



# Views and Vistas Scenic Landscape Review

**Prepared for Wingecarribee Shire Council** 

July 09 project no 4043-00

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### issue register

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### 1 Introduction

Wingecarribee Shire Council is an area of approximately 130 kilometres south west of Sydney centre located within the Southern Highlands of NSW. The area has been a popular tourist area for many years dating back to the mid 1800's where its scenic attractions and cooler summer climate made it an ideal retreat from Sydney. The shire is rural in nature, with a number of towns and villages set within the varied landscape and topography. It has significant historic buildings, properties and landscapes. The combination of the visual, heritage and natural resources continue to make it a popular tourist destination for weekends, daily trips and longer visits.

The significance of the heritage places and the cultural landscapes have been identified in planning controls developed by Wingecarribee Shire Council.

As a result of the tourist popularity of a 'country drive' throughout the Shire as well as the higher numbers of individual properties, significant boundary planting along tourist roads and property boundaries has occurred. In many cases this planting has been through hedge planting of fast growing species, with a dominance of *Cuppressus leylandii* planted as tall hedges. The purpose of this planting is assumed to be a combination of factors.

- To provide privacy along road frontages,
- To identify entries and gates into properties,
- To mark the boundaries of a property as well as the fence lines and paddock layout.

### 1.1 Brief and response to brief

Wingecarribee Shire Council has identified a problem resulting from these hedge plantings particularly along the road frontage boundaries due to the tall height of the species being planted, its rapid growth and the lack of pruning to maintain the height of the hedge planting. The concern of Council is that a balance between privacy and maintenance of the views and vistas along the roads and tourist thoroughfares within the Shire needs to occur.

In order to address this issue Councillors reviewed the tourist roads, identified views and vistas available from these roads and undertook a subjective scenic rating of the views from these roads. This was prepared as an inventory with results marked up on maps

#### 1.1.1 Brief

The brief for this study was to review the survey mapping undertaken and to prepare an independent, professional assessment of the views and vistas from the scenic/tourist roads within the Shire. This was to be undertaken by a suitably qualified Cultural Landscape Architect and to result in an objective assessment of the views and vistas. Survey mapping was also to be prepared.

The outcome of the study was to enable Council to 'be in a position to:

- Substantiate the identified significant views and vistas throughout the Shire,
- Present a case to the Department of Planning for statutory provisions restricting vegetation screen planting to be included in environmental planning instruments.



Clearly articulate the qualities and characteristics present in significant views and provide Council
officers a set of criteria that may be applied to development applications to identify significant views.'
(Consultant Brief)

DEM were commissioned to undertake the study on 29 September 2008. DEM's landscape architectural division, (previously Landscan in association with Professor Ken Taylor) had completed the 'Historic Cultural Landscape Assessment for Wingecarribee Shire', as part of the Heritage Study commissioned in 1990. This study resulted in the zoning of Environmental Protection Landscape Conservation areas within the Shire, due to the high cultural landscape qualities.

#### 1.1.2 Response to Brief

DEM responded to the brief by setting out a methodology that would professionally review the views and vistas from the tourist roads, map these views and provide a series of assessments through visual quality criteria and pro-forma sheets from each of the tourist roads.

### 2 Methodology

The Methodology for this project has been based on providing an independent assessment of the views and vistas from the scenic roads. This has been undertaken through:

- Detailed Field Assessment from the tourist roads identifying the views and vistas available from each road.
- Defining the visual significance of the views using a rating scale for the visual quality based on clearly defined criteria.
- Visual Quality Methodology has been based on a combination of factors including;
  - Observers position,
  - Visibility distance
  - Topography/Landform
  - Water Present- and character of water
  - Vegetation Characteristics
  - Historic Cultural Landscape
- Mapping the viewpoints used for the assessment
- Mapping the resulting scenic road rating
- Summarising in this report

