

**BEFORE THE ENVIRONMENT COURT**

Decision No. [2011] NZEnvC 387

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of appeals under Clause 14 of the First  
Schedule to the Act

**BETWEEN** HIGH COUNTRY ROSEHIP  
ORCHARDS LIMITED AND  
MACKENZIE LIFESTYLE LIMITED  
(ENV-2009-CHC-175)

**AND** MOUNT GERALD STATION LIMITED  
(ENV-2009-CHC-181)

**AND** MACKENZIE PROPERTIES LIMITED  
(ENV-2009-CHC-183)

**AND** MERIDIAN ENERGY LIMITED  
(ENV-2009-CHC-184)

**AND** THE WOLDS STATION LIMITED  
(ENV-2009-CHC-187)

**AND** FEDERATED FARMERS OF NEW  
ZEALAND (INCORPORATED),  
MACKENZIE BRANCH  
(ENV-2009-CHC-193)

**AND** FOUNTAINBLUE LIMITED, PUKAKI  
DOWNS TOURISM HOLDINGS  
PARTNERSHIP AND SOUTHERN  
SERENITY LIMITED  
(ENV-2009-CHC-190)

**AND** R, R AND S PRESTON AND  
RHOBOROUGH DOWNS LIMITED  
(ENV-2009-CHC-191)



AND

HALDON STATION  
(ENV-2009-CHC-192)

AppellantsAND

MACKENZIE DISTRICT COUNCIL

Respondent

Court: Environment Judge J R Jackson (presiding)  
Environment Commissioner H-A McConachy  
Environment Commissioner J R Mills

Venue: Twizel and Christchurch

Hearing: 16 to 20, 23 and 24 August 2010  
(Site inspections 30-31 August, 1-2 September 2010, 17 and 18 October 2011)

Appearances: A Schulte for Mount Gerald Station Limited  
C P Thomsen for Mackenzie Properties Limited  
J Maassen for Meridian Energy Limited  
J Gallen for Federated Farmers of New Zealand (Incorporated),  
Mackenzie Branch and for The Wolds Station Limited  
A J Prebble and A J Schulte for Fountainblue Limited, Pukaki  
Downs Tourism Holdings Partnership and Southern Serenity  
Limited  
A Thomas for Haldon Station Limited  
J G Hardie and D Caldwell for Mackenzie District Council  
S Newall for New Zealand Transport Agency (section 274 party)

Date of Decision: 12 December 2011

Date of Issue: 14 December 2011

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**FIRST (INTERIM) DECISION**

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A: In respect of the general rural zone landscape objective [Objective 3 in section 7 of the operative district plan]:

- (1) the Mackenzie District Council is to choose by Friday 30 March 2012 whether it wishes that objective to commence:



“Objective 3A Landscape Values

“Protection of the outstanding landscape values ...”

or

“Objective 3A Landscape Values”

“Protection of the natural character of the landscape ...”

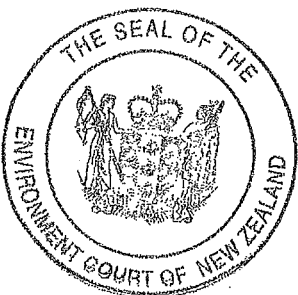
- (2) and, if the Council chooses the latter, it should lodge with the Registrar and serve on the parties an application under section 293 of the Act in respect of the change to the operative district plan; or
- (3) if the Council wishes Rural Objective 3A to remain the same (outside the Mackenzie Basin subzone) as it is in the operative district plan, then it should advise the Registrar and parties accordingly and that will be recorded in the Environment Court’s final decision.

B: In respect of section 293 of the Resource Management Act 1991:

- (1) if any party wishes to make submissions to the court on the interpretation of the section or on the exercise of our discretion under that section, they must give notice summarising the argument(s) to be made in writing to the Registrar by 29 February 2012 (and serve copies on all other parties);
- (2) if notice is given under (1) all subsequent orders will be suspended until the parties have been heard on section 293 by the court and a decision issued.

C: Leave is reserved until 30 March 2012 to:

- (1) Meridian Energy Limited to apply to the Environment Court to remedy any omission from the matters raised under its appeal or to correct any inconsistency in the court’s interim decision in relation to the issues raised by Meridian;
- (2) any of the owners or lessees of land which contain farm base areas affected by Meridian’s flood hazard areas to apply for one or more alternative farm base areas to be approved;
- (3) the owners of Ferintosh, Haldon and Mt Gerald Stations or any appellant who sought such relief in their notice of appeal to apply for one or more extra or alternative farm base areas on their lands;
- (4) (in respect of wilding exotics in the Mackenzie Basin subzone) any party to lodge and serve written submissions on:
  - (a) the legal analysis in the Reasons of the effects of other legislation and the Canterbury Regional Pest Strategy;

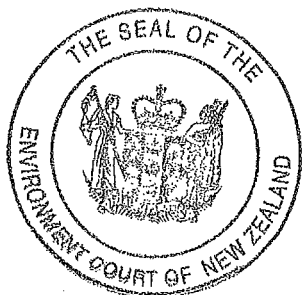


- (b) the implications of that submission for the evidence and on the findings by the court;
- (c) whether or not the court should exercise its powers under section 293 to settle:
  - (a) rules in respect of wilding control;
  - (b) areas where ETS forests would be acceptable;
    - in the operative district plan in respect of wilding spread;
  - (d) whether the court should hear further evidence on these issues;
- (5) to any:
  - (a) appellant to apply to the court to deal with any relief claimed in its appeal, not abandoned at, or before, the hearing (subject to the identified exceptions in the Reasons, for example in respect of farm base areas) and overlooked by the court in the other orders;
  - (b) party to seek that the court resolve any ambiguity or error in the decision;
  - (c) party to apply to amend or vary any of the other directions in Orders C to K if more time is reasonably needed or for other good reason.

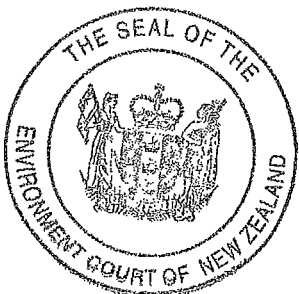
D: Under section 293 of the Act the Mackenzie District Council is directed:

- (1) to draw up a topographical map or maps (“the 2012 landscape map”) incorporating:
  - (a) the scenic viewing areas and lakeside protection areas shown in the Mackenzie District Plan as amended by these orders;
  - (b) the areas of low and medium visual vulnerability as shown in Map 3 (annexed to this decision) together with any amendments the Council considers should be made;
  - (c) the flood hazard areas identified by Meridian Energy Limited and showing;
  - (d) the farm base areas provisionally confirmed or approved in this interim decision;
  - (e) Mr G H Densem’s understanding, as landscape architect engaged by the Council, of the Scenic Grasslands provisionally identified under this interim decision and of any improvements or extensions he wishes to suggest as, in his expert opinion, achieving the aim of policy 3B/8;
  - (f) the “residential” and tourism subzones provisionally approved in this interim decision.
- (2) to lodge the map prepared under (1) with the court for provisional approval as to accuracy, completeness and legibility by 30 March 2012.

E: Under section 293(1) of the RMA the court directs:



- (1) the Mackenzie District Council shall prepare a complete draft set of objectives, policies and methods of implementation (including rules and definitions) in accordance with this interim decision, and to lodge this document (together with a cross-referencing to the paragraphs in the Reasons for this decision) with the Registrar by 18 May 2012 (serving copies on the parties).
- (2) the Mackenzie District Council is to consult under section 293(1)(b) of the RMA with:
  - the parties to this proceeding;
  - Te Runanga O Ngai Tahu;
  - the Commissioner for Crown Lands ;
  - the Department of Conservation;
  - the Waimate District Council about exotic forestry near boundaries with that district;
  - any other person it considers appropriate;
  - about the 2012 landscape map and the draft objectives, policies and rules (together called “PC13(2012)”) prepared as a response to this decision;
- (3) by Friday 27 July 2012 or such later date as is approved by the court the Mackenzie District Council shall lodge for approval by the Environment Court and serve on the parties a draft public notice which:
  - (a) introduces the 2012 landscape map and explaining briefly the amended objectives, policies and rules in the PC13(2012) and the changes for which approval is sought by the Council as a result of consultation;
  - (b) invites any person who considers they qualify under section 274 of the RMA and wishes to call new or further evidence (without limitation other than relevance but especially on any potential ecological effects not considered by the court) on any issue to:
    - (i) apply for leave to lodge a late notice under section 274 with the Registrar of the Environment Court at P O Box 2069, Christchurch;
    - (ii) serve the application on the Mackenzie District Council at 53 Main Street, Fairlie 7925 Fairlie by (a date to be settled);
    - (iii) serve a copy of the application on the persons named in the public notice (being the appellants and existing section 274 parties to these proceedings);
  - (c) explaining that after receiving the notices and considering any applications to become a section 274 party) the Environment Court will hold a judicial conference to arrange a further hearing into the



relevant issues raised by the parties or the (allowed) section 274 parties before finalising the objectives, policies and rules of PC13;

- (4) any party who wishes to make submissions on the form or contents of the public notice and on whether it meets the directions in these orders may lodge a written submission with the Registrar within ten working days of service of the draft public notice on them.

F: If any party wishes to:

- (1) be heard on the 2012 map and on PC13(2012) and/or
- (2) (in due course) oppose any application to become a party under section 274

– they must lodge and serve a notice of opposition within ten working days of receipt of the relevant application, specifying the grounds of opposition or the changes they consider should be made.

G: By consent the court directs the lakeside protection areas shown in the operative district plan are to be amended on the western side of Lake Pukaki as agreed between the parties to appeal ENV-2009-CHC-190.

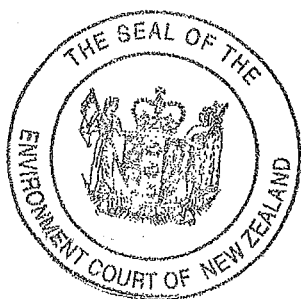
H: The court directs that:

- (1) the parties to the appeals by Mackenzie Properties Limited (ENV-2009-CHC-183), Fountainblue Limited and its co-appellants (ENV-2009-CHC-190) are to confer about and prepare a complete set of subzone rules for rural-residential subzones on the Ohau River Block and Pukaki Downs respectively as set out in Part 7 of this Interim Decision;
- (2) similarly Fountainblue Limited and its co-appellants are to confer with the Mackenzie District Council about and prepare a complete set of subzone rules based on Mr C Vivian's Exhibit CV1 for a tourist accommodation subzone(s) on Pukaki Downs as set out in Part 7 of this decision;
- (3) failing agreement on these sub-subzones by 30 April 2012 leave is reserved to any party to apply to the court for directions as to how to settle the subzone rules.

I: Under section 292 of the Resource Management Act 1991 the Environment Court directs:

- (1) that in Utilities Rules at p. 15-7 the first unnumbered rule shall be amended by the **substitution of "15" for "14"** so that it reads (strike-out shown):

The rules contained in this part of section 14 15 take precedence over any other rules that may apply to utilities in the District Plan, unless specifically stated to the contrary;



- (2) that Schedule A1 para "Activities" be amended so that in the second paragraph the word "or" is substituted for "of" so that it reads (strike-through shown):

In terms of this schedule the word "Significant" shall have the meaning of : Any modification or addition which results in more than 20 m2 of additional land being utilised ... of or the height of any existing building being increased by more than 2.5 metres".

– unless the Mackenzie District Council or any other party gives notice (specifying grounds) objecting to that course of action by 29 February 2012.

- J: (1) Subject to (2), all issues relating to Assessment Criteria in the rules are adjourned, pending resolution of the matters in the orders above, however  
(2) the parties are invited to resolve these in the light of the Court's interim decision if they feel able to.

K: The Mackenzie District Council is:

- (1) directed to lodge and serve an affidavit by an authorised officer or agent by 29 February 2012 as to what steps the Council has taken to review rule (7)12.1.1.g (Clearance of) Short Tussock Grasslands; and  
(2) requested, if it considers the information is relevant, and if the Council is part of the focus group referred to in Part 8 of this decision, to lodge an affidavit detailing what its terms of reference and procedure are, and when (if) a relevant outcome is likely from its deliberations

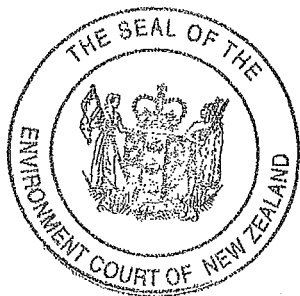
– by 29 February 2012.

