

**BEFORE THE ENVIRONMENT COURT  
AT CHRISTCHURCH**

**UNDER**

The Resource Management Act 1991

**IN THE MATTER OF**

Appeals under clause 14(1) of the First Schedule  
to the Act

**BETWEEN**

**FEDERATED FARMERS OF NEW ZEALAND  
(INCORPORATED) MACKENZIE BRANCH**

**HIGH COUNTY ROSEHIP ORCHARDS LIMITED  
AND MACKENZIE LIFESTYLE LIMITED**

**MOUNT GERALD STATION LIMITED**

**MACKENZIE PROPERTIES LIMITED**

**MERIDIAN ENERGY LIMITED AND GENESIS  
ENERGY LIMITED**

**THE WOLDS STATION LIMITED**

**FOUNTAINBLUE LIMITED & OTHERS**

**R, R AND S PRESTON AND RHOBOROUGH  
DOWNS LIMITED**

**HALDON STATION**

Appellants

**AND**

**MACKENZIE DISTRICT COUNCIL**

Respondent

---

**EVIDENCE IN CHIEF OF STEPHEN KENNETH BROWN ON BEHALF OF ENVIRONMENTAL DEFENCE  
SOCIETY INCORPORATED (LANDSCAPE)**

**14 September 2016**

---

## INTRODUCTION

1. My name is Stephen Kenneth Brown. I hold a Bachelor of Town Planning degree and a post-graduate Diploma of Landscape Architecture. I am a Fellow and past President of the New Zealand Institute of Landscape Architects, an Affiliate Member of the New Zealand Planning Institute.
2. This statement of evidence has been prepared in response to the appeals over Mackenzie District Council's (**Council**) Proposed Plan Change 13 (**PC13**). I have been asked by the Environmental Defence Society Incorporated (**EDS**) to review the section 293 version of the PC13 provisions (**PC13 (s293v)**) and to consider whether or not it would produce outcomes that are consistent with the identification of the Mackenzie Basin as an Outstanding Natural Landscape (**ONL**). As a result, I have visited the Mackenzie Basin and undertaken an evaluation designed to assist the Court in its deliberations over PC13.

## PROFESSIONAL EXPERIENCE

3. I have practised as a landscape architect for 34 years. During that period, the great majority of my professional practice has focussed on landscape assessment and planning. This has included evaluating the landscape, natural character and amenity effects associated with large scale proposals, such as Auckland's Waterview Connection (SH16 / SH20) project, the King Salmon marine farm proposals in the Marlborough Sounds and, very recently, the Blueskin Wind Farm project, north of Dunedin.
4. I have also undertaken a large number of assessments of landscape and natural character characteristics and values in different parts of New Zealand. Relevant projects are set out in **Appendix A**. In 2006 I was part of a team managed by Urbis Ltd that was awarded the (UK) Landscape Institute's Strategic Planning Award for the "*Landscape Value Mapping Study of Hong Kong*". I developed the assessment method and assessment criteria employed in that study.

### **CODE OF CONDUCT**

5. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I further confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

### **SCOPE OF EVIDENCE**

6. I have been asked to review PC13 (s293v), together with relevant documentation, and to address the adequacy of its proposed objectives, policies and rules as a means of effectively managing the Mackenzie Basin ONL. PC13 (s293v) specifically identifies the Mackenzie Basin ONL as a Subzone to the Rural Zone (Council's proposed Attachment 5). It is to this Subzone that PC13 (s293v) applies. When I refer to the Mackenzie Basin or the Basin in this statement I am referring to that Subzone.
7. As part of the review process, I have read Council's Section 293 Report, its evidence on PC13 (s293v), and that of the main appellants. As a result, I have reached a number of findings about PC13 (s293v) that are largely supportive of the provisions proposed, of the background work undertaken by Council's landscape architect, Graham Densem, and of most of the recommended modifications to the PC13 (s293v) provisions.
8. I have also worked closely with Peter Reaburn who has been engaged by EDS to give expert planning evidence in reviewing PC13 (s293v).

### **KNOWLEDGE OF THE BASIN**

9. I need to indicate at this point that I have visited and stayed within the Mackenzie Basin over many years – in fact, decades – and consider that I know it reasonably well, albeit not with the same familiarity and intimacy as those

who live and work within the Basin. Even so, I have visited it in both a professional capacity, and also as a 'visitor': passing through on the way to Wanaka, Queenstown and Mt Cook / The Hermitage far more times than I can recall, as a guest at Tekapo village (swimming in the lake was an adventure not to be forgotten) and Omarama, while skiing at Roundhill, Mt Dobson and Ohau ski fields, and as a student undertaking field trips to the Pukaki Basin, Mt Cook and the Tasman Glacier.

10. In 2009 I was briefed to assess the effects of proposed irrigation schemes on behalf of a number of Upper Waitaki landholdings owned by Southdown Holdings Ltd, Five Rivers Ltd, Williamson Holdings Ltd, and Killermont Station Ltd. After initially presenting evidence on this matter to Environment Canterbury, I was subsequently asked to prepare evidence for additional intensive dairying proposals. After much consideration, I decided that I could not endorse or support proposals for further dairy intensification within the Upper Waitaki catchment. I was involved in preliminary discussions between Richard Peacock in 2010 (then owner of Glen Eyrie Downs and one of the water right applicants) and EDS, but these occurred without achieving any merger of views over the future of the Upper Waitaki area.
  
11. In 2013, I was invited to visit Simons Hill Station, abutting SH8, southeast of Lake Pukaki. Again, I was asked if I could support irrigation proposals to support dairy intensification. After much deliberation, I decided that I was unable to support the landowner's proposals for irrigation of large parts of that property.

#### **WIDER CONTEXT – UNDERLYING THREATS**

12. I raise these matters because I need to make it clear that I have not come into the current appeals without much forethought about the situation unfolding within the Mackenzie Basin. The issues of tussock decline and loss, rabbits, forestry, and wilding trees, even the effects of past hydro-electricity development and more recent rural-residential 'sprawl' near Twizel, are hardly new. However, I believe that the recent acceleration of change within the Basin

has left us now perilously close to a landscape ‘tipping point’, beyond which it would be all too easy to see one of this nation’s truly iconic landscapes irrevocably changed to the point where its sense of place and identity are largely lost. I believe this would be a tragic outcome for the Mackenzie Basin, Canterbury Region and nation as a whole. Indeed, I see the Mackenzie Basin as symbolic of a range of landscape issues that presently confront New Zealand – where in light of cumulative and accumulative effects, the very sense of place associated with key landscapes is being eroded and, in some instances, lost. I regard the Mackenzie Basin as one of these places.

13. The extent of change and the importance of protecting the spectrum of landscape types was made very clear to me during a project in 2012. While undertaking an initial assessment of landscape and natural character values within the West Coast Region, I met a small group of Swiss tourists at Cape Foulwind, near Westport. I had just completed an initial reconnoitre of the coastal landscape from Oparara near the start or end of the Heaphy Track in the Buller District, to Big Bay at the bottom of the Westland District. The tour group explained to me that they had spent 3½ weeks touring both the North and South Islands and were thoroughly fed up with seeing endless ‘bare pasture and production forestry’ – not the pristine environments and landscapes of promotional legend. I countered that more than a third of the country’s landscape heritage is protected in national parks, but their quick, rather perceptive, repost to this, was that much of our national park system focuses on the snow, ice and scree of the Southern Alps and the three volcanoes of the Volcanic Plateau. Rural New Zealand, including parts of Central Otago and the Mackenzie Basin, had rather underwhelmed them.
14. What their comments highlighted is, in my view, the increasing ‘internationalisation’ of New Zealand’s rural landscapes. Moreover, the landscapes of a country once renowned for its diversity are – outside the national parks network – developing an increasing ‘sameness’, a homogeneity of elements and patterns, that is irrevocably eroding the specialness of New Zealand as a whole.

