

**Before the Commissioner / Hearing Panel appointed
by Canterbury Regional Council**

IN THE MATTER OF The Resource Management
Act 1991

AND

IN THE MATTER OF resource consent applications
to take and use water for
agricultural and horticultural
activities

Section 42A Officer's Report

Report 5: Landscape Effects – Supplementary Report

Date of Hearing: January 2010

Report of Christopher Raymond Glasson

23 December 2009

Introduction

1. Since my initial section 42A report was completed more detail has been presented by the applicants as to their farming intention and the type, scale and intensity of each irrigation development. The following evidence is an updated assessment with appropriate mitigation measures, taking into account the evidence presented by the applicants and submitters.
2. My supplementary evidence has been formatted on a catchment basis according to my original assessment, as well as in alphabetical order.
3. My general comments are:
 - Retaining the identity of the Mackenzie Basin and Waitaki Valley is a critical issue where the landscape is of high natural character and amenity. The identity of this landscape sets itself apart from much of New Zealand.
 - As I stated on page 8 of my original assessment, “*the most enduring landscape features of the basin are its vastness and openness contained by the grandeur of a mountain backdrop*”.
 - Concern initially was that pivots were to be used in most places. This is now not the case where there is now a diversity of land uses and irrigation types.
 - The content for some sites is still conceptual.
 - Wherever centre pivots are used then these need to be at right angles to and not parked by the road, rivers and features.
 - Need to be sensitive to the content of the developments i.e.: roads, ponds, buildings and feedlots, and when they are to be located.

- Development becomes more concentrated and industrial in appearance, than generally occurs in a rural landscape, for large cow sheds.
 - This landscape needs to retain its identity.
4. The scope of Ecan's jurisdiction prevents them from having an opinion on the large cow sheds proposed for several farms in the Ohau and Omarama landscape units. I understand that it is the Local Authority's prerogative to grant or decline consent for these sheds. It is however in my opinion that these sheds will significantly change the landscape character and quality in an adverse manner. These structures, regardless of location, form and colour will tend to industrialise the character of the location due to their location, bulk and size. Hence there could be a loss of identity to this part of the Mackenzie Basin.
 5. I do not consider conifer shelterbelts are an appropriate mitigation measure in order to screen buildings or irrigation development, shelterbelts become a highly impacting phenomena in this landscape.
 6. The following is a review of Andrew Craig's Part1 report, and the submitters report from Di Lucas and Anne Steven. My recommendations from these reports and those of Mike Steven and Stephen Brown are included in the evaluation of each application:

Mackenzie Guardians submitters

Report by Di Lucas, Landscape Architect, for the Mackenzie Guardians

7. Para. 4 of visibility:
 - Contrary to Ms Lucas' interpretation, the sites have been assessed from the lake shore and rivers. E.g. Views from the Tekapo, Twizel, Pukaki and Ahuriri Rivers were considered important enough so that considerable buffer distances were promoted and the result of this principle has been

applied by Simons Pass, High Country Rosehip Orchards and Rosehip Orchards NZ etc.

8. Para.10 of visibility:

- It is difficult to have absolute buffer distances. These distances have been formulated on a hierarchy of importance basis and are only a guide, not a restrictive formula so that some naturalness of riparian edges can be retained or enhanced.

9. Lilybank

- Ms Lucas agrees that no hillside irrigation should occur but disagrees that the riparian buffer should be greater than 100m. She does not give any recommended buffer distance. Given that the current land use is grazing to the rivers, I believe that this is a satisfactory distance. If only the flats are irrigated then the visual appearance will be very low, while the riparian buffer will be enhanced.

10. Godley Peaks

- A similar situation to Lilybank occurs at Godley Peaks. Ms Lucas believes that the riparian buffer is inadequate. How wide it should be is not discussed by Ms Lucas. Dr Steven doesn't believe that it is necessary to have one. I do agree with Ms Lucas that a landscape plan could be undertaken for the rivers and lake edges, but importantly a buffer free of irrigation should be retained.

