

**Before the Commissioners appointed by Canterbury Regional Council**

**IN THE MATTER OF**     The Resource Management Act 1991

**AND**

**IN THE MATTER OF**     Applications by Southdown Holdings Ltd, Five Rivers Ltd, Williamson Holdings Ltd and Killermont Station Ltd for Water Permits to take and use surface water and Land Use Permits to disturb the bed of Lake Ohau and the Ahuriri River

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**FURTHER STATEMENT OF EVIDENCE OF STEPHEN KENNETH BROWN ON BEHALF OF  
THE APPLICANTS**

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**Introduction**

1. My name is Stephen Kenneth Brown. I hold a Bachelor of Town Planning (Auckland) and a post-graduate Diploma of Landscape Architecture (Lincoln). I am a Fellow of the New Zealand Institute of Landscape Architects and an Affiliate Member of the NZ Planning Institute. I have practised as a landscape architect for 28 years and my experience is described in my primary statement of evidence.
2. In relation to the current applications, I appear on behalf of Southdown Holdings Ltd, Williamson Holdings Ltd, Five Rivers Ltd and Killermont Station Ltd, and have been asked to assess the landscape effects of their combined implementation.
3. The following comments respond to the matters raised in the Supplementary Report of Chris Glasson dated January 2010. They firstly address generic issues pertinent to all four application properties and proposals, then respond to concerns and recommendations raised by Chris Glasson in relation to the individual properties owned by Southdown Holdings Ltd, Williamson Holdings Ltd, Killermont Station Ltd and Five Rivers Ltd:

## General Comments

4. At page 2 Chris Glasson states that “retaining the identity of the McKenzie Basin and Waitaki Valley is a critical issue where the landscape is of high natural character and amenity”. But this fails to recognise that the predominantly rural land base for the Basin / Valley perpetuates the retention of a cultural landscape that is physically framed by the more (though still not wholly) natural mountains which delimit this high plateau area. Permitted activities for the Waitaki District actively support this regime and the dichotomy between these ‘more modified’ and ‘more developed’ halves of the wider landscape. It is only the slow uptake of the agricultural potential of this land that has maintained a veneer of naturalness throughout much of the MacKenzie Country and Waitaki Basin.
5. More over, Hieraceum, pines, Douglas Fir, rabbits and a wide range of other weeds and pests, have reinforced the contrast between the imagery and public perception of what this plateau landscape is and the reality of its physical nature.
6. Yet this context – both for the present applications and future land management within the Waitaki Basin – does not feature at all in Chris Glasson’s assessment of the current water right applications. For example, there is no mention at all of the 1200ha of pines that covered Glen Eyrie Downs Station prior to the current applications or the implications that such ‘accidental afforestation’ might have for the Waitaki Basin.
7. At the 2008 **Conflict in Paradise** Conference hosted by EDS, Professor Simon Swaffield, head of the School of Landscape Architecture at Lincoln University, made the following points about ‘production landscapes’ that are directly relevant to the sort of pressures for land use and landscape change being exerted on the Waitaki:

*The rural landscape of production is an expression of the agri-industrial rural ideal [Marsden 2003]. It emphasizes efficient and profitable food production, based upon integrated commodity chains serving global markets. In this rural space, production is managed privately, through the decisions of farmers, influenced by the quality control and marketing systems of the industrial food companies. The landscape is valued for its biological productivity, as a material resource. Production systems are highly capitalized, increasingly specialized, and as a consequence are continually under pressure at the economic and environmental margins.*

*Landscapes with access to reliable water and processing facilities are becoming highly intensive:- particularly those based upon dairy or viticulture. Intensification has changed the character of both landscape and community, with shelterbelts removed and replaced by large open irrigated pastures, woolshed replaced by high-tech milking sheds, pasture replaced by grapevines, and family farms replaced by corporate structures [Primdahl and Swaffield 2004].*