15. Ben Espie, at his paragraph 3.16 comments that: “... *the fragmentation or visual division of the empty, open landscape of the Mackenzie is a significant threat to its character and the visual amenity that it provides...*”. This implies that the Basin’s landscape is becoming increasingly compartmentalised, losing its vast, expansive qualities. For example, when I recently drove past Simons Hill Station next to SH8, its now verdant plane of green pasture directly abutting the highway, together with production forestry straddling the hill slopes south of Simons Hill, reminded me that this iconic part of the South Island is progressively losing its distinctiveness and the very qualities that until recently set it apart from most of the rest of New Zealand. The repetition of international models of rural production places the Mackenzie Basin at risk of losing its uniqueness and much of its sense of place.
16. Similarly, when I first visited Glen Eyrie Station with Richard Peacock in 2009, I explained to Mr Peacock that I was concerned about the loss of identity within both the upper Waitaki Basin and wider Mackenzie Country, faced with the potential outward spread of dairy pasture and irrigation from between Lake Ruataniwha and Omarama, particularly (at that stage) towards Lake Ohau and the Lindis Pass. He countered by telling me that he had spent millions of dollars removing wilding pines from his own property near Omarama and then drove me north of Twizel, pointing out the expanse of pine forestry and wilding conifers evident near Lake Pukaki, west of Twizel, and climbing into the foothills north of Lake Ohau. He very succinctly commented that soon all of the Basin landscape ‘would be Canada’.
17. The situation has hardly improved since that 2009 site visit. Attachment A to the Council’s Section 293 Report (addressing the Environment Court’s First, Sixth, Seventh, Eighth and Ninth Decisions, and its comments on matters raised in relation to PC13) includes the Court’s commentary on the risks of taking no action to better manage the Mackenzie Basin landscape:<sup>1</sup>

---

<sup>1</sup> Mackenzie District Council Plan Change 13 s293 Report (27 May 2016), p.22 addressing First Environment Court Decision

[250] *As for the risks of acting or not acting, we agree with the Council's Section 32 report that "There is a very real risk that if action is not taken soon that some very important landscape [...] could be degraded by some very inappropriate development and subdivision". Further, the operative district plan and PC13(N) raise the probability of degradation to the landscape (and also potentially ecosystems) from further areas of intensified farming activities."*

18. There are a number of other underlying factors impacting the Basin landscape. Firstly, as Mr Densem points out in paragraphs 14, 52 and 53 the traditional consolidation of pastoral irrigation and oversowing within 'sheltered homestead blocks' has fundamentally changed as a result of the leasehold tenure review process, with an accelerating impact on former dry stocking grasslands since 2009. Secondly, the proposed 'grandfathering' clauses in PC13 (s293v)<sup>2</sup> and the operative District Plan may have further exacerbated this transition:
- a. By aligning the activity status of future applications for Pastoral Intensification<sup>3</sup> with a cut-off date for regional consents for irrigation there is a risk that PC13 (s293v) incentivised a rush for those regional consents, and hence, conversion of large tracts of dry stocking land to 'green pasture'.
  - b. With the more stringent restrictions on Pastoral Intensification in PC13 (s293v) pending, it is equally possible that the exception allowed from rules covering Vegetation Clearance have been employed to undertake clearance as a Permitted Activity. This is discussed by Mr Reaburn at paragraph 42 of his statement.
19. I do not know the extent to which these 'grandfathering' exceptions have actually been relied on. Rather, I am identifying the risk of a rush to intensification prior to PC13's more stringent provisions coming into effect.

---

<sup>2</sup> Rule 15A.1.2(b) PC13(s293V)

<sup>3</sup> Noting that Pastoral Intensification is specifically defined for the Subzone, as is discussed in Mr Reaburn's statement.

Clearly this would have, and may already have had, an adverse effect on the Basin ONL.

20. More generally, the Basin's iconic, tussock landscape continues to succumb to rabbits and over-grazing, and its glacial valleys and basins are dotted or lined with a mixture of hydro canals, roading, sporadic farm development and transmission lines. It is truly a checkerboard of disparate activities and forms of land cover. As a result, it is barely 'hanging in there' as one of the true touchstones of the New Zealand landscape and national identity and it is my opinion that the entire Basin is at, or close to, a key 'tipping point' in relation to its landscape future. I agree with Mr Densem that some areas of the Basin Subzone have already descended below the threshold for ONL status. When considered as a whole, the Subzone still qualifies as being sufficiently natural and outstanding to deserve identification as an ONL, but at a more fine-grained level, not all of its constituent parts reach the outstanding threshold. This is especially evident around the margins of Twizel and Lake Ruataniwha.
21. Yet, the pressures for change within the Basin are hardly new. This is reflected in the concluding remarks to the following article from the *New Zealand Journal of Ecology 2001*, pages 12 and 13 (*New Zealand Journal Of Ecology*, Vol. 25, NO. 1, 2001; *The Origin Of The Indigenous Grasslands Of Southeastern South Island In Relation To Pre-Human Woody Ecosystems*, M.S. McGlone Landcare Research, P.O. Box 69, Lincoln):

*" ..... The history of the impact of human settlement on grasslands is an important factor when considering conservation management and goals. The present indigenous lowland and montane grasslands are unparalleled in the historical record. Pre-fire grasslands tended to have abundant Chionochloa only above tree line in the wetter western ranges. On the flat topped mountains of the dry interior, a diverse mixture of grass species and low shrubs seems to have been more the rule than pure tussock grassland. Below tree line, the grasses formed intricate mixtures with trees and shrubs. The extensive Chionochloa rubra, C. rigida and C. macra tussock grasslands present in 1840 AD*



*represented a new anthropogenic community that was created by periodic fire that eliminated and repressed the previous woody ecosystems. ....*

*Despite this clearly anthropogenic origin, the tussock grasslands of the montane and lowland South Island have been regarded as the de facto natural vegetation cover. ....*

*As lowland and montane tussock grasslands are increasingly being brought into the national conservation estate, the question of how to manage them has become important. Being seral communities, formed and maintained by fire and modified by grazing, they are unstable. Those adjacent to shrubland and forest, exotic or indigenous, will always be vulnerable to invasion by woody plants. Most are open to fast-spreading weeds and mammalian pests. Ultimately, management designed to maintain them in their current condition, be that continuation of grazing, fire, or other means of woody plant and weed control (for instance, Calder et al., 1992), will have to be undertaken on a large scale.*

*More importantly, as has been known for a long time, behind nearly every lowland or montane tussock grassland stands the ghost of a destroyed woody ecosystem and, on a national scale, a unique dryland ecological zone has been nearly eliminated. If preservation of the entire span of fully functional New Zealand ecosystems is an aim, it follows that some attempt will have to be made to ensure the existence of self-sustaining examples of the pre-human woody cover of the southeastern South Island. However, there must be some doubt as to how feasible this goal is. .... In the current pyrophilic situation, it is difficult to envisage how sustainable indigenous semi-arid woodlands could be recreated. Perhaps the most that can be done is to attempt to preserve small examples as ecosystems-in-waiting while maintaining the ecological health of the magnificent, although thoroughly anthropogenic, successor grasslands.”*

22. Looking to the future, preservation or protection of the status quo might be a worthwhile starting point for management of the Mackenzie Basin Subzone landscape, but I doubt that this will be 'enough', taking a longer view.