11. Maryburn Station / Classic Properties – CRC063106

- Ms Lucas agrees that this site should be declined.

12. Maryburn Station / Classic Properties- CRC070406

- Located on the north side of SH8, east of Simons Pass. Ms Lucas questions the inadequacy of the buffer distance of 100m. However the land is subject already in irrigation, hence its natural character values have already been diminished.

- I am still of the opinion that this buffer will assist to integrate the irrigated land.

13. Grays Hills

- Ms Lucas believes the riparian buffer is inadequate. However she gives no alternative recommendation other than to say that the site is inappropriate. I still believe that the proposed irrigation will be integrated into the landscape forms.

14. Grampians / Hope –CRC041543, CRC041542

- Ms Lucas agrees that this site is inappropriate.

15. Five Rivers- CRC061154

- Ms Lucas agrees that this site should be reduced in size.

16. Southdown Holdings - CRC040835

- Ms Lucas agrees that this site be declined.

17. Simons Hill – “CRC062824”

- I presume Ms Lucas means CRC062842 (north side of SH8).
- She believes that this site will be “*visually prominent and distract and detract from the valued aesthetic of the Basin ONL,*” (para 48).
- I agree that it will be prominent but there are many prominent cultural elements in the Mackenzie basin. It is however a relatively contained site at the junction between hill slope and plain. I believe that the level of modification is satisfactory.

18. Simons Pass – CRC062867 (22ha)

- Located on the south side of SH8, east of Simons Pass and on the immediate north side of SH8.
- Ms Lucas believes that irrigation is inappropriate.
- Currently the southern side has a conifer shelterbelt screening the site from SH8.

- I believe the site is well integrated, contained and of a small scale and to be acceptable for irrigation purposes.
- The northern side should have a buffer of at least 100m of native grassland between the road reserve and the irrigated land.

19. Simons Hill Station

- Ms Lucas believes the current site should not be expanded. This is a discrete and contained site and set back from the Tekapo and Maryburn Rivers. I still believe that the site is appropriate for irrigation.

Report by Anne Steven, Landscape Architect for the Mackenzie Guardians

20. Classic Properties

- Anne Steven believes that this site has significant inherent values with tussock grassland cover. This contributes to high natural character. Irrigating this land would diminish this open natural grassland and *“would be significantly adverse.”*
- Ms. Steven does not conclude that the site should be declined but believes that *“the development would significantly compromise those values”*.
- She believes that for the northern part of the site, which is currently cultivated, irrigation could be appropriate.

21. Simons Pass and Simons Hill

- Ms Steven recognises that much of the Simons Hill application sites have been consumed by irrigation development contributing to a loss of natural character.
- Ms Steven has described at great length the landscape character and quality and the ecological values. Her assessment appears to be a well informed one.
- She says in para124 that, *“the outwash plain is a highly distinctive and classic and definitive natural element of the Mackenzie Basin.”* I agree,

but this element will not change due to the advent of irrigation. Where Ms Steven's assessment, I believe, goes astray is her consideration of this site to be an ONL landscape. It is a degraded floor of the Basin therefore reducing its natural character to a less than high rating. We should be more discerning when assessing the outstandingness of landscapes.

- Ms Steven discusses the importance of the "brown landscape", paras 157-163. However the basin is diverse in colour with conifer trees having changed the complexion with a green- black appearance, the briar rose and the greyness of the hawkweed.
- I promoted the mitigation measures for Simons Pass Station which the applicant has undertaken to fulfill. The setback from SH8 will include moraines and hard rock areas. Views from Simons Hill were not considered due the lack of importance of the view from this location. Views were considered from SH8, the Pukaki and Tekapo Rivers and the moraine downs adjacent to SH8.
- I agree with Ms Steven that views from the surrounding hills and from the air will give full visibility of the irrigated areas.
- The pipeline from Lake Tekapo, I believe, will be underground.
- I also agree with Ms Steven in para173 "*that the vast basin floor is just as important for defining the basin as a 'place'*", and we both agree that Dr Steven's approach is an academic one as to his division between basin floor and mountains in para40, i.e. Altering the floor is alright as long as the mountains and openness remain.
- Therefore one needs to be sensitive in terms of how and where the changes are made, hence the buffers from roads and rivers, so as to integrate and contain irrigated land and retain the identity of the Basin.