### 2.1 Visual Quality Rating Methodology

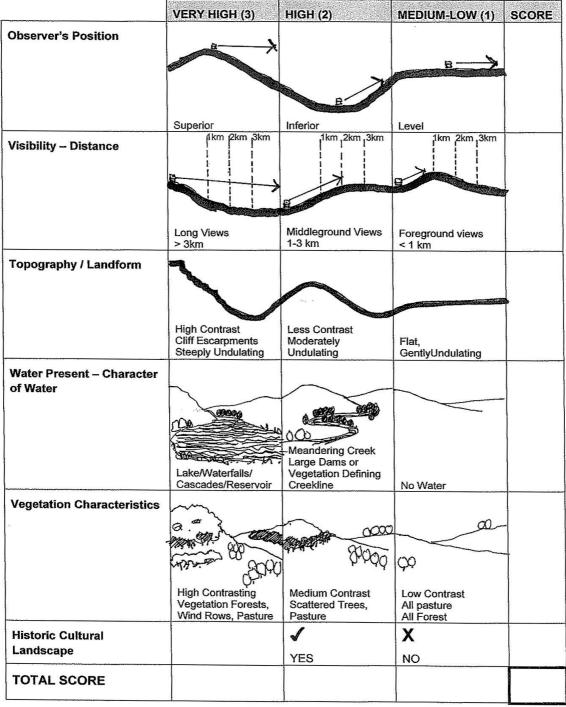
The following table 1 identifies the visual quality criteria used for the rating of views from each viewpoint. This table provides a guide for assessing visual quality within the Shire for this study and is a tool that can be taken in the field to assess and rate views from selected viewpoints.



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**Table 1: Assessment of Visual Quality Methodology** 

### ASSESSMENT OF VISUAL QUALITY: METHODOLOGY



**Very High Visual Quality** 

Scores 17-14

**High Visual Quality** 

Scores 13-10

**Medium Visual Quality** 

Scores 9-8

**Low Visual Quality** 

Scores 7-6



### 2.2 Description of Methodology Factors

The diagrams within Table 1 provide a clear indication of the varying factors that are considered as the major components present within the Wingecarribee landscapes that contribute to the visual quality of the view from the viewpoints available. These factors are not considered in isolation but in combination to achieve the resulting visual quality score. In isolation one element may rate differently due to specific factors within the view, however the combination of these factors is generally the most objective manner to score visual quality. Other factors can be included also, however they have not been included as major contributors to the visual quality within the views generally available within the Shire.

Visual quality and the perception of what is a high quality view is affected by many individual and cultural issues- ethnic background, age, education, are some of the factors that contribute to the perception of view. Studies have been carried out to provide an assessment of scenic quality, by utilising a number of scenes as markers for scaling a landscape and its perception. Generally the factors included here incorporate the most common perception factors contributing to visual quality.

**Observer's Position:** The position of the observer affects the perception of the view and the visual quality rating.

- Superior (High): The observer is higher than the surrounding landscape, and the whole landscape is visible providing a clear understanding of the grouping and linear nature of elements in the landscape, the relationship of the parts that make up the view are visible. Longer views are generally available.
- Level: The observer is at a similar level to the surrounding landscape. Viewing distance is generally less than superior views.
- Inferior (Low): This occurs where the observer is lower than the surrounding landscape and looks up to elements. Ridges become more dominant, and surrounding ridges can also restrict the view catchment or the extent of view available.

**Visibility - Distance:** The distance that is available from a viewpoint usually affects the visual quality rating.

- Long Views > 3 km: Longer views allow a greater perception of the entire landscape. These long views are usually available from lookouts and high vantage points and allow an appreciation of the scenic quality of the view. A very high visual quality results.
- Middleground Views 1-3 km: Middle distance views and perception of some detail in the views is available resulting in a high visual quality.
- Foreground Views < 1 km: Detail is more visible within foreground views, however the extent of view is less and the appreciation of the whole of the landscape is less available resulting in a medium to low visual quality.

**Topography – Landform:** The topographic contrast affects the visual quality

- High Contrast in topography, steeply undulating landform, cliffs and escarpments all contribute to a very highly scenic landscape and very high visual quality.
- Moderately undulating topography has less contrast, less varied views and generally results in a high visual quality.



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 Flat to gently undulating topography has little contrast, and little variety in the view and generally results in a medium to low visual quality.

**Water Present- Character of Water:** Water is a major factor in the perception of high quality views. Most people regard views with water in them as having a high visual quality.