8. In looking to the future, he went on to foreshadow the advent of landscapes that have a more explicitly productive content, that are less aesthetically appealing than our traditional ideals and perceptions might yearn for, and that also involve more interweaving of rural productivity with conservation areas:

*What will the regenerative rural landscapes of the 21st century look like? They will vary widely depending on circumstances. They will all incorporate green blue networks that reveal and express the hydrology of the area. They will include much more tall woody vegetation, particularly on steeper land and associated with waterways. There will be more indigenous vegetation, in many cases interwoven with exotic species-for example in shelterbelts, and as understory to plantations [Brockhoff et al 2003, Carnus et al 2006, Meurk and Hall 2006]. **But they will not look as picturesque as the food adverts suggest.....** [my emphasis]*

9. The current state and recent evolution of land uses within the Waitaki Basin and Mackenzie Country appear to reflect precisely these transitions. The nature of rural economies and farming practice is rapidly changing and this will have a commensurate impact on landscape character and values.

10. Instead, he focuses on a rather simplistic comparison of what exists and what is proposed, without recourse to the land use and land management 'permitted baseline' for the area or a realistic assessment of alternative development scenarios for the future. As stated at the close of my evidence in chief (para. 139):

*"hieracium and pinus contorta offer a much more radical and physically impoverished vision of the potential future for the Upper Waitaki. The current state of the WHL Killermont Block and the past state of much of Glen Eyrie Downs Station offer clear testament to this. In focusing more directly on the current irrigation proposals I have not, therefore, considered the romantic recreation of tussockland or similar as being a realistic alternative to the dairy conversion proposals: cropping, dry stocking and forestry are the alternatives in reality and all of these would still stamp a productive, rural mark on the Waitaki landscape, as indeed they already do".*

11. Consequently, the temporal limitations of Chris Glasson's statement – locked exclusively into the here and now – fail to recognise:
- the changing the nature of the Waitaki Basin and the landscape change already occurring within it;
  - the potential that Permitted Activities have to exacerbate such change; and
  - the potentially disastrous physical and landscape consequences of other land use alternatives to both those permitted at present and those associated with the current water take applications.

## Southdown Holdings Ltd (Glen Eyrie Station)

12. Chris Glasson states that buffering is still needed around the Wairepo Creek and Quailburn Conservation Area. However, as is made clear in my primary statement, the DOC reserve is primarily a biophysical entity, rather than being valuable in a visual or perceptual sense. This is accentuated by the physical isolation of the reserve relative to virtually all of the public domain – focused upon Quailburn Rd, SH8, Lake Ohau Rd and even Omarama. Again, I do not believe that it comprises and ONL in the sense of a landscape or feature that is eminent, conspicuous or remarkable in terms of its perceived, as well as biophysical, values. Although Mr Glasson refers to it having ‘recreational value’, it is difficult to determine what this might be, apart from bird watching (possibly). The rest of the Wairepo Creek corridor, which displays even less landscape value *per se* and is virtually imperceptible from Lake Ohau Rd, would be physically protected from the proposed irrigation system and cubicle barns.
13. In relation to those barns, Chris Glasson also states that they will have a very high impact when viewed from Lake Ohau Rd. Yet, they would be viewed over distances of 4kms or more and would have a low-slung, horizontal profile that mimics the natural lie of the land. In my assessment, the proposed sheds would become minor components of the wider rural landscape exposed to Lake Ohau Rd. Low level mounding that merges seamlessly with the terrain north of the barns, together with low level tussock planting or similar, could be employed to further mitigate any exposure and break down their elongated profiles. This would lend the barns an appearance much more akin to that of existing farm sheds found in the working rural landscape of the Waitaki Basin.
14. In all but views from Quailburn Rd, the pivot irrigation system proposed would be viewed as fine filigree of structural elements across the alluvial terraces exposed to Lake Ohau Rd and would do little to alter or diminish the essentially pastoral nature and content of the Glen Eyrie Station landscape.
15. Even when viewed from Quailburn Rd, the proposed combination of cubicle barns, irrigation and ancillary structures near the roadway represents the sort of clustering of farm buildings and related activity already evident on local stations up and down that road. Indeed, the road corridor is frequently flanked by shelterbelts and current farm buildings to the point where it has even more of a working, rural character than many of the other Waitaki road ‘landscapes’. Just as important, the proposed barn pairs exposed to Quailburn Rd would sit