22. Killermont Station - CRC041777, CRC041331, Southdown Holding – CRC073115, CRC041788

- I am unsure whether Ms Steven was referring to my assessment or Steven Brown's, but contrary to her opinion, I did assess the sites from Short Cut Road, as well as SH8, and the road from Omarama to Dunstan Peaks and

the Ahuriri River. From these locations the Knot is visible, and should be protect from irrigation development.

- It is still my opinion that the Killermont Station site CRC041331 is inappropriate for irrigation, that there should be a buffer for the sites south of SH8 i.e. above and beyond the edge of the river terrace and 300m back from the SH8 where the terrace fades out (east end).
- A buffer along the walking route and Short Cut Road is a possibility for each side, i.e. 100m. I would advocate this buffer distance.

Andrew Craig Landscape Assessment for UWAG : Part 1

23. This report has been used by many of the UWAG applicants as a landscape assessment for their irrigation applications. According to Andrew Craig this report “*focuses on general landscape matters concerning the effects of irrigation as they would apply universally to all of the properties I represent.*” This report does not focus on the localized effects of each application, which Part 2 does.

24. Matters Mr Craig discusses in Part1, I have described in my assessment, including landscape character and landscape amenity, and we are both in general agreement. He also discusses the effects arising from irrigation and mentions that these landscape effects are going to be “*entirely contextural*”. I agree, and what concerns me is that some of UWAG applicants have not considered the effects of irrigation on the character and quality of the landscape. For example, the proximity of the Hope and Haldon sites along Haldon Road.

25. Mr Craig also assesses the proposed irrigation developments in the light of the statutory planning instruments.

26. Overall, the most significant consideration is the effect of the proposed irrigation of each in the context of its landscape character and quality. Will there be an adverse effect, and how can an effect be mitigated in order to maintain the character and quality of the landscape?

27. I do not agree with Mr Craig's conclusion in Para8.3 "*that the potential adverse effects will be significantly less than minor.*" There are sites that do have adverse effects that are more than minor and I have evaluated each site in the light of the most recent proposals.

LANDSCAPE UNIT 1:

Lilybank - CRC071786 , New

28. Proposal elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1&2
- Pivot and K-Line irrigation
- No irrigation on the hillside
- No mitigation measures have been promoted from the irrigated land to the Macaulay and Godley Rivers

29. Recommendation :

- This proposal is acceptable provided that there is a buffer of at least 100m of native shrubland, and is required given that these rivers are well used for recreational pursuits.

Lone Star farms at Godley Peaks Station - CRC031175, New,

30. A landscape assessment was undertaken by Mike Steven

31. Recommendation:

- The mitigation measures I have recommended should be undertaken to maintain the integrity of the landscape and visual values, i.e. at least 100m buffer from the lake and 50m riparian strip on each side of the small rivers.
- A mistake was made in my original report for a buffer distance from Lake Tekapo. I refer to para109 of that report which gives the correct distance of 100m.

Glenmore Station – CRC052502, Replacement

32. Proposal elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1&2
- Pivot irrigation system
- No mitigation measures have been proposed
- To be sited 800m from the edge of Lake Tekapo

33. Recommendation:

- A riparian buffer along the shores of Lake Tekapo and each side of the rivers is required. The 800m will take care of the buffer from the lake edge.

LANDSCAPE UNIT 2:

Hope - CRC041542 & CRC041543, New

34. Proposal elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1.

35. Recommendation:

- The proposed sites should be declined due to the reasons given in my original assessment.

Grays Hills – CRC042661, New

36. Proposal elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1.

37. Recommendation:

- My recommendation remains the same as for my original assessment.
- There should also be no shelter belt planting on the site which would assist to retain the openness of this location.