L: Costs are reserved.

## REASONS

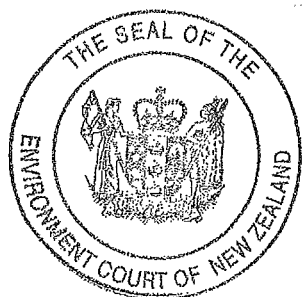
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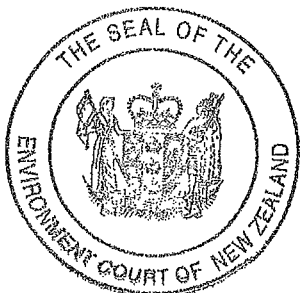
## 1. Introduction

### 1.1 Sustainable management of the Mackenzie Basin's landscape(s)

[1] Enabling farmers, tourism operators, hydro-electric generators and the wider community including Ngai Tahu as tangata whenua, and visitors to the district to provide for their wellbeing, health and safety while appropriately avoiding, remedying and mitigating adverse effects on the landscape(s) of the Mackenzie Basin is the issue for these proceedings about Plan Change 13 to the Mackenzie District Plan.

[2] In fact, these proceedings under the Resource Management Act 1991 ("the Act" or "the RMA") are not about the whole of the Mackenzie Basin if that is thought of as including a lower southern area centred on Omarama within the Waitaki District. Rather, the proceedings are about the landscapes of the northern and higher part of the Mackenzie Basin from Te Kopi o Opihi/Burkes Pass to Twizel. That is the part of the basin within the Mackenzie District<sup>1</sup> and which we will call "the Mackenzie Basin" for the purpose of these proceedings. The Mackenzie Basin is as shown in Map 1 "Mackenzie Basin, Topography, Boundaries" on the next page<sup>2</sup>.

[3] The appeals are about Plan Change 13 to the Mackenzie District Plan. The most important issues for the court to resolve are:



<sup>1</sup> Shown in Appendix E to the Mackenzie District Plan.

<sup>2</sup> This is map 1 attached to Annexure "3" to the evidence-in-chief of the landscape architect, Mr G H Densem [Environment Court document 3].



- (1) how is the Mackenzie Basin changing?
- (2) is the whole Mackenzie Basin an outstanding natural landscape<sup>3</sup>? or are there different landscapes in the Basin?
- (3) what should be the landscape objectives and policies in the district plan for the Mackenzie Basin's landscape(s)?
- (4) in particular what objectives and policies should apply to buildings and structures in the Basin?
- (5) should there be additional new residential type zones?
- (6) what other methods should be used for implementing those objectives and policies?

There are more specific issues arising out of those which we identify later.

#### 1.2 The notification, submissions on and hearing of Plan Change 13

[4] Proposed Plan Change 13 ("PC13") was publicly notified by the Mackenzie District Council on 19 December 2007. The public notice of PC13 stated<sup>4</sup> (relevantly):

**PUBLIC NOTICE OF PROPOSED CHANGE 13  
(RURAL ZONE – MACKENZIE BASIN)  
TO THE MACKENZIE DISTRICT PLAN**

**CLAUSE 5 OF THE FIRST SCHEDULE OF THE RESOURCE  
MANAGEMENT ACT 1991**

The Mackenzie District Council has prepared Proposed Plan Change 13 Rural Zone – Mackenzie Basin to the Mackenzie District Plan. The primary purpose of this Plan Change is to provide greater protection of the landscape values of the Mackenzie Basin from inappropriate subdivision, development and use. To achieve this greater acknowledgement of outstanding natural landscapes and features within the District is provided through objectives, policies and rules, particularly as they apply to the Mackenzie Basin.

A new rural residential zone is created for the Manuka Terrace area that lies between the Ohau Canal and Lake Ohau, which recognises recent subdivision of this area into large residential lots. The Plan Change also addresses a number of minor matters and errors and omissions in the subdivision and transportation rules including a limitation on the number of lots that can be served by private rights-of-way and the method of calculating reserve contribution credits.

The main provisions of this Change are set out below:

**Rural Issues, Objectives and Policies**

- Split existing Objective 3 Landscape Values into Objective 3A, which focuses on outstanding natural landscapes, and Objective 3B, which deals with general landscape values across the District.
- New policies to support Objective 3A with residential use and subdivision generally being limited to either existing towns or existing clusters of building usually associated with

<sup>3</sup> Within the meaning of section 6(b) of the RMA.

<sup>4</sup> Environment Court document 2A.



homesteads. Provision is also made for the establishment of new clusters where they meet stringent standards and have the ability to replicate existing clusters or nodes.

#### Rural Zone Rules

- Establishing a new Mackenzie Basin Subzone within the existing Rural Zone.
- Identify existing building nodes on maps and provide for the establishment of new building nodes and extension of existing building nodes as a discretionary activity within the Mackenzie Basin Subzone.
- Generally limit buildings and subdivision to within existing or approved building nodes, with all non-farm buildings within nodes being restricted discretionary activities.
- Provide for remote non-farming buildings outside nodes as a Controlled Activity.
- Controlling larger scale earthworks whether or not the earthworks are part of building node development or subdivision.
- Create a new Rural Residential – Manuka Terrace Zone with a maximum building density of one residential unit and minor unit per 4ha, and with control over earthworks, servicing and the external appearance of buildings.
- Delete Lakeside Protection Areas.

#### Subdivision rules

- Provide as a discretionary activity subdivision with a minimum allotment area of 200ha within the Mackenzie Basin Subzone (but with no provision for building within such a lot).

...

#### Miscellaneous Amendments

- Requiring access to subdivisions of more than 6 lots to be by way of road and not private way or access lot.
- Amend the calculation method for contributions towards open space and recreation to clarify that the credit for underlying lots is determined by deducting the number of underlying lots from the total number of new lots created.

...

[5] The primary objective introduced by PC13 is<sup>5</sup> “To protect and sustain the outstanding natural landscapes and features of the district”. Oddly, the objective does not say where those landscapes (plural) are within the district. The specificity is added by the first implementing policy which is<sup>6</sup> “to recognise the Mackenzie Basin as an outstanding natural landscape and ... to protect the Basin from inappropriate subdivision, use and development ...”. The issues to be dealt with in the plan by the addition of PC13 are identified as<sup>7</sup>:

- “rural lifestyle ... and rural residential development ... [which is] too extensive or in the wrong location ...”;
- subdivision “... result[ing] in the loss of the former high country ethos and landscape pattern”;
- “... more intensive use of the remaining farmed areas” especially with the “... freeholding of former pastoral lease land”;
- “... loss or degradation of views from the ... tourist highways”;

5

PC13 as notified p. 5.

6

PC13 as notified p. 5.

7

PC13 as notified p. 4.



- "... the extent to which additional irrigation will 'green' the Basin and change land use patterns".

[6] Many submissions on PC13 were lodged with the Council. A summary of the submissions was notified on 3 May 2008 and the closing date for further submissions was 30 May 2008. Commissioners<sup>8</sup> appointed by the Council conducted a hearing of the submissions in September and November 2008. A further hearing was held on 22 May 2009. The Commissioners' succinct decision on PC13 was released on 5 September 2009. However, it left for the future, the identification of any outstanding natural landscapes within the Mackenzie Basin. That is usually an error<sup>9</sup> – see *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council* where the court held that it was mandatory to recognise the matters of national importance, and that required identification of "... the boundaries of the areas concerned". There will be few exceptions to that principle.

[7] Other outcomes of the decision on PC13 were:

- to allow some development within what were called "nodes" in the notified change but were renamed as "farm base areas" albeit rather expanded in some cases from traditional farm base areas;
- outside of farm base areas, making all farm buildings controlled activities, non-farming buildings discretionary activities, subdivision for farming purposes restricted discretionary, and subdivision for non-farming purposes discretionary;
- including residential units and accommodation for farm workers and their families in the definition of farm buildings;
- to make specific provision for farm retirement dwellings;
- reintroducing the lakeside protection areas with non-complying status for buildings and subdivision;
- removal of areas to the west and south of Twizel from the Mackenzie Basin subzone. This last matter was not appealed. We record that the Council has since notified and issued a decision<sup>10</sup> on its Plan Change 15 relating to these areas. There has been no appeal on that decision so it is not before us. We comment on its relevance later when considering the area around Twizel.

[8] There are three relevant versions of PC13 for us to consider:

- PC13 as notified – we will abbreviate this to "PC13(N)";
- PC13 as in the Commissioners' version – abbreviated to "PC13(C)";

<sup>8</sup> Commissioners D W Collins, G Page and E Williams.

<sup>9</sup> *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council* [2000] NZRMA 59 at para [56].

<sup>10</sup> Memorandum of Mr Caldwell, counsel for the Council, dated 17 August 2011.



- PC13 as agreed by most of the parties (except for the appellant Federated Farmers of New Zealand (Incorporated) Mackenzie Branch) which we will call “PC13(V)”<sup>11</sup>.

### 1.3 The appeals, the parties and the evidence

[9] Ten appeals were lodged with the Registrar. Seven appellants appeared at the hearing. The appeal by High Country Rosehip Orchards Limited and Mackenzie Lifestyle Limited (ENV-2009-CHC-175) was withdrawn, as was the appeal by Aoraki Trust Lands Limited (ENV-2009-CHC-182)<sup>12</sup>. However, for tactical reasons relating to jurisdiction, Mackenzie Properties Limited as a section 274 party to the appeal by Rosehip requested that the former appeal (ENV-2009-CHC-175) be kept alive *pro forma*. The appeal by R, R and S Preston and Rhoborough Downs Limited (ENV-2009-CHC-191) was the subject of a consent memorandum<sup>13</sup> between the appellants and the Council. We will consider that memorandum – which give site-specific solutions to the issues raised – when we come to consider individual properties later. The appeal by Mt Gerald Station Limited (“Mt Gerald”)<sup>14</sup> was withdrawn<sup>15</sup> in all respects except for the request for a further farm base area of about seven hectares on a sloping terrace above Lake Tekapo and south of the existing homestead and Coal River. The general appeal by Fountainblue Limited and others together called “Pukaki Downs” (ENV-2009-CHC-190) challenging PC13 in its entirety was kept open for jurisdictional purposes. In other words, as we understood Mr Prebble, counsel for Pukaki Downs<sup>16</sup>, it only maintained its challenge to PC13 so as to maximise the court’s powers in respect of Fountainblue’s wish to have a rural-residential and tourism zone(s) on different parts of its land. It may, of course, also enable other changes to PC13 if we consider those are appropriate. The appeal by Meridian Energy Limited (“Meridian”) has to protect its interests in the Waitaki power scheme.

[10] Most of the appellants were section 274 parties on other appeals. There were also a number of independent section 274 parties, although most of them withdrew before the hearing commenced. Counsel for the New Zealand Transport Agency, a section 274 party, was given leave to withdraw since it intended to take no further part in the proceedings (consequent upon the withdrawal of the High Country Rosehip appeal). A number of other section 274 parties which had served evidence – Simons Hill Limited, Simons Pass Limited, Pukaki Irrigation Company Limited, Lone Star Farms Limited and Star Holdings Limited – gave notice of withdrawals on 13 August 2010, immediately before the start of the hearing.

<sup>11</sup> It was produced by a planning witness, Mr C Vivian, as his annexure “D” [Environment Court document 25].

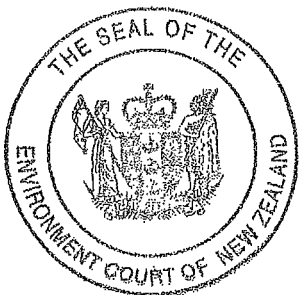
<sup>12</sup> Withdrawn by notice dated 26 July 2010.

<sup>13</sup> Environment Court document 29A.

<sup>14</sup> ENV-2009-CHC-181.

<sup>15</sup> Mr Schulte’s submissions para 5.

<sup>16</sup> Mr Prebble’s submissions [Environment Court document 21] as amplified orally – see the Transcript at pp 468 to 470.





