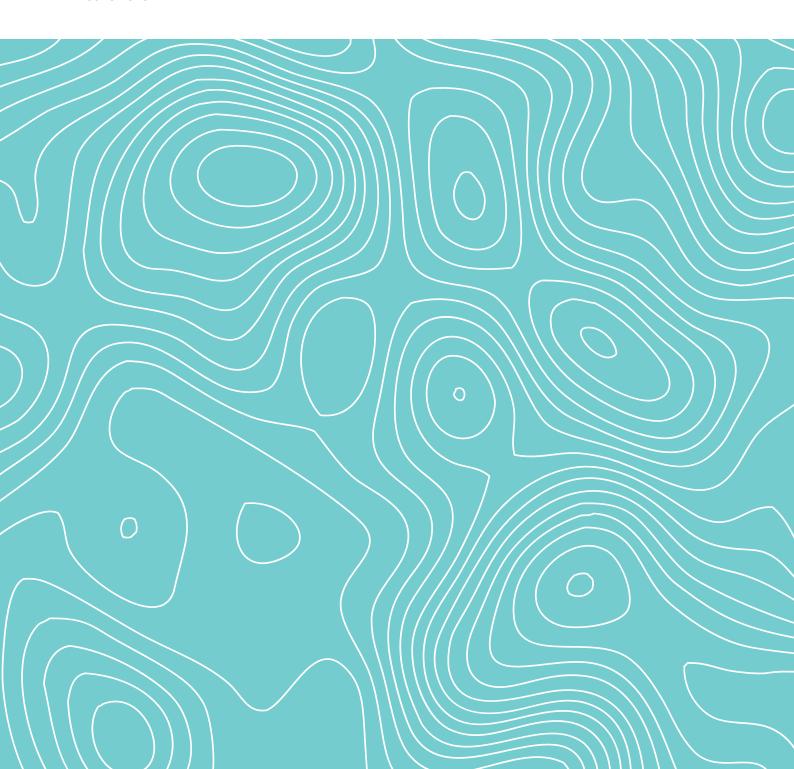


# Guidance Note for Landscape and Visual Assessment

June 2018





Seventeen Seventy, Gladstone region

00 – Foreword	iv
01 – Introduction	3
02 – Background	4
03 – Terminology and language	6
04 – Principles	8
05 – Scope and approach	10
06 – Methodology	12
07 – Describing impact	14
08 – Mitigation	16
09 – Environmental assessment	18

Landscape and Visual Assessment (LVA) is an essential tool of reconciling development with landscape and scenic values and promoting better outcomes for our communities.

This guideline acknowledges the important role of Landscape Architects in this field and ensuring landscape and visual assessment work is completed to a consistently high standard. This is particularly relevant due to the unprecedented pressures on our urban, peri-urban and rural landscapes.

The purpose of this document is to provide a practical framework for the practice of Landscape and Visual Assessment (including impact assessment) among Registered Landscape Architects based in Queensland or working on projects in Queensland. Adoption of this guidance note will provide some consistency in approach and terminology.

This guideline has been developed during a series of working sessions by members of the Australian Institute of Landscape Architects (AILA) Queensland Regional Landscapes Group. This group of Registered Landscape Architects has extensive experience in the field of Landscape and Visual Assessment.

The team includes a number of recognised leaders of the profession, which provides credibility to this document.

Comments received from AILA Queensland members following publication of the draft have also been incorporated into this document.

### Core Writing Team:

Wendy Davies AILA Suzie Rawlinson AILA Alayna Renata AILA Chris Madigan AILA Ata Tara AILA

### Peer Review:

Alan Chenoweth FAILA

### Graphic Design:

Chad Ward

The following members also contributed over the years:
John Van Pelt, Tony Prineas, and Catherine Brouwer.

This Unam

David Uhlmann AILA

Queensland State President AILA



View from Mary Cairncross Park to the Glasshouse Mountains, Sunshine Coast





This document provides a framework for the practice of Landscape and Visual Assessment (LVA) among Landscape Architects.