- Lakes/ Waterfalls/ Cascades and reservoirs all include large bodies of water or moving water, that is very highly scenic and is very high in visual quality.
- Meandering creeks, large dams and areas where a meandering creek is defined by vegetation, even though the actual water may not be visible have been identified as resulting in a high visual quality. The extent of visible water is less, however the variety that results from presence of water elements within the landscape is high.
- No water within this factor of scoring results in a medium to Low visual quality.

Vegetation Characteristics: The contrast of vegetation within a landscape affects the visual quality.

- High contrasting vegetation including forests, with pasture, tree clusters and wind row planting all
  contribute to varied textures, colours and forms within the landscape. This contrast results in a very
  high visual quality
- Medium contrasting vegetation including scattered trees and pasture. generally results in a moderate contrast of textures, colours and forms resulting in a high visual quality.
- Low contrasting vegetation where the vegetation is all one element, such as all forest or all pasture, results in less contrast and less visual quality. This needs to combine with the other factors to give a true representation of visual quality as a forest on its own can contribute to a high visual quality.

**Historic Cultural Landscape:** Whether the area is within the key historic cultural landscapes assessed within the Shire, gives it an importance in relation to the visual quality rating. The key historic cultural landscapes are areas where the cultural heritage significance and importance in the history of the area are contributing factors to the historic landscape setting of the Shire. These landscape need to be conserved and they are therefore an important factor to the visual quality scoring.

- Key Historic Cultural Landscape: If the area is within a key historic cultural landscape it has been given a high visual quality rating
- Not within a key Historic Cultural Landscape: it has been given a medium to Low visual quality rating.

### 2.3 Scoring of Visual Quality

The scoring of visual quality using the combination of the factors described previously has resulted in total visual quality scores for each viewpoint. The scoring provides an objective assessment of the visual quality based on the contributing factors.

Very High Visual Quality Scores 14-17 (17 is the highest possible score)

High Visual Quality Scores 10-13

Medium Visual Quality Scores 8-9

Low Visual Quality Scores 6-7 (6 is the lowest possible score)



### 3 Scenic Road Rating

The selection of roads and views for the study have been based on the tourist maps available from the Tourist Information Centre, nominally the Craigies Visitors' Map Southern Highlands NSW, (Reference 13<sup>th</sup> Edition 2007), as well as the marked up maps from the Councillors. The roads selected have been roads that are recognised tourist roads, as well as roads surrounding key tourist towns and villages. In some cases roads that are under threat of change, due to significant hedge planting that is currently occurring have been included.