[11] The remaining appeals by the named appellants raise issues about:

- the existence and extent of outstanding natural landscapes within the Mackenzie Basin subzone;
- the Rural objective(s) as to landscape;
- the implementing policies and landscape;
- hazard provisions;
- some of the implementing rules in section 7 of the district plan, especially in relation to reflectivity and wilding trees;
- land use practices and sustainability;
- specific farm base areas and/or rules;
- proposed new Rural-Residential and Tourist Resort zones.

*The evidence*

[12] Most of the evidence called by the parties was lodged with the Registrar, served by each party on the others, pre-read by the court's members, and entered into the court's records in the normal way when the witness produced and confirmed it on affirmation (or oath). The evidence was then tested by those parties who wished to cross-examine the witness, or by questions from the court. Some evidence was entered on the record without opposition<sup>17</sup> when no party wished to cross-examine the witness.

[13] Exceptionally, after the hearing we have had (provisional) regard to<sup>18</sup> some further evidence and information which has not yet been tested. Since this decision is interim an opportunity to do so will be given to any concerned party. We now outline the evidence and information we have referred to. First at the end of the hearing we asked for further evidence from Mr G H Densem, the landscape architect called by the Mackenzie District Council. On 8 September 2010 Mr Densem lodged and served with the Registrar a further statement of evidence<sup>19</sup>. We treat this evidence with caution because apart from the fact that none of the parties have had the chance to test its accuracy in court, it was prepared at the time of the first Canterbury earthquakes and so Mr Densem recorded that it had not been checked by him.

[14] Second we have entered the statement of Mr D A Fastier onto the record<sup>20</sup> despite the fact that the appellant for whom he lodged and served evidence withdrew its appeal at the last minute, and Mr Fastier did not enter the witness box to produce it. Mr Fastier is a director of Simons Hill Station Limited and has, for the last 16 years, been a farmer of this land with his partner and his son. We had read his evidence in preparation for the hearing<sup>21</sup>. Our grounds for referring to his evidence are first that his

<sup>17</sup> E.g. that of an ecologist, Dr K M Lloyd, called by the Council [Environment Court document 13].

<sup>18</sup> Under section 276 of the RMA.

<sup>19</sup> Environment Court document 32.

<sup>20</sup> As Environment Court document 35.

<sup>21</sup> Briefs were also lodged by experts (Mr C R Glasson, a landscape architect and Mr M J G Garland, a resource manager). We have not re-read these, but copies are on the court file.



evidence about Simons Hill and Simons Pass Stations is relevant, second it is the best evidence available about those stations, third we doubt if any party would object to it, fourth it reads as the statement of someone who has worked with and cared for "his" part of the Mackenzie Basin for some time and is acutely aware of the problems the land faces; and fifth it is a relatively careful and considered statement which is not obviously self-serving. Naturally, any of the facts we recite in reliance on Mr Fastier's statement may be challenged by any of the parties to these proceedings before we come to our final decision.

[15] Third there are a number of references in the evidence of Dr K M Lloyd, an ecologist called by the Council, to a report from the Parliamentary Commissioner for the Environment (Dr J Wright) called "Change in the high country : Environmental stewardship and tenure review"<sup>22</sup>. This was not produced as an exhibit. We record that because of its general relevance to high country issues in the South Island some of the court's members have read it. We have not relied on it in any way in coming to this decision except negatively : it reminds us that we received minimal ecological evidence and so we should reserve leave for any party to call such evidence if they wish to.

[16] Since the map of Mackenzie Basin stations produced to us<sup>23</sup> is quite out of date (it is dated September 2006) we have referred to the Land Information New Zealand website to ascertain which stations in the Mackenzie Basin are still crown pastoral leases. Naturally any of our statements about these may be put right if a party shows it is wrong (and relevant).

[17] Finally, we have referred to a geological map<sup>24</sup> for fundamental geological information; and to topological maps<sup>25</sup> for general information although through oversight only one of these – Dover Pass – was produced as an Exhibit<sup>26</sup>.

#### 1.4 Legal issues

##### *The pre-2009 version of the RMA*

[18] As a preliminary point we record that the parties agreed<sup>27</sup> that these appeals should be resolved under the Resource Management Act 1991 in its form prior to the Resource Management Amendment Act 2009. That is because PC13 was notified in 2007, well before the 2009 Amendment came into force.

<sup>22</sup> "Change in the high country : Environmental stewardship and tenure review" Parliamentary Commissioner for the Environment, April 2009.

<sup>23</sup> G H Densem, Exhibit 28.1.

<sup>24</sup> IGNS (2007) Map 15 Aoraki.

<sup>25</sup> New Zealand Topo 50 maps -BY16 (Mount Stevenson), -BY17 (Lake Tekapo), -BZ15 (Twizel), -BZ16 (Dover Pass) and -BZ17 (Te Kopi o Opihi/Burkes Pass).

<sup>26</sup> Exhibit 16.2.

<sup>27</sup> Transcript p. 470.





*Matters to be considered*

[19] Because these proceedings are about a plan change we must first identify the legal matters in relation to which we must consider the evidence. In *Long Bay-Okura Great Park Society Incorporated v North South City Council*<sup>28</sup> the Environment Court listed a “relatively comprehensive summary of the mandatory requirements” for the RMA in its form before the Resource Management Amendment Act 2005. We now amend the list to reflect the changes made by the Resource Management Amendment Act 2005. The different legal standards to be applied are emphasised, and we have underlined the changes<sup>29</sup> and additions since *Long Bay* (but before the 2009 amendments):

A. General requirements

1. A district plan (change) should be designed to **accord with**<sup>30</sup>, and assist the territorial authority **to carry out** – its functions<sup>31</sup> so as to achieve, the purpose of the Act<sup>32</sup>.
2. When preparing its district plan (change) the territorial authority **must give effect** to any national policy statement or New Zealand Coast Policy Statement<sup>33</sup>.
3. When preparing its district plan (change) the territorial authority shall:
  - (a) **have regard to** any proposed regional policy statement<sup>34</sup>;
  - (b) **give effect to** any operative regional policy statement<sup>35</sup>.
4. In relation to regional plans:
  - (a) the district plan (change) must **not be inconsistent with** an operative regional plan for any matter specified in section 30(1) or a water conservation order<sup>36</sup>; and
  - (b) **must have regard to** any proposed regional plan on any matter of regional significance etc<sup>37</sup>;
5. When preparing its district plan (change) the territorial authority must also:
  - **have regard to** any relevant management plans and strategies under other Acts, and to any relevant entry in the Historic Places Register and to various fisheries regulations<sup>38</sup>; and to consistency with plans and proposed plans of adjacent territorial authorities<sup>39</sup>;
  - **take into account** any relevant planning document recognised by an iwi authority; and
  - **not** have regard to trade competition<sup>40</sup>;

<sup>28</sup> *Long Bay-Okura Great Park Society Incorporated v North Shore City Council* Decision A78/2008 at para [34].

<sup>29</sup> Except in A5 below where “not” was already underlined in *Long Bay*.

<sup>30</sup> Section 74(1) of the Act.

<sup>31</sup> As described in section 31 of the Act.

<sup>32</sup> Sections 72 and 74(1) of the Act.

<sup>33</sup> Section 75(3)(a) and (b) of the Act.

<sup>34</sup> Section 74(2) of the Act.

<sup>35</sup> Section 75(3)(c) of the Act [as substituted by section 46 Resource Management Amendment Act 2005].

<sup>36</sup> Section 75(4) of the Act [as substituted by section 46 Resource Management Amendment Act 2005].

<sup>37</sup> Section 74(2)(a) of the Act.

<sup>38</sup> Section 74(2)(b) of the Act.

<sup>39</sup> Section 74(2)(b) of the Act.

<sup>40</sup> Section 74(3) of the Act.



6. The district plan (change) must be prepared in accordance with any regulation<sup>41</sup> (there are none at present) and any direction given by the Minister for the Environment<sup>42</sup>;
7. The formal requirement that a district plan (change) must<sup>43</sup> also state its objectives, policies and the rules (if any) and may<sup>44</sup> state other matters.

B. Objectives [the section 32 test for objectives]

8. Each proposed objective in a district plan (change) **is to be evaluated** by the extent to which it is the most appropriate way to achieve the purpose of the Act<sup>45</sup>.

C. Policies and methods (including rules) [the section 32 test for policies and rules]

9. The policies are to **implement** the objectives, and the rules (if any) are to **implement** the policies<sup>46</sup>;
10. Each proposed policy or method (including each rule) is to be examined, **having regard to its efficiency and effectiveness**, as to whether it is the most appropriate method for achieving the objectives<sup>47</sup> of the district plan:
  - (a) **taking into account:**
    - (i) the benefits and costs of the proposed policies and methods (including rules); and
    - (ii) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods<sup>48</sup>; and
  - (b) if a national environmental standard applies and the proposed rule imposes a greater prohibition or restriction than that, then whether that greater prohibition or restriction is justified in the circumstances<sup>49</sup>.

D. Rules

11. In making a rule the territorial authority must **have regard to** the actual or potential effect of activities on the environment<sup>50</sup>.
12. There are special provisions for rules about contaminated land<sup>51</sup>.
13. There must be no blanket rules about felling of trees<sup>52</sup> in any urban environment<sup>53</sup>.

E. Other statutes:

14. Finally territorial authorities may be required to comply with other statutes.

<sup>41</sup> Section 74(1) of the Act.  
<sup>42</sup> Section 74(1) of the Act [added by section 45(1) Resource Management Amendment Act 2005].  
<sup>43</sup> Section 75(1) of the Act.  
<sup>44</sup> Section 75(2) of the Act.  
<sup>45</sup> Section 32(3)(a) of the Act.  
<sup>46</sup> Section 75(1)(b) and (c) of the Act (also section 76(1)).  
<sup>47</sup> Section 32(3)(a) of the Act.  
<sup>48</sup> Section 32(4) of the Act.  
<sup>49</sup> Section 32(3A) of the Act [added by section 13(3) Resource Management Amendment Act 2005].  
<sup>50</sup> Section 76(3) of the Act.  
<sup>51</sup> Section 76(5) of the RMA [as added by section 47 Resource Management Amendment Act 2005].  
<sup>52</sup> Section 76(4A) of the RMA as added by the Resource Management (Simplifying and Streamlining) Amendment Act 2009. Strictly, there can be such rules but they will be revoked by section 76(4A) as from 1 January 2012.  
<sup>53</sup> Section 76(4B) of the RMA.



## F. (On Appeal)

15. On appeal<sup>54</sup> the Environment Court must have regard to one additional matter – the decision of the territorial authority<sup>55</sup>.

[20] From A above items A1, A3(b), A5 and A7 are relevant. As for A1 : it is expressly within the prescribed functions of the Council to control<sup>56</sup> the actual or potential effects of the use, development and protection of land by establishing and implementing<sup>57</sup> objectives, policies and rules. We outline the relevant provisions in the operative regional policy statement next. We consider B for objectives below and then the policies and rules under C and D. With one possible exception, E (Other statutes) is only peripherally relevant and each such statute will be discussed in the context it arises in. The exception is the Climate Change Response Act 2002 together with subsequent amendments to that statute. We discuss this later. Finally, in relation to F: we have regard to the Commissioners' decision during the course of this decision as we consider each issue (if the Commissioners had considered it). However, we will also bear in mind that, probably owing to the pressure of time in which to reflect and make a decision, the Hearing Commissioners failed in a primary task which was to require whether any or all of the Mackenzie sub-zone is or is not an outstanding natural landscape. In our view that failure then colours most of their subsequent determinations.

*The Canterbury Regional Policy Statement*

[21] Turning to A3 in the list above : we must give effect to any operative regional policy statement. In this case it is the Canterbury Regional Policy Statement ("the RPS")<sup>58</sup>. In Chapter 8 of the RPS there is a slightly confusing objective for the region which is<sup>59</sup> to protect or enhance the natural landscapes and features "that contribute to Canterbury's distinctive character and sense of identity, including their associated ecological, cultural, recreational and amenity values". The objective is puzzling because it does not refer to outstanding natural landscapes (or features) but to those landscapes which contribute to Canterbury's distinctive character and sense of identity, without actually saying what the latter are.

[22] The implementing policy in the RPS reads<sup>60</sup>:

<sup>54</sup> Under section 290 and Clause 14 of the First Schedule to the Act.

