Quantifying the Visual Effects of Wind Farms;
A Theoretical Process in an Evolving Australian Visual Landscape.

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APPENDICES

NOTE:
Appendices 5 and 6 are included in the print copy of the thesis held in the University of Adelaide Library.

Appendix 8.1

Viewpoints for Assessment

Without Turbines

Average=4.42

With Turbines

Average=4.54

Landscape absorption calculation

Viewpoint 1

Northing 441430

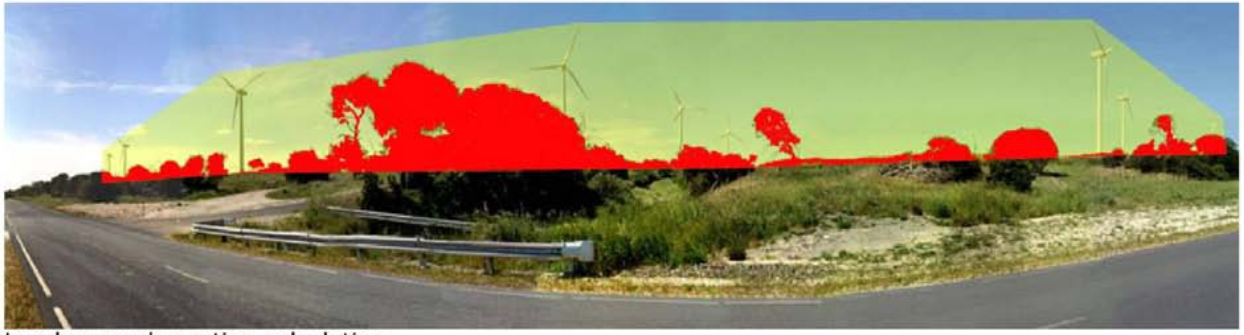
Easting 5830899

Without Turbines

Average=4.94

With Turbines

Average=4.75



Landscape absorption calculation

Viewpoint 2

Northing 443460

Easting 5826808

Without Turbines

Average=5.95

With Turbines

Average=5.46

Landscape absorption calculation

Viewpoint 3

Northing 443460

Easting 5828805

Without Turbines

Average=5.36

With Turbines

Average=5.12

Landscape absorption calculation

Viewpoint 4

Northing 445457
Easting 5822845

Without Turbines

Average=5.41

With Turbines

Average=5.10

Landscape absorption calculation

Viewpoint 6

Northing 445457
Easting 5826840

Without Turbines

Average=5.58

With Turbines

Average=5.34

Landscape absorption calculation

Viewpoint 8

Northing 447487
Easting 5820848

Without Turbines

Average=5.11

With Turbines

Average=5.00

Landscape absorption calculation

Viewpoint 9

Northing 447519
Easting 5822813

Without Turbines

Average=5.28

With Turbines

Average=5.33

Landscape absorption calculation

Viewpoint 11

Northing 449484
Easting 5818883

Without Turbines

Average=4.95

With Turbines

Average=4.92

Landscape absorption calculation

Viewpoint 13

Northing 438448
Easting 5831941

Without Turbines

Average=5.21

With Turbines

Average=4.73

Landscape absorption calculation

Viewpoint 15

Northing 442452
Easting 5823795

Without Turbines

Average=5.21

With Turbines

Average=5.24

Landscape absorption calculation

Viewpoint 16

Northing 442360
Easting 5831803

Without Turbines

Average=5.09

With Turbines

Average=5.09

Landscape absorption calculation

Viewpoint 17

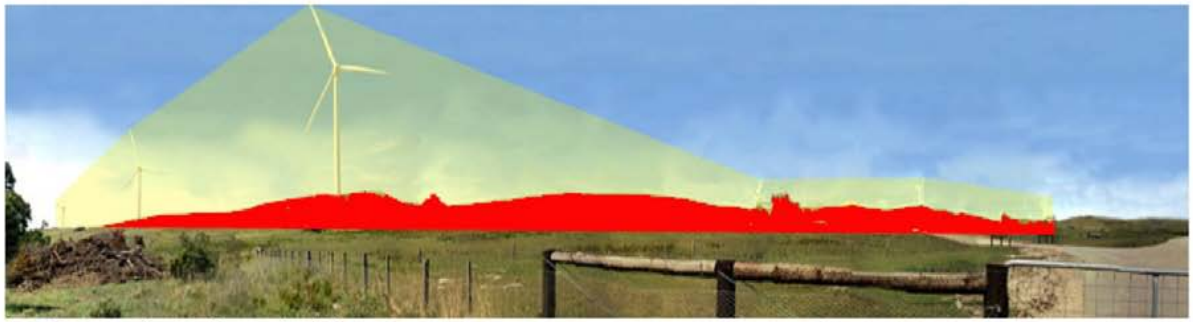
Northing 446456
Easting 5815879

Without Turbines

Average=5.71

With Turbines

Average=5.25



Landscape absorption calculation

Viewpoint 18

Northing 446410
Easting 5819929

Without Turbines

Average=4.84

With Turbines

Average=4.85

Landscape absorption calculation

Viewpoint 20

Northing 446502
Easting 5831941

Without Turbines

Average=5.09

With Turbines

Average=4.90

Landscape absorption calculation

Viewpoint 22

Northing 450553
Easting 5819929

Without Turbines

Average=5.39

With Turbines

Average=5.39