#### **THE LONG TERM FUTURE OF THE MACKENZIE BASIN SUBZONE LANDSCAPE & KEY ISSUES**

23. The issues associated with this 'transitional landscape' and its grassland ecosystems have been identified repeatedly over the duration of the current proceedings by Mr Densem and others.
24. First, there is a fundamental need to protect those key aspects of the Subzone landscape that are recognised, shared, and endorsed by the wider community:
- a. the penetrating, crystal clear, views across large, even vast, open spaces;
  - b. the strong visual signature of landforms – of the glacial valley / moraine / shield framed by an ice and snow clad, alpine fastness – that is fundamental to the Basin's character;
  - c. the lakes that are the jewels and points of focus in the Mackenzie 'crown';
  - d. the grassland landscapes that are both harsh and also softly flowing and gently rolling, with that reveals subtle gradations and topographic transitions; and
  - e. the unique ecology of the lower montane grassland environment.

It is, in places, a sublimely beautiful and, in many places, a notably empty landscape (**Annexures 1-4**), even if the Subzone landscape increasingly oscillates between retention and degradation of these elements.

25. The second key issue that needs to be confronted is that raised by Matt McGlone in his 2001 paper<sup>4</sup>: just what sort of ecological and landscape future is realistically achievable for the Mackenzie Basin, given the transitional nature of its current grassland regime? The Basin, as we know it, is not one of a climax of ecological sequences of beech forest framing alpine lake margins (except near Ben Ohau), woody shrubland, wetlands and glades of tussock – of the sort that first confronted Maori explorers and can still be found within parts of the Te Wahipounamu World Heritage Area and nearby Snowdon Forest. Nor is it the landscape experienced by Julius Von Hochstetter on his trails to the Godley River, Mt Cook and Lake Ohau in 1862<sup>5</sup>, when he described seeing groves of ‘Wild Irishmen’, cabbage trees, flax, coprosma, griselinia, matagouri, Spaniards, and ‘fagus’ of various kinds, as well as large swathes of tussock. Instead, the Mackenzie vernacular now idealised has come to mean a more simple palette of tussock, matagouri and Spaniards, with a clear emphasis on the low level matrix of grasslands that helps to express landforms and enhance the Basin’s much celebrated ‘long views’.
26. Yet, much of this land is too arid, too peppered with rabbits, too affected by over grazing, and too chemically impoverished to re-establish the ‘swaying sea of tussock’ that no doubt most New Zealanders still associate with the Mackenzie Basin. Consequently, despite reading much about the Basin’s ecology and discussing it at length with other experts, I remain unclear just what the ‘end game’ for the Mackenzie Basin really is. What can realistically be achieved across it, given the pressures that the Basin is subject to, the very specific botanical niche of its tussock communities and the importance now attached to those communities by New Zealand at large?
27. In my view, it is doubtful that tussock grassland regeneration on any scale can be achieved without some form of human intervention, even if this means no more than reduced stocking rates and continuation of the war on rabbits.

---

<sup>4</sup> *New Zealand Journal Of Ecology, Vol. 25, NO. 1, 2001; The Origin Of The Indigenous Grasslands Of Southeastern South Island In Relation To Pre-Human Woody Ecosystems, M.S. McGlone Landcare Research, P.O. Box 69, Lincoln*

<sup>5</sup> *Geology Of The Provinces Of Canterbury And Westland, New Zealand : A Report Comprising The Results Of Official Explorations - Exploration Of The Head Waters Of The Waitaki, Julius Von Hochstetter, 1862*

However, current trends also raise the prospect of increasing rationalisation of those areas already used for rural production versus protection and enhancement of those that have more of a conservation focus (eg. north of Mount John - **Annexure 5, Photo F**). What is required are unique and innovative methods to provide the financial support necessary for the resurrection and sustenance of tussock communities, and therefore the grassland landscapes, across the Subzone. These need to be coupled with protective mechanisms and environmental bottom lines to preserve key values and attributes.

28. Moreover, just as not all perceptions of the Mackenzie landscape are aligned with its ecological reality, the Subzone is also far from 'pristine' or wholly natural. Its landscape contains a plethora of cultural 'relics', aside from the High Country runs. These include its linear matrix of hydro canals, associated accessways and earth channels that dissect the central shield / moraine landscape between Tekapo and Pukaki, before extending through to Lake Benmore and re-emerging around Lake Ruataniwha (**Annexure 5, Photo G**). This strategic network is augmented by the transmission towers that march across the Basin south of Tekapo and from Twizel to the Dalgety Range. Moreover, SH8 and a matrix of local roads impose their own geometric pattern on its soft terrain near the western and eastern edges of the main glacial corridor below Tekapo.
29. Taking all of these factors into account, it is my view that PC13 cannot hope to provide any permanent resolution for the future of the Subzone. At best, it provides breathing space within which future, more permanent, outcomes for the Basin ONL can be explored. This will likely require the on-going involvement of the District Council, the Mackenzie Trust, the Department of Conservation, iwi, landowners and other stakeholders. In my opinion, it is critical that such collaboration focuses on options that have a sound ecological foundation and that it promotes landowner engagement in the rehabilitation process.
30. PC13 (s293v) offers the opportunity to address some of the more immediate issues, and related pressures, that face the Basin ONL. Purely from a landscape

standpoint (and recognising that some matters are beyond the scope of PC13), these include:

- a. The expansion of cultivated, irrigated pasture into areas that have remained part of the dry land stocking regime until recently. This is occurring notably near SH8 from Irishmans Creek through to Simons Hill Station, and within Burkes Pass; near Mt Gerald Station, Godley Peaks Station and Lake Alexandrina – both sides of Lake Tekapo; near the Tekapo Canal above Lake Pukaki; west of Haldon Rd near the Grays River then Grampian Mountains; both sides of Twizel; and within pockets north to west of Lake Benmore (examples – **Annexure 6: Photos H & I; Annexures 13-18 / 20-31: Photos 8, 12, 13, 14, 39, 47 & 48**);
- b. The associated development and use of pivot irrigation systems within a landscape that has limited ability to absorb or integrate structures of this size (examples – **Annexure 7: Photo J; Annexures 13-18 / 20-31: Photo 14**);
- c. The ad-hoc spread and interruption of views by shelterbelts, often disrupting key ‘long views’, notably in the vicinity of SH8 and Haldon Rd (examples – **Annexure 8: Photos K & L; Annexures 13-18 / 20-31: Photos 12, 14, 15, 25, 34, 36-38, 40, 41 & 46**);
- d. The spread of production forestry blocks and other woodlots across the Basin landscape. This is a largely an historical occurrence, but now has a very marked impact on areas west and south of Lake Pukaki extending in pockets through to Lake Ohau, and including the key scenic corridor past Glentanner Station towards Mt Cook / Aoraki. More recent woodlots are also located south of Tekapo in the central basin (examples – **Annexure 9: Photos M & N; Annexures 13-18 / 20-31: Photos 2, 3, 8, 15-17, 19, 20, 22 & 34**);
- e. The related spread of wilding trees across the Basin, most notably across the striated, glacial landscape framing Lake Pukaki, but also south of the Tekapo and into the margins of the Rollesby Range,

Dalgerty Range and Grampian Mountains west of Hawdon Rd (examples – **Annexure 11: Photo Q; Annexures 13-18 / 20-31: Photos 2, 3, 19, 22 & 27**);

- f. The depletion of grasslands, together with other natural ecological associations across the Basin, notably within areas that are more arid and that have been, or are still, subject to over-stocking (examples – **Annexure 10: Photo O; Annexures 13-18 / 20-31: Photos 5, 7, 15, 19, 20, 23, 31, 32, 42, 44, 45, 49 & 50**); and
- g. Pockets of isolated and / or sporadic / ad-hoc development, although traditional farm homesteads are also part of the Mackenzie Country landscape vernacular (examples – **Annexure 11: Photos P & Q; Annexures 13-18 / 20-31: Photos 15, 28 & 29**);

31. In looking at this list of issues and, in particular, at point (f), it is my understanding that even though the issue of grassland retreat is commonly farmed in terms of tussock being 'out-competed' by Hieracium, it is actually an issue of natural species competition tilted in favour of one species by over-stocking and rabbits. Hieracium is, in fact, part of the natural matrix and ecological sequence of plant species found across the Mackenzie Basin; more so within its arid eastern extremities near Haldon Road and Hakatamea Pass Road. These areas would struggle to support tussock grassland even without Hawkweed. Twenty years of experience with the Tekapo Scientific Reserve has demonstrated that the removal of stock and rabbits alone can result in significant rejuvenation of grasslands. In other words, the issue is not Hawkweed; it is human induced over use of a fragile soil resource and habitat. This is discussed by Dr Walker, in particular at paragraphs 34-37 and 39 of her statement.