<sup>55</sup> Section 290A of the RMA as added by the Resource Management Amendment Act 2005.

<sup>56</sup> Section 31(b) of the RMA.

<sup>57</sup> Section 31(a) of the RMA.

<sup>58</sup> A proposed replacement regional policy statement has been notified in 2011 but we do not refer to that. All references in this decision are to the operative regional policy statement.

<sup>59</sup> Objective 8/2 CRPS pp. 106-107.

<sup>60</sup> Policy 8/3 CRPS p. 107.



### Policy 3

Natural features and landscapes that meet the relevant criteria of sub-chapter 20.4(1) should be protected from adverse effects of the use, development, or protection of natural and physical resources, and their enhancement should be promoted. Activities that may have adverse effects include those involving the clearance or modification of areas of indigenous vegetation (particularly tall tussock), earthworks, alteration to landforms, tree planting, or the erection of structures.

The particular sensitivity of these natural features and landscapes to regionally significant adverse effects in terms of sub-chapter 20.4(2) should be reflected in the provisions of district plans in the region.

Assessments of effects should be made by considering:

- (i) aesthetic values;
- (ii) expressiveness;
- (iii) transitory value;
- (iv) natural science factors.

[23] Sub-chapter 20.4(1) specifies that a matter is of regional significance<sup>61</sup> when it concerns<sup>62</sup> (relevantly):

- (e) Landscapes and natural features that are distinctive, unique to, characteristic of, or outstanding within the Canterbury region, including the processes that maintain them;

...

In identifying ... landscapes and natural features, factors to be considered include whether a site, place or area is:

- (i) Identified as being a regionally outstanding landscape or natural feature in the Canterbury Regional Landscape Study;
- (ii) A geopreservation site of regional significance and/or identified in the Geopreservation Inventory of the New Zealand Geological Society;
- (iii) An area identified as an Area of Significant Conservation Value;
- (iv) An area identified as a Recommended Area for Protection in a Protected Natural Areas Report; or
- (v) In the sub-alpine or alpine zone.

The fact that a particular site, place, or area is listed above will not necessarily mean that the site, place, or area is of regional significance. The Regional Council or other parties should take criteria (a) to (k) into account together with other relevant considerations, in deciding whether or not a site, place, or area is of regional significance. **It is acknowledged that some site information in data bases may have changed or contain inaccuracies and may require verification.**

That document refers to the Canterbury Regional Landscape Study (1993) which assessed<sup>63</sup> the flat areas, lakes and areas with National Parks as "Regionally Outstanding Landscapes" but other hills and mountains as merely "Regionally Significant Landscapes". We accept Mr Densem's criticism<sup>64</sup> of that study as making too sharp a



<sup>61</sup> RPS p. 287.

<sup>62</sup> RPS p. 289.

<sup>63</sup> G H Densem, evidence 13 May 2010 para 2.18 [Environment Court document 3].

<sup>64</sup> G H Densem, evidence 13 May 2010 para 2.20 [Environment Court document 3].

distinction between the mountains and the plains, and that in reality they have high “visual coherence”<sup>65</sup>. Further, at the hearing we received copies of an updated study<sup>66</sup> from Dr Y Pflüger, a landscape architect called by the Council, which we will refer to when considering the landscape(s) of the Mackenzie Basin.

[24] Relevant under A5 is the Canterbury Regional Pest Management Strategy<sup>67</sup>. In fact, a new version<sup>68</sup> of this came into effect on 1 July 2011 while we were writing this decision and we will refer to it in due course because of its direct relevance.

*The RMA binds the Crown – with some exceptions*

[25] Another preliminary legal matter is to note that the RMA binds the Crown generally<sup>69</sup>. However, the Act does not apply to some particular uses of Crown land. Section 4 states (relevantly):

**4. Act to bind the Crown**

- (1) This Act binds the Crown, except as provided in this section.
- (2) This Act does not apply to any work or activity of the Crown which –
  - (a) Is a use of land within the meaning of section 9; and
  - (b) The Minister of Defence certifies is necessary for reasons of national security.
- (3) Section 9(3) does not apply to any work or activity of the Crown within the boundaries of any area of land held or managed under the Conservation Act 1987 or any other Act specified in Schedule 1 to that Act (other than land held for administrative purposes) that –
  - (a) Is consistent with a conservation management strategy, conservation management plan, or management plan established under the Conservation Act 1987 or any other Act specified in Schedule 1 to that Act; and
  - (b) Does not have a significant adverse effect beyond the boundary of the area of land.

A large area of red tussock<sup>70</sup> grasslands on the higher downs<sup>71</sup> between Lakes Tekapo and Pukaki is administered by the Ministry of Defence and we assume section 4(2) applies. Further, much of the land north of Lakes Ohau, Pukaki and Tekapo (to the Main Divide) is a National Park and is managed under plans established under the Conservation Act 1987.

*When is a submission “on” a plan change?*

[26] In relation to various appeals the Mackenzie District Council challenged some of the relief sought as being beyond the jurisdiction of the court. These arguments mostly

<sup>65</sup> G H Densem, evidence 13 May 2010 para 2.22 [Environment Court document 3].

<sup>66</sup> CRC Landscape Study 2010 [Environment Court document 4].

<sup>67</sup> Prepared under the Biosecurity Act 1993.

<sup>68</sup> Canterbury Regional Pest Management Strategy 2011-2015.

<sup>69</sup> Section 4(1) of the RMA.

<sup>70</sup> *Chionochloa rubra*.

<sup>71</sup> The land is identified as “Defence” on Exhibit 28.1.



relied on a claim that the submissions to the Council seeking the relief were not on the subject of PC13 and therefore the relief was *ultra vires* the Council and (on appeal) the Environment Court. We now summarise the important cases cited to us on this issue.

[27] First Mr Hardie, counsel for the Council, referred to the leading authority which is *Clearwater Resort Limited v Christchurch City Council*<sup>72</sup>. In that decision – and we think it makes no difference that the proceedings were concerned with a variation rather than a plan change – William Young J stated<sup>73</sup>:

1. A submission can only fairly be regarded as “on” a variation if it is addressed to the extent to which the variation [plan change] changes the pre-existing *status quo*.
2. But if the effect of regarding a submission as “on” a variation would be to permit a planning instrument to be appreciably amended without real opportunity for participation by those potentially affected, this is a powerful consideration against any argument that the submission is truly “on” the variation.

We respectfully think that the first point being made by William Young J can be elaborated on by observing that a plan change may be narrow or broad and/or at a high or low level. It may involve objectives, policies and methods of implementation, or only policies and/or methods (it is more difficult to change objectives and not policies and/or methods). Then the point of *Clearwater* is that it is the extent to which the variation or plan change differs from the status quo which sets the scope of the plan change. If the proposed change to the plan is minor, then any submission is similarly limited. For example, if a plan change sought only to amend a rule then a submission seeking to change a policy above that rule would not be “fairly and reasonably” on the subject of the plan change, to adopt the words of the Full Court in *Countdown Properties (Northlands) Limited v Dunedin City Council*<sup>74</sup>.

[28] Mr Hardie also referred to *Avon Hotel Limited v Christchurch City Council*<sup>75</sup> where the court suggested a third test, being “That the submission should not open up for relitigation aspects of the plan which have previously passed the point of challenge”. On reflection we consider that is probably just an aspect of *Clearwater*’s first point.

[29] More authoritatively, in *Option 5 Incorporated v Marlborough District Council*<sup>76</sup> Ronald Young J agreed with the approach in *Clearwater*. He also stated that the

<sup>72</sup> *Clearwater Resort Limited v Christchurch City Council* HC Christchurch AP34/02, William Young J, 14 March 2003.

<sup>73</sup> *Clearwater Resort Limited v Christchurch City Council* HC Christchurch AP34/02, William Young J, 14 March 2003 at para [66].

<sup>74</sup> *Countdown Properties (Northlands) Limited v Dunedin City Council* [1994] NZRMA 145 at 166 where the Full Court held that an amendment to a plan change must not “... go ... beyond what is reasonably and fairly raised in submissions on the plan change”.

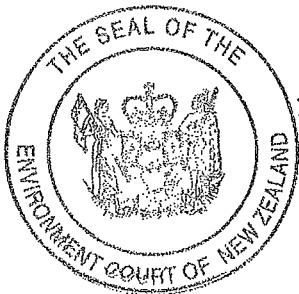
<sup>75</sup> *Avon Hotel Limited v Christchurch City Council* Decision C42/2007.

<sup>76</sup> *Option 5 Incorporated v Marlborough District Council* HC Blenheim CIV-2001-406-144, Young J, 28 September 2009.



Environment Court in its decision appealed from was also correct in taking into account the policy behind the variation and the purpose of the variation.

[30] Finally, we accept Mr Hardie's submission that the assessment of whether any amendment sought by a submission as fair and reasonable "... should be approached in a realistic workable fashion rather than from the perspective of legal nicety" using the phrase of Pankhurst J in another High Court decision : *Royal Forest and Bird Protection Society Incorporated v Southland District Council*<sup>77</sup>. We will apply those tests when any relief sought is challenged on this ground.



77

*Royal Forest and Bird Protection Society Incorporated v Southland District Council* [1997] NZRMA 406 (HC).

## 2. Descriptions and predictions

### 2.1 A snapshot of the existing landscape

[31] The district plan<sup>78</sup> identifies the Mackenzie Basin as one of three "... basic landscape units" within the district – the other two being the mountainous chain of the Main Divide, and the farmland east of the Two Thumb, Albury and Dalgety Ranges. Of relevance to these proceedings is the description of<sup>79</sup>:

The vast tussock grasslands of the **Mackenzie Basin**, enclosed in mountain ranges such as the Ben Ohau, Two Thumb, Hall, Gammack, and Grampian Ranges. The Basin contains the large lakes and canals of the Upper Waitaki Power Development and the townships of Twizel, Mt Cook and Tekapo. The landscapes of these high country areas are vast and spacious with subtle colourings and vegetation patterns, dominated by natural features and extended views. Development in the high country has also been generally unobtrusive with isolated contained settlement and a lack of prominent artificial structures and patterns.

...

That description is in our view generally accurate. More specifically the basin is a high, dry area surrounded by mountains – it is the largest such inter-montane basin in New Zealand<sup>80</sup>. The floor of the basin is not level. It has a north to south altitudinal gradient – the high point on the State Highway 8 west of Tekapo is approximately at 800 metres above sea level ("masl"), and a low point at Lake Ruataniwha is about 500 masl. There is also a striking rainfall gradient – decreasing from north and west (700 mm/year) to south (less than 450 mm/year). The lower parts of the basin rival Central Otago as being the driest place in New Zealand.

[32] Almost all the floor of the basin is glacial deposits or fluvioglacial outwash deposits. Underlying those Quaternary deposits, the oldest of which are less than 1.8 million years, is late Permian and Triassic bedrock of greywacke<sup>81</sup> interbedded with argillite<sup>82</sup>, all about 250 million years old. The underlying greywacke protrudes, forming the Mary Range, Grey Hills and mountains to the east of the Mackenzie Basin. The rock has become increasingly metamorphosed towards the Main Divide – forming semischist and schist.

[33] Landscape characteristics of the Mackenzie Basin were identified<sup>83</sup> by Mr G H Densem, the landscape architect called by the Council. They include long open views<sup>84</sup> over brown grassland, the "dramatic visual backdrop" of the Southern Alps<sup>85</sup> and the

<sup>78</sup> Chapter 7 (Rural Issues).

<sup>79</sup> MDP p. 7-10.

<sup>80</sup> To the west are the Mauka Atua/Ben Ohau and (hidden behind) Newmann Ranges, to the northwest the Southern Alps including Aoraki/Mt Cook, to the east is the Two Thumb and Rollesby Ranges, and to the south, the Kirkliston and Benmore Ranges.

<sup>81</sup> A schistose sandstone : IGNS (2007) Map 15 Aoraki.

<sup>82</sup> A siltstone-mudstone : IGNS (2007) Map 15 Aoraki.

<sup>83</sup> G H Densem, evidence-in-chief 13 May 2010 para 3.21 [Environment Court document 3].

<sup>84</sup> G H Densem, evidence 13 May 2010 para 3.22 [Environment Court document 3].

