IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF of resource consent applications by various parties (**UWAG)** to irrigate land in the upper Waitaki Catchment

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Part 1: General Landscape Evidence of Andrew William Craig

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1.0 INTRODUCTION

1.1 My name is Andrew William Craig. I am a Landscape Architect.

1.2 I acknowledge that I have read the code of conduct for expert witnesses contained in the Environment Court's Practice Note. I have complied with it when preparing my written statement of evidence and I agree to comply with it when I give this oral evidence.

1.3 I hold a Bachelor of Arts degree and a post graduate diploma in Landscape Architecture. I am also an associate member of the New Zealand Institute of Landscape Architects, and have been practising since 1987. For the last 5 years I was employed by Peter Rough Landscape Architects Ltd. I now operate my own landscape architecture consultancy. Before that I was employed by the Christchurch City Council for 13 years, working in the area of environmental policy and planning. Most of my work since graduation and to date has involved landscape assessment and the development of landscape policy. I have also taught landscape architecture at Lincoln University.

1.4 By way of background and of relevance to the resource consents sought, in 2005 I prepared and presented landscape evidence in respect of the Waitaki Catchment Water Allocation Regional Plan (WCWARP), and latterly with regard to Waitaki District's proposed Variation 2. I have also prepared and presented evidence on behalf of Selwyn District Council regarding the proposed Central Plains Water (CPW) application. I have also lived and worked in the Mackenzie District and have a good knowledge of the entire area within which the UWAG application sites are located.

1.5 I have prepared this evidence on behalf of the Upper Waitaki Applicant's Group (UWAG), the members of who are listed in my Appendix 1.

1.6 I have visited the application sites and their surrounds. I have also read the S42A landscape report prepared by Mr Chris Glasson.

2.0 SCOPE

2.1 My evidence will be presented in two parts. The first, comprising this brief, focuses on general landscape matters concerning the effects of irrigation as they would apply universally to all of the properties I represent. As part of this, I also briefly consider the general landscape character and amenity of the wider application site settings.

2.2 The second part of my evidence concerns the individual applications listed above. Here I will focus on the localised effects of each application. As is apparent, I am not addressing all of the application sites within the UWAG collective. Only those whose proposed irrigation activity is located on visually sensitive sites are considered. For the most part, visual sensitivity is determined by the location of publicly accessible vantage points and the views that can be had from them in relation to the applied for irrigation areas. Additionally, other criteria will also be applied, most of which is drawn from Mr Glasson's report[1], which I have elaborated on and / or refined.

[1] Full title: *Section 42A Officer's Report*
Report 5: Landscape Effects
Date of Hearing: 21 September 2—9
Report of Christopher Raymond Glasson

2.3 Other landscape matters I consider include the statutory, particularly with regard to the Waitaki Catchment Regional Plan (WCRP). Also of relevance is the Proposed Natural Resources Regional Plan (NRRP), and to a lesser extent the Mackenzie and Waitaki District Plans. In his s42A report Mr Glasson lists [69 – 103] the objectives and policies within these plans that relate to landscape matters. Notwithstanding these, I note that for all of the Districts involved, that farming activity is generally permitted, and in particular irrigation is not specifically ruled out other than in the Outstanding Landscape areas identified within Waitaki District.

2.4 Finally, I will address those submissions where landscape issues are raised.

2.5 In considering all of the above matters, including those to be addressed in part 2 of my evidence, I refer to Mr Glasson's s42A report.

3.0 SUMMARY ASSESSMENT OF LANDSCAPE CHARACTER AND AMENITY

3.1 I am not going to go into too much detail regarding the landscape character and amenity of the catchment. In this regard I generally concur with the observations of Mr Glasson. The landscape has also been described in detail within the various studies that have been undertaken for each District, specifically those recently undertaken by Mr Graham Densem (to be tabled).