Landscape absorption calculation

Viewpoint 23

Northing 450507
Easting 5823841

Without Turbines

Average=4.73

With Turbines

Average=4.73

Landscape absorption calculation

Viewpoint 24

Northing 454465
Easting 5815879

Without Turbines

Average=5.30

With Turbines

Average=5.30

Landscape absorption calculation

Viewpoint 30

Northing 436607
Easting 5834137

Without Turbines

Average=7.35

With Turbines

Average=7.35

Landscape absorption calculation

Viewpoint 34

Northing 444561
Easting 5810130

Without Turbines

Average=5.13

With Turbines

Average=5.13

Landscape absorption calculation

Viewpoint 40

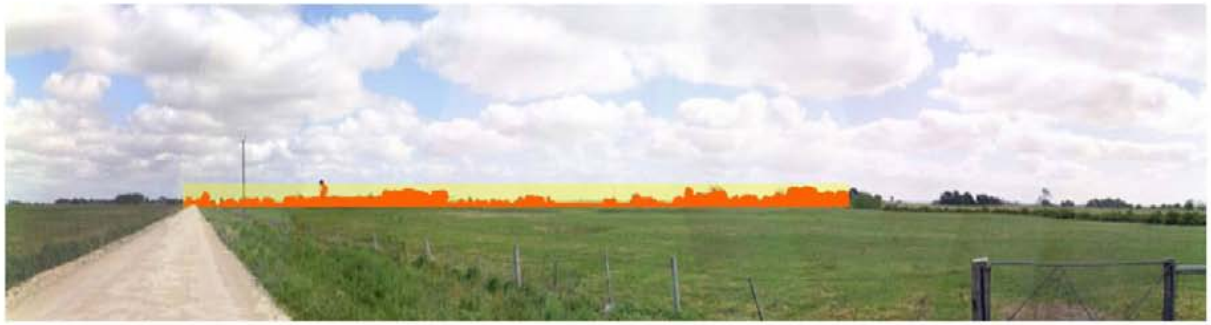
Northing 452661
Easting 5826036

Without Turbines

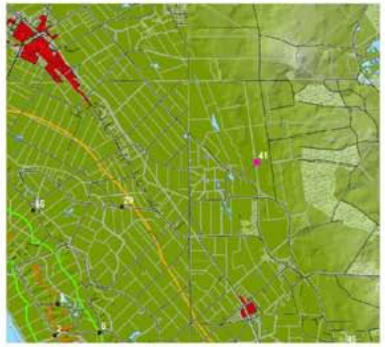
Average=4.17

With Turbines

Average=4.17



Landscape absorption calculation



Viewpoint 41

Northing 452514
Easting 5833842

Without Turbines

Average=6.00

With Turbines

Average=6.00

Landscape absorption calculation

Viewpoint 42

Northing 452808
Easting 5841942

Without Turbines

Average=5.45

With Turbines

Average=5.45

Landscape absorption calculation

Viewpoint 47

Northing 460467
Easting 5809983

Without Turbines

Average=5.77

With Turbines

Average=5.77

Landscape absorption calculation

Viewpoint 48

Northing 460467
Easting 5817641

Without Turbines Average=5.64

With Turbines Average=5.64

Landscape absorption calculation

Viewpoint 55

Northing 468420
Easting 5809835

Appendix 8.B

Internet Survey

Wind Farm Visual Assessment

Welcome and thank you for participating in this survey.

In this survey you will be asked several questions and shown a series of landscape images, which I kindly ask you to assess with respect to the scenic quality.

As part of a PhD research study at The University of Adelaide your answers will provide valuable information to help guide a possible methodology to assess the visual effects of wind farms. No qualifications or experience is required to participate. No personal information will be disclosed and all information provided will only be used for this project. The survey will take approximately 10 minutes. If you have any questions related to the survey please contact me on brett.grimm@adelaide.edu.au.

By clicking on the link below you are indicating that you are giving permission for the analysis of your responses.

Once again thank you for participating.

Please click HERE to start the survey.

Wind Farm Visual Assessment Questionnaire Page 2

Landscape Scenic Beauty Assessment

You are invited to assess the images that follow based on your perception of their scenic beauty.

