

## WHAT IS LANDSCAPE?

## Qualities of landscapes include:

- Aesthetic quality.
- Cultural landscapes or historical landscapes traces the human interaction with the natural systems that have formed the landscape.
- Sense of place the meanings that residents assign to a landscape through living in it.

- Dreamtime Aboriginal culture's meaning embedded in the landscape.
- Sustainable landscapes linking aesthetic quality with the sustainability of landscapes.
- Stimulus of other senses smell, sound, touch.
- Emotional response (e.g. familiarity).



## THE SIGNIFICANCE OF THE LANDSCAPE

Am I glad to be home again? I cannot tell you how glad. The Australian landscape has always seemed to me the most beautiful in the world as well as the most mysterious. When I first saw the brown, hot earth from the ship's deck at Fremantle I cannot tell you the emotion it gave me – after all that confounded sappy English green.

Sir John Longstaff (artist), 1910.

Till well into my life, houses, places, landscape meant more to me than people...It was landscape which made me long to return to Australia while at school in England. It was landscape more than anything which drew me back when Hitler's War was over.

Patrick White, 1981

"The beauty of the Inman Valley, and the country between Cape Jervis and Yankalilla, with its heathaze of eucalypts on a summer's day, and glimpses of a cool sea, the road lined with dusty Christmas bush in flower are memories of a wonderful boyhood. It seems terrible to me that this country has been utterly devastated so that it might support a few sheep. The trees which Hans Heysen immortalized have almost all been destroyed. They are irreplaceable and for what paltry gain!"

Sir Mark Oliphant, 1969



## **VIEWS OF THE EARLY SETTLERS**

An early writer in Adelaide in 1843 stated "I can scarcely imagine a more interesting scene than to observe a country in the course of being rescued from nature." (Bennett, 1943).

George French Angas (1847) proclaimed that the sound of the woodman's axe echoing through the solitude of the Mount Lofty Ranges represented the "dawn of civilisation and industry."

"And for the face of the country, it has become more like a British country, covered with Royal forests, aristocratic estates, thriving farms, and flourishing gardens,..." (Butler,1977).

A colonist in the Southern Vales wrote in the 1850s; "the wild bushland is fast disappearing to make way for 'civilization'. There is, indeed, a certain sadness associated with our pioneering work." (Whitelock, 1985).



## **EFFORTS TO PROTECT THE RANGES**

During the 1960s through to the 1980s, the Mount Lofty Ranges Association was active in promoting the conservation and protection of the Ranges. The University of Adelaide's Adult Education Department sponsored a number of seminars on the future of the Ranges – Whitlock, 1969 and 1974, Corbett & Whitelock, 1977.

A proposal which gained much prominence at the time was to establish the Mt Lofty Ranges as a national park in the English model, privately owned with farming and towns and industry but under tight planning controls to safeguard its landscape amenity.

"Scenery is a resource and it must be considered along with other resources if rational planning decisions are to be made"
Australian planner, George Wright, 1974.



## **EFFORTS TO PROTECT THE RANGES**

The State Planning Authority conducted a study of the Mt Lofty Ranges in 1972-3 and in its report (SPA, 1974) recommended:





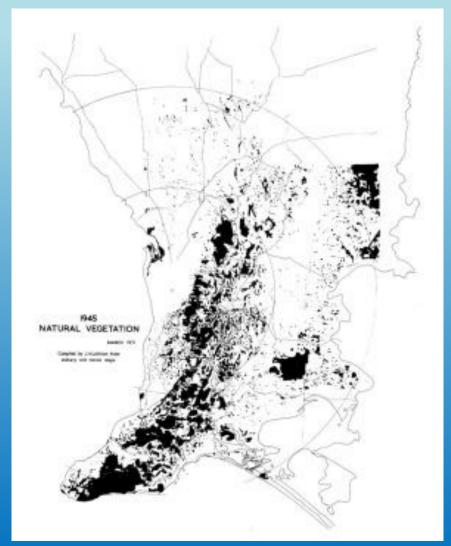
"The protection of natural beauty should be the overriding policy governing all decisions relating to the development and use of land in the Mount Lofty Ranges."