3.2 **Landscape Character**

Mr Glasson concludes that the scale of the catchment landscape is too great to be considered as one unit [123]. Consequently he divides the catchment into eight discrete units based on physical character. I agree with this approach. Importantly what this indicates is that the catchment has a diverse landscape character. This diversity occurs due to the following factors:

- A wide range of landforms that include mountains, hills, valleys, terraces, outwash plains, lakes, alluvial fans, moraines, wetlands and rivers.

- Various land uses that include all aspects of pastoral farming, conservation, electricity generation and transmission, tourist operations, settlements, roading, fish farming, forestry, military, and recreational activity.

- Vegetation cover is primarily grasslands comprising a mix of exotic pasture and tussock. Conifers, consisting of both shelter planting and wilding pines are the predominant tree species, but their land coverage is comparatively low.

- Seasonal variation is highly apparent, which is expressed in changes to vegetation, particularly the exotic including pasture regimes.

- Weed species are also evident and dominate in some areas as hieracium, sweet briar rose and the aforementioned wilding pine.

- Because of the predominance of grassland and low tree coverage, views within the catchment are expansive.

- Modification reflects the above listed land uses, where most occurs at low levels on moderate to flat grades. Modification lessens with altitude.

- The most dominant man made structures include dams, canals, pylons, roads and settlements.

- Naturalness, embodying least modification, is most evident as mountains, lakes, rivers and moraines; and where it is land based is greatest at altitude.

- Because vegetation cover in the catchment is mostly grassland, its landforms are highly readable, and therefore the natural processes, such as glaciation, that lead to its formation are readily apparent.

- Because the upper catchment is surrounded by extensive high mountain ranges and is well endowed with lakes, natural character is dominant, and therefore sublime with respect to the human activity within.

- Scenic values, expressed as the most dramatic presentation of the above natural features, are at their greatest west of State Highway 8, generally facing the Main Divide. In the upper Waitaki Valley they are oriented east toward the Waitaki River and lakes.

- Due to the above factors, its inland location and relatively high altitude, the upper catchment will be perceived by most as being remote and exposed (by New Zealand standards).

- Weather conditions in the catchment can be extreme, varied and are therefore an integral part of the landscape experience.

3.3 **Landscape Amenity**

Amenity generally arises from those characteristics which make the landscape pleasant.[2] They include those factors that provide for physiological comfort such as shelter, safety and security as well as the aesthetic pertaining to all the senses. Regarding irrigation effects on the landscape, visual amenity is going to be the key consideration. Associative effects are important also, where they concern peoples' expectations of where activity (irrigation) should or is anticipated to occur.

3.4 The amenity of the catchment in its entirety, but especially that including and above the Waitaki Lakes is undoubtedly derived from its scenic qualities, identified in the character summary above. In terms of their attractiveness, these qualities are not evenly distributed across the landscape of the catchment. They vary considerably. The landscape contains what might be described as charismatic or iconic features – namely Mt Cook, the main divide, and the lakes. This is especially so where they combine as a single viewing entity, such as that where Mt Cook dramatically backdrops and

[2] RMA definition: amenity values means those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes

terminates the view across Lake Pukaki. The same applies for the mountain backdrops to Lakes Tekapo, Ohau and to a lesser extent those of the Waitaki lakes. Other features, such as the eastern ranges (Rollesby, Dalgety and Grampian Ranges), while highly natural, do not by comparison attract the same attention. One only has to travel the highway to notice where people stop most to take photographs, or to picnic. It is invariably going to be beside a lake with a mountain backdrop. Man made features may also attract scenic attention, particularly those associated with power generation such as the dams and canals.

3.5 Visual amenity is therefore subject to a hierarchy, where within the catchment there are scenes that are significantly more attractive than others. For many visitors, the iconic views are likely to be firmly imprinted via travel promotions such as that found in tourist brochures. Because of this such scenes are highly anticipated, whereas others are not. Thus it is important to understand that peoples' expectation of the landscape within the catchment is not going to be impartial and therefore evenly appreciated as a result. In this regard, the landscape here is analogous to a homunculus, where some parts are going to be salient or outstanding, while others 'take a back seat.' This principle is a very important one when considering the effects of irrigation on landscape character and amenity.