<sup>85</sup> G H Densem, evidence 13 May 2010 para 3.22 [Environment Court document 3].





other encircling peaks and mountains; the grand<sup>86</sup> U-shaped glacial valleys with their blue lakes (Lakes Tekapo and Pukaki), the simple<sup>87</sup> straight lines of the hydro canals and the transmission lines, scattered homesteads and farm bases<sup>88</sup>. The vegetation which creates the golden brown landscape is grass. There are several native tussock species including red tussock<sup>89</sup>, hard tussock<sup>90</sup> and snow tussock<sup>91</sup>. Introduced browntop<sup>92</sup> is also widespread. Shelterbelts, plantations and wildings of exotic conifers are scattered through the Basin, and exotic willow and poplar species line many of the larger rivers. We received minimal evidence of the remaining native vegetation and fauna within the Basin. Matagouri and spaniards<sup>93</sup> are obvious in wetter, more fertile areas, but the existence and extent of smaller herbs was not described.

[34] The braided rivers and moraine ponds are important for various native bird species. Most famous is the black stilt which is one of the rarest waders in the world, but other species which live here and are easily observed are black-winged (pied) stilt, south island pied oyster-catcher, double-banded dotterel, and wrybill. The area is also home to black-fronted terns and two gull species, as well as New Zealand falcon and swamp harriers. The habitat of insects and lizards was not described.

[35] Despite the simple immediate perception of a huge brown plain ringed by mountains, areas within the basin vary in their geomorphological, floral and developed characteristics. These areas were described by Mr Densem as different "landscape character areas"<sup>94</sup>. These are shown as Map 2 on the next page: "Landscape Character Areas"<sup>95</sup>. Since the majority of visitors' (and residents') experiences of the Mackenzie Basin as a whole are obtained from State Highway 8, we describe the areas in order that they are seen from that road when travelled from north to south:

1. The Eastern Plain (Mr Densem's "East Basin Landscape Character Area") including the mountains to the east;
2. (Lake) Tekapo<sup>96</sup>;
3. The Centre (Irishman and Mary Creeks – south of the Tekapo Canal – and Mt Mary Range – this area is Mr Densem's "Central Basin");
4. The Pukaki River Plain (Mr Densem's "South Basin");

<sup>86</sup> G H Densem, evidence 13 May 2010 para 3.22 [Environment Court document 3].

<sup>87</sup> G H Densem, evidence 13 May 2010 para 3.22 [Environment Court document 3].

<sup>88</sup> G H Densem, evidence 13 May 2010 para 3.22 [Environment Court document 3].

<sup>89</sup> *Chionochloa rubra*.

<sup>90</sup> *Festuca novaezealandiae*.

<sup>91</sup> *Chionochloa rigida*.

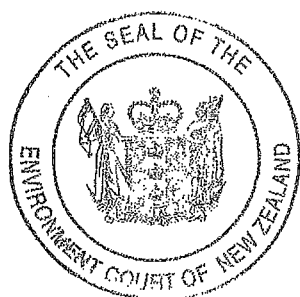
<sup>92</sup> *Agrostis capillaris*.

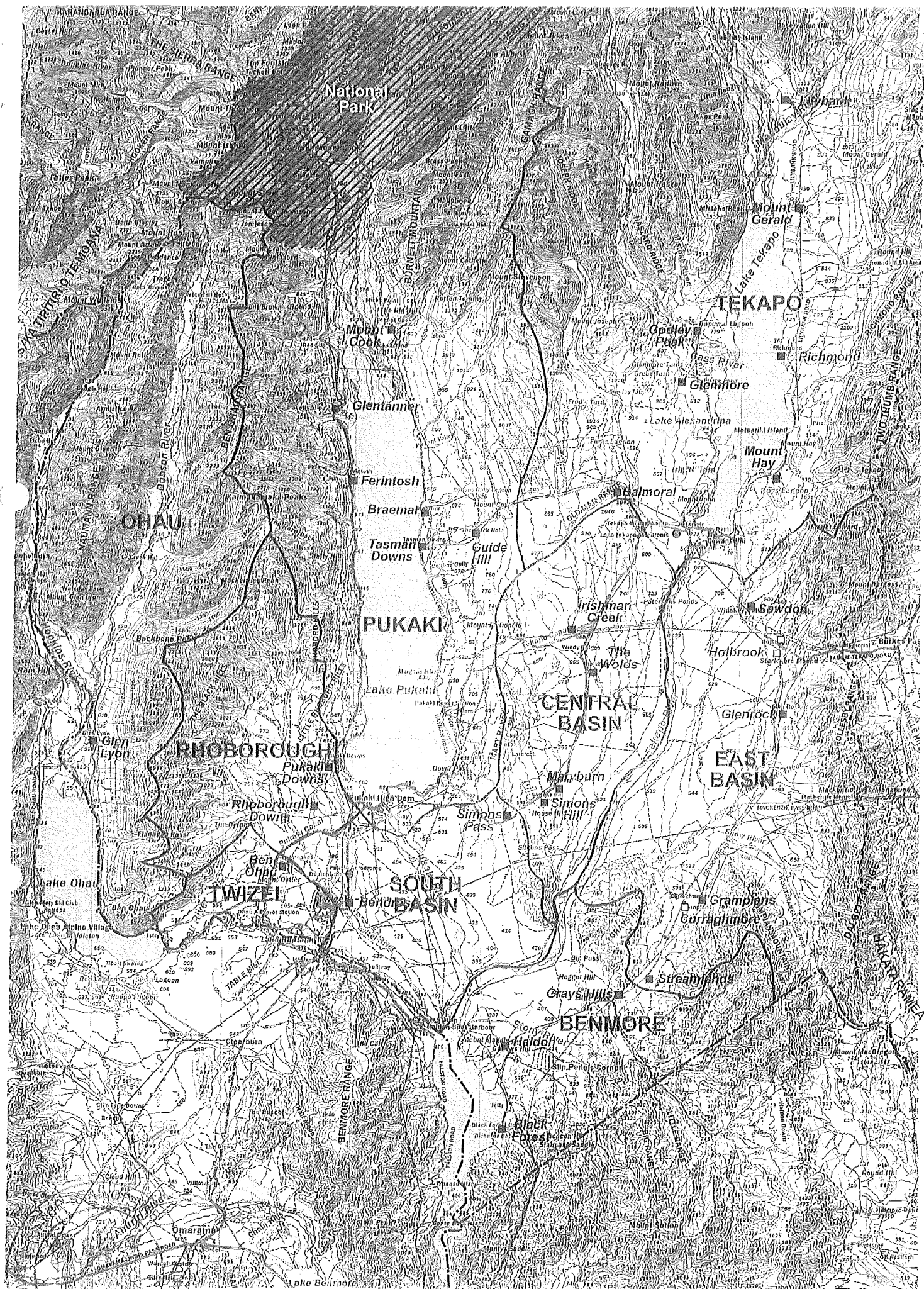
<sup>93</sup> *Aciphylla* spp.

<sup>94</sup> G H Densem, evidence 13 May 2010 Attachment 3 : The Mackenzie Basin Landscape (November 2007) [Environment Court document 3].

<sup>95</sup> This is map 4 attached to annexure "3" to the evidence-in-chief of Mr G H Densem [Environment Court document 3].

<sup>96</sup> G H Densem, evidence-in-chief photo 1 [Attachment to Environment Court document 2].





Mecklenze Basin Landscapes Map 2  
LANDSCAPE CHARACTER AREAS

December 2007

5. Pukaki<sup>97</sup>;
6. The Twizel River Plain<sup>98</sup> (Mr Densem's "Rhoborough" and "Twizel");
7. The Dobson River Catchment (Mr Densem's "Ohau");
8. Benmore<sup>99</sup>.

Some of these areas are only glimpsed from the State Highway (e.g. Te Ao Marama/Lake Benmore) and others are large areas seen at a distance, e.g. most of the Eastern Plains while the Dobson area is not readily visible from within the Mackenzie Basin.

[36] The landscape Issue in the district plan states<sup>100</sup>:

The landscapes of the District are of significant value to the people who live, work and visit there. Most of this experience of the landscape is gained from within the settlements and the main transport routes. However, an increasing number of people are interested in exploring more remote locations by vehicle or by foot. The high country landscape, in particular, is not only important for its residents and a drawcard for recreation and tourism, it is also part of the identity of New Zealand which can be seen in writings, paintings, songs and advertisements. Many of these landscapes are working landscapes containing farming and forestry elements such as fences, buildings, cultivation, introduced pasture, forestry and livestock. The significance of these elements varies with the intensity of use, the most intensive farming and forestry containing the greatest degree of modification. In many areas these elements constitute the typical rural landscape.

[37] Another relevant passage in the statement of landscape values describes<sup>101</sup>:

... the high country [as] a dynamic landscape with ecological changes, including the spread of [hieracium] and wilding trees, and changes as result of agricultural practices, such as shelter planting, ploughing and topdressing. These changes continue to have an impact on the character of the landscape. At the same time there is a growing awareness and appreciation of the many values of largely unmodified areas of the high country. The landscape values of the high country, in particular higher altitude areas, are very sensitive to change by activities, particularly activities involving earthworks, establishment of buildings and structures, the planting of trees and intensification of pastoral and arable use. Changes to indigenous vegetation patterns can also affect the visual qualities of the landscape, as they contribute to the colour, texture and naturalness of an area. The challenge is to find an appropriate balance between land uses and activities and the maintenance of outstanding landscape qualities.

The last sentence largely encapsulates the key issue in these proceedings.

<sup>97</sup> G H Densem, evidence-in-chief photographs 3 and 4 [Attachment to Environment Court document 2].

<sup>98</sup> G H Densem, evidence-in-chief photographs 5, 6, 7 and 8 [Attachment to Environment Court document 2].

<sup>99</sup> G H Densem, evidence-in-chief photo 10 [Attachment to Environment Court document 2].

<sup>100</sup> MDP p. 7-10.

<sup>101</sup> MDP p. 7-11.



[38] The statement of issues is not directly changed by PC13, although a new paragraph is added<sup>102</sup> about changes which are affecting the landscape values of the Mackenzie Basin, in particular housing, and the effects of irrigation “greening” the basin.

*People in the Mackenzie Basin*

[39] As described by Mr Densem<sup>103</sup>, many specific areas and landscape features are of cultural significance to Ngai Tahu who are the dominant tangata whenua. These features include trails, archaeological sites, mahinga kai<sup>104</sup> sites, mountains, water and place names (notably Aoraki, Pukaki and Tekapo). Tangibly the visual shafts between the southern shores of the main lakes and the mountains are particularly important<sup>105</sup> to Ngai Tahu to maintain their relationships with those places.

[40] The population of the Mackenzie District was just over 3,800 in the 2006 census although that figure swells over summer. For example, Twizel with a population of a little over 1,000 is reported to treble as holiday homes and camping-grounds fill. We bear in mind that the district has one of the smallest rate-paying populations in the country, so that it is not in a position to fund expensive research into the effects of development, or readily to promote changes to the district plan.

[41] Tourism provides 35% of the employment in the Mackenzie Basin subzone<sup>106</sup>. At 20% the farming, forestry and fishing sector is a distant (but important) second<sup>107</sup>. It is not correct that “Pastoral farming is still the predominant business in the Mackenzie Basin” as stated<sup>108</sup> by Mr J B Murray, a very experienced farmer, owner of The Wolds Station, and Chairman of the Mackenzie Branch of Federated Farmers of New Zealand Incorporated. With respect to Mr Murray, if the importance of business is measured by the number of employees, then clearly tourism is the dominant business of the basin. Or, as we shall see, if importance is rated by the direct contribution to the national economy, that part of the Waitaki hydroelectric power scheme which is within the Mackenzie Basin subzone (we will call this part “the Waitaki Power Scheme”) wins hands-down over farming.

[42] However, farming is very important socially and culturally. The Mackenzie Basin contains a number of high country stations<sup>109</sup>, some of which – for example Lilybank, Mt Cook, Balmoral, Irishman Creek, Haldon and Black Forest – have become quite famous in New Zealand folklore. An inspection of map 1 shows that a

<sup>102</sup> PC13(N) at p. 4.

<sup>103</sup> G H Densem, evidence-in-chief “Cultural Impact Assessment” May 2010 [pp 22 *et ff* of Appendix 2 to Environment Court document 2].

<sup>104</sup> Traditional food gathering sites.

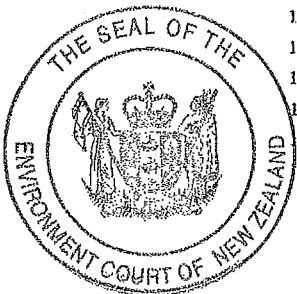
<sup>105</sup> G H Densem Appendix 2 p. 23 [Environment Court document 3].

<sup>106</sup> R A Corbett, evidence-in-chief para 4.1 [Environmental Court document 22].

<sup>107</sup> R A Corbett, evidence-in-chief para 4.1 [Environment Court document 22].

<sup>108</sup> J B Murray, evidence-in-chief para 10 [Environment Court document 16].

<sup>109</sup> The stations are shown on Map “1”.



substantial proportion of the Rural zone land is held by a small number of private landowners or lessees under Pastoral Leases. That is important for two reasons : first we are concerned that a disproportionate burden of landscape protection may be borne by a very small number of landowners. What makes that worse is that high country farming is generally an unprofitable activity at present<sup>110</sup>. Secondly, in the opinion of Mr Densem, the existing plan was established with the “leasehold farming system in mind” and tenure review applications under the Crown Pastoral Land Act may change that<sup>111</sup>. The owners of some of the stations are appellants in these proceedings and some are represented by the Mackenzie Branch of Federated Farmers of New Zealand Incorporated which is also an appellant.

[43] Large parts of the Mackenzie Basin are owned by quasi- or public bodies – the Department of Conservation pre-eminently but LINZ, the NZTA and Meridian also hold land in the basin.

*Infrastructure : State Highway 80 and the Waitaki power scheme*

[44] The basin is divided in two from northeast to southwest by two obvious infrastructure corridors – State Highway 8, and the Tekapo-Pukaki-Ohau canal and power-line systems. State Highway 8 is the only sealed route through the Basin. The road enters the Basin at Te Kopi o Opihi/Burkes Pass and exits at Lake Ruataniwha as the road continues into the Waitaki District and towards Omarama.

[45] The Waitaki valley’s hydroelectric power scheme as a whole generates<sup>112</sup> nearly 30% of New Zealand electricity. While extensive, the Waitaki Power Scheme is not large in proportion to the area of the Mackenzie Basin as a whole. Key assets in the (upper) Waitaki Power Scheme are two dams – the Pukaki High Dam and the Ruataniwha Dam, four canals<sup>113</sup>, five power stations and the transmission lines. As we have recorded, there is an appeal about PC13 by Meridian, the owner (at the time of the hearing) of most of the infrastructure in the Waitaki Power Scheme. The transmission lines are owned<sup>114</sup> by Transpower, which took no part in the hearing. Meridian’s witness, Mr Smales<sup>115</sup>, and counsel also emphasised that the Waitaki Power Scheme is a major and ongoing engineering enterprise. It requires maintenance to ensure it continues to run efficiently and indeed to meet resource consent conditions. We will consider the predicted relationships between the Waitaki Power Scheme and both existing and likely new activities in part 2.4 of this decision.

<sup>110</sup> J B Murray, evidence-in-chief para 10 [Environment Court document 16]; A E Tibby, evidence-in-chief [Environment Court document 23].

<sup>111</sup> G H Densem, evidence 13 May 2010 Attachment3 : “Landscape Values of the Mackenzie Basin” G H Densem (2007) para 7.2 [Environment Court document 3].

<sup>112</sup> Explanation to Policy 11A [Mackenzie District Plan p. 7-38].

<sup>113</sup> The Tekapo, Pukaki, Ohau, and Ohau B-C canals: K A Smales, evidence-in-chief Figure 2 [Environment Court document 10].

<sup>114</sup> And shown as designations on the district’s planning maps.

<sup>115</sup> K A Smales, evidence-in-chief para 83 [Environment Court document 10].





[46] These infrastructure corridors have far-reaching consequences in that they have, directly and indirectly, an effect on their containing landscape(s). Further, the road creates the viewing opportunities for many of the visitors to the Mackenzie Basin. It defines what has become an important visual corridor from which the landscape is viewed. Similarly, the canals have changed the hydrological systems – for example, the upper Tekapo River, and the Pukaki and Ohau Rivers have been substantially dewatered (most of the year). No doubt there have been ecological consequences, although we do not know what they are in any detail.

## 2.2 The changing landscape

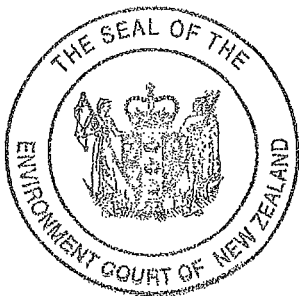
[47] In popular perception “the Mackenzie Country” is a land of picture postcard beauty. It is a series of clichés of the picturesque that can still move the viewer: the conifers and tussocks and, in summer, colourful lupin flowers of Te Kopi o Opihi/Burkes Pass; the views north over the sward and lake in front of the cafés and motels at Tekapo, with the Church of the Good Shepherd in the right hand side of the frame; the broad vistas and the encircling brown or ‘golden’ tussock-covered hills, and later the view up the length of Lake Pukaki to Aoraki/Mt Cook<sup>116</sup>. It has been described as “iconic” and “timeless”. In our view the (incorrect<sup>117</sup>) use of the word “iconic” is an attempt to describe the fact that a landscape epitomises or symbolises qualities of a landscape type – “the high country” or simply “the Mackenzie country” – with which many people are familiar and which they admire greatly. Nor is this landscape timeless. The Mackenzie Basin was (probably) mostly forest before humans arrived. There would have been forest in the wetter valleys to the north and west (as in the Dobson and Hopkins Valleys now) and podocarp and broadleaf forest on the plains to the south and east. The Basin has changed much over the last 1,000 years since Maori arrived and the rate of change sped up after James Mackenzie discovered it for Europeans and burning became even more prevalent and exotic grasses and grazing mammals were introduced.

[48] There have also been very significant changes to the Basin as a result of the Waitaki Power Scheme which started in the 1960s. The hotel and settlement at Lake Pukaki was flooded when the outflow was dammed<sup>118</sup> and the lake was raised by 50 metres and as a consequence greatly increased its surface area (and volume). The hotel and settlement at Lake Tekapo was relocated to higher ground, and the new village was commenced. The system of canals was built to move water from Tekapo to the turbines at Pukaki, and then via the Pukaki Canal to the turbines at Lake Ruataniwha. Three transmission lines cross the Basin, and there is a complex web of them south of Twizel.

<sup>116</sup> See G H Densem, evidence-in-chief photographs 11 and 12 [Attachment 1 to Environment Court document 2].

<sup>117</sup> It is probably now far too late, and simply pedantic to complain that no landscape is iconic. The very term ‘landscape’ was originally used to describe a painting of an expansive view. An icon by contrast is properly a painting of a part of a human figure e.g. the Christos Pantokrator of the Eastern Orthodox Church thrown up by a Google search.

<sup>118</sup> The Pukaki High Dam.



Again there would have been ecological changes as a result of all these works, but they were not the subject of evidence in these proceedings.

[49] There are a number of other changes<sup>119</sup> to the landscape of the Mackenzie Basin which are continuing, and in some cases accelerating:

- (1) increased numbers of buildings;
- (2) changes to plant biodiversity – the problem of weeds;
- (3) rabbits and other animal pests;
- (4) changing land management practices;
- (5) soil loss.

We consider these in turn.

#### *Buildings*

[50] As PC13's statement of the Issue suggests, one of the primary motivations for the plan change was the proliferation of houses in parts of the Mackenzie Basin – especially around Twizel and near the southwestern corner of Lake Pukaki. After the Commissioners' decision the Council decided to remove the area around Twizel – and especially the area between that town and Lake Ruataniwha – from PC13 and deal with it in a separate plan change. That area is not the subject of this decision. The only remaining issues of residential development which this decision focusses on (later) are:

- residential development on farm base areas;
- farm buildings;
- rural residential blocks;
- visitor accommodation (in a limited way).

#### *Changes to plant biodiversity?*

[51] There are questions about the future of the landscape which the Council has recognised but not fully tackled. The golden landscape of myth (principally the golden-brown hard tussock<sup>120</sup> and introduced browntop) is being overwhelmed from three directions – from the south by the dark purple<sup>121</sup> stain of hieracium, and from within by the central spread of irrigated paddocks with green exotic grasses, and from the north by a blanket of dark conifers. Scattered through the basin are various areas of conifers<sup>122</sup>, shelter belts and homesteads, shelter and firewood plantings by huts, woodlots for potential timber, experimental plantings in the Ohau and (especially) Tekapo Rivers, and since the Waitaki Power Scheme, amenity planting around the edges of Lake Pukaki. Further, the riverbed of both the two main rivers, totally within the Basin (the Tekapo

<sup>119</sup> G H Densem, evidence-in-chief Attachment 3 : "The Mackenzie Basin Landscape" para 4.1 *et ff* [Environment Court document 3].

<sup>120</sup> *Festuca novaezealandiae*.

<sup>121</sup> This is seasonal.

<sup>122</sup> K M Lloyd, evidence para 25 [Environment Court document 13].



and Pukaki Rivers) is vested in Meridian. Its ownership appears to be defined by parallel private roads either side of the rivers. There are numerous wilding conifers within these riverbeds, especially on the banks of the Pukaki River. The lower Tekapo River also contains considerable areas of willows which appear to have been planted within the last five to ten years.

[52] In respect of vegetation away from the riverbeds a convenient summary of changes in plant distributions within the Mackenzie Basin is given in a paper produced by the Federated Farmers' witness, Mr J B Murray through counsel<sup>123</sup>. In *Influence of pastoral management on plant biodiversity in a depleted short tussock grassland, Mackenzie Basin* the authors wrote<sup>124</sup>:

Although much of this area was forested prior to human settlement ..., dramatic ecological transformations have occurred with both Polynesian and European settlement ... due to human induced fires, grazing by sheep and cattle, and through the deliberate and accidental introduction of adventive species, resulting in large areas of induced grassland. As a result of these changes it is possible that some of these high country ecosystems are now crossing ecological thresholds that are unlikely to be readily reversed ...

That appears to be especially true of the lower altitude areas, although other areas are also changing quickly.

[53] Mr Fastier wrote that "... with the advent of weeds and especially *Hieracium*, competition for moisture is so severe that the tussock seedlings can not compete and grasslands are unable to recover"<sup>125</sup>. He estimated that on the Pukaki flats (held by Simons Pass and Simons Hill Stations) *Hieracium* cover is approximately 50% of the area<sup>126</sup>. We find that while most of State Highway 8 passes through short tussock grasslands, the lower and drier parts of the basin are a semi-desert of bare ground or introduced weeds – often dominated by hawkweed (chiefly *Hieracium pilosella*).

[54] Conversion of areas of hawkweed to pasture not only makes the land (potentially) more profitable but also removes the weeds and reduces the number of rabbits. We also understand from our general knowledge of the area that there is some suggestion that several native bird species use cultivated and irrigated pasture in preference to tussock grasslands (where it appears they tend to be confined to the edges

<sup>123</sup> As attachments to Mr Gallen's memorandum 27 August 2010 [Environment Court document 30].  
<sup>124</sup> *Influence of pastoral management on plant biodiversity in a depleted short tussock grassland, Mackenzie Basin* D A Norton, P R Espie, W and J Murray, *New Zealand Journal of Ecology* (2006) 30(3): 335-344 at 335 (Citations omitted) [Environment Court document 30A].  
<sup>125</sup> D A Fastier, statement 2 July 2010 para 39 [Environment Court document 35].  
<sup>126</sup> D A Fastier, statement 2 July 2010 para 39 [Environment Court document 35].





of farms and wetlands). We saw black-fronted terns, banded dotterels and South Island Pied Oystercatchers in multiples of ten on cultivated land on Mt Gerald Station during our site inspections.

### *Wilding conifers*

[55] Perhaps the most serious issue is the spread of exotic conifers. Mr Fastier wrote that the scale of the wilding problem is “seldom appreciated”<sup>127</sup> and when describing the Simons Hill clearance work said “... [we] are absolutely staggered at the strike rate of wilding seedlings”. He considered that a return to tussock grassland is not going to occur<sup>128</sup> and that if nothing is done on the Pukaki flats “... wilding pine will become the dominant species”<sup>129</sup>. Dr Lloyd, whose brief of evidence<sup>130</sup> for the Council was entered in the record by consent, wrote<sup>131</sup> that in the Parliamentary Commissioner for the Environment’s opinion wilding conifers present the greatest weed problem in the South Island high country. The main coniferous species with capacities to spread are: Lodgepole pine (*Pinus contorta*), *Pinus ponderosa*, Corsican pine (*Pinus nigra*), Douglas-fir (*Pseudotsuga menziesii*) and European larch (*Larix decidua*). Dr Lloyd considered<sup>132</sup> that:

Wilding conifers present a major threat to the sustainable use of extensively-grazed high country lands. They also threaten indigenous vegetation and habitats, particularly montane shrubland and grassland. Left unchecked, wilding trees have the potential to cover much of the Mackenzie District, apart from areas of developed pasture, very dry soils, mountain lands above 2,000 m, and lakes ...

That threat is not unmanaged at present. We understand that pastoral lessees have an obligation to contain wildings under their leases. That is managed in different ways. Stock reduce the rate at which wildings spread - allegedly<sup>133</sup> by up to 90%. Many farmers<sup>134</sup> are making continuous efforts to pull, cut and/or poison wildings on their land. That must be a hard and thankless task, as Mr Densem observed. We understand some government departments, especially the Department of Conservation, contribute workers and/or funds. Everyone who travels through the wide open parts of the Basin should be grateful for the efforts of those individuals and their financial supporters.

[56] Despite those efforts, at present it seems to us that the exotics are winning, conspicuously so on the sides of Lake Pukaki. On three stations at the southern end of the western side – Ferintosh, Pukaki Downs and Rhoborough – there are very extensive areas of mixed exotics. On the northeastern side of Lake Pukaki, Corsican Pine is the

<sup>127</sup> D A Fastier, statement 2 July 2010 para 60 [Environment Court document 35].  
<sup>128</sup> D A Fastier, statement 2 July 2010 paragraphs 34-43 [Environment Court document 35].  
<sup>129</sup> D A Fastier, statement 2 July 2010 para 44 [Environment Court document 35].  
<sup>130</sup> Environment Court document 13.  
<sup>131</sup> K M Lloyd, evidence-in-chief para 16 [Environment Court document 13].  
<sup>132</sup> K M Lloyd, evidence para 15 [Environment Court document 13].  
<sup>133</sup> J B Murray, evidence-in-chief para 24 [Environment Court document 16].  
<sup>134</sup> D A Fastier, statement 2 July 2010 para 58 [Environment Court document 35].



main wilding species in a major infestation on Mount Cook and Braemar Stations<sup>135</sup>. There are various exotics in the margins of Lake Pukaki on what we understand to be Meridian's land. There are signs of some management of those but exotics still appear to be escaping. It is possible that without external assistance, the landscape of the Mackenzie Basin will change irrevocably and become first a coniferous woodland and then, at least in parts, a dense forest (as now along the southwestern edge of Lake Pukaki).

[57] Further, the situation has recently changed again under each Emissions Trading Scheme ("ETS") set up under the Climate Change Response Act 2002 and the Climate Change Response (Emissions Trading) Amendment Act 2008 (together "the Climate Change Response Act") and subsequent regulations. The Climate Change Response Act is very complex. We will try to summarise its relevant provisions. The basic idea is to encourage carbon to be captured by growing trees<sup>136</sup>. A forest owner may register<sup>137</sup> as a participant in an emissions trading scheme to earn carbon credits in respect of defined areas on their land. "Forest land" is defined<sup>138</sup> by the Emissions Trading Act as:

- (a) meaning an area of land of at least 1 hectare that has, or is likely when the forest species<sup>139</sup> reach maturity to have, tree crown cover from forest species of more than 30% in each hectare; and
- (b) including an area of land that temporarily does not meet the requirements specified in paragraph (a) because of human intervention or natural causes but that is likely to revert to land that meets the requirements specified in paragraph (a); but
- (c) ... not including:
  - (i) a shelter belt of forest species, where the tree crown cover at maturity has, or is likely to have, an average width of less than 30 metres; or
  - (ii) an area of land where the forest species have, or are likely to have, a tree crown cover at maturity of an average width of less than 30 metres, unless the area is contiguous with land that meets the requirements specified in paragraph (a) or (b).

[58] In an apparent example of the law of unintended consequences the possibility of an ETS can act as an incentive to a farmer to encourage the spread of wildings as regeneration which takes up carbon. That is because the ETS allows (in its present form) any post-1989 forest to earn carbon credits. All a farmer needs to do is to let the wildings spread until two minimum conditions are met: a coverage of 30% by trees, and total coverage of at least one hectare. Then, as we (imperfectly) understand the scheme the farmer contacts the scheme's administrator – from December 2011 this will be the

<sup>135</sup> K M Lloyd, evidence-in-chief para 34 [Environment Court document 13].

<sup>136</sup> There are problems when the trees die, which we need not go into here.

<sup>137</sup> Section 188 of the Emissions Trading Act.

<sup>138</sup> Climate Change Response (Emission Trading) Amendment Act Section 6.

<sup>139</sup> Forest species means a tree species capable of reaching at least 5 metres in height at maturity in the place where it is located. The definition shows that a "reversion" of grassed land to forest species can qualify land as forest land. The Climate Change Response Act provides for various growth rates to be met. Thus, provided a landowner complies with the Canterbury Regional Pest Strategy they can let their wildings go.



Environment Protection Agency – which measures the area and the rate of growth (as a surrogate for carbon capture) and a first payment will be made. So if the current brake within the Mackenzie Basin – compliance with the terms of pastoral leases – is removed, this incentive then presses the accelerator. It is important to recognise that the ETS is not completely harmful in this context : an ETS might provide capital with which a farmer may change their wilding forests over time to more benign (non-spreading) species or otherwise change activities on their land so as to control wilding spread on their property as we heard from Mr A E Tibby, an owner of Pukaki Downs. But that depends on the attitude, goodwill and (we suspect) financial situation of the farmer.

[59] We note that in a limited way the Climate Change Response Act does recognise that establishing carbon forestry might cause ecological problems : any applicant for registration in the Emissions Trading Scheme must make a declaration<sup>140</sup> that any “action” taken by them (after 1 January 2008) complies with the provisions of the RMA and any plan under that statute. However, that provision would have little or no effect in the Mackenzie Basin (and we suspect in many other places) for the reason that carbon forestry of wildings does not require any action : the landowner can simply wait for the wind to blow seeds across or onto his or her land and watch them grow. Further, as we shall see, in the case of the Mackenzie District Plan there are various problems with the rules about wildings which suggest compliance declarations would readily be able to be given.

[60] In Mr Densem’s opinion the spread of wilding conifers into open grasslands of natural aesthetic and productive values is one of several modifications (the others are rural-residential subdivision and development, and the development of cultivated paddocks) which<sup>141</sup>:

... lessen and detract from the outstanding values ... [T]hese modifications, once extensive enough, come to extinguish the sense of those values and replace them with a less-distinctive lowlands character.

#### *Animal pests*

[61] On the issue of pests the district plan describes how<sup>142</sup>.

Animal pests, and in particular rabbits in the high country, are an ongoing concern because of their contribution towards loss of ground cover. ... the problem of controlling rabbit numbers on a long term basis still exists ...

Predators such as rats, mustelids and cats prey on native river birds and some wild animals threaten animal health through the spread of disease.

<sup>140</sup> Section 188(1)(c) of the Climate Change Response (Emissions Trading) Act 2002.  
<sup>141</sup> G H Densem, evidence-in-chief 13 May 2010 para 3.27 [Environment Court document 3].  
<sup>142</sup> MDP pp 7-5 and 7-6.



Mr Murray described<sup>143</sup> how rabbits were seriously reduced in numbers for a short period following the introduction of Rabbit Haemorrhagic Disease in the mid 1990s but that numbers are now returning to pre-introduction levels.

[62] In summary, the influence of pests and weeds is huge. As we have found, a large part of the Tekapo, Pukaki and Twizel River Plains and of the Benmore Plain is a bleak semi-arid<sup>144</sup> desert of introduced weeds (hieracium, broom ...) and elsewhere wilding conifers are spreading rampantly. About this issue the operative district plan states<sup>145</sup> (relevantly):

Over time there have been a wide range of plant and animal pests within the District which have caused damage to existing vegetation and have impaired production options. In recent decades parts of the high country have experienced changes in vegetation. Many of these changes have been into species such as hawkweeds and woody species, which reduce grazing and in some cases threatens nature conservation and landscape values. Some of the changes are thought to be due to structural changes in plant communities as a result of past and present management practices including high rabbit numbers and burning and overgrazing.

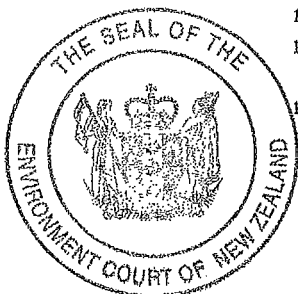
...

But it says little about what should be done about these problems.

*Changes in land management*

[63] A considerable part of the lower basin is held in pastoral leases, and there are freehold areas too – for example at Braemar on the eastern side of Lake Pukaki, and at Haldon Station on the eastern side of Te Ao Marama/Lake Benmore. Many of the stations have some fields of exotic grasses on the better classes of soils. These appear to have increased in recent years, and some farms have introduced pivot irrigators, e.g. The Wolds in the Maryburn catchment south of the Tekapo canal. In answer to a question from the court Dr M L Steven, an experienced and thoughtful landscape architect called for Pukaki Downs, stated that<sup>146</sup> "... the popular view [is] that the level of dairy farm development that one sees between Twizel and Omarama [is] going to spread throughout the entire basin".

[64] However, due at least in part to the approvals needed under Part 1 of the Crown Pastoral Land Act 1998, the rate of change at least on pastoral leasehold land has been relatively sedate compared with other parts of New Zealand. Still the rate of change has been enough for both the district plan and Mr Densem to raise questions about the effect of the greening of the landscape (and on ecological biodiversity).



<sup>143</sup> J B Murray, evidence-in-chief para 20 [Environment Court document 16].

<sup>144</sup> G H Densem, evidence 13 May 2010 Attachment 3, Map 3 (Climate Zones) [Environment Court document 3].

<sup>145</sup> MDP pp 7-5 and 7-6.

<sup>146</sup> Transcript p. 509 (23 August 2010).

[65] There are two other drivers for change in land management – tenure review under Part 2 of the Crown Pastoral Land Act 1998, and the recent availability of about 15 m<sup>3</sup>/sec of water to farmers in the basin from Meridian. Tenure review allows farmers to freehold some of their land, so that they have the flexibility to subdivide and/or develop as they see fit – subject of course to the district plan. That flexibility means that those who have access to some of the released water then have the opportunity to intensify production on their land. Other things being equal, those are highly desirable outcomes. However, the purpose of PC13 was to recognise the level of importance of each of the landscape units in the basin – and its overall importance – and to protect any outstanding natural landscapes. The potential effects of tenure review and of irrigated pasture on the landscape need to be considered.

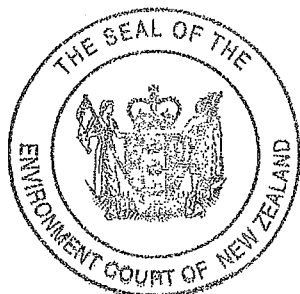
[66] With his September 2010 evidence Mr Densem lodged a map “Cultural Layers” showing his understanding of locations in the Mackenzie Basin (and beyond in the Ohau Basin) where there are current applications to the Canterbury Regional Council for various discharge permits. It appears that within the Basin irrigation sites for intensified farming activities are currently being considered for the following stations (from north to south):

- Lilybank
- Godley Peaks
- Irishman Creek
- The Wolds
- Maryburn
- Simons Hill
- Simons Pass
- The Grampians
- Curraghmore
- Bendrose
- Haldon

[67] Conversion of land to irrigated pasture is far more than a landscape issue. Such conversion raises other very important issues as to:

- reducing erosion by replacing bare ground and hieracium with a grass sward;
- the effect of conversions on the ‘dry-lands’ endemic flora and fauna;
- water quality.

We received minimal evidence about those possible effects. Clearly they are issues which the Council (or the Regional Council) should address, preferably before any resource consents for the irrigation are finally issued and (for pastoral lease land) before any tenure review is completed.



[68] A controversy about large winter barns for stock in the adjacent Ohau Basin (within the Waitaki District) has alerted us to the possibility of such large buildings in the Mackenzie Basin. While factory farming is generally a discretionary activity<sup>147</sup> we are concerned that large farm buildings used for such activities are at present subject to few controls (e.g. a height limit of 15 metres but none as to area). We will consider later whether the objectives require tighter management of (especially) large farm buildings which might be associated with more intensive farming activities. There are also issues about the location of large pivot irrigators in the basin.

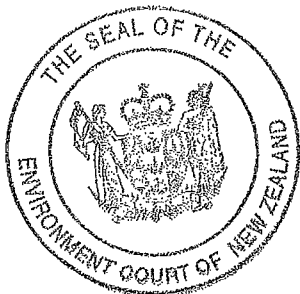
#### *Soil loss*

[69] We have described how much of the river flats of the Pukaki and Tekapo Rivers is a barren plain of bare soil, hieracium and other weeds with some sparse and struggling native plants. The most pressing issues are about erosion control and protecting biodiversity. Except for some figures in Mr Fastier's statement<sup>148</sup>, we were not referred to any quantified losses of soil, but it is clear that soil loss is an issue.

[70] Questions of what the landscape of the lower river flats will look like in the future are dependent to a considerable extent on what the land is managed for and how. The paper which we have already referred to - *Influence of pastoral management on plant biodiversity in a depleted short tussock grassland, Mackenzie Basin*<sup>149</sup> concludes:

That results of our research together with the results of other studies of short tussock grasslands highlight an interesting management conundrum if biological control fails to significantly reduce *Hieracium pilosella* abundance. No-input management ... is likely to result in a decline of conservation values (native biodiversity), as well as production values, as *H. pilosella* mats both deplete soil nutrients and restrict regeneration of native species. However, management input of fertiliser and adventive seeds to increase the abundance and enhance the vigour and persistence of dominant species ..., although resulting in an increase in the vigour and abundance of some native species (mainly tussocks), will also result in a decline in overall native species richness as a few, mainly adventive legume and grass species, dominate.

It is obvious that the type of management input required in short tussock grasslands will depend on the management goals for the grassland concerned. Fertiliser can be used to enhance the vigour and abundance of native tussocks, but will most-likely result in the loss of other native grassland species, especially if applied in conjunction with the sowing of adventive grassland species, although it is less clear what the effect of fertiliser addition without adventive seed addition will be on native biodiversity. Where the management goals are pastoral production, then it seems clear that the only viable management option is to maintain fertiliser and adventive seed inputs, otherwise *H. pilosella* mats will continue to deplete soil nutrients resulting in the declines in soil and vegetation condition that have been well documented in other studies (Martin, 1994). At the whole-property scale it is probable that active management inputs will be required to maintain areas of short tussock grassland where the specific management goal is maintaining high native species diversity.



<sup>147</sup>

Rule (7)5.1 [Mackenzie District Plan p. 7-47].

<sup>148</sup>

D A Fastier, statement 2 July 2010 paragraphs 45-46 [Environment Court document 35].

<sup>149</sup>

D A Norton, P R Espie, W Murray and J Murray, New Zealand Journal of Ecology (2006) 30(3): 335-344 at 342 (<http://www.nzecs.org.nz/nzje>) [Environment Court document 30B].

Not only is there a tension between preservation of biodiversity on the one hand, and conversion to pastoral grasses on the other, but there is a more subtle tension between maximising biodiversity and maximising direct scenic values.

[71] There is no complete current answer to soil loss and/or hieracium spread on the lower plains as far as we know. In the limited areas where there are soils of sufficient depth and water can be supplied, there is a potential solution: to poison the *Hieracium* (and any remnant small native plants), direct drill exotic grasses, and to irrigate. This appears to have been carried out successfully on, for example, parts of Sawdon and Holbrook, The Wolds, Maryburn, Simons Hill, Simons Pass and Haldon Stations. But of course it leads to a "greening" of the Basin, which the extra issues statement in PC13(N) identifies as an issue for the Mackenzie subzone. A similar "improvement" of the land by ploughing, sowing exotic grasses, and irrigation is noticeable in the Waitaki District, where major developments occur on either side of the Twizel-Omarama Road (SH 8) south of Lake Ruataniwha.

*Summary : the question about weeds*

[72] The description of issue 3 (Plant and Animal Pests) in the operative district plan states<sup>150</sup>:

The increasing spread of wilding trees is a key issue for sustainable management in the District because it is having significant adverse effects on pasture availability, the landscape values and natural conservation values. If unchecked, it is likely to preclude land use options such as ecological restoration, nature conservation, recreation and tourism from large areas of the District, and may also threaten pastoral viability and commercial forestry options over large areas. In some areas wildings are already overwhelming sites of natural significance and spreading into high altitude areas in the Mackenzie Basin.

Notwithstanding that some economic benefits can be derived from mature wilding trees in a few areas of the basin, the quality of trees is likely to be variable. The often random nature of wilding forests also means that it is difficult to apply location and design conditions in order to address visual effects.

In addition to pines, hieracium and broom, other weeds are spreading — notably lupin<sup>151</sup> along the state highways.

[73] The explanation in PC13 states:

As plant pests and animal pests are almost by definition invasive, control on a small scale, e.g. on individual properties, it is only effective if all property owners are involved in that control. To the extent that weeds and pests have the potential to adversely affect other people's rights to enjoy their own property without interference there is perhaps a responsibility to control these pests.

<sup>150</sup> p. 7-6 Mackenzie District Plan.

<sup>151</sup> We do not overlook that lupin has food value for grazing animals (and is also a nitrogen-fixer).



The question is : if that is such an important issue in the district plan, what are the objectives, policies and rules for dealing with it? For example, PC13(C) appears to rely on a non-policy approach for managing the spread of wilding pines – grazing and unspecified “... additional control measures”<sup>152</sup>. There is a limited (indirect) policy about Tree Planting in PC13(C)<sup>153</sup> which is to control future planting so conditions about wildings may be imposed. We return to this question later.

### 2.3 Delimiting the landscape(s)

[74] A fundamental question for these proceedings is whether there is one or more outstanding natural landscapes within the meaning of section 6(b) of the RMA in the Mackenzie Basin. To answer this we need first a definition of “landscape” and then to answer three factual questions:

- (1) is there one landscape or more in the Mackenzie Basin?
- (2) if so, is any identified landscape natural?
- (3) if yes to (1) and (2) for any landscape, then is the natural landscape also outstanding?

[75] On the definition of “landscape” as the word is used in section 6(b) of the RMA, in *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council*<sup>154</sup> the court wrote that:

... [A] “landscape” involves both natural and physical resources themselves and also various factors relating to the viewer and their perception of the resources.

The court also referred to a landscape as an “arbitrary cultural lumping”<sup>155</sup> rather than as (necessarily) being “... ecologically significant”.

*Is the Mackenzie Basin one landscape or more?*

[76] Proposed (Rural) Policy 3A as notified was “[t]o recognise the Mackenzie Basin as an outstanding natural landscape”. There was therefore no need to map landscapes which qualify as outstanding natural landscapes because PC13 was based on the finding<sup>156</sup> by the Council that the whole of the Mackenzie Basin was one such landscape. That finding was based<sup>157</sup> on a 2007 landscape assessment by Mr Densem which recognises that the Basin is an outstanding natural landscape.

<sup>152</sup> PC13(C) p. 9 (Oddly this explanation comes under the policy heading “Farming Buildings and Subdivision”).

<sup>153</sup> Policy 30 – Tree Planting – PC13(C) p. 12.

<sup>154</sup> *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council* [2000] NZRMA 59 at (77).

<sup>155</sup> *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council* [2000] NZRMA 59 at (78).

<sup>156</sup> PC13(N) p. 1.

<sup>157</sup> PC13(N) p. 1.





[77] However, Policy 3A resulting from the Commissioners' decision stated differently: it described the Mackenzie Basin "... as having a distinctive and highly valued landscape containing outstanding natural landscapes ...". That causes problems because the reader of the district plan cannot find whether any particular area is within an outstanding natural landscape or not. The Commissioners' Decision stated that<sup>158</sup> "only a very detailed mapping exercise could really identify areas where it could be confidently predicted that development would have no significant effect on the landscape". With respect, that approach is incorrect for several reasons. First, as we have stated, objectives and policies cannot be set until the relevant facts are established and issues stated<sup>159</sup> – see *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council*<sup>160</sup> and more recently *Environmental Defence Society Incorporated v Kaipara District Council*<sup>161</sup>. In effect the Commissioners' Decision puts off making a decision on the facts. Second, the recognition of a landscape is a separate and prior exercise to determining what is needed to manage it sustainably. Thirdly, the test is not whether there be "no significant effects" on the landscape<sup>162</sup> but whether the possible effects are inappropriate. Fourthly, and practically, in the meantime landowners and occupiers are entitled to know where they stand.

[78] The Commissioners in their decision<sup>163</sup> concluded that the landscape "values can be better controlled by rules that require assessment of development proposals against specified criteria rather than relying on detailed classification of the Basin, particularly a classification that attempted to distinguish outstanding natural from the rest". That is an interesting passage because it shows, with respect, a further error that has crept into and confused much of the discussion of the witnesses before us. It is the confusion of fact and prediction with the remedies in the district plan. In the simplest terms the Commissioners' Decision confuses what exists, what is the case (or may be in future), with what ought to be as a matter of objective or policy. Further, the case for rules is far weaker if a landscape does not meet the standards of section 6(b) of the RMA. If the Mackenzie Basin is not a single landscape and any component landscape within it is not an outstanding natural landscape then it may be that there should not be any rules to protect whatever other landscape qualities it possesses.

[79] We now turn to consider the evidence on whether the Mackenzie Basin is one or more landscapes. We adopt the approach stated by the court in *Maniototo Environmental Society Incorporated and others v Central Otago District Council and*

<sup>158</sup> Commissioners' Decision para 126.

<sup>159</sup> Section 75 of the RMA.

<sup>160</sup> *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council* [2000] NZRMA 59 at para 54.

<sup>161</sup> *Environmental Defence Society Incorporated v Kaipara District Council* [2010] NZEnvC 284.

<sup>162</sup> Whatever "significant" means – since that is a context-driven word.

<sup>163</sup> Commissioners' Decision para 128.



*Otago Regional Council (the Lammermoor case)*<sup>164</sup>. There the court stated that to “describe and delimit”<sup>165</sup> a landscape a local authority could usefully consider:

- (1) a reasonably comprehensive (but proportionate to the issues) description of the characteristics of the space such as:
  - the geological, topographical, ecological and dynamic components of the wider space (the natural science factors);
  - the number, location, size and quality of buildings and structures;
  - the history of the area;
  - the past, present and likely future (permitted or consented) activities in the relevant parts of the environment; and
- (2) a description of the values of the candidate landscape including:
  - an initial assessment of the naturalness of the space (to the extent this is more than the sum of the elements described under (1) above);
  - its legibility – how obviously the landscape demonstrates the formative processes described under (1);
  - its transient values;
  - people and communities’ shared and recognised values including the memories and associations it raises;
  - its memorability;
  - its values to tangata whenua;
  - any other aesthetic values; and
  - any further values expressed in a relevant plan under the RMA; and
- (3) a reasonably representative selection of perceptions – direct or indirect, remembered or even imagined – of the space, usually the sub-sets of:
  - (a) the more expansive views of the proposed landscape<sup>166</sup>; and
  - (b) the views, experiences and associations of persons who may be affected by the landscape.

There is some repetition [between] the sets. For example the objective characteristics of the landscape go a long way towards determining its naturalness. More widely, the matters in the third set influence the perceptions in the second.

[80] In his principal general evidence<sup>167</sup> Dr Steven gave a remarkably similar analysis to sets (1) and (2) from the *Lammermoor* decision although he did not refer to the decision. He even produced two schedules<sup>168</sup> which at first sight correspond to those sets in that they refer to natural science characteristics and community-held values respectively. For all we know those schedules may wholly or