Classic Properties – CRC063106, New,

38. Proposal elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1&2
- Pivot irrigation
- No mitigation proposed

39. Recommendation:

- The reasons for my recommendation remain the same as for my original assessment. I cannot recommend that the consent be granted with the current scale and mitigation measures proposed.

Simons Hill Station – CRC062842 & CRC082304, New

40. A landscape assessment was undertaken by Mike Steven

41. Recommendation:

- My original recommendation remains valid. The site is acceptable for irrigation.

Simons Hill Station and Classic Properties combination – CRC070406 & CRC062842, CRC082304, CRC062867 and CRC082311, New

42. A landscape assessment was undertaken by Mike Steven

43. Recommendation:

- I recommend that irrigation on this site will not cause any unnecessary adverse effect, but I still recommend a buffer of at least 100m between the road reserve and the irrigated land to be left in native tussock. This is a less than optimum amount but which of the site is already irrigated.
- The House Hill site is suitable for irrigation in its current form.

Irishman Creek Station – CRC011845 , Replacement

44. A landscape assessment was undertaken by Andrew Craig, Part 1.

45. Recommendation:

- This site is suitable for irrigation

LANDSCAPE UNIT 3:

Falconer – CRC060253, Replacement

46. No landscape assessment was undertaken

47. Recommendation:

- This proposal is acceptable provided that there is a buffer of at least 100m from Lake Benmore and 50m from streams

Glentanner Station – CRC083609 & CRC071362, New & Replacement

48. A landscape assessment was undertaken by Andrew Craig, Part 1.

49. Recommendation:

- A very discrete site. However, my original recommendation remains relevant whereby the hillocks should remain in tussock grassland so that the flatter irrigated areas will become more integrated.

Simons Pass Station – CRC062867 & CRC082311, New

50. Proposal elements:

- A landscape assessment was undertaken by Mike Steven.
- Pivot irrigation
- Large buffer from SH6 and Tekapo and Pukaki Rivers
- No irrigation on north side of SH8
- No irrigation on the moraine downlands and hard rock outcrops
- No buildings

51. Recommendation:

- Agreement was reached with the applicant prior to the hearing regarding the mitigation measures required for the irrigation development. These measures were undertaken so that the landscape and visual values of the site could be retained. With these measures in place the site is suitable for irrigation development.

High Country Rosehip Orchards – CRC072233, New

52. Proposal Elements:

- A landscape assessment was undertaken by Mike Steven.
- Pivot irrigation
- Buffer between irrigation and the terrace riser and the rivers
- All irrigation on the upper terrace

53. Recommendation:

- Agreement was reached prior to the hearing by the applicant regarding the mitigation measures. It is my opinion that if these measures are undertaken then the landscape and visual values of the site can be retained.

Rosehip Orchards NZ – CRC072118 & CRC021749, New

54. Recommendation:

- Agreement was reached prior to the hearing by the applicant regarding the mitigation measures. It is my opinion that if these measures are undertaken then the landscape and visual values of the site can be retained.

Haldon Station – CRC082269 & CRC042561, Mixed and New

55. A landscape assessment was undertaken by Andrew Craig, Part 1.

56. Recommendation:

- It is my opinion that CRC082269 is suitable for irrigation in its proposed form. However, mitigation measures as outlined in my evidence should be undertaken for CRC042561 to become integrated. These measures include moving the irrigated area away from the road to Haldon Arm. I note that the applicant will not park the pivot adjacent to the road.

Totara Farming – CRC020584, New & Falconer – CRC060253, New

57. Proposal elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1
- Pivot / K-Line irrigation

58. Recommendation:

- I am still of the opinion that there must be a buffer area of at least 100m between the lake edge and the irrigated area.

LANDSCAPE UNIT 4:

Birchwood Run – CRC0122291, Replacement

59. A landscape assessment was undertaken by Andrew Craig, Part 1.

60. Recommendation:

- This is a discrete site and in its proposed form is suitable for irrigation.