32. Consequently, solutions to the 'loss of grasslands' and the elimination of Hawkweed do not need to solely focus on Pastoral Intensification. Other alternatives are available; for example, retirement and lower stocking rates

across many areas traditionally used for dryland grazing offer another, potentially more sustainable, alternative.

### **PC13 & THE EVIDENCE OF OTHER LANDSCAPE ARCHITECTS**

33. Council's evidence has largely responded to most of the issues identified above, and it is my opinion that Mr Densem has undertaken the landscape assessments that underpin the plan change in a wholly professional, considered, and rigorous manner. I therefore consider that PC13 (s293v) should be substantially supported, subject to recommended changes proposed by Mr Reaburn, Dr Walker, and some additional changes that I will address shortly. PC13 (s293v) provides a solid platform for responding to the pressures faced by the Basin ONL at present.
34. I also note that Mr Densem addresses the criticism of other landscape architects and expert witnesses, at paragraphs 70 to 71 of his evidence. I substantially agree with his comments in relation to the issues identified at his paragraphs 70.1 to 70.15 and don't intend to re-trace the ground traversed in Mr Densem's reply to other experts.
35. Even so, there is one matter raised by other landscape architects that I would like to briefly address is that of Mr Densem's shift from an assessment method directed at addressing different levels of 'Landscape Vulnerability'<sup>6</sup> to one focused on 'Landscape Sensitivity'<sup>7</sup>. At paragraph 60 of his statement Mr Densem explains the reason for this change in approach:

*".... change can be out of sight yet still impact on the landscape character, for example the empty, silent character, of a place or the unbroken sweeps of grassland. A change is a change, even if unseen. For this reason, I now prefer the concept of 'landscape character' as a better indicator for assessing change in ONL values, rather than narrower visual vulnerability ..."*

---

<sup>6</sup> 2012 assessment approach.

<sup>7</sup> 2015 assessment approach.

36. This shift is supported by Ben Espie at paragraphs 4.8 to 4.10 of his evidence. I also strongly support this approach. ONLs are identified and exist with or without connection to public viewpoints. They have intrinsic value. Effects on unseen or little seen landscapes (or parts thereof) remain effects on the character and intrinsic values of that landscape. Subject to effects of sufficient magnitude, they can cease to be ONLs or their extent can be subject to change. The risk of degradation and loss exists irrespective of whether the landscape is visible or not.
37. This contrasts with the view expressed by Mr Glasson at paragraph 21 onwards of his evidence, which emphasises the remote location of Mount Gerald Station and its limited access by tourist and recreationalists. This is relied on as justification for less stringent restrictions applying to the property. I do not agree with Mr Glasson that visibility and public exposure equates to value. For this reason alone, the move away from assessment of visual sensitivity to evaluation of landscape character and landscape sensitivity is important. In my view, remoteness is a key value in its own right. It should not become a rationale for further degradation of the Mackenzie Basin's less publicly accessible parts.
38. Mr Glasson also criticises the lack of 'ground truthing' associated with the delineation of Scenic Grasslands and tussock grasslands across parts of Mount Gerald Station. Similarly, Mr Espie raises concern about the need for more detailed analysis by Council of landscape sensitivities across Pukaki Downs Station. Ideally, there should always be enough detail to respond to such concerns. However, Council's resources are limited and, in reality, there may never be enough detail or quite the right kind of detail necessary to address the myriad of location-specific, development proposals that could emerge for large run-holdings.
39. Given this need for both focus and flexibility, a better alternative may in fact be to focus on the key characteristics and values of the Basin's constituent



landscapes. This would reduce the financial burden on Council at the front end of PC13's implementation and retain a strong focus on the protection of the Subzone's outstanding characteristics and values. This approach underpins my suggested changes discussed below. I note Dr Walker's evidence proposes parallel consideration of key ecological characteristics, which are also a core component of the ONL. Indeed, they are critical to the landscape condition of the Basin and need to be taken into account when assessing the impacts of activities on the ONL landscape.

## **PLAN CHANGE 13'S PROVISIONS**

### **Initial Comments**

40. I have already indicated my general support for PC13 (s293v) and the work undertaken by Mr Densem. However, as with any significant resource management strategy, there are different way of interpreting both what it is setting out to achieve and the means of realising such goals. In this case, it is my view that PC13 (s293v) is generally comprehensive in terms of the RMA planning framework that it provides and I believe that it sets some realistic goals for the short and medium term. However, any long term outcomes for the Mackenzie Basin must inevitably follow research into, and evaluation of, land use / conservation options that are still underway at present – particularly in relation to the means of restoring and maintaining the health of tussock communities and managing, hopefully eliminating, wilding trees.
  
41. Consequently, Mr Reaburn and I largely support the objectives, policies and most of the rules proposed by Council in PC13 (293v). This includes adoption of strict limits on future use and development within:
  - a. Sites of Natural Significance
  - b. Scenic Viewing Areas
  - c. Scenic Grasslands
  - d. Lakeside Protection Areas

42. Notwithstanding this, I have serious concerns about the 500m limit imposed on Scenic Grasslands relative to key roads. Council has acknowledged that this limit is arbitrary and Mr Densem clearly recognises the significance of grassland continuums that often stretch well beyond 500m from key roads. Consequently, unless a second tier of assessment is developed to complement the Scenic Grassland overlay – focusing on ONL characteristics and values beyond the 500m limit – many of the Basin’s key landscape attributes may still go unprotected (such as its long, open views). Even so, I agree that the Scenic Grasslands offer a degree of certainty about landscape management near main road corridors and, because of the overlap with other mechanisms for management of landscape effects, Mr Reaburn and I accept that the Scenic Grassland overlay is still an important adjunct to more conventional bulk, location and design controls.
43. Looking at PC13 (s293v) as a whole, it is my view that four areas of particular concern remain in relation to Council’s current proposals:
- a. Firstly, the Subzone characteristics referred to within **Rural Objective 3B – Activities in the Mackenzie Basin’s Outstanding Natural Landscape** should be expanded to refer to (and therefore include) a wider range of characteristics and values that are more physically targeted and specific. This would require consequential additions to the Objective’s Explanation and Reasons, as well as to **Policy 3B1** - Recognition of the Mackenzie Basin’s distinctive characteristics; **Policy 3B6** – Lakeside Protection Areas; **Policy 3B13** – Pastoral Intensification; **Policy 3B14** – Wilding Trees; **Rule 3.2.2** – Controlled Activities – Buildings<sup>8</sup>; **Rule 3.3.3** – Discretionary

---

<sup>8</sup> Non-Buildings or extensions to Non-Farm Buildings within Farm Based Areas. I note that the title to this rule states that it is a Discretionary Activity, however the body of the Rule as amended by Council in the PC13(s293v) states that it is a Restricted Discretionary Activity and lists specific matters of discretion. This is unclear and needs to be addressed.

