives, Policies and Rules, Long Term Council Community Plans, Iwi Resource Management Plans, and relevant local area, catchment, structure and asset management plans.

A widely used system of evaluation currently in use in New Zealand is the so called 'Amended Pigeon Bay Criteria'. These have evolved from a list of factors used to assess landscapes. They are not exhaustive nor do they necessarily apply to all landscapes. There is, however, accumulated case law and a level of acceptance of their use as a framework for landscape assessment. The 'Amended Pigeon Bay Criteria' can usefully be framed within the three broad categories of landscape attributes used in the description stage, that is, biophysical features, patterns and processes, sensory qualities, and associative activities and meanings.

Each evaluation should use internally consistent evaluative terms that relate to the characteristics and factors being assessed. For example, rarity is a term that describes the relative frequency of a landscape type or feature; coherence describes the structural qualities of a landscape, for example the spatial patterns of landform and vegetation; integrity describes the quality of the relationships within the landscape, for example the health of ecosystems. It is helpful to users of an assessment if the terms used in the evaluation are defined.

**Condition and effects:** Analysis of landscape condition is focused upon understanding the functioning of a landscape and the way that the landscape systems are likely to respond to external change. It may assess the resilience of the character and values in a landscape, and their capacity to accommodate change. It may also assess the sensitivity of landscape character and values to change, and their vulnerability to particular types of change. The analysis should identify the opportunities, risks, threats, costs and benefits arising from potential change.

A project based assessment also determines the types of effects that are likely to arise from the project, including actual, potential and cumulative effects, and their relative magnitude and importance. The RMA recognises different types of effect, which need to be clarified when making assessments.

It is also important to use a robust and consistent rating scale for assessing the magnitude and importance of conditions, change or effects. The following seven point scale is a useful guide:

Extreme/very high/high/moderate/low/very low/negligible

The application of these categories is always relative to the context of the assessment.

Assessment of landscape conditions, change, and effects may complement other assessment activities, such as cultural and social impact assessment of effects on tangata whenua and communities, or engineering and science assessments.

**Change management:** All landscapes are dynamic and continually change. Landscape assessment is not about how to 'freeze' a landscape in a particular state. It is always about managing the direction and consequences of change, and how to sustain landscape values and attributes over time. An essential part of assessment is the identification of strategies and methods to manage change. These may include: expression and recognition of the visions and aspirations of communities including tangata whenua; Mātauranga Māori; policies, plans and institutional initiatives to achieve desirable outcomes; and design measures to create new values and to avoid, remedy, or mitigate adverse effects, including the consideration of alternatives.

**Presentation:** The stages of landscape assessment described above do not constitute the headings for an assessment report. These must be developed for the purpose at hand and in accordance with the relevant statutory requirements and protocols. For example, material from a landscape assessment presented in the Environment Court must comply in form and content with the protocols for preparation and presentation of evidence. This will be different from the format adopted for a report to a client, a community, or a council.

It is important to include accurate reporting of consultations and engagement with tangata whenua, communities and interest groups, and acknowledgement of sources.

Peer review of landscape assessment reports is good practice, and can increase the credibility of the process and its outcomes.

# ACKNOWLEDGEMENTS

This guide has been prepared by Frank Boffa and Simon Swaffield on behalf of the New Zealand Institute of Landscape Architects Education Foundation. The content is based upon the outcomes of two workshops and related working groups between 2008 and 2010. Around 50 senior members of the NZILA contributed to the workshops and to preparing the document, a number of whom have also provided helpful and thoughtful comments upon various drafts. We have also received helpful comment, through Alan Titchener, from Karl Nixon of Nga Aho. We thank and acknowledge all who have contributed in different ways. Responsibility for the final content and for any errors or mistakes remains with the co authors.