within a relatively discreet part of the rural landscape that is almost entirely divorced from the mountain ranges, Ben Ohau, Lake Ohau and other landscape features that are really critical to the character and qualities of the wider locality. Consequently, any buffer along that road (as recommended by Chris Glasson) would, in all likelihood, contradict the working nature of the existing environment that frames Quailburn Rd.

16. Nevertheless a pine shelterbelt next to the road would, if still required, fit in with the existing pattern of land uses in the road's immediate vicinity and serve to screen both the irrigation and barn proposal within a relatively short time frame. I don't consider that such screening / filtering is either necessary or desirable for the margins of Lake Ohau Rd because of the much greater viewing distances involved and the flatter viewing perspective to both the proposed cubicle barn and pivot irrigation sites.
17. In the context of the working environment generally found around Glen Eyrie Station, it is also clear that the shelterbelts on and around neighbouring Ribbonwood Station are already notable features. This, combined with the past proliferation of wilding pines across some 1200ha of Glen Eyrie Station (prior to its current ownership) clearly alludes to a 'complying' or, at least, non-regulated form, of land management that would ultimately be much more damaging in terms of the Waitaki's open, expansive, landscape character than the current proposals for the Station. Yet such effects – both at present and in the future - have not been taken into account in Chris Glasson's assessment of the proposals for Glen Eyrie Station.

### **Williamson Holdings Ltd (WHL Killermont)**

18. Chris Glasson reiterates his Section 42 report findings and, in particular, maintains the need for a buffer between SH8 and the proposed irrigation fields in the order of 300m. He further states that planting is not a 'suitable mitigation measure' and the proposed cubicle barns would again have a very high impact on the landscape character and quality of this site.
19. This assessment fails to recognise the depauperate state of the site at present: its present land cover is largely dominated by hieraceum and other weeds, with rabbits precluding the likelihood of any more 'natural' regrowth of tussock or pastoral grasses at present. Whether viewed from SH8 or Broken Hut Rd, the subject site is entirely impoverished, and its unremittingly flat terrain east of the Ahuriri River terraces adds little to its intrinsic character or value. Mr Glasson has greatly over-stated its appeal in my opinion.

20. On the other hand, the subject land does afford the 'base plate' to views of the much more characterful and important Ewe, Wether and Dunstan Ranges to the east; but it is only when travelling past the north-most quarter of the site that motorists would see the proposed irrigation and sheds against that mountain backdrop – close to where an existing farm already operates pivot irrigation, without any set-back. Even so, I recognise that two of the proposed irrigators would be viewed at closer range and would be more prominent in such views. This could be addressed by pulling both irrigators back 100m or so from the road boundary – to the point where they merge with the array of shelterbelts and vegetation close to Broken Hut Rd.
21. Further south, looking from SH8 down most of the length of WHL Killermont, both the pivot irrigators and sheds would be concealed by the intervening river bank (near the edge of the subject property). Consequently, I assessed that only three irrigators would be visible from the highway and only the first two would be relatively prominent. With only the outer rotation areas reaching close to both the highway and Broken Hut Rd, and the potential for even low level planting (perhaps massed tussock and matagouri) to break up the profile of most of the irrigators – without screening the mountains in the background – it seemed to me that a buffer strip of less than 10m could be just as effective as the proposed 300m.
22. Furthermore, the viewing distance of 1.2kms to the nearest cubicle barn, combined with the flat viewing perspective from surrounding roads, and the potential to use bunding with low level revegetation across those bunds for mitigation, would help to appreciably reduce their presence – to the point where they merge with the combination of pine woodlot, shelterbelts and farm buildings that already exist near Broken Hut Rd. In my opinion, such measures would be entirely compatible with the working nature of the farmland at present. Perhaps just as important, the combination of irrigated pasture and revegetated margins is preferable to allowing the WHL Killermont Block to physically deteriorate further – to the point where its physical decline is irreversible.
23. The important point to emerge from my analysis is that the application property is NOT in a natural state at present, nor is it the actual focus for views from either SH8 or Broken Hut Rd. Yet, this is how Chris Glasson appears to be treating it – as a landscape feature in its own right.