Activities - Buildings<sup>9</sup>; **Rule 6.3** Restricted Discretionary Activities – Tree Planting; and **Rules 16.2.k** and **16.2.l** Assessment Matters – Resource Consents – Buildings.

- b. Secondly, it is my view that for the Scenic Grasslands and protection of the Subzone more generally to be effective, it is necessary for specific criteria to address Pastoral Intensification and built development beyond the 500m limit.
- c. Thirdly, Pastoral Intensification allowed because of a permit or permits for water take(s) granted by the Canterbury Regional Council prior to 14 November 2015 should be subject to assessment as a Controlled Activity and specific, related criteria. In my view, without such a control mechanism, Pastoral Intensification under **Rule 15A.1.2(b)** PC13 (s293v) could have a significant and adverse impact on sensitive parts of the Subzone. It is my understanding that the grant of these regional water permits may not have always had regard to relevant landscape issues (although I acknowledge this is a legal and planning, not landscape, issue).
- d. Lastly, it is the opinion of both Mr Reaburn and myself that the current provisions directed at new Tree Planting and Forestry, under **Rule 6.3.1** of the operative District Plan, need to be focused on avoiding adverse effects on the characteristics and values of the Subzone – which effectively brings me back to the first issue outlined above. Any proposals for tree planting should be assessed against those outstanding characteristics and values. Proposed amendments to **Rules 6.1.6** and **6.3.1** also address the management of wilding trees to implement Council’s new Policy 3B14 PC13(s293V).

---

<sup>9</sup> Farm Buildings outside Farm Based Areas

## Landscape Characteristics and Values

44. The Supreme Court's decision on *King Salmon*<sup>10</sup> has changed the nature of ONL management in New Zealand. With the new focus on environmental 'bottom lines' landscape provisions of second generation policy and planning instruments are increasingly being structured around protection of the key 'characteristics and values' that underpin ONLs.
45. Instead of effectively fossilising such landscapes by prohibiting any change within them, a philosophy has emerged that accommodates some flexibility in this regard within an ONL, provided any such changes / modification are consistent with the outstanding characteristics and values identified for it. Mr Reaburn and myself have supported such an approach in evidence on the revised ONL provisions for the Proposed Auckland Unitary Plan and they have emerged substantially unscathed within the recommendations from the Independent Hearings Panel.
46. Presently, the characteristics and values of the Subzone as a whole are identified in Rural Objective 3B:
- (a) *the openness and vastness of the landscape;*
  - (b) *the tussock grasslands;*
  - (c) *the lack of houses and other structures;*
  - (d) *residential development limited to small areas in clusters;*
  - (e) *the form of the mountains, hills and moraines, encircling and/or located in, the Mackenzie Basin;*
  - (f) *undeveloped lakesides and State Highway 8 roadside;*

---

<sup>10</sup> *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38.

47. In my opinion, these are appropriate characteristics and values at the broad Subzone level. They succinctly capture the overall tenor of the Subzone's landscape. However, there is very limited direct referencing to these characteristics within other parts of PC13 (s293v). While they need to be addressed in the course of any Non-Complying or Discretionary Activity resource consent application, they might also have been usefully referenced in relation to both such evaluation and the assessment of Restricted Discretionary and Controlled Activity resource consents (eg. relocated residential buildings, earthworks and tracking, and pastoral intensification under **Rule 15A.1.2(b)** PC13 (s293v)).
48. More focused characteristics and qualities are captured to a limited extent by reference to Mr Densem's two 'external' reports – "*The Mackenzie Basin Landscape: Character And Capacity*", November 2007, and "*Intensification and Outstanding Natural Landscape: Landscape Management of the Mackenzie Basin in the Light of Court Decisions*", September-November 2015 – in the Explanations and Reasons for various provisions.<sup>11</sup> Yet, overall, the characteristics and values of the Mackenzie Basin ONL do not loom large in the evaluation of the different types of use and development addressed by PC13 (s293v). Instead, it focuses on controlling specific effects of specific activities, with emphasis on such matters as the visibility of development when viewed from public locations and effects on skylines or local terrain. The effects generated by activities outside those parameters are largely ignored. In my opinion, it is difficult to understand whether or not a proposed activity is consistent with protection of the Basin ONL if evaluation of that proposal doesn't expressly take into account the identified characteristics and values which Council is trying to protect.
49. In order to protect the Basin's ONL, PC13 should be amended to require decision-makers to assess the effects of a proposal on the ONL's characteristics and values. If a proposal does not protect those characteristics and values then

---

<sup>11</sup> Although I understand these references are proposed to be deleted by Mr Espie. I understand Mr Reaburn's change incorporates this change on the basis that the characteristics and values appendix is included.

(consistent with an environmental bottom line approach) it should not be approved. In contrast, if it does not threaten those values, then it can be approved (subject to relevant conditions). However, for this approach to work the outstanding characteristics and values must be identified at a level that is fine-grained enough to ensure that key characteristics and values are not missed. To try and provide some substance to this idea, I started looking at the landscape characteristics found across the Subzone and decided that there are six clearly defined, physical catchments (**Annexure 12**):

**Catchment 1:** Lake Tekapo

**Catchment 2:** The Tekapo River

**Catchment 3:** Lake Pukaki

**Catchment 4:** Ohau

**Catchment 5:** Twizel

**Catchment 6:** Lake Benmore

50. I then decided to trial the identification of characteristics and values for the first two of these catchments. This resulted in characteristics and values – both positive and negative – that naturally fell into four broad categories, as shown in the trial tables for the **Lake Tekapo** and **Tekapo River** catchments, (starting below):

CATCHMENT 1. LAKE TEKAPO			
POSITIVE CHARACTERISTICS & VALUES			
BIOPHYSICAL CHARACTERISTICS:	SPATIAL CHARACTERISTICS:	OTHER EXPERIENTIAL CHARACTERISTICS & VALUES:	ASSOCIATIONS:
<i>Glacial basin</i>	<i>Grandeur of large scale, landscape</i>	<i>Dramatic interplay of mountains, shield &amp; lake</i>	<i>The 'Pounamu Trail'</i>
<i>Alps, inland ranges &amp; snow / ice fields</i>	<i>Focal nature of lake</i>	<i>Stark white / brown / turquoise imagery</i>	<i>Moa hunting</i>
<i>Gently rolling to planar glacial 'shield' landscape</i>	<i>Elongated, basin catchment</i>	<i>Extensive 'carpet' of grasslands</i>	<i>Features eg. Te Rua Taniwha / Tekapo</i>
<i>Striated, glacial, landforms</i>	<i>River corridors into Main</i>	<i>A landscape of landforms (except</i>	<i>Early farmers / shepherds /</i>

<i>framing lake</i>	<i>Divide</i>	<i>for lakes)</i>	<i>settlers</i>
<i>Elongated body of lake</i>	<i>Containment by mountains</i>	<i>Matrix of browns &amp; yellows across shield</i>	<i>Historic runs / stations</i>