3.6 Overall, the upper Waitaki catchment can be summed up as a dramatic and powerfully assertive landscape due to the combination of elements described above and the contrast between them. Because human activity, while clearly present in many places, is in such a sublime landscape, it is very much subservient to it. This is not to say that the landscape is insensitive to change, as it clearly is, largely due to its predominantly open and expansive grassland character. The key landscape issue therefore, concerns the nature and extent irrigation activity has on such a landscape, subject to the context of its setting and natural or seasonal variability. Or to put it another way, to what extent does such activity derogate from its character and amenity as summarised above.

4.0 GENERAL EFFECTS ARISING FROM IRRIGATION ON THE LANDSCAPE

4.1 Mr Glasson describes these in his evidence [17ff], and I generally agree. To reiterate in summary, the effects are as follows.

- The effects can be divided into two broad categories arising from;
  - the greening of the landscape
  - the infrastructure of irrigation – irrigators, pump houses, races, intakes.

- The chief effect from greening arises from an obvious change in colour or tone that is most apparent when in contrast with surrounding vegetation.

- Apropos the above point, the effects of irrigation will be seasonal, and therefore variable throughout the year, thereby reflecting natural changes. Irrigation is least likely to occur over the winter months.

- More subtly, as a result of irrigation, some areas, namely the high country, will be retired from grazing and will therefore revert to new vegetation regimes and subsequent changes in colour and tone.

- New vegetation textures will result arising from various feed vegetation, but this too will be subject to seasonal variation.

- New geometric patterns will be introduced, especially the circular ones caused by pivot irrigators. However, it should be noted that due to their size and the effects of foreshortening, these are not easily discerned at ground level.

- Landform character will be emphasised where irrigated flatter areas lead to brighter greens that contrast with the tawny tones of adjoining hill country.

- The visible presence of weed species will disappear in those areas subject to irrigation. (The presence of weed species and denudation by rabbits is considered a significant problem for the Mackenzie District as outlined in the issue statements within their Plan[3])

- Landscape coherence or homogeneity is diminished where blocks of contrasting tone are introduced into the overall landscape.

- Because the upper catchment is relatively treeless there can be little opportunity to screen irrigation effects.

- The most noticeable visual effects are going to be those where the greatest amount of appreciable change occurs – namely the irrigation of country that has not been modified through cultivation, over-sowing or is not subject to past or present irrigation.

- The apparatus of irrigation – centre pivots, hard hose guns, and pump sheds, have the potential to affect views because they introduce a vertical dimension to the landscape.

- Earthworks associated with water races and reservoirs potentially affect landform where the effects are likely to be permanent and irrevocable.

- Temporary earthworks effects arise from the installation of pipelines and intakes, where the land is relatively easy to restore following implementation.

- Ephemeral effects such as those arising from water spray, mobility of irrigators, and seasonal changes are also to be considered.

4.2 Overall the above visual effects of irrigation are going to vary considerably depending on the context of its setting and the seasons. As suggested above, the greatest effects are going to be those where the highest degree of change will be apparent to the viewing public. However, it is

[3] MDP Section 7 Rural Issue 1 – Land management in the high country

important to appreciate that the appearance of the land changes seasonally as do current farming regimes involving crop rotations. Thus the landscape of the catchment overall is dynamic, where its appearance alters through the course of the year. Local residents and regular visitors will notice this especially, although first time visitors will not.

4.3 It is also important to appreciate that while irrigation will have visual and landscape effects to varying degrees, the receiving environment will fundamentally remain rural. Green pasture and crops carrying the mechanisms of irrigation are very much part of the rural landscape. This aspect will be discussed in more detail when I consider the statutory documents later on in my evidence.

4.4 Nonetheless, visual and landscape effects will depend on the following factors, which I also consider to be assessment criteria. Mr Glasson also lists some of these in his evidence, particularly with regard to cumulative effects.