This guidance allows a client to commission a Landscape Architect to undertake a LVA, and be assured that the work will be undertaken within the framework set out by the Australian Institute of Landscape Architects, with a common language and rigour. This guideline is not a 'how to' guide, and does not prescribe a methodology or approach, as one size does not fit all projects. It does, however, function as a check list to guide practitioners.

### How to use this Document

This guideline is a working document and will be updated and revised to reflect changes in practice and approaches. It is also intended to be accompanied by a number of practice notes that will address specific technical areas which support the practice of landscape and visual impact assessment. These may include:

- Photography for Visual Assessment
- Photomontage and Visualisation

There may also be similar guidelines prepared for Landscape Character Assessment and Landscape Heritage Assessment.

# Landscape and Visual Assessment is a field of expertise of Landscape Architecture.

There is currently no national level guideline document for Landscape or Visual Assessment (LVA) in Australia. Landscape Architects in Australia have instead relied on a number of guidance documents offered by other international Landscape Architecture Institutes and Government bodies. In particular, most assessments undertaken in Queensland have been based on key international quidance documents, including:

- The Guidance for Landscape and Visual Impact Assessment (GLVIA), Third Edition (2013) prepared by the Landscape Institute and Institute of Environmental Management and Assessment; and
- Scenic Management System (1996) as described in the publication Landscape Aesthetics: A Handbook of Scenery Management prepared by the US Forestry Service.

In each state there are also different department specific guidance documents, and guidelines available for different kinds of infrastructure.

However, none of these references is comprehensive enough to guide the wide range of projects requiring LVA by Landscape Architects.

### Sources

International sources that are most commonly referred to in LVA include:

- Landscape Institute and Institute of Environmental Management and Assessment (2013) The Guidelines for Landscape and Visual Impact Assessment, Third Edition.
- United States Department of Agriculture. (1995). Landscape Aesthetics A Handbook for Scenery Management, Agriculture Handbook Number 701. United States Department of Agriculture Forest Service.
- New Zealand Institute of Landscape Architects, NZ (2010) Best Practice Note: Landscape Assessment and Sustainable Management 10.1.
- Scottish Natural Heritage and the Countryside Agency (2002) Landscape Character Assessment Guidance for England and Scotland.
- U.S. Department of Transportation Federal Highway Administration (2015) Guidelines for the Visual Impact Assessment of Highway Projects.

Queensland specific guidance includes:

- Queensland Government
   Office of Urban Management
   Department of Infrastructure
   (2007); Implementation
   Guideline No 8. Identifying
   and protecting scenic amenity
   values (including Scenic SEQ
   2004 Public Preference Survey).
- Queensland Department of Transport and Main Roads (2013) Road Landscape Manual - A Guide to the Planning, Design, Operation and Maintenance of Road Landscape Infrastructure (particularly Appendix 2 Visual Assessment).
- Queensland Government
  Department of Infrastructure,
  Local Government and Planning
  (2016); Wind Farm State Code
  Planning Guideline.

Other states have their own guidance and some authorities have developed guidance for specific types of infrastructure, which are also used to guide and inform practice in Queensland, for example:

Roads and Traffic Authority (RTA)
 NSW: Urban Design Section.

 (2018). Environmental Impact
 Assessment Guidance Note:
 Guideline for landscape character and visual impact assessment.

- Western Australian Planning Commission, Department for Planning and Infrastructure (2007) Visual Landscape Planning in Western Australia: A manual for evaluation, assessment, siting and design
- Environment Protection and Heritage Council (2010) National Wind Farm Development Guidelines – Draft (Note: this will not be developed into a final document)

National and state specific case law can also be considered as appropriate.

## How this Guideline should be used

Establishing a common approach is important to the credibility and reliability of Landscape and Visual Assessment.

This guidance is not intended to completely replace other techniques. However, it is intended to provide an accepted baseline of agreed methods and terms for AILA members in Queensland. It sets out the minimum requirements for what needs to be covered including the key issues that need to be addressed and appropriate level of reporting. Specific techniques outlined in other documents may still be drawn upon where appropriate, particularly where they are a requirement of a planning or legal process.