<i>Deep river valleys</i>	<i>Long views down lake corridor</i>	<i>Interplay of lake margins &amp; landforms</i>	
<i>Turquoise glacial waters</i>	<i>Open views across lake</i>	<i>Relative absence &amp; isolation of development</i>	
<i>Dominance of terrain hugging vegetation</i>	<i>Openness of most lake margins &amp; shield surfaces</i>	<i>Relative simplicity of most lake margins &amp; shield surfaces</i>	
<i>Expansive mixed grassland sequences</i>	<i>Planar nature of some lake margins &amp; shield surfaces</i>	<i>Relative complexity of surrounding mountains</i>	
<i>Braided rivers / head waters</i>	<i>Big skies</i>	<i>Merger of tilted shield planes with mountains</i>	
<i>Tussock grasslands</i>		<i>Rural character of lake surrounds &amp; shield</i>	
<i>Matagouri / wild Spaniard</i>		<i>Natural qualities of lake &amp; mountains / ranges</i>	
<i>Birdlife</i>		<i>Interplay of tussock &amp; pasture north of Mt John</i>	
		<i>Clear skies</i>	
		<i>Dark skies</i>	
		<i>Solitude (away from Tekapo settlement)</i>	
		<i>Remoteness (away from Tekapo settlement)</i>	

#### NEGATIVE CHARACTERISTICS

<b>BIOPHYSICAL CHARACTERISTICS:</b>	<b>SPATIAL CHARACTERISTICS:</b>	<b>OTHER EXPERIENTIAL CHARACTERISTICS &amp; VALUES:</b>	<b>ASSOCIATIONS:</b>
<i>Pine woodlots</i>	<i>Interruption of views by woodlots</i>	<i>Sporadic interruption of landscape by pines</i>	<i>Power generation infrastructure: canals, control gates, accessways, boom</i>
<i>Shelterbelts on open terrain</i>	<i>Interruption of views by shelterbelts</i>	<i>Pines around Tekapo township &amp; camp ground</i>	
<i>Degraded tussocklands</i>	<i>Erosion of landscape's expansiveness</i>	<i>Sporadic encroachment by irrigation systems</i>	
<i>Irrigated paddocks</i>	<i>Erosion of landscape's simplicity</i>	<i>Contrast of green paddocks with other grasslands</i>	
<i>Irrigation equipment near roads</i>	<i>Erosion of landscape's grandeur</i>	<i>Poor quality development within Tekapo township</i>	
<i>Sporadic buildings / development</i>	<i>Increasing Fragmentation of landscape</i>	<i>Modification of lake margins</i>	
<i>Tekapo settlement</i>	<i>Increasing compartmentalisation of basin</i>	<i>Spread of wilding pines near Tekapo</i>	
<i>Round Hill ski field</i>		<i>Sporadic encroachment by farm buildings</i>	
<i>Hydro canal gates &amp; infrastructure</i>		<i>Sporadic loss of aesthetic appeal</i>	

		<i>Sporadic loss of naturalness</i>	
--	--	-------------------------------------	--



CATCHMENT 2. TEKAPO RIVER BASIN

POSITIVE CHARACTERISTICS			
BIOPHYSICAL CHARACTERISTICS:	SPATIAL CHARACTERISTICS:	OTHER EXPERIENTIAL CHARACTERISTICS & VALUES:	ASSOCIATIONS:
<i>Shallow basin</i>	<i>Grandeur of large scale, landscape</i>	<i>Dramatic interplay of mountains &amp; basin landforms</i>	<i>The 'Pounamu Trail'</i>
<i>Alps / Inland ranges &amp; snow / ice fields</i>	<i>Focal nature of basin</i>	<i>Stark white / brown imagery</i>	<i>Moa hunting</i>
<i>Gently rolling basin landscape</i>	<i>Containment by ranges &amp; mountains</i>	<i>Extensive 'carpet' of grasslands</i>	<i>Features: Te Rua Taniwha / Tekapo</i>
<i>Central channel of the Tekapo River</i>	<i>Largely unconstrained, long views across basin</i>	<i>A landscape of landforms</i>	<i>Early farmers / shepherds / settlers</i>
<i>Linear course of Tekapo – Pukaki Canal</i>	<i>Openness of basin landscape</i>	<i>Matrix of browns &amp; yellows across basin</i>	<i>Historic runs / stations</i>
<i>Dominance of terrain hugging vegetation</i>	<i>Big skies</i>	<i>Simplicity &amp; openness of basin</i>	
<i>Expansive mixed grassland sequences</i>	<i>Channelised river corridor</i>	<i>Relative absence &amp; isolation of development</i>	
<i>Tussock grasslands</i>		<i>Relative complexity of surrounding mountains</i>	
<i>Matagouri / wild Spaniard</i>		<i>Merger of tilted basin plane with ranges</i>	
<i>Birdlife</i>		<i>Rural character of basin</i>	
		<i>Natural qualities of ranges &amp; Southern Alps</i>	
		<i>Clear skies</i>	
		<i>Dark skies</i>	
		<i>Relatively high level of solitude</i>	
		<i>Relatively high level of remoteness</i>	
NEGATIVE CHARACTERISTICS			
BIOPHYSICAL CHARACTERISTICS:	SPATIAL CHARACTERISTICS:	OTHER EXPERIENTIAL CHARACTERISTICS & VALUES:	ASSOCIATIONS:
<i>Sporadic pine woodlots</i>	<i>Interruption of views by shelterbelts</i>	<i>Sporadic interruption of landscape by pine woodlots</i>	<i>Power generation infrastructure: canals, control gates, accessways, lines</i>
<i>Shelterbelts on open terrain</i>	<i>Interruption of basin landform by woodlots &amp; shelterbelts</i>	<i>Interruption of landscape by pine shelterbelts (increasing 'checkerboard' effect)</i>	
<i>Degraded tussocklands</i>	<i>Erosion of basin landscape's expansiveness</i>	<i>Contrast of green paddocks with other grasslands</i>	
<i>Irrigated paddocks</i>	<i>Erosion of basin landscape's simplicity</i>	<i>Sporadic encroachment by farm buildings</i>	
<i>Irrigation equipment</i>	<i>Erosion of basin landscape's grandeur</i>	<i>Encroachment by transmission corridors</i>	
<i>Sporadic buildings / development</i>	<i>Increasing Fragmentation of landscape</i>	<i>Linear profile of hydro canals &amp; access roads</i>	

<i>Hydro canals &amp; infrastructure</i>	<i>Increasing compartmentalisation of basin</i>	<i>Sporadic encroachment by irrigation systems</i>	
<i>Transmission corridors</i>		<i>Spread of pines around Tekapo Army Camp</i>	
		<i>Spread of wilding pines near Tekapo</i>	
		<i>Lines of willows near stream courses</i>	
		<i>Ad-hoc location of air field &amp; associated buildings</i>	
		<i>Sporadic loss of aesthetic appeal</i>	
		<i>Sporadic loss of naturalness</i>	

51. **Annexures 13 to 31** comprise photos and maps of the photopoint locations, which identify, and help to explain, the characteristics and values I have identified. Additional tables for the Lake Pukaki, Ohau, Twizel and Lake Benmore catchments would be relatively easy to complete, in conjunction with further refinement of these trial tables. For example, further detail on the ecological and geophysical elements should be included<sup>12</sup>. In my opinion, this approach would provide an appropriate level of detail against which the effects of Pastoral Intensification, new planting, new buildings and other uses and development can be evaluated by Council. The characteristics and values tables would complement the various factors that PC13 (s293v) already requires to be addressed by resource consent applications. They would provide a direct correlation between the effects of a particular proposal and the characteristics and values of the particular part of the Subzone which is currently missing from PC13 (s293v).

52. Some would doubtless argue that this creates an excessively onerous application process. However, it is my view that this additional layer of ‘factors’ that are relevant to the assessment of individual resource consent applications is necessary, given the precarious state of the Subzone landscape. They would assist both applicants and decision-makers by identifying key landscape

---

<sup>12</sup> The outstanding ecological characteristics and values are identified in Dr Walkers statement. I understand that in her view the ONLs ecological factors are most appropriately identified at a Basin-scale, with the specific factors present in a particular area identified at the time of application.

characteristics and values applicable to different receiving environments and catchments without having to rely on ad-hoc, application by application, identification of such landscape components. As a result, EDS's proposed amendments to PC13 (s293v) make reference to "*having regard to the characteristics and values identified in **Appendix V Areas of Landscape Management***" within the provisions bullet pointed at my paragraph 29. The tables for each catchment (similar to those trialled above) would comprise **Appendix V**, which would become part of the District Plan.