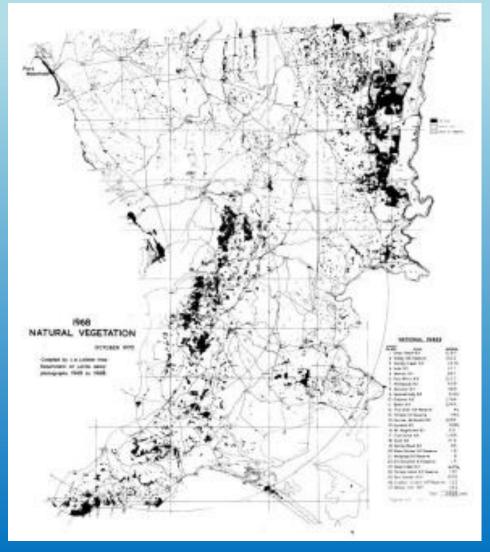
"The outstanding conclusion of the study is that the Mount Lofty Ranges are one of South Australia's greatest natural assets and their beauty must be preserved. However, the Ranges are a valuable source of food, timber and minerals, they are a major source of water and they provide outlets for recreation and places for people to live. All these activities must be accommodated but governed by a policy which places preservation of natural beauty foremost."



## **CHANGE IN THE LANDSCAPE**

Comparing the extent of natural vegetation in 1945 with that remaining in the late 1960s, I found that it had been reduced by over half. In terms of scenic quality, opening up the tracts of natural vegetation may have enhanced it, albeit with severe ecological consequences.





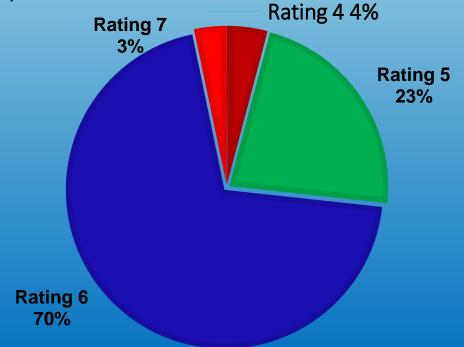
## **CHANGE IN THE LANDSCAPE – MOUNT BARKER SUBDIVISION**

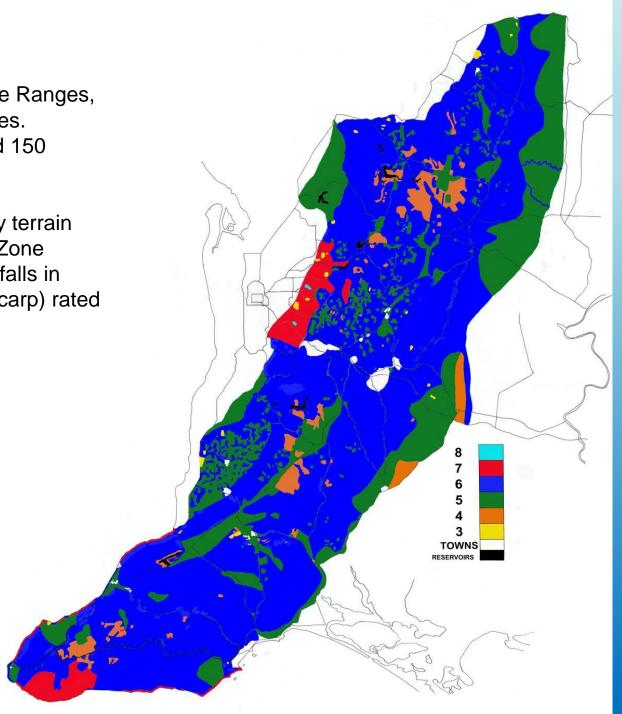


## **AESTHETIC QUALITY OF THE MT LOFTY RANGES**

In 2015, working in conjunction with the World Heritage bid for the Ranges, I carried out an assessment of the landscape quality of the Ranges. This was based on an Internet survey with 519 people who rated 150 photos.

Rating 6 dominated with 70% of the Ranges – this due to the hilly terrain with many large trees and water in dams. The central Hills Face Zone overlooking Adelaide, and Deep Creek rated 7. The cliffs & waterfalls in Waterfall Gully and Morialta rated 8. Barren areas (e.g. Palmer scarp) rated 5 and pine forests rated 4.