It is noted that Landscape and Visual Assessment is usually part of a bigger process (e.g. an Environmental Impact Assessment) or design process and the assessment may need to be tailored to address the requirements of that process. The approach will also need to be tailored depending on the context – rural, urban, peri-urban, coastal etc.

This document is intended to be used by suitably qualified professionals who prepare LVAs and to inform clients commissioning such studies. In describing landscape and visual conditions and impacts, there are a number of specific terms that are commonly used.

It is important that these terms are used logically and consistently. It is also important that the language used in Landscape and Visual Assessment (LVA) is clear and easily understood.

### Guideline:

- Language should be simple and able to be understood by a wide audience
- Any terminology that is relied upon in a LVA should be defined
- The language used should be clear and the use of emotive terms limited
- Terminology should be used consistently and according to definitions

The following pages list a number of terms and definitions that are suggested. Practitioners who wish to use other terms should define these.

### Amenity

The pleasantness of a place as conveyed by desirable attributes including views, noise, odour etc.

### Artist's impression

An indicative visual representation illustrating the appearance of a proposal. Typically used to communicate a concept when photomontages are not available and / or when accuracy cannot be assured.

### Character

A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, and often conveys a distinctive 'sense of place'. This term does not imply a level of value or importance.

### Effect

The landscape or visual outcome of a proposed change. It may be the combined result of sensitivity together with the magnitude of the change.

### Impact

The categorisation of effects. Legislative context should be considered in defining 'impacts' and their significance.

### Landscape

Landscape is an all-encompassing term that refers to areas of the earth's surface at various scales. It includes those landscapes that are: urban, peri-urban, rural, and natural; combining bio-physical elements with the cultural overlay of human use and values.

### Magnitude of change

The extent of change that will be experienced by receptors. This change may be adverse or beneficial. Factors that could be considered in assessing magnitude are: the proportion of the view / landscape affected; extent of the area over which the change occurs; the size and scale of the change; the rate and duration of the change; the level of contrast and compatibility.

### Mitigation

Measures to avoid, reduce and manage identified potential adverse impacts.

### Offset

Measures to compensate for potential adverse impacts that cannot be otherwise mitigated.

### Photomontages

A visual representation of a proposal from a particular receptor viewpoint, on a photographic base. The methodology for the preparation of any photomontage and its accuracy should be defined.

### Receptor

A place, route, viewer audience or interest group which may receive an effect and require assessment.

### Scenic amenity

A measure of the relative contribution of each place to the collective appreciation of the landscape. The term scenic amenity has a specific meaning and application in GIS mapping (a combination of visual exposure and scenic preference) and has been incorporated into several local planning schemes across Queensland.

### Sensitivity

Capacity of a landscape or view to accommodate change without losing valued attributes. Includes the value placed on a landscape or view by the community through planning scheme protection, and the type and number receivers.

### **Values**

Any aspect of landscape or views that people consider to be important. Landscape and visual values may be reflected in local, state or federal planning regulations, other published documents or be established through community consultation and engagement, or as professionally assessed.

### View

Any sight, prospect or field of vision as seen from a place, and may be wide or narrow, partial or full, pleasant or unattractive, distinctive or nondescript, and may include background, mid ground and/or foreground elements or features.

### Viewpoint

The specific location of a view, typically used for assessment purposes.

### Viewshed

Areas visible from a particular location (may be modelled or field-validated).

### Visibility Analysis Map (VAM)

A map illustrating areas of land with views to a particular feature. This may be modelled or field-validated, and assumptions must be stated. A digitally modelled analysis is usually based on a digital terrain model, and may also incorporate the screening effect of vegetation and built form. Other terms, such as Zone of Visual Influence (ZVI), Zone of Theoretical Visibility (ZTV), Potential Visibility Zone, Visual Envelope, may be used, but should be defined.

### Visual absorption capacity

The potential for the physical attributes (landform, vegetation and built form) of a scene to absorb a particular change.

### Visual amenity

The attractiveness of a scene or view.

### Visual catchment

Areas visible from a combination of locations within a defined setting (may be modelled or field-validated).

### Visual representation

Graphic representation of a proposal in context showing its likely appearance and scale.

There are some common principles which determine scenic preference and the importance of views.

Whilst scenic preference and the values placed on views may be culturally influenced, the following general principles have been consistently found in scenic preference studies and community consultation.

In general:

- Water and natural elements are preferred over urban scenes
- Mountains and hills are preferred over flat land
- Views are preferred which include both mid-ground elements (with some detail discernible) and a background
- Views with skyline features and views which include focal points are preferred

The following discussion identifies further, more complex relationships which typically guide the preference and importance of views.

Views dominated by, or with a high proportion of attractive features (such as ocean or mountains) are considered to be more attractive, and hence more important to retain, than those with only a minor or distant proportion of such elements Similarly, panoramic views with a number of such distinctive

elements are more attractive and worthy of protection than narrow view corridors or a line of sight to a single element.

Diversity is generally preferred over uniformity, and heritage over modernity, but these need to be balanced with preferences for consistency and coherence of built form, which are also valued.

Viewpoints (including residences and public places) may have primary views in one direction (e.g. to an attractive or distinctive feature) and secondary views in other directions. The distinction may be related to desirability of views (e.g. ocean or river views), viewing distance, or to the orientation of viewpoints (e.g. lookouts)

Discordant elements which contrast markedly with their otherwise-attractive settings are often regarded as having a detrimental impact on amenity. This depends on the viewing distance, proportion of view affected, and overall design.

The degree to which good design can overcome or integrate strong contrasts (e.g. Sydney Opera House, Eiffel Tower) is largely a matter of subjective opinion. Contrast and visibility should be objectively analysed,



Surfers Paradise, Gold Coast

separate from any opinions offered as to the appropriateness of design or the acceptability (or otherwise) of high visibility and strong contrasts.

When assessing the importance of views, for example in prioritising scenery and sightlines for planning scheme protection, or when evaluating the landscape

and urban character of a place, views from accessible public spaces (streets, lookouts, parks etc.) are valued more than views available only from private residences. In general, no resident has a 'right' to a view, but impacts on private residential views may be relevant in relation to planning scheme intentions.

# Scope and approac

The scope should be designed to fit the scale and potential impacts of the project. It should also consider the project stage and purpose.

For example in the preliminary design phase an assessment may identify opportunities and constraints for the design, whereas a full Environmental Impact Assessment may be required where a planning decision relies on the assessment.

### Guideline:

- Landscape and Visual Assessment (LVA) should be scoped to reflect the scale of the project
- It should reflect community values and preferences, particularly as described in any published study
- It should be based on an understanding of the setting and valued attributes
- It should have an appropriate level of rigour to inform



Kingfisher Bay, Fraser Island

The following are the key questions to be asked when scoping a LVA:

- What legislation and planning regulations are relevant?
- What receptors may be impacted by the project?
- Who and what may be impacted by the project (current and future)?
- What is the purpose of this assessment, and who is the audience?
- How does the setting of the project (urban, rural etc.) influence the assessment approach?
- Will there be impacts during construction, operation, decommissioning?
- Will there be impacts during the day and night or during different seasons?
- Are there any other projects planned that may change the landscape in the future?
- What visual representations or Visibility Analysis Map (VAM) are required?
- What coordination or consultation with other technical disciplines and/or stakeholders needs to occur?

Any limitations to the approach undertaken should be clearly stated within an assessment report, such as project timeframes and constraints, access issues, availability of information, and design changes for example.

In overview, a project-specific LVA should address the following:

- Visibility where will the proposed development be seen from and by whom?
- Appearance what will it look like?
- Mitigation to what extent can the visibility and/or appearance be modified by screening or integration?
- Effects and impacts what views and viewers will be affected, and to what extent, with and without mitigation measures?
- Will the amenity of receptors be reduced by shadowing, overlooking, and character contrast?
- Context and planning intention - is the development consistent with existing and intended local character and community expectations and values? Are the impacts important in this context?

The first four of the above are largely objective and present information which decision-makers and the community can interpret, whereas the fifth incorporates a degree of expert judgement.

LVA, like other aspects of impact assessment, should clearly distinguish between fact and subjective opinion, and avoid advocacy.

There is a range of approaches to Landscape and Visual Assessment. These include viewpoint assessments, character assessments, and mapping based assessments.

There are some fundamental steps that must be undertaken in order to identify potential landscape and visual impacts. It is essential that a landscape and visual assessment has a clear, logical and repeatable approach to the identification of effects and categorisation of impacts, and this method should be clearly stated in any assessment.

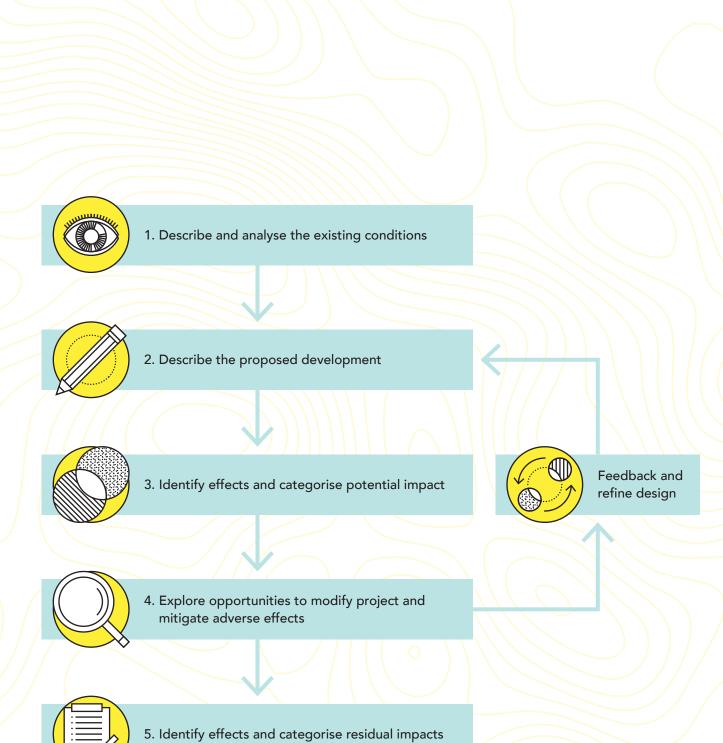
Guideline:

- Methodology should be clearly set out, logical and repeatable
- The process of assessment should be consistently applied throughout any assessment
- A methodology may be refined to reflect the specific issues of the site or project and should not be designed to achieve a particular outcome
- Aim to reduce subjectivity as much as possible
- Distinguish between objective and subjective evaluation when presenting information to decision-makers
- Limitations should be stated
- Consider seeking a review to validate the methodology

All methodologies should generally follow the following steps:

- Describe and analyse the existing conditions
- 2. Describe the proposed development
- Identify effects and categorise potential impacts
- Identify opportunities to modify the project and / or mitigate adverse effects
- 5. Identify and categorise residual impacts i.e. with mitigation incorporated into the proposed conditions (if required).

While this guideline does not aim to identify a 'one size fits all' approach, the following discussion further explains a number of key factors that should be considered within a defined methodology.



Landscape and visual impact is the combination of an effect (magnitude of change) and the sensitivity of a landscape or view.

The way in which an effect and visual sensitivity are combined, to create a visual impact level, must be clearly defined in the Landscape and Visual Assessment methodology. LVA is usually described using a ranking system with terms such as high, moderate and low.

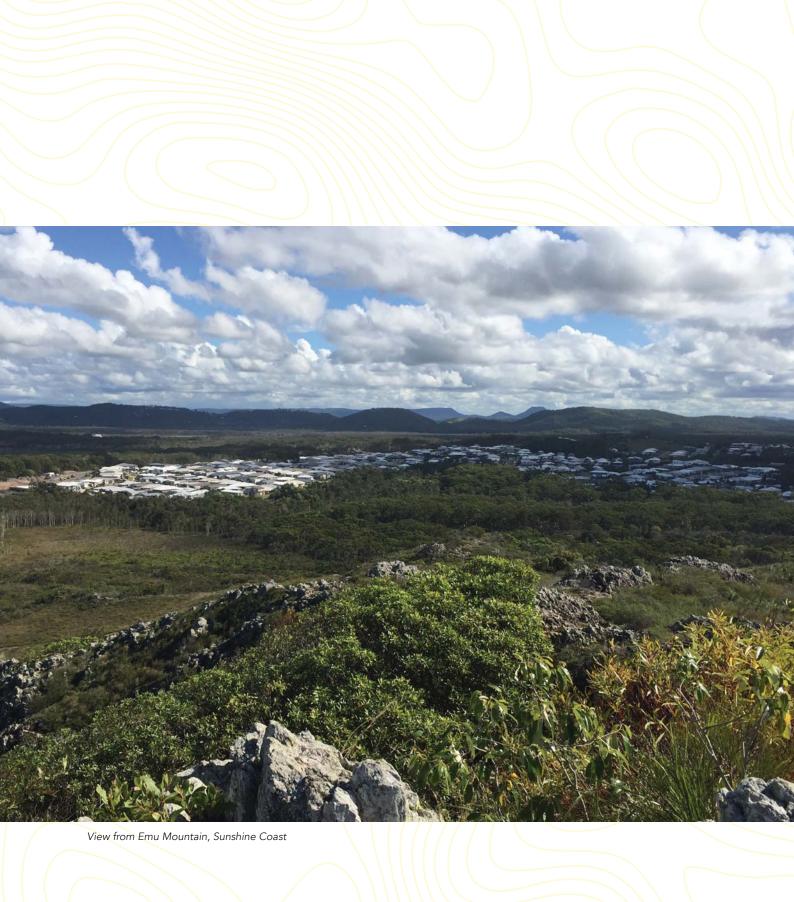
It is useful to clearly identify which values are impacted, however emotive and colourful descriptions diminish the objectivity and clarity of an impact description and therefore should be avoided.

It is important that these impact levels include a range that allows for the widest possible array of impacts. This allows for the relative severity of an impact to be appreciated across projects. It is also recommended that the categorisation of impacts allow for adverse as well as beneficial impacts.

### Guideline:

- For LVA in Queensland

   a significance framework
   approach is preferred over
   a risk based method (i.e.
   likelihood x consequence)
- Impact levels should refer to a combination of effect (magnitude of change) and sensitivity of the receptor
- Impact ranking should be clearly defined for example through a significance matrix
- Impacts should range from adverse to beneficial
- Impact rankings should be graduated sufficiently to allow for the full range of potential impacts
- Where other specialist studies or local guidance is available, consistent ranking terminology should be adopted
- Objective terminology and clear conclusions should be drawn to describe impacts



Landscape and Visual Assessment AILA Guidance Note for Queensland

The aim of a Landscape and Visual Assessment is to understand the potential impact of a project so that any adverse effects can be mitigated.

Mitigation measures should be proposed as a means of avoiding, remedying or reducing potential impacts.

These measures are typically developed following the identification of impacts, and can influence the design of a project, or may be in addition to the original description of the project. These measures can be designed featires, or may be ongoing management and maintenance strategies.

Mitigation measures should therefore aim to avoid and reduce adverse impacts as far as reasonably practicable during the construction, operation and decommissioning phases of a project.

A section of the Landscape and Visual Assessment (LVA) should be dedicated to outlining the proposed mitigation measures. This section most commonly follows on from the assessment of potential impacts and should be informed by the existing character and visual amenity conditions.

Mitigation, as a first priority, should aim to eliminate or minimise adverse impacts through careful upfront planning and design of the project. In this way the mitigation becomes incorporated into the project.

This is sometimes referred to as 'inherent' mitigation.

Mitigation treatments must reduce visual effect and or sensitivity factors.

Visual effects are reduced by 'at site treatments'. These treatments achieve screening and or higher levels of visual integration of the proposed development with the landscapes of the location.

Mitigation measures should also consider 'receptor treatments'; being those treatments that occur outside of the project site, in public or private properties that are impacted by the development. Such treatments also will either seek to screen and or integrate the proposed development depending on a range of view factors.

Where mitigation measures require time to have an effect, (e.g. growth of screening plants) this should be explained, and maintenance requiremets specified.

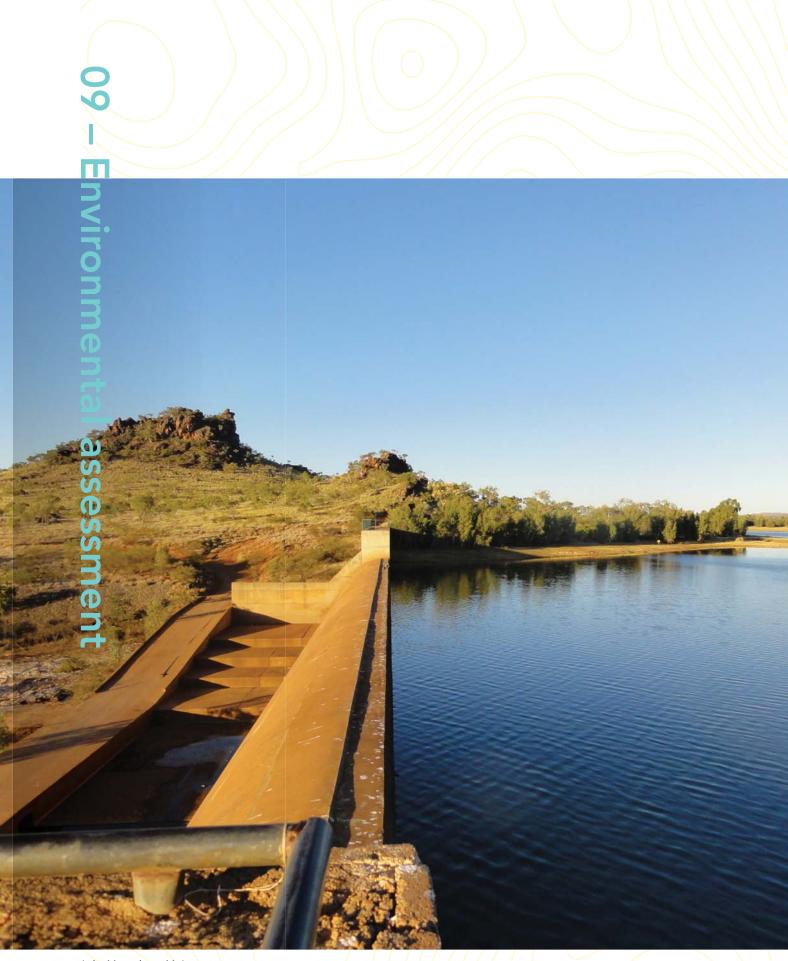
Landscape and visual mitigation factors should aim at reducing adverse visual impacts to acceptable levels. However, where this is not possible, there may be opportunities to provide landscape improvements that offset an adverse impact.



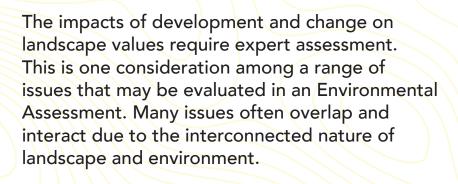
- Mitigation measures can be more than shrubs and screen planting
- Mitigation measures should respond to the identified impacts
- Onsite and offsite mitigation opportunities should be considered
- Other opportunities for considered to offset adverse impacts



View from Castle Hill, Townsville



Lake Moondarra, Mt Isa



For example, there are often issues of ecology, heritage and social issues which influence the perception of landscape and visual values. However, specialists' evaluations should be clearly defined and focused on their area of professional expertise.

The purpose of environmental assessment is to provide information to assist decision-making. Therefore, it may be appropriate for a landscape and visual assessment to use rankings and language consistent with other studies being undertaken as a part of the assessment process for consistency of reporting.

17016 11 11

### Guideline:

- Landscape and Visual
   Assessment (LVA) undertaken
   for the purposes of an
   Environmental Impact
   Assessment should respond
   to the project specific terms
   of reference
- Be clear about the scope of the LVA
- Describe the extent and purpose of any stakeholder and community input
- Identify any areas where overlap and interaction occur with other environmental disciplines.
- Consider the strategic and cumulative impacts where appropriate
- Identify the limitations of the study and data and highlight any further studies or information required