### 3.1 Fieldwork and Assessment

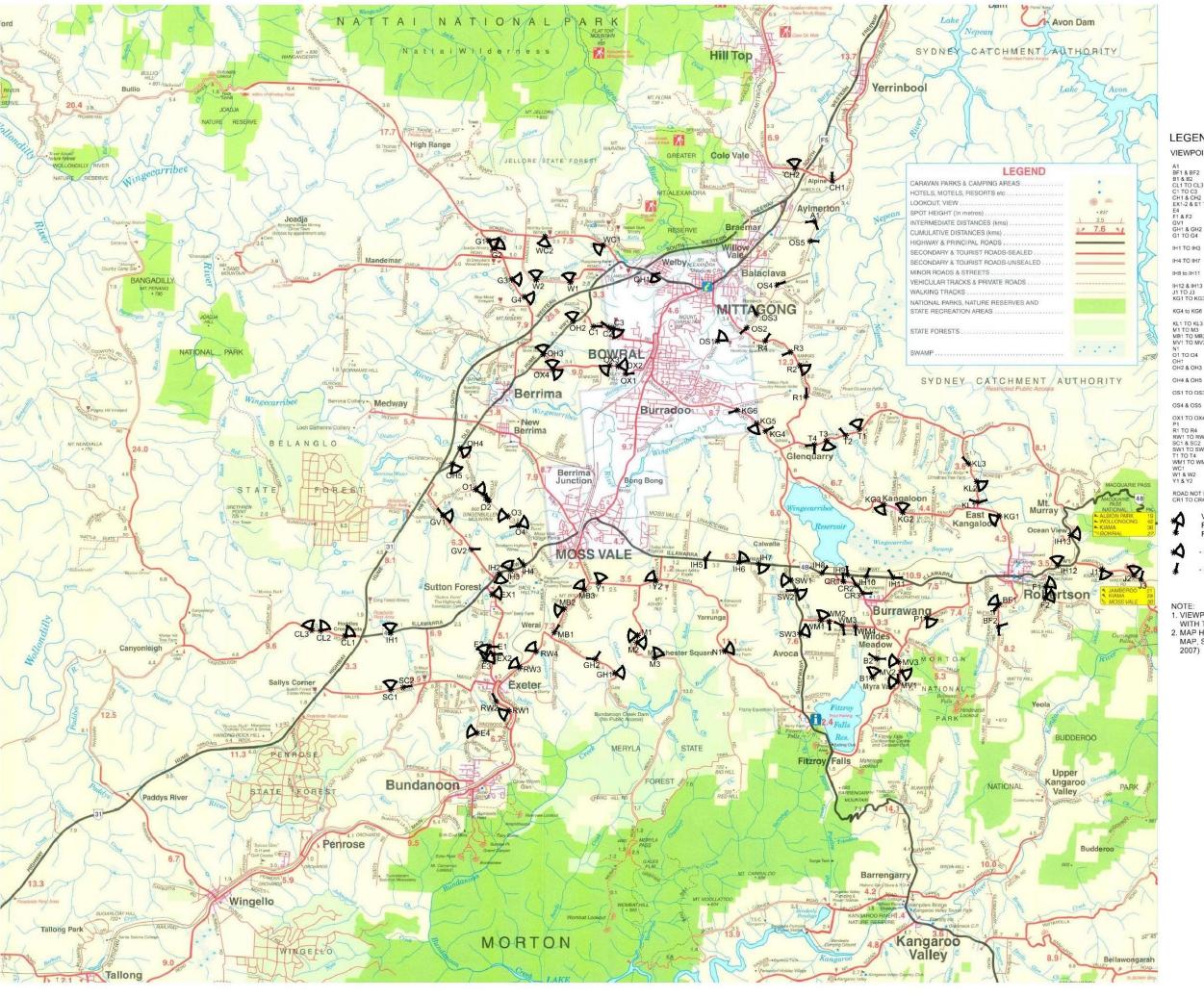
A number of days were spent driving the nominated roads, selecting the representative viewpoints along these roads and recording these views. This was done by photographic record, site notes and completing the proforma sheet for assessment of the visual quality for each road. A blank proforma sheet was used to record the elements that were common for all roads.

- Road location and description including an extract map.
- Visual Quality Assessment table completed. Where portions of the roads varied in the visual quality score this was noted and included within the viewpoints and the table.
- Recording notes with the photos of variations in the views and contributing factors to the analysis.
- Description and General comments providing a description of the elements within the views. Particular note was made of areas where Cuppressus leylandii and other hedges have been planted that are affecting the view, or that may in the future affect the visual quality, the extent of view and the overall perception and appreciation of the landscape.

### 3.2 Visual Quality Viewpoint Assessment

The completed visual quality pro-forma sheets for each road and viewpoint are included within **Appendix A: Visual Quality Assessment Sheets.** The sheets are arranged in alphabetical order and provide the comprehensive assessment of the visual quality for each of the roads and viewpoints nominated. Some roads have multiple viewpoints and where panoramic photos have been taken all of the viewpoints have been mapped on the following **Figure 1: View point Locations**.

The summary of the Scenic Road rating resulting from the assessment of the viewpoints is included in **Figure 2: Scenic Road Rating**. This also provides the extent of the road visual quality assessment.