## **MOUNT LOFTY RANGES**



Dense low trees 5.27



Dense medium height trees 6.76



Dense tall trees 7.16

## Mt Lofty & Cleland

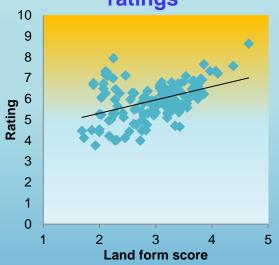


With transmission wires 5.92

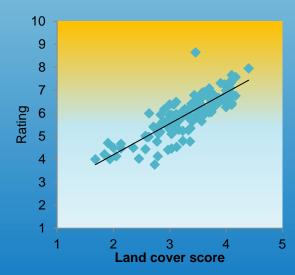


Without transmission wires 6.51

# All scenes: Influence of land form & land cover on scenic ratings

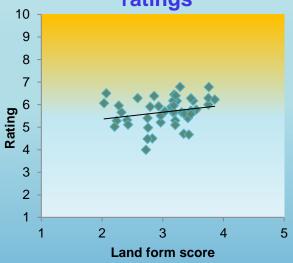


Trend line: y = 0.64x + 4.03,  $R^2 = 0.20$ 

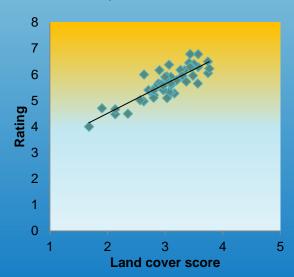


Trend line: y = 1.35x + 1.50,  $R^2 = 0.69$ 

## Grazing land: Influence of land form & land cover on scenic ratings

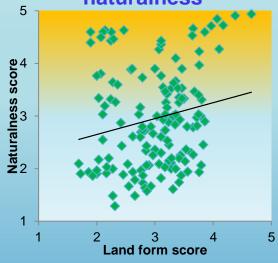


Trend line: y = 0.31x + 4.74,  $R^2 = 0.05$ 

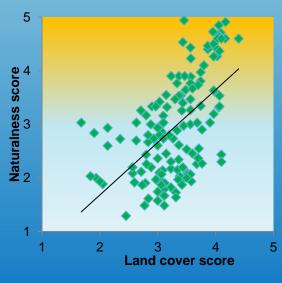


Trend line: y = 1.21x + 2.27,  $R^2 = 0.72$ 

## All scenes: Influence of land form & land cover on naturalness



Trend line: y = 0.30x + 2.05,  $R^2 = 0.04$ 



Trend line: y = 0.98x - 0.28,  $R^2 = 0.32$ 

## **SURPRISE FINDING**



Carey Gully green 6.04



Carey Gully yellow 5.97

A surprise finding was that autumn colours rated slightly lower than green. Three sets of scenes showed the same results:

Green	Yellow
6.04	5.97
5.36	5.31
6.51	6.41

#### **GENERIC RATINGS**

- Market gardens 5
- Orchards & vines on steep land 6,
- Orchards & vines on undulating land 5
- Farm dams & reservoirs 6
- Flat land with scattered trees 5
- Undulating land with scattered trees 6
- Steep land with scattered trees 7

## **NEGATIVE INFLUENCE OF VINES ON SCENIC QUALITY**

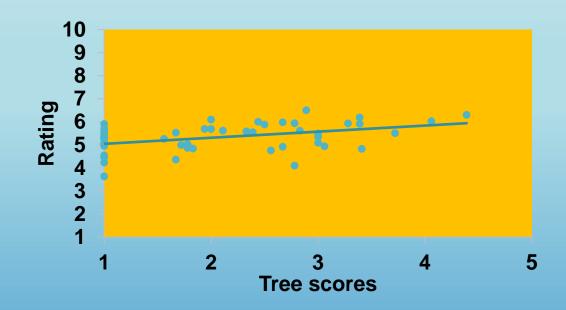
An interesting finding from an earlier Barossa Valley study was that the vines do not enhance the landscape, they actually diminish it.

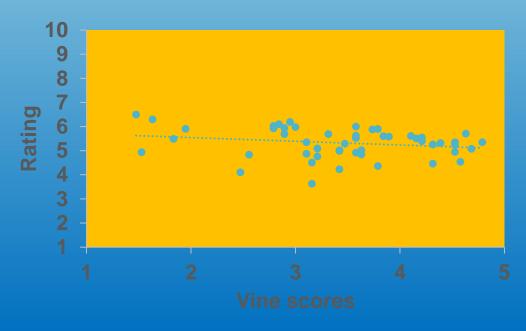
It is the trees around vineyards, along creeks & roadsides that enhance it.

Top graph - as the trees in the scene increase, so too does the rating.

Bottom graph - as the vines in the scene increase, the ratings decrease.