## **Killermont Station Ltd (Killermont Station)**

24. Very similar comments apply to the Pebbly Block, which helps to frame views to the 'Clay Cliffs' ONL across the Ahuriri River, but which is physically degraded, indeed impoverished, in its own right. As stated in my evidence, greening of the Pebbly Block would create a degree of domestication and modification that is discernible by the general public. However, it would not obstruct or intrude into views of the adjacent river and Clay Cliffs, and even though the land cover content of the immediate foreground would change, particularly when viewed from the vicinity of SH8, the Ahuriri's channels, braids, banks and foothill margins would not be physically touched by such modification. Perception of these landscape components would be affected to a limited degree.
25. K-line irrigation is the least visually intrusive form of practicable irrigation for the Pebbly Block and would have no discernible impact on the Clay Cliffs or Ahuriri River – despite Chris Glasson still asserting that he cannot support irrigation because of such effects.
26. At the end of the day, one has to judge whether the greening of the Pebbly Block is similar, worse or better than its gradual 'browning' and occupation by rose briar, hieraceum and other weeds. In my opinion, the perceived effects are similar – particularly given the framed nature of the landscape between Lake Ruataniwha and the northern entry to the Lindis Pass. However, the physical landscape effects would be more positive and should not be discounted.
27. Consequently, even though the foreground that provides part of the setting for views to both the Clay Cliffs and Ahuriri may well end up appearing more domesticated, I regard this as being – at worst – comparable with the mixed hawkweed / rabbit tussock regime at play within the Pebbly Block at present.
28. In relation to the rest of Killermont Station, Chris Glasson also retains concerns about cubicle barns and pivot irrigation. However:
  - No cubicle barns are proposed for Killermont Station.
  - The mixture of irrigators within the main body of Killermont Station would be physically isolated east of SH8, behind the elevated river bank running south of the WHL Killermont site that extends as far as 600m east of the highway. This means that the irrigators would be almost entirely screened from view by that

same feature. Even those pivot irrigating arms that are intermittently visible (and it is unclear if this would actually be the case) would be distant from the road corridor and so screened by the intervening bank that they would be all but imperceptible. Although the Dunstan and Wether Ranges comprise the immediate backdrop to Killermont Station and are part of a wider chain of outstanding mountains, the irrigators would barely intrude into views into them at all (in all likelihood, not at all). They would be very minor, light-weight elements that sit well below the main viewing axis to the mountains and, as such, would either have no impact on such views or a negligible effect.

### **Five Rivers Ltd (Ohau Downs)**

29. The situation in relation to Ohau Downs Station is, however, somewhat more complex. I agree with Chris Glasson that the relocation of pivot irrigators since the original application helps to buffer Lake Ohau and protect the moraine area at the western end of the subject property. As stated in my evidence, a trapezoid of open space would be maintained either side of Lake Ohau Rd, protecting key views to Ben Ohau and the Ohau Range. In conjunction with a triangle of open land between the 220kV line that crosses the road corridor and Ohau Downs Station, this would help to maintain open views to Ben Ohau and the Ohau Range. Even so, it is acknowledged that part of the pivot irrigation system immediately north of Lake Ohau Rd would still intervene into views of both features just after one enters Ohau Downs from the east – before climbing up to Swan Lagoon.
30. Chris Glasson considers that his original buffer recommendation of 300m should be retained, in conjunction with the measures already described. However, he still considers that the cubicle barns would have a very high visual impact.
31. Again, however, this fails to recognise the ‘working’, farmed, nature of the landscape around Lake Ohau Rd east of Swan Lagoon and the moraine field. It is already modified by both farming activity and buildings / structures to a significant degree. Sitting within this cultural part of the wider Ohau landscape, the proposed irrigation system would therefore affirm a pattern of use, including the compartmentalisation of the landscape’s more natural and modified ‘halves’, that is already well established. Moreover, the bulk of the northern irrigation field would be hidden behind a strip of moraine that marks the point of transition to a lower terrace on which most of the irrigators would be located.