Five Rivers – CRC061154, New,

61. Proposal elements:

- A landscape assessment was undertaken by Stephen Brown
- 38 pivot irrigators
- 7 milking sheds
- No irrigation on moraine hills, tarn, lagoon and lake edge areas

62. Recommendation:

- Some of the moraine - tarn and lake areas have been mitigated / protected from irrigation through the QEII covenant and the Ohau Downs Dryland area, however part of the proposal still needs buffering from the Lake Ohau Road, according to my original assessment.
- The sheds will have a very high visual impact when viewed from Ohau Road. This is a very sensitive landscape and I am of the opinion that these will detract from the identity of the location regardless of form and colour. I recommend that these sheds be declined consent.

Southdown Holdings (Glen Eyrie) – CRC040835, New (2500ha & 381ha)

63. Proposal elements:

- A landscape assessment was undertaken by Stephen Brown
- 26 pivot irrigators
- 6 milking and wintering shed sites
- Some protection of wetland area (OLA) from proposal

64. Recommendation:

- Buffer required for Quail Burn Road, Serpentine Creek, Wairepo Creek and DoC recreation reserve.
- Buffering around the OLA wetland area is also recommended as originally mentioned in my assessment. While this is more isolated than some other applications, it contains both recreational and ecological values as well as the public road being elevated above some of the proposed irrigation area.
- Removal of the south-western pivots.
- The sheds will have a very high visual impact when viewed from Ohau Road. This is a very sensitive landscape and I am of the opinion that these will detract from the identity of the location regardless of form and colour. I recommend that these sheds be declined consent.

Marie Horo (Ohau Co. Trust) – CRC042011 & CRC042018, New, (120ha)

65. A landscape assessment was undertaken by Andrew Craig, Part 1.

66. Recommendation:

- Retention and protection of the wetland area is required as part of the irrigation development.

Bellfield Land Co. – CRC071649, New

67. A landscape assessment was undertaken by Andrew Craig, Part 1.

68. Recommendation:

- Treatment of the site as outlined in my original assessment is required.

McAughtrie, Ellis-Lea – CRC011940, Replacement & McAughtrie, Greenfield, Ellis-Lea Farms – CRC991473, Replacement

69. A landscape assessment was undertaken by Andrew Craig, landscape architect, Part 1.

70. Mr. Craig's view is that no mitigation measures are required because there are no iconic views from the highway being impacted upon.

71. Recommendation:

- This site is close to SH8. The site layout has been amended so that the hill country and OLA is not included in the development. The irrigation will be on the flat land.
- I am still of the opinion that a 300m buffer along Quailburn Road is required so as to protect the landscape and visual values.

LANDSCAPE UNIT5:

Southdown Holdings Ltd – CRC040835, New (434ha)

72. No landscape assessment was undertaken.

73. Recommendation:

- I cannot recommend that the consent be granted with the current scale and mitigation measures proposed and on the basis of the locations high landscape and visual values.

LANDSCAPE UNIT 6:

Bellfield Land Co. – CRC011987, Replacement

74. A landscape assessment was undertaken by Andrew Craig, landscape architect, Part 1.

75. Recommendation:

- The mitigation measures outlined in my original assessment should remain.

Killermont Station (Pebbley Block) – CRC041331, New

76. Proposal elements:

- A landscape assessment was undertaken by Stephen Brown
- Portable K-line irrigation and related stock regime, seen as being acceptable by S. Brown.
- Important view of Clay Cliffs across this site.

77. Recommendation:

- I cannot recommend that the consent be granted with the current scale and mitigation measures proposed and due to the importance of the view to Clay Cliffs and the landscape values associated with the Ahuriri River.