## INFLUENCE OF ORCHARD COVERS AND FIRES ON SCENIC QUALITY



Burfords Hill Rd, Kenton Valley. Covered orchard 4.03



Croft Road, north Lenswood. Covered orchard 5.94

The average rating of uncovered orchards is 5.47 while for covered orchards it is 4.99, a difference of 0.48 or about 9%. Thus covering orchards does reduce scenic quality.



Gawler - Kersbrook Road. 4.80



Gumeracha Forest 3.77

The impact of fires on scenic quality is substantial - by at least two units or around 40%.

## **QUARRIES**





Quarrying in the Hills Face Zone impacts the entire city.

Quarrying in the Hills presents to local residents noise, dust, heavy traffic, and occasional blasting.



## **PLANNING AND DESIGN CODE**

Until 2021, each council had their own development plan. Since then, the Planning and Design Code establishes Statewide planning policies and an on-line system indicates what applies to every property.

Landscapes and scenic quality are addressed in several policies.

#### **Hills Face Zone**

Preserve its <u>natural character</u> – this being its natural topography, native vegetation and colours, such as greens and browns of non-reflective earthen tones.

## **Productive Rural Landscape Zone**

Conserve the natural and rural character ... and sensitive environmental areas and scenic qualities of the landscape.

Dwellings, shops, tourist accommodation and large buildings are to be designed and sited and of a scale to reduce impacts and maintain a <u>pleasant rural character and amenity</u> and reduce impacts on scenic and rural vistas.

#### **Rural Zone**

Greenhouses used in horticulture to be sympathetic to surrounding rural landscape character and amenity. Industry, storage, warehousing, transport distribution or similar activities are sited, designed and of a scale that maintains <u>rural character and function and respects landscape amenity</u>.

## **Forestry**

Commercial forestry plantations are established where there is no detrimental effect on the ... scenic quality of the rural landscape.

## **Resource extraction (quarries and mines)**

Apart from requiring progressive reclamation and betterment of disturbed areas, there are no provisions regarding the landscape.

## **PLANNING AND DESIGN CODE**

## **Infrastructure and Renewable Energy Facilities**

Desired outcome: Manage adverse visual impacts on natural and rural landscapes.

The visual impact of above-ground infrastructure networks and services (excluding high voltage transmission lines), renewable energy facilities (excluding wind farms), energy storage facilities and ancillary development is minimised from townships, scenic routes and public roads by:

- a) utilising features of the natural landscape to obscure views where practicable
- b) siting development below ridgelines where practicable
- c) avoiding visually sensitive and significant landscapes
- d) using materials and finishes with low-reflectivity and colours that complement the surroundings
- e) using existing vegetation to screen buildings
- f) incorporating landscaping or landscaped mounding...

## Wind turbine generators

Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation: 2 km from settlements and towns.

Manage their visual impact on natural landscapes is managed by ensuring turbines are uniform in colour, size and shape with blade rotation and direction coordinated and tubular towers used as opposed to lattice towers.

## Solar power facilities

Not located on areas of high environmental, scenic or cultural value.

## LANDSCAPE SOUTH AUSTRALIA ACT 2019

The Landscape South Australia Act 2019 recognises and protects the intrinsic values of landscapes.

It acknowledges the nature, extent, quality and value of those landscapes and provides for the protection, improvement and, if relevant, rehabilitation, of those landscapes.

I take these provisions to mean that the Act enables the aesthetic component of the landscape to be recognised, protected and managed.

This would empower authorities to consider amenity and visual impacts in their consideration of policies and action programs.

The State Landscape Strategy identified the status of thirteen landscape components but landscape amenity is not included. Nor is it included in any of the 7 Statewide Priorities.

The priorities identified for the Hills & Fleurieu Landscape Board are:

- Land Regenerating biodiverse and highly productive landscapes
- Water Managing water resources sustainably
- Nature Conserving natural places, ecosystems and wildlife
- Climate Becoming a carbon neutral and climate resilient region
- Community Everyone caring for our landscapes



## HILLS & FLEURIEU LANDSCAPE BOARD

The Hills & Fleurieu Landscape Plan 2021-26 identifies 7 key challenges including soil acidity, bird & fish loss, weeds & pests, water, bushfires and global markets.

- 5 priorities
   Regenerating biodiverse and highly productive landscapes
   Managing water resources sustainably
- 2. Conserving natural places, ecosystems and wildlife
- 3. Becoming a carbon neutral and climate resilient region
- 4. Everyone caring for our landscapes

Each of these lists projects and strategies. None of these address landscape amenity directly.