Please identify the value you place on each scene by ticking a box on a scale of 1 (very low scenic quality) to 10 (very high scenic quality).

Please pick the appropriate rating in the scale by clicking the mouse on the numbered button.

Once a rating has been registered the survey will proceed to the next landscape scene.

Please trust your initial instincts and don't try to analyse your responses (each image slide should take no longer than 5 seconds).

The first few images will be practice examples to show you the screen layout and method of assessment. Please proceed through to the survey.

Next

Wind Farm Visual Assessment Questionnaire Page 1

Demographic information

There is no obligation to complete the following demographic details however it would be greatly appreciated if you could. This information will be kept confidential and will only be used for evaluation of statistical data.

1. Your sex?
   ☐ Male | ☐ Female
2. Your age?
   ☐ 18-24 | ☐ 25-44 | ☐ 45-64 | ☐ 65+
3. Your country of residence?
   Australia
4. Your residential postcode?
5. Highest education qualification?
   ☐ Diploma/Certificate | ☐ Degree | ☐ Higher Degree | ☐ Other
6. Have you physically seen a wind farm before?
   ☐ Yes | ☐ No
7. If Yes, where was the wind farm?
8. Did you specifically travel to visit the wind farm?
   ☐ Yes | ☐ No
9. Before your visit had you seen pictures of the wind farm?
   ☐ Yes | ☐ No
10. If Yes, did your impression of the wind farm change in anyway as a result of your visit?
    ☐ Yes | ☐ No | ☐ Not applicable
11. Please explain.

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Wind Farm Visual Assessment Questionnaire Page 3

Test Image 1

This is a test image to allow you to familiarise yourself with this survey tool. Your response to this image will not be recorded.

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

- Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.
- The survey will advance to the next image as soon as you select your reponse.

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Wind Farm Visual Assessment Questionnaire Page 3

Test Image 2

This is a test image to allow you to familiarise yourself with this survey tool. Your response to this image will not be recorded.

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

- Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.
- The survey will advance to the next image as soon as you select your reponse.

Wind Farm Visual Assessment Questionnaire Page 3

Test Image 3

This is a test image to allow you to familiarise yourself with this survey tool. Your response to this image will not be recorded.

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

- Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.
- The survey will advance to the next image as soon as you select your reponse.

Wind Farm Visual Assessment Questionnaire Page 4

Survey progress:

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.

Wind Farm Visual Assessment Questionnaire Page 4

Survey progress:

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.

Wind Farm Visual Assessment Questionnaire Page 4

Survey progress:

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.

Wind Farm Visual Assessment Questionnaire Page 4

Survey progress:

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.

Wind Farm Visual Assessment Questionnaire Page 4

Survey progress:

1	2	3	4	5	6	7	8	9	10

Low — Scenic beauty — High

Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.

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Survey progress:

1	2	3	4	5	6	7	8	9	10
Low				Scenic beauty					High

Please wait for the image to complete loading before you respond -especially if you are experiencing a slow network connection.

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Wind Farm Visual Assessment Questionnaire Page 4

Impacts

1. What positive impacts can wind farms have on the landscape?

2. What negative impacts can wind farms have on the landscape?

3. What type of pictures do you find the most effective in visual presentation of a wind farm?
   - ☐ Panoramic static photo
   - ☐ Computer simulation (dynamic- rotating blades)
   - ☐ Other
4. Please explain:

Finish

Wind Farm Visual Assessment 2.4

Thank you for your completing this survey.

Appendix 8.C

Letter to participate

Dear Colleagues and friends,

I would invite you to take part in a survey that aims to help appreciate strategic planning of wind farms.

As an important part of my PhD studies at the University of Adelaide, I have prepared a survey of wind farm visual assessment.

This survey is being distributed to individuals with general interest in landscapes and renewable energies.

This survey will ask you to rate the scenic quality of a range of scenes in which wind farm developments will and will not be present. You will be asked to qualify your impression of the scenic quality through a series of landscape pictures. The survey will take approximately 10-15 minutes.

No qualifications or experience are required to participate and all responses will remain anonymous. Anyone over 18 years of age can participate.

If you have any questions about the survey or project you can contact me on

08 8303 4818 or by email: brett.grimm@adelaide.edu.au or my principal supervisor, Dr David Jones at the University of Adelaide on 08 8303 4589 or david.jones@adelaide.edu.au

I would be most grateful if you could forward the details of this survey to other members within your respective community groups, who may be interested in taking part.

The survey is available on the Internet at the following location:

http://www.arch.adelaide.edu.au/wfva/

Thank you for participation.

Regards

Brett Grimm

PhD candidate

School of Architecture, Landscape Architecture and Urban Design

University of Adelaide