- The scale of environment, where the larger it is the better able to absorb effects.
- The size of the land to be irrigated, where the smaller it is the less extensive its visual effects are going to be.
- The importance and orientation of the view catchment within which the irrigated area lies, particularly where the landscape contains iconic features such as Mt Cook or any of the lakes.
- The view type or quality depending on how complex and variable the landscape appears, particularly with regard to land use.
- Allied to the above point, the nature of vegetative land cover adjoining the vantage point.
- The importance of the vantage point – is it, for example, a readily identified or designated scenic viewing point (such as those identified in the Mackenzie District Plan as 'Scenic Viewing Areas'[4]).
- The location of the application site, particularly with regard to any statutory landscape overlays such as those subject to RMA s6(b) (the protection of outstanding natural landscapes and features).
- The level of modification, particularly with regard to current land use.
- Whether the activity is revocable (most irrigation activity will be, since affected land will always harbour the potential to be restored to its former state or undergo new land use).
- The presence of occluding or screening features such as intervening vegetation or landforms such as ridges.

[4] Mackenzie District Plan – Rural Policy 3C.

- Whether remedial effects of irrigation will occur, such as the eradication of weeds, wilding pine, rabbits and soil erosion within application sites.

4.5 Overall, the landscape effects of irrigation are going to be entirely contextual, based on the factors listed above. Not all of these factors should be given equal weight, as some are more important than others. Critical, in my view, is the existing character of the application site, as this sets the environmental baseline against which effects are measured. In other words, it triggers the question posed earlier, to what extent does the applied for activity derogate from current landscape character? The next most important question concerns the location of the proposed activity within the view catchment, especially in relation to iconic landscape features.

4.6 Despite weighting, it is nonetheless important to consider all of the above effects based criteria as a package. This I have undertaken with regard to the applicants I represent, where I conclude for all that any adverse effects arising from the applied for irrigation activity on landscape character and amenity will be significantly less than minor. The reasons for reaching this conclusion will be detailed in my evidence regarding each of the individual applicants.

5.0 MITIGATION

5.1 In his report Mr Glasson addresses the issue of mitigation. Mitigation is only a consideration where effects on the landscape are likely to be more than minor. Further, avoidance and remediation are also considerations. Broadly there are two approaches in this regard. One involves circumstantial conditions such as those arising from current site conditions. This might include, for example, the degree of modification and the presence of screening features like trees and ridges. The other approach entails intervention measures, such as the need for view buffers that Mr Glasson promotes in his report.

5.2 Mr Glasson lists the following factors, which I have paraphrase and summarised, as being those that assist in the avoidance, remediation and mitigation of potential adverse effects arising from irrigation activity. Where necessary I comment on these, but otherwise generally agree with them.

- *Irrigation needs to be compatible with landform patterns.*

  This is likely to happen as gradients are a key determinant of where irrigation can occur. For example a pivot irrigator cannot operate on a slope greater than 15^0. Further it is not able to operate in a landscape cluttered with fences, shelterbelts, buildings or any other structure likely to impede its operation. Additionally steeper slopes are avoided because water will run off them rather than soak into the soil.

  Overall, irrigation is only going to occur on relatively shallow gradients thereby reflecting landform pattern. One result of this is that the contrast between these landforms will be highlighted, where the quality of each becomes more apparent.

- *Avoid key vantage points.*

This will depend on how these are defined. As mentioned the Mackenzie District Plan identifies scenic view points. Other points are also significant, but their importance varies depending on view quality, accessibility, and the extent of the viewing audience.

- *New and existing patterns need to be integrated.*

  As all of the application sites I consider are in some way already cultivated or improved, existing patterns will generally be maintained and integrated with current land use regimes.

- *Compatibility with natural features.*

  As identified earlier, key natural features are the mountains, lakes and rivers within the catchment. Other less salient features include terraces, moraines, alluvial fans, wetlands and outwash plains. Although they are natural in appearance, and display high visual amenity, the Waitaki hydro lakes are strictly speaking artificial. Avoidance will be the main method of dealing with the visual effects of irrigation on these features, chiefly through the appropriate location of activity in relation to them.

  While some of the applicants that I represent have application sites in proximity to natural features, none are in areas that are not already cultivated or improved in some way.

- *Avoid significant natural landscapes.*

  These concern landscapes that are subject to RMA s6(a) and s6(b) matters – namely the natural character of waterbodies generally, and outstanding natural features and landscapes. It is important to appreciate with regard to these that the section 6 matters do not rule out development and use in such landscapes, provided it is not inappropriate to the protection of their natural character.

- *Avoid arbitrary locations.*

  See comments above regarding ‘New and existing patterns need to be integrated’.

- *Best location at change points in the landscape.*

  See comments above regarding ‘Irrigation needs to be compatible with landform patterns’.

- *Avoid rigid geometric patterns.*

  This will be difficult, if not impossible to achieve since areas to be irrigated are divided into paddocks subject to a geometric layout. This already occurs and has been the convention since farming practices were introduced to New Zealand.

- *Avoid cadastral boundaries.*

See above comments.

- *Locate near modified areas*

  For the applicants I represent all irrigation will occur in areas that are currently modified to varying degrees. All of the application sites have been and are currently cultivated and improved. Fencelines, farm vehicle access tracks and shelter belts are all common features of modification as well.

- *Provide buffers alongside key vantage points – especially in areas free of irrigated land and which consists of tussock, shrubland or exotic trees.*

  These may be necessary alongside important natural features or as foregrounds to significant views, such as those of Mount Cook or of the Mackenzie lakes. In areas where land is currently improved in relation to such features buffers are likely to have negligible effect, since the precondition of 'tussock, shrubland or exotic trees' are not likely to be present in those circumstances.

- *A 10km buffer zone around Mt John.*

  Mt John is a key destination point for visitors and due to its height offers expansive views of the Mackenzie basin and surrounding mountains. The 10km buffer zone is questioned, since within it much of the land is substantially modified where it includes Tekapo Township, the two lakeside settlements at Lake Alexandrina, Tekapo airstrip, Tekapo power station, the Tekapo Military Camp and Balmoral, Glenmore, Godley Peaks and Mt Hay stations. Tracts of land within these stations are cultivated and some of it is currently irrigated. Thus the character of the receiving environment is an important consideration when assessing visual amenity effects, where the latter are informed by existing conditions.

- *Structures to be recessive.*

  This largely concerns colour and reflectivity of structures. The more natural colours are and the lower reflectivity is, the less obvious structures will appear in the landscape. Buildings such as pump houses can be easily painted in this way. Pivot irrigators are much more difficult to treat in this manner because of their intricate design and generally large extent. Being galvanised, they will initially appear as bright objects in the landscape. But this lessens with time as the galvanising weathers and becomes increasingly dull. This effect can be seen in the pylons that occur in the catchment, which colour and reflectivity wise are generally recessive in the landscape. It is also important to bear in mind that the landscape itself is at certain times of the year bright, particularly when under cover or snow or in frosty conditions. In fact, the catchment displays a wide range of colour and tone in response to seasonal and varying climate conditions. Consequently it will be difficult to achieve year round recessiveness.

However, the avoidance of bright primary colours can be achieved, especially where it is important to do so in sensitive landscape settings.

- *Buffer distances alongside: SH83 – 50 to 100 m; lakes 100m; river terrace risers 50m; rivers 100m, streams 50m.*

  The figures cited can only be regarded as a guideline, as each application site has characteristics that are unique. There may be circumstances where it is necessary to impose such a buffer, but there will be exceptions. These will be largely dependent on contextual matters concerning current land use, degree of modification, importance of views and vantage points. The presence of intervening vegetation and landforms are to be taken into account also.

5.3 Overall, avoidance, remediation and mitigation is very much a contextual matter. Because of this it is important that the blanket application of these measures is avoided. Instead they should be considered as a guiding principle, where each case is considered on its merits, particularly with regard to the avoidance, remediation and mitigation of adverse landscape effects. It is also important to balance these effects against those which are positive, chief among them the freeing up of visually sensitive high country from extensive grazing and the control of weeds, wilding pines and soil erosion within application sites.

6.0 SUBMISSIONS

6.1 There are a number of submissions opposing the irrigation applications that cite adverse landscape effects as a reason for declining consent. The main issue in this regard concerns the loss of natural character. A number of submitters have also identified that landscape assessment thus far has been inadequate. With regard to the applicants I represent, this issue will be covered on case by case basis with reference to the assessment criteria listed above, and within the context of the relevant statutory documents that I discuss next. It is also important to appreciate that consideration of natural character is subject to a spectrum ranging from highly modified to highly natural landscapes. So when assessing landscape effects, the question has to be asked where on the spectrum does the proposed activity lie, and how far from it does it derogate from the baseline environment?

7.0 STATUTORY MATTERS CONCERNING EFFECTS ON THE LANDSCAPE

7.1 Based on advice from Counsel, my understanding is that the most pertinent statutory matters to consider are those provided for within the Waitaki Catchment Regional Water Allocation Plan (WCRWAP) and the Proposed Natural Resources Regional Plan (NRRP). The District Plan provisions (Waitaki, Mackenzie and Waimate) are to be regarded, but not given as much weight as the regional plans identified above. Mr Glasson has listed many of the relevant objectives and policies from the District Plans, but not the regional ones. In considering the relevant statutory documents I am aware that the consent applications are for water permits and not land use.

The Waitaki Catchment Regional Water Allocation Plan

7.2 Objectives 1(c) and 3 from the WCRWAP is what I have been most mindful of when preparing my evidence for the individual applicants. Of relevance to effects on the landscape, Objective 1(c) states;

'*managing the water bodies in a way that maintains natural landscape and amenity characteristics and qualities that people appreciate and enjoy*'

And Objective 3 states;

In allocating water, to recognise beneficial and adverse effects on the environment and both the national and local costs and benefits (environmental, social, cultural and economic).

7.3 In achieving these objectives, I note that the policy[5] focus is on the water bodies that are potentially affected by abstraction rather than wider landscape effects. That is, the Plan is concerned with the effects of abstraction and the allocation of water where it may adversely affect those waterbodies that contribute to areas of high natural character. The policies do not appear to be concerned with the effects of irrigation on land, such as that arising from greening and the presence of apparatus. As directed by the relevant policies, I will consider the landscape effects of abstraction for those application sites within high natural character areas. However, my main concern will be on land based effects, in large part because these inform Mr Glasson's conclusions and recommendations. These also include consideration of effects on those application sites adjoining water bodies, where specifically buffers are sought by Mr Glasson. In this regard it is necessary to consider the relevant District Plan provisions, particularly with respect to the permitted baseline. This will be discussed shortly.

7.4 **The Proposed Natural Resources Regional Plan**

In preparing my evidence I have also been mindful of the Objectives in the NRRP that relate to landscape matters. Of particular relevance is Chapter 6 Objective BLR1 that seeks, among other things, the following outcomes for the beds and margins (of lakes and rivers):

- *(d) preserving natural character;*
- *(e) protecting outstanding natural features and landscapes;*
- *(g) promoting the maintenance and enhancement of amenity values;*

7.5 These reflect RMA sections 6(a), 6(b) and 7(c) respectively. I understand the Districts are charged with identifying and managing the areas subject to the above outcomes with a view to implementing the objectives, which for the most part is incorporated into the District Plans. However, they are not all fully operative in this regard, particularly concerning s6(a) and (b) matters.

7.6 Nonetheless, in reading the explanation and principal reasons to this objective and supporting policy (BLR1) I note that the emphasis is on the effects of activity on natural processes, such as flooding, rather than landscape character and amenity. From a landscape perspective, the actual irrigation of land is unlikely to affect the beds and margins of rivers and lakes,

[5] WCRWAP policies 2, 4(c), 12(f), and the locality specific policies 30 (a), 31, 32 (d)(i)

although intake structures will certainly have the potential to do so. As per the WCRWAP discussion above, I will consider the effects of these where they lie within areas of high natural character.

7.7 The District Plans

As a permitted activity, the three District Plans (Waitaki, Mackenzie and Waimate) all contemplate the presence of irrigation within their rural zones, although Waitaki imposes non-complying activity status on it within its outstanding natural landscape areas (subject to a forthcoming decision). While there are restrictions on activities such as earthworks and buildings, particularly where they are located near water body margins or in areas of natural significance (Mackenzie & Waimate) these do not appear to apply to irrigation activity. Indeed, specific reference to irrigation is generally scant within all three District Plans. The only plan that specifically mentions irrigation within the scope of permitted activities is Waitaki. Here farming is a permitted activity (of relevance) '…*except for… the irrigation of land for pastoral or crop production within areas identified as an Outstanding Landscape shown on the Planning Maps.'* Thus there is a explicit expectation within Waitaki District that irrigation, and it effects, are going to be expressed as part of the rural landscape outside of outstanding natural landscape areas.

7.8 The same applies to the other Districts, but when compared to Waitaki, irrigation activity is more implicit with regard to what is allowed as a permitted activity.

7.9 In the Waimate District Plan farming activity is permitted (other than factory farming) subject to various clauses, none of which exclude irrigation with regard to its effects on the landscape. In these clauses the focus appears to be on earthworks, indigenous vegetation removal and the location of buildings, particularly within areas subject to various landscape overlays such as sites of Natural Significance, Significant Natural Features, High Altitude Areas and Lakeside Protection areas. Irrigation is not specifically mentioned,[6] although if it entails any of the identified activities then the effects of these are restricted.

7.10 In the Mackenzie District Plan rural section, the word 'irrigation' appears once[7] and is otherwise not excluded as an activity identified in Clauses 3 to 14. These clauses are conditional on farming as a permitted activity.[8] The only restriction that may affect the location and extent of irrigation activity concerns pastoral intensification[9] which '…*shall not exceed 5% of any Site of Natural Significance identified on the Planning Maps other than on Geopreservation sites.* So like the other two Plans, the Mackenzie one clearly permits irrigation activity and therefore entertains its effects on the landscape.

7.11 Overall, because irrigation is, as part of normal farming activity, a permitted activity then we can assume that its effects will not offend the relevant

[6] Except with regard to dairy farming where there is a risk that irrigation may facilitate the run off of effluent into water bodies.
[7] MDP Section 7 Rural - Introduction
[8] Identified as such in Clause 15.1
[9] MDP definition - *Pastoral Intensification: means subdivisional fencing and/or topdressing and oversowing.*

landscape objectives and policies. For all Plans, the focus with regard to the effects of farming activity on the landscape appears to revolve around earthworks, indigenous vegetation clearance, building location and the establishment of plantation forestry. Controls become increasingly restrictive as levels of landscape protection are elevated, particularly around waterbodies and their margins, high country, significant natural areas (largely of ecological or scientific interest) and any land draped with a RMA s6(a) or (b) overlay. Apart from within the Waitaki District, irrigation is not restricted in these areas, although subsequent activity such as pastoral intensification will be, as is earthworks and suchlike.

7.12 **Summary of planning documents**

7.13 Overall, the relevant objectives and policies fundamentally concern amenity values as derived from landscape character. While there is greater emphasis on potentially affected water bodies in the WCWARP and by extension on the beds and margins of lakes and rivers in the NRRP, the District Plans address land use in the wider setting. Notwithstanding the effects of intake structures and such like on the beds and margins of rivers and lakes, the more extensive visual effects will occur on the land, which appear to lie outside of the policy concerns of the WCWARP and NRRP. However, I acknowledge that some application sites adjoin rivers and lakes, while other areas are remote from them. Nonetheless, the District Plans recognise that some of these water bodies extend their influence beyond their immediate shorelines, where they are identified as lakeside protection areas or similar. The same applies to rivers where significant natural area status or near equivalent is imposed. However, the landscape outcomes for these areas are ultimately dictated by implementation of the permitted baseline that for most places allows irrigation activity, including associated apparatus.

7.14 n this regard it is important to appreciate that planning documents seek the maintenance of existing environments with respect to the continuance of current activity, but also to that anticipated by them. For the applicants I represent, especially those addressed in my Part 2 evidence, all of the application sites are farmed and improved in some way. Thus rural activity is expected to continue with irrigation regimes under the permitted baseline umbrella while allowing specific landscape changes to occur as a result. Consequently, generic rural character and amenity will be maintained as is anticipated by all of the statutory plans. That is, the rural landscape is not a static, unchanging entity, which Mr Glasson acknowledges in his s42A report [11- 13]. With regard to irrigation, a generally permitted activity within all affected districts, varying degrees of specific landscape change will occur, but the generic character of the rural environment will not change at all.

7.15 For each of the applicants I represent, it is essentially on this basis that my assessment is undertaken, with what is permitted being uppermost in my consideration.

8.0 CONCLUSION

8.1 Regarding landscape effects arising from the proposed activity, context is generally going to be the key factor. While assessment is subject to universal principles or methods, each application site presents unique circumstances.

With regard to effects these can be favourable or otherwise. Notwithstanding this, the most important landscape consideration in my opinion is going revolve around the question, as stated earlier; to what extent do effects depart from the baseline environment, while taking into account the outcomes anticipated by the relevant statutory documents? And following this the next question concerns the importance of the setting with regard to effects, especially those affecting views. In this regard effects on the wider landscape are considered, particularly in respect of view significance and public expectation.

8.2 I also believe that it is important to consider whether proposed activity is revocable or not. Or to put it another way, are the effects going to be permanent? For the most part I conclude that the effects are essentially ephemeral, although I acknowledge that they could be enduring. Nonetheless, the potential to introduce other land uses, including restoration of more natural character, is not precluded by irrigation activity.

8.3 Finally, with regard to the applications I have assessed with regard to the above considerations, it is my opinion that the potential adverse effects will be significantly less than minor. For the most part my conclusion is reached on the basis that all of the application sites I consider are in some way modified and / or cultivated, and that the views into them will not change to any great or incongruous extent.

Andrew Craig
Landscape Architect
September 2009

APPENDIX 1

List of UWAG members

CRC No.	Applicant
CRC072363	Mr F I Graham
CRC063564	Twin Peaks Station Limited
CRC011940	Mr D W McAughtrie
CRC011845, CRC084263	Irishman Creek Station Limited
CRC012291, CRC082211	Birchwood Run Limited
CRC041031, CRC083692	Aviemore Limited
CRC020355, CRC041033	Otematata Station Limited
CRC071786	Lilybank Station Holdings Limited
CRC042661	Grays Hills Station Limited
CRC071362, CRC083609	Glentanner Station Limited
CRC052501, CRC052502	Glenmore Station Limited
CRC020584	Totara Farming Co Limited
CRC030944	Waitangi Station Limited
CRC011361, CRC011362	Dunstan Peaks Limited
CRC071649, CRC011987	Bellfield Land Company Limited
CRC012047	Otamatapaio Station Limited
CRC041542, CRC041543	Mr A N Hope – Grampians
CRC991473	Mr D W McAughtrie, Greenfield Rural Opportunities Ltd & Ellis-Lea Farms (2000) Ltd - Government Race
CRC063106, CRC070406	Classic Properties Limited
CRC012017, CRC012019	Messrs K J & D K & Mrs S R Anderson
CRC042011, CRC042015, CRC042017, CRC042022, CRC042025, CRC042020, CRC042018	M Horo - Ohau Trust
CRC042561, CRC082269	Haldon Station Limited