The Grassroot Grants support not-for-profit community-based organisations, volunteer groups and individuals to run local projects that help care for our soil, water and biodiversity.

Grants can be used to kick-start a new project or build on an existing one for activities such as weed treatment, pest management, fencing, erosion management, revegetation and community education activities.

48 grants are listed covering diverse projects.

In addition, the Landscape Priorities Fund funds some larger projects.



## **OVERSEAS LANDSCAPE MEASURES**

In the United Kingdom, grants are available to protect and manage hedgerows and watercourses, trees and woodlands.

Protected Landscape areas grants are available to protect or improve the quality and character of the landscape.

The project should deliver:

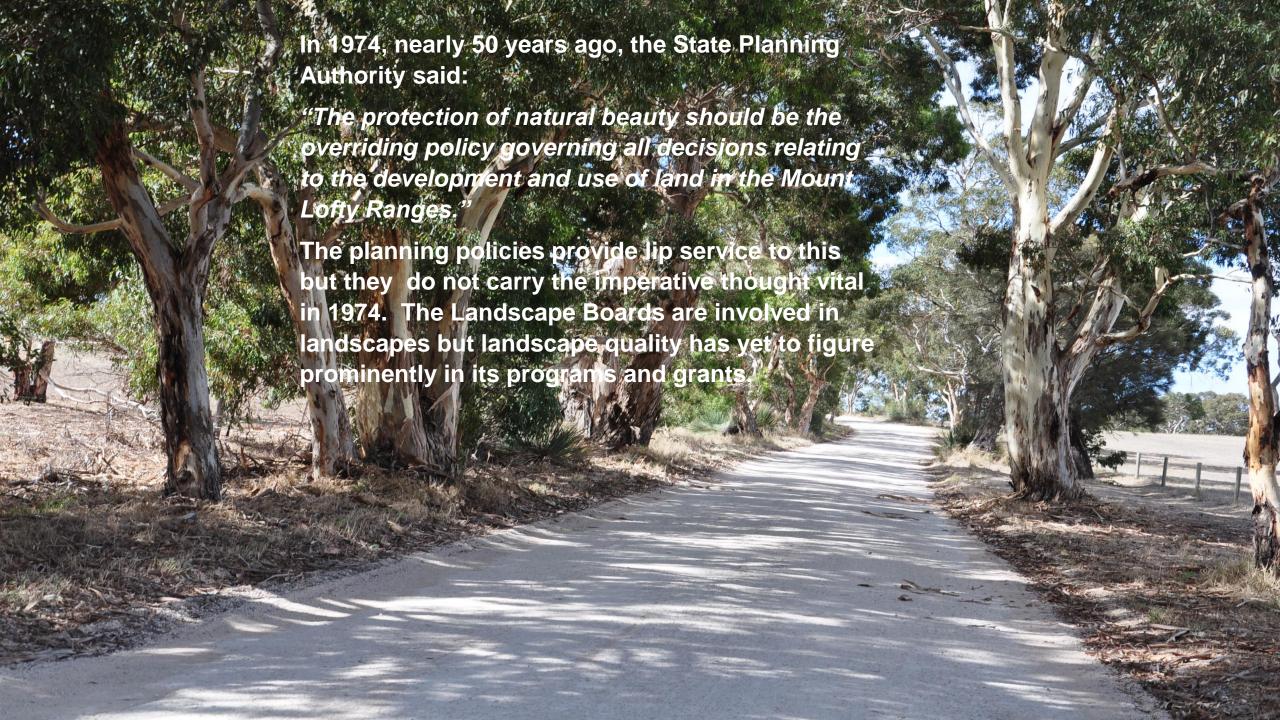
- more opportunities for people to explore, enjoy and understand the landscape
- more opportunities for diverse audiences to explore, enjoy and understand the landscape

Up to 100% of the project cost is available, providing there is no commercial gain.

In the European Union, agri-environment schemes (AES) establish basic rules that all farmers have to comply. Good Agriculture + Environmental Conditions (GAEC) provides funds for biodiversity conservation, pollution control, organic farming, climate resilience as well as the retention of landscape features.

"Under current rules, farmers are rewarded for the land they farm, and can apply for supplementary subsidies based on implementing measures to protect the environment and preserve wildlife and flora." *The Guardian*, 5 November, 2019





## THANK YOU!

For further information, go to www.scenicsolutions.world