### VIEWPOINTS ROAD NAMES

C1 TO C3 CH1 & CH2 EX1-2 & E1 TO E3 E4 F1 & F2

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to Oxleys Hill Road Junction)
OLD HUME HIGHWAY3 (From Taylors Avenue Junction to
South Western Freeway Junction)
OLD SOUTH ROAD 1 (From Bowral and Bong Bong road Jun
Mittagong)
OLD SOUTH ROAD 2 (Diamond Fields Road Junction, Lowe

PEARSONS LANE RANGE ROAD RINGWOOD ROAD & WERAI ROAD SALLYS CORNER ROAD SHEEPWASH ROAD

VIEWPOINT LOCATIONS

REFER TO VIEWPOINT ASSESSMENT SHEETS FOR PHOTOS FROM THESE VIEWPOINTS

- PANORAMIC VIEWPOINT PHOTO LOCATION

SINGLE VIEWPOINT PHOTO LOCATION

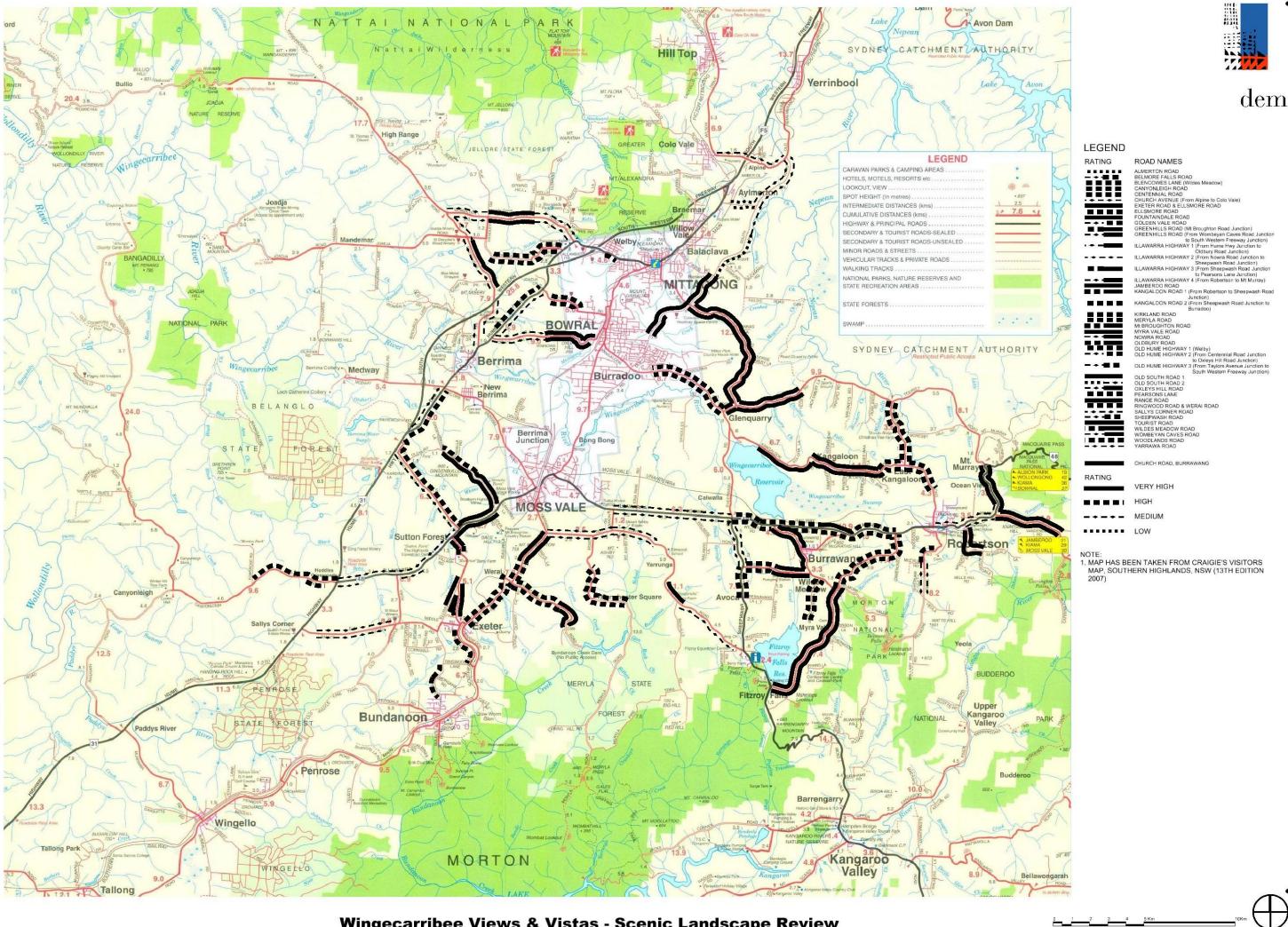
NO IE:

1. VIEWPOINT LOCATIONS SHOWN CORRESPOND WITH THE VIEWPOINT ASSESSMENT SHEETS.

2. MAP HAS BEEN TAKEN FROM CRAIGIE'S VISITORS MAP, SOUTHERN HIGHLANDS, NSW (13TH EDITION 1997).

Wingecarribee Views & Vistas - Scenic Landscape Review

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# 4 Impacts of the Hedges on Significant Views and Vistas

The rating of the scenic roads within **Figure 2 Scenic Road Rating**, has provided a map of the roads where significant views and vistas are available. The very high, high, medium and low rating within this map identifies these areas where significant views and vistas are available. Those having a very high and high rating, are those that have the greatest significance in terms of the views and vistas available from the road.

In many cases these significant views are being affected by hedgerow planting that has occurred within the last 10 years. The majority of this hedgerow planting is being undertaken using the very fast growing *Cuppressus leylandii*.

In order to assess this impact it is important to look at the context of this planting. The historic landscape character of the Wingecarribee Shire has traditionally used windrow planting to define paddock layouts and to punctuate ridges. Indeed the planting of hedgerows and windrows has been considered an important contributing factor in the development of the cultural landscape, where combinations of hedgerows, structures, cultural vegetation and natural elements occur. These demonstrate the interrelationship of events, places and people through time to give a sense of history and meaning to the landscape.

The historic cultural landscape assessment for the shire identified pine shelter belts as reinforcing the topography and paddock layouts, and affecting the scale and vegetation patterns of the landscape. The difference between the historic pattern of windrow planting and pine shelter belts lies within the character of the species being planted and the manner of the planting. Figure 4 and 5 illustrate this difference.



**Figure 3 Traditional Pine Shelter belts**Planting of pines is situated on ridges, is not continuous and incorporates open canopy trees that allow some

light and view through. Trees are slow growing. A short row of Cuppressus is present below the ridge.



Figure 4 Cuppressus leylandii hedgerows

Trees are very dense from the top to the ground, screen all views and light and are very rapid in growth, changing the visual character of the landscape very quickly.





**Figure 5 Traditional Pine Windrow** 

Planting of pines is not continuous for the entire paddock and allows views of Gingenbullen mountain. Trees are slow growing.



Figure 6 Cuppressus leylandii Windrow

Planting is continuous and screens views. Views of Gingenbullen mountain will be screened within the next 3-5 years as these trees are fast growing.

### 4.1 Examples of views disappearing

There are many situations where the scenic views are disappearing at a rapid rate. We have compared the landscape of Wingecarribee Shire over the last 18 years between approximately 1990 and 1992, when previous studies were carried out for the Council, with the current study in 2009. This has enabled the changing nature of the landscape to be assessed.

A number of comparative views follow to provide a visual description of these view changes over time.





Figure 7 View from Canyonleigh Road in 1992 showing long distance views



Figure 8 Current View from Canyonleigh Road in late 2008 showing long distance views becoming screened by hedgerow planting. This view will be screened within the next 3-5 years.

In addition to these view changes over time, the comparison between an open view from a road on a ridgeline and a closed view can be seen in the following figures. What can be seen from these photos is the closing in of views that has and is continuing to occur as a result of continuous hedge planting, particularly along the roads and road frontages.

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Figure 9 *Cuppressus leylandii* hedgerows along Greenhills Road

These trees screen the view to the right of the photo totally. If there were more spaces between the long hedgerows glimpses of the view would be available.



Figure 10 Existing view within the hedgerow on Greenhills Road

The panoramic view is visible in the small gap between the hedges. This gap is too small to appreciate the view from the road.



Figure 11 Cuppressus leylandii hedgerows

Tall trees closely planted along Jamberoo Road will obscure these scenic views towards Kangaroo Valley totally within approx. 5 years or less.