32. Moreover, when looking from the margins of Lake Ohau itself, the great bulk of the proposed irrigators would either be totally, or very substantially, screened by the jumbled moraine field that flanks the Lake. Any irrigators that remain partially visible would emerge as wholly subordinate, small scale, components of the wider lake landscape and its setting.
33. While acknowledging, therefore, that those irrigators closest to Lake Ohau Rd would still intrude into views of Ben Ohau, it is considered that such effects are of a Moderate, rather than High, level. If considered necessary, the possible relocation of two smaller pivot irrigators immediately north of Lake Ohau Rd (and the sightline to Ben Ohau) would appreciably reduce this impact level even further. Again, a set-back of around 100m should be sufficient to sink these irrigators into the terrain below Ben Ohau, without rendering them invisible.
34. South of the road corridor, a second irrigation field would be located 900m or more away, beyond Six Mile Creek and physically depressed well below the main viewing plane from Lake Ohau Rd. As a result, the irrigators' impact on views towards Glen Eyrie Station and its mountain backdrop would be much more limited, and I don't anticipate that further mitigation measures would achieve a great deal in terms of landscape character and values.
35. Turning to the issue of the cubicle barns, those south of both Lake Ohau Rd and Six Mile Creek would be so low lying and distant as to be all but impossible to see, except for a very short time when descending from the moraine area near of Swan Lagoon. Even then, they would be so low lying and viewed over such a distance that they would have little real presence or impact. North of Lake Ohau Rd, 2, perhaps 3, of the barn groupings would be all but totally screened by the moraine 'strip' at the edge of the near terrace, while one pair of barns would be located some 2.6kms from the road. Viewing distance, the low profile of the structures, and the intervening terrain would render them insignificant components of the visible landscape, despite their physical dimensions per se. Again, mounding and planting could further soften and mitigate the effects of those barns that remain visible, rendering them wholly subservient elements within the Waitaki's expansive landscape.

### **Further Mitigation**

36. Having made my stance clear in relation to each application site, I also acknowledge that further mitigation could be achieved through the relocation of two pivot irrigators on the

north-most part of WHL Killermont and two irrigators immediately north of Lake Ohau Rd on Ohau Downs. Both 'pairs of irrigators are identified on the accompanying Annexure 1.

## **Conclusions**

37. Having reviewed Mr Glasson's further statement and Appendices, my opinion in relation to the proposed irrigation systems and cubicle barns therefore remains much as stated in my primary statement of evidence. I consider that just as the direct effects of the proposals must be taken into account, so must the effective permitted baseline for the subject properties and related land use alternatives for the three stations. As such, I can only reiterate that many of the issues raised in Mr Glasson's September 2009 report have become effectively redundant precisely because of modifications to the proposed irrigation fields and related mitigation. I consider that the further mitigation measures outlined above would be sufficient to address the only outstanding concerns that I have identified.
  
38. Furthermore, the current proposals would help to retain the very openness and austerity of the high country landscape, and much as I might personally prefer to see the upper Waitaki high country revert to a more natural condition, this is not a realistic expectation for the subject properties as they presently stand. Accordingly, I regard the current proposals for WHL Killermont, Killermont Station, Glen Eyrie Downs Station and Ohau Downs as being appropriate in terms of the landscape and statutory contexts that exist.

### **Stephen Brown**

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