### **Scenic Grasslands Beyond The 500m Limit**

53. In my opinion, the Scenic Grasslands serve a useful function. However, they are unable to protect the tussock and grassland communities of the wider Basin, or important views across them, without the support of other protection mechanisms. The continuum of landforms beyond this arbitrary boundary are often critically important in terms of the expansiveness of the Basin landscape and its long views. For example, the more distant framing of lakes and the transition from glacial moraine and shield terrain into the foothills that provide a stepping stone into the Basin's alpine climes (**Annexures 13-18 / 20-31: Photos 7, 31, 32, 33, 35, 39, 45, 47 & 48-50**). It is my understanding that these areas also frequently contain areas of critical ecological importance. This is particularly important given the age and accepted incompleteness of the operative District Plan's Significant Natural Area mapping.<sup>13</sup>
54. To manage these important landscapes it is my view, shared by Mr Reaburn, that Pastoral Intensification outside the proposed Scenic Grasslands that is subject to application as a Discretionary Activity should be evaluated against the characteristics and values of the applicable catchment within **Appendix V**.

---

<sup>13</sup> Evidence in Chief M Harding.

## Pastoral Intensification Under The Grandfathering Clause

55. Proposed Rule 15.A.1.2 provides for Pastoral Intensification as a Permitted Activity when a regional consent has been granted prior to 14 November 2015. Pastoral Intensification (as defined in PC13 (s293v) and as captured by the rule) is wide ranging, addressing farm sites that have been subject to everything from oversowing and fertilising, through to cultivation and pivot irrigation.
56. In my opinion it is critical that Council retain the ability to manage the effects of new areas of 'greenery' within the Subzone, to prevent such development from modifying the landscape of the Basin in an incremental and ad-hoc fashion. Mr Reaburn and I agree that Controlled Activity status should apply to applications for Pastoral Intensification covered by this rule. This would allow Council to place appropriate management conditions on new areas of 'green pasture', while holders of existing regional consents would retain certainty that those consents can be implemented. In line with this approach, Mr Reaburn and myself have developed the following suggested assessment criteria:
- i The location and visibility of irrigation equipment relative to public vantage points, including State Highways and Tourist Roads (refer definitions).*
  - ii. The screening and /or mitigation of visual effects associated with the proposed pastoral intensification in relation to public vantage points.*
  - iii The extent to which compensatory enhancement of tussock grasslands (s) is proposed.*
  - iv The extent to which compensatory protection and enhancement is proposed within any stream corridors and other areas of ecological value on the application property.*

- v *The extent to which wilding trees are to be removed and controlled in future on the application property.*
- vi. *The extent to which other weed species are to be managed on the application property.*

### **New Tree Planting**

57. Without question, one of the foremost issues confronting Council, and challenging public perceptions of the Basin as a whole, is the emergence of forest blocks across its shield / valley landscapes and the visual fragmentation of its open spaces by both wilding trees and shelterbelts. The issue of shelterbelts is difficult. They are fundamental to farming practice within a wind stressed, often arid, physical environment. Inevitably, they will follow in the trail of new areas of pastoral intensification. Forestry blocks and wilding trees are more manageable, if only at the statutory level.
58. Consequently, I support Mr Reaburn's proposed changes to **Rule 6.3.1**, which makes all new tree planting subject to evaluation against the characteristics and values of proposed **Appendix V** as a Restricted Discretionary Activity. In addition, suggested amendments to the provision would address the issue of wilding trees – both within application properties at the time of a resource consent application for any new planting and subsequently emanating from any new plantation / planting. This approach is carried over to **Rule 6.1.6** addressing the removal of wilding trees in conjunction with 'forestry in proximity to buildings'.

### **CONCLUSIONS**

59. PC13 (s293V) is an important step forward in terms of the protection of the Mackenzie Basin landscape. The situation that has unfolded within the Subzone encapsulates many of the issues confronting rural New Zealand, particularly so in a time of change in terms of land ownership, uncertainty over future rural market conditions and increasing pressure from tourism. As such, the

Mackenzie Basin can be regarded as the landscape 'bellwether' of this country. The management process set in place by the plan change will have important implications for other important and sensitive landscapes across New Zealand.

60. In my view, the Council has largely 'got it right'; perhaps not surprising given the numerous Court decisions, consultation, landowner engagement and diverse range of inputs to the current proposal. I support the cornerstones of PC13 (s293v), including its outline of the over-arching values of the Mackenzie Basin Subzone, its approach to management of specific parts of the Basin landscape using overlays and different types of land use, and the rules applicable to most activities within the Subzone. However, as with any complex statutory instrument, it is also my opinion that PC13 (s293v) would benefit from some 'fine tuning' of its management system. In particular, it is my opinion, that the evaluation of development proposals, and their effects, needs to be more closely aligned with the protection of identified characteristics and values. Protection of these attributes would set clear environmental bottom lines for the Subzone ONL. In my opinion, identifying these attributes at the catchment scale provides appropriate precision and detail, but also enough flexibility, to be appropriate for incorporation within PC13 (s293v) and the District Plan. To this end, I have suggested a number of changes to the plan change that I believe support its current direction, but also add to the robustness and focus of its landscape management approach. In my opinion, these proposals support the additional changes that are also recommended by Dr Walker and Mr Reaburn.

**Stephen Brown**

BTP, Dip LA, Fellow NZILA

## APPENDIX A – S BROWN LANDSCAPE, NATURAL CHARACTER & AMENITY ASSESSMENT PROJECTS

### AWARDS:

**Landscape Value Mapping of Hong Kong (2001 – 5):** development of the methodology and assessment criteria for the ‘landscape values and sensitivity mapping’ of Hong Kong undertaken by Urbis Ltd for the Hong Kong Government – awarded the Strategic Planning Award by the (UK) Landscape Institute in 2006.

**Auckland Geomorphic / Geological Features Assessment (2011):** analysis of past case law, the RMA and current policy, together with field evaluation of 207 features to determine if they qualify as ONFs – for Auckland Council: NZILA Distinction (Landscape Planning & Environmental Studies Category) 2014

### STRATEGIC ASSESSMENTS:

**Volcanic Cone Sightlines & Blanket Height Control Review (2015/16):** re-appraisal of 87 sightlines within Auckland City to Mt Victoria, Mt Albert, Mt Roskill, Mt Eden, Mt Hobson, Mt Wellington, One Tree Hill, Mangere Mountain, Browns Island and Rangitoto, together with a complete review of the Blanket Height Control Areas that flank all of the major cones across and near the Auckland Isthmus: analysis of the sensitivity of each cone and the key threats to their visual integrity followed by the mapping of areas that should be subject to a new regime of building height controls under the Proposed Auckland Unitary Plan - for Auckland Council.

**West Coast Region & Buller / Grey / Westland Districts Landscape Study & Natural Character Assessment (20011-14):** assessment of the Buller, Grey and Westland Districts to identify the combined Districts’ / Region’s Outstanding Natural Landscapes and those part of the Region’s coasts and lake / river / wetland margins that display High and Outstanding levels of Natural Character – for the West Coast Regional Council & District Councils

**Thames Coromandel Landscape Review & Assessment (2007 - 14):** peer review of the Thames Coromandel landscape assessment leading to a complete re-assessment of the Peninsula, identification of its Outstanding and Amenity Landscapes, as well as coastal environments displaying high to outstanding natural character values – for Thames Coromandel District Council.