Killermont Station (Williamson Holdings Ltd) – CRC073115 & CRC041788, New

78. Proposal elements:

- A landscape assessment was undertaken by Stephen Brown
- 10 pivot irrigators
- 3 milking and wintering shed sites
- NW corner of proposal is kept free of irrigation on lower terrace

79. Recommendation:

- While mitigation has occurred in relation to landform (i.e. no irrigation between SH8 and upper terrace), a significant buffer is still required between the Omarama-Lindis Pass Road (SH8) and the irrigation scheme as originally intended and as agreed with S. Brown. However, planting is not seen as a suitable mitigation measure.
- My original mitigation measures should be retained.
- The location of large cow sheds is seen as having a very high impact on the landscape character and quality of this site.

Killermont Station (Killermont Station Ltd) – CRC041777 & CRC041798, New,

80. Proposal elements:

- A landscape assessment was undertaken by Stephen Brown
- 7 pivot irrigators
- Unknown of number and location of associated sheds, if any
- Linear irrigator on eastern side of site
- K-Line irrigator on western side of site
- All irrigation methods are on the upper river terrace apart from the pipeline to the intake.
- S. Brown does not believe that an additional buffer is required.

81. Recommendation:

- Intake and pipeline must be of the submerged option
- All other mitigation measures are already proposed (i.e. behind upper terrace).
- Suitable for irrigation but not for the location of cow sheds due to the high impact on the landscape character and quality of the site.

Twin Peaks Station – CRC063564, New & Killermont Station – CRC040180, Replacement

82. A landscape assessment was undertaken by Andrew Craig, Part 1.

83. Recommendation:

- This site is acceptable for irrigation in its proposed form.

Dunstan Peaks Ltd – CRC011361, Replacement

84. Proposed elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1.
- K-Lines and pivot irrigation

85. Recommendation:

- The site is acceptable for irrigation in its proposed form

LANDSCAPE UNIT 7:

Marie Horo – Ohau Co. Trust – CRC042020, New

86. A landscape assessment was undertaken by Andrew Craig, Part 1.

87. Recommendation:

- The site is acceptable for irrigation in its proposed form.

LANDSCAPE UNIT 8:

Anderson (Rob Roy Station) – CRC012017 & CRC012019, Replacement

Proposed elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1 and 2.
- K-line irrigation
- No mitigation measures were proposed

88. Recommendation:

- This proposal is acceptable provided a buffer of 100m to Lake Benmore and 50m to any streams is undertaken.

Aviemore Ltd – CRC083692, New

89. Proposed elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1 and 2.
- K-lines
- No mitigation measures were proposed

90. Recommendation:

- This proposal is acceptable provided a buffer of 100m to Lake Benmore and 50m to any streams is undertaken.

Munro – CRC0060938, New

91. No landscape assessment was undertaken.

92. Recommendation:

- This small site of 6ha as a vineyard requires no buffer from the lake.

Otematata Station – CRC041033 & CRC020355, New

93. Proposed elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1 and 2
- K-Lines
- Cropping
- No mitigation measures have been proposed

94. Recommendation:

- This proposal is acceptable provided a buffer of 100m to Lake Benmore and 50m to any streams is undertaken.

Waitangi – CRC030944, New

95. Proposed elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1 & 2
- No mitigation measures have been proposed

96. Recommendation:

- The site is not directly adjacent to the lake edge so no buffer is required.

Otematapaio Station – CRC012047, Replacement

97. Proposed elements:

- a landscape assessment was undertaken by Andrew Craig, Part 1 and 2
- Pivot irrigation
- Irrigation only on inland side of state highway
- No mitigation measures have been proposed

98. Recommendation:

- With the removal of irrigation from the lake and river side of the road, this irrigation proposal is now acceptable

Graham – CRC 072363, New

99. A landscape assessment was undertaken by Andrew Craig, Part 1.

100. Recommendation:

- This irrigation proposal is acceptable in terms of landscape and visual values.

Aviemore Ltd – CRC041031, New

101. Proposed elements:

- A landscape assessment was undertaken by Andrew Craig, Part 1 and 2.
- K-Lines for irrigation
- No mitigation measures have been proposed

102. Recommendation:

- This proposed irrigation development is acceptable provided there is a buffer of 100m from Lake Waitaki.