### 4.2 Inappropriate hedges

The nature of the planting that has occurred within the last 10-15 years at Wingecarribee has changed the landscape character. This character is evolving, as large rural properties are being subdivided, the rural nature of the properties is giving way to hobby farms and non working farms and the scale of the property holdings is becoming smaller due to the subdivision into smaller parcels of land.

Combined with this change in subdivision pattern, is the impact of the hedges along these boundaries. As the hedges are defining the boundaries, the boundaries and paddocks are more sub-divided, the potential for screening and loss of view increases.

A drive around the roads within the Shire cannot go unnoticed with the quantity, scale and length of the single monoculture planting of *Cuppressus leylandii*. In many cases the plants are located at 2 metre centres in a double row, making the visual enclosure more immediate and dense. Growth rates of at least 1 metre per year, and in many cases where favourable weather conditions occur, double this rate means that a solid wall of planting can occur within 1 – 2 years, when viewed from level ground and 5 + years when viewed from a superior viewpoint. These plants grow into very tall trees (>40 metres) and are capable of overpowering, overshadowing and totally screening a road frontage where existing high quality views are valued.

The scale, density and lack of variety in this monoculture of planting is the problem affecting the scenic landscape and rural road views. Particularly where hedges are planted continuously on one side of the road for any length beyond 100 to 200 metres, or where they are planted on both sides of the road, a tunnel effect results and no views to any of the rural landscape are available. This will continue to create a case of the existing scenic views disappearing altogether and the value of scenic rural drives disappearing at a rapid rate through landscape change. The affect of this will be to significantly reduce the tourist value of the scenic tourist roads, the amenity for the residents and the heritage values of the cultural landscapes of the Shire.

The historic circulation routes, within the Shire were identified as important components of the historic cultural landscape. The lanes, the early routes through the Shire opened up by Hoddle, as early as 1830, and the explorer routes are important visual and heritage connections. Many of the landscape conservation management recommendations of the Historic Cultural Landscape Assessment include preservation of views from these roads.

The line of the Old South Road marks the original line of road through the area, constructed in 1819 after initial exploration by Hume, Throsby, and Wild. This road provides a very scenic crossing of the Mittagong range with long views to the north beyond Mittagong. These views are becoming more overgrown, making the preservation of these views important in the appreciation of the history of the area.

## 4.3 Guidelines for the protection of significant views from high visual quality roads.

Whilst it is understood that views change and landscapes evolve there are visual management guidelines that can be adopted to control this process and preserve the important high quality visual and cultural landscape that is a major asset and makes these areas an important tourist attraction of the Wingecarribee Shire. The protection of these views is recommended to maintain the scenic quality of the region for both residents and visitors alike. The views and vistas from these scenic roads provide orientation and landmarks, which enhance the day to day experience of living, working and visiting the region.



The landscape Conservation Management Recommendations included in the Feb 1992 report 'Historic Cultural Landscape Assessment' included Landscape Conservation Management Recommendations. These included 'protection of the existing character of the landscape unit is a high priority to maintain its cultural significance' and '…retain the rural character as seen from these roads.' In order to do this it was recommended that a Local Environment Plan for the key historic landscape units be prepared with additional detailed analysis of the historic landscape fabric. Council prepared a DCP No 53 Siting Design and Landscaping of Rural Developments in 2004.

This Views and Vistas Scenic Landscape Review recommends the following guidelines are adopted as a minimum, for the protection of significant views within the shire and views from the very high and high visual quality roads identified in the scenic road rating. These include:

- Where hedges or screen planting are proposed an assessment of the impact of that planting on the existing views should be made, using the pro-forma developed for this study.
- The assessment of the impact should be undertaken with an assessment of the current view without the hedgerow or vegetation screen. An assessment of the view with the screen should then be made. If the assessment results in a lowering of the visual quality score from its current value- ie high reduced to medium, then the extent or height of the hedgerow should be varied.
- Planting of hedges or windbreaks should consider the character of the existing landscape and species selection should be based on the historic and/or natural vegetation characteristics of the location. The proposed plant species, quantity, layout and size at planting should be considered.
- The required maintenance of a hedge or windbreak must be considered prior to planting. The required pruning and maintenance of height regime should be considered. Where hedges will not be able to be pruned to control their height and growth, an alternative plant species that does not require strict pruning should be considered. A maintenance schedule of proposed pruning heights and widths should accompany any hedge or windbreak planting proposal.
- Fast growing vegetative screens that do not allow any partial views or glimpses through or around are not preferred.
- The proposed standards for vegetative barrier planting outlined by Council in the DCP No 53 are supported as the minimum requirement, and in some cases recommended increases in the guidelines are suggested. These include lengths and widths of vegetation screens are to be limited to a maximum of 50 metres in any continuous planting. The gaps between planting should be equal or more than the length of the screen. ie minimum 50 metres, and preferred greater than 50 metres. The length of any planting within a property frontage, should not exceed half the length of the allotment frontage to a public road and be less than 50 metres length in any continuous length.
- Detailed landscape plans should be provided for any new development outlining the proposed landscape treatment.