**West Coast Rural Policy Area (2011):** evaluation of the coastal environment, areas of coastal influence and assessment of amenity values to determine the extent of the proposed West Coast Rural Policy Area overlay – for Auckland Council

**Buller District Landscape & Natural Character Assessment (2011):** assessment of the Buller Districts Outstanding Natural Features and Landscapes, together with identification of its coastal environment, lake / river / wetland margins and identification of those areas displaying high Natural Character – for Meridian Energy Ltd & the Environment Court (in relation to the Mokihinui hydro-electric project appeals)

**Waikato Regional Policy Statement Chapter 12 – Landscape Review (2011/12):** review of proposed ONLs and areas of high natural character across the Waikato Region, taking into account public submissions and the 2010 NZ Coastal Policy Statement – for the Waikato regional Council

**Auckland Geomorphic / Geological Features Assessment (2011):** analysis of past case law, the RMA and current policy, together with field evaluation of 207 features to determine if they qualify as ONFs – for Auckland Council

**Auckland Region: Outstanding Natural Features Study (2011):** assessment of over 220 geomorphic and ecological features (mainly volcanic remnants such as the Wiri Lava Cave, Orakei Basin / crater) to determine which of those should be classified as an Outstanding Natural Feature under section 6(b) of the RMA – for Auckland Council

**Auckland Region: Amenity Areas Study (2011):** description and mapping of those areas within the Region that qualify as Amenity Landscapes within the Auckland – in terms of their aesthetic and natural characteristics, recreational appeal, etc – with reference to section 7(c) of the RMA – for Auckland Council

**Auckland Region: Natural Character Assessment (2012/13):** delineation of the coastal environment for the Auckland Region and identification of areas of high natural character employing key environmental indicators / parameters – for the Auckland Regional Council.

**Manawatu / Tararua / Lower Rangitikei District Landscape Assessment (2009):** identification of the Outstanding Natural Landscapes and Amenity Landscapes distributed within all three districts within 150km of the Turitea Wind Farm site in the northern Tararua Range – for Mighty River Power.

**Otorohanga District Landscape Assessment (2009 - 11):** identification of Outstanding Natural Features and Landscapes, Amenity Landscapes and parts of the District's coastline – together with lake and river / stream margins – that display high Natural Character values – for Otorohanga District Council.

**Kawhia Aotea West Coast Assessment (2006):** assessment of the landscape and natural character values of the catchments around Kawhia and Aotea Harbours, including the identification of the area's outstanding landscapes, visual amenity landscapes and parts of the coastline displaying high natural character – for Environment Waikato and the Waikato, Waipa and Otorohanga District Councils.

**Whangarei District Landscape review / Assessment (2005):** assessment of landscape values across Whangarei District to identify its Outstanding Landscape and Visual Amenity Landscapes, involving use of past public preference research, public consultation, identification of natural character values, landscape heritage values - in conjunction with Beca Carter Hollings & Ferner Ltd for Whangarei District Council.

**Assessment of the Auckland Region's Landscape (2001-4):** responsible for a review of landscape assessment methodologies appropriate for re-assessment of the Auckland Region's landscape, including literature search and organisation of workshops to review theoretical options - designed to address identification of Auckland's outstanding / iconic landscapes; followed by Q-Sort testing of public attitudes to landscape, and mapping of the Auckland Region's Outstanding Landscapes - for the Auckland Regional Council.

**Hauraki Gulf Islands District Plan - Plan Change Reviews (2003):** detailed reviews of Plan Changes 23 (Subdivision), 24 (Earthworks), 25 (Indigenous Vegetation Clearance) & 26 (Lot Coverage) involving detailed assessment of the Waiheke and Great Barrier Island landscapes in respect of their capacity to accommodate changes to the relevant thresholds for permitted and discretionary activities and assessment criteria leading to recommendations in relation to each Plan Change - for Auckland City.

**Auckland Urban Coastline Assessment:**

**Waiheke Island Coastal Landscape Assessment:**

**Great Barrier Island Coastal Landscape Assessment:**

(1993-5): Assessment of the VALUE, VULNERABILITY and overall SENSITIVITY of each of these coastal areas - involving their breakdown into landscape units, description and discussion of landscape character types and preparation of preliminary policies for landscape management - for the Auckland Regional Council.

**East Manukau Assessment:**

(1994-6): responsible for managing / overseeing assessment of the landscape values in each of these strategic landscape studies - involving their breakdown into landscape units, description and discussion of landscape character types and preparation of preliminary policies for landscape management - for the Hawkes Bay Regional Council & Manukau City Council.

**Mahia Peninsula / Wairoa Coastal Strategy (2003):** assessment of the landscape and natural character values of the Mahia Peninsula and nearby coastal areas, including Mahanga and Opoutama, to provide input on both conservation and strategic development strategies for the Wairoa District Coastal Strategy Study - for Beca Carter Hollings & Ferner and Wairoa District Council.

**North Shore City Significant Landscape Features Assessment (1998-2001):** identification, analysis and description of all significant landscape features within the Albany, Greenhithe, Paremoremo and Long Bay / Okura parts of North Shore City - for North Shore City Council.



**East Tamaki Catchment Management Study (2001):** analysis of landscape and open space values in the East Tamaki catchment leading to recommendations in relation to future open space provision and park acquisition - for Beca Carter & Manukau City Council.**Whangarei District Coastal Management Study (2003):** assessment of the landscape values and 'carrying capacity' of settlement areas down the eastern Whangarei coastline leading to recommendations about future development and conservation strategies - in relation to: Oakura, Moureeses Bay, Woolleys Bay, Matapouri, Pataua South & North, Ocean Beach, Urquharts Bay, Taurikura, Reotahi and McLeods Bay - for Beca Carter & Whangarei District Council.

**Waitakere City Northern Strategic Growth Area Study (2000 - 2001 & 2003):** Analysis of existing landscape features, character areas and resources within the Whenuapai / Hobsonville / Brighams Creek catchment as the basis for evaluation of future growth options. This work includes the identification of key landscape sensitivities within the catchment, the identification of development constraints and opportunities in relation to the local landscape and the preliminary assessment of effects associated with shifting Auckland's MUL in the subject area - for URS New Zealand Ltd and Waitakere City Council (Eco Water). In 2003 this work was extended to cover Herald Island and the Red Hills area - for Landcare Research.

**Franklin District Rural Plan Change Study (2002/3):** responsible for re-evaluation of most of Franklin District - in relation to landscape values, sensitivities and residential development potential / appeal - to determine areas that present opportunities for residential growth, rural areas that should be specifically excluded from rural-residential development and generic features that should be conserved throughout the District - for Franklin District Council.

**Assessment of the Auckland Region's Landscape (1983-4):** region-wide appraisal of both the aesthetic quality and the visual absorption capability of different parts of Auckland's extra-urban landscape (covering 425,000 has). This study involved breaking the Region down into 633 landscape units and incorporated a public preference study with over 1100 public participants. It has enabled planners to come to terms with both public perceptions of landscape value and the relative vulnerability of different parts of the Region to development - for the ARC.

**Whangarei District North-eastern Coastal Settlements Assessment (1996):** assessment of key landscape features and elements that should be conserved to help define the margins of urban growth around Whangarei District's north-eastern coastline - from Ocean Beach in the south to Oakura and Whangaruru - for Whangarei District Council.

**Volcanic Cone Sightlines Review (1997 - 2003):** appraisal of current sightlines to Auckland's volcanic cones leading to suggestions about the addition, deletion and location of sightlines, and the specification of controls in relation to each - for the ARC and Auckland City Council.