As Council currently only has control over landscape works associated with a Development Application, then these guidelines can only be suggested and encouraged for other landscape works, not requiring a Development Application. In order to prevent the loss of these significant high quality scenic views it is recommended that a landscape plan is required to be submitted to Council for any planting that exceeds the current DCP No 53 'Section D Landscape and Landscaping' criteria. The planning provisions requiring landscape plan submissions to Council need to be included within the LEP.



In order for Council to be able to consider the impacts of any vegetation screen planting as hedges, windrows or massed plantings it is suggested that LEP provisions should be included within the LEP to protect very high and high scenic vistas that make it necessary for a Development Application to be lodged for vegetative screening. The very high and high scenic vistas would be those identified on the Views and Vistas Scenic Landscape Review –Scenic Road Map.

The potential threats to the landscape character of Wingecarribee Shire if these guidelines cannot be implemented within the planning provisions available to Council are:

- Panoramic views over the landscape from the scenic rural roads will be lost. The extent of this loss will depend on the prevalence of further hedgerow planting that is currently occurring.
- The experience of driving along some roads may result in a tunnel effect of hedgerows both sides, with no appreciation of the landscape beyond.
- Lack of views to landmarks making orientation whilst travelling difficult.
- Monotonous views and vistas, with a loss of scenic quality and the subsequent impacts of this on amenity and possible visitor attraction.
- Loss of light and amenity along these roads, through overshadowing.
- Loss of perception of one's position in the wider landscape, and the heightened experience obtained from long distant views over varied high scenic quality, natural and cultural landscapes.
- The importance and conservation of the historic cultural landscapes within the 7B Environmental Protection- Landscape Conservation zones will be diminished.

Possible wording for inclusion in the LEP 2009 could follow the Department of Planning's Practice Note PN09-002 with the following inclusions:

#### 'Scenic Protection

- (1) The objective of this clause is to protect high and very high value scenic vistas.
- (2) This clause applies to land identified as high and very high scenic views from roads identified within the Views and Vistas Scenic Road Map.
- (3) Despite any other provisions of this Plan, development consent is required for any of the following;
  - (a) the planting of vegetation screens (native or exotic) with a maximum length of 50 metres
  - (b) that will mature to a height in excess of 2 metres.
  - (c) will alter the existing views and vistas available along routes identified on the Scenic Road Map within high and very high scenic views.
- (4) Before granting consent to development to which this clause applies, the consent authority must be satisfied that the plantings;
  - (a) provide sufficient scope for maintaining views and vistas
  - (b) do not result in screening of over 50 percent of the frontage of any property
  - (c) do not conflict with the objectives of the key historic cultural landscape zones.
- (5) For the purpose of this clause Views and Vistas Scenic Road Map means the Wingecarribee Local Environmental Plan 2009 Views and Vistas Scenic Landscape Review- Scenic Road Rating Map.'



### 5 References

Craigies Visitors Map Southern Highlands NSW, (Reference 13<sup>th</sup> Edition 2007)

Dept of Environment, UK. Aug 2005. 'Nuisance High Hedges- Consultation Document and Questionnaire' Hedgewise- Community Brochure various extracts.

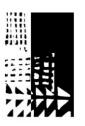
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Wingecarribee Shire Council, April 2006. 'Development Control Plan 53- Siting, Design and Landscaping of Rural Developments'.

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6 Appendix A: Visual Quality Assessment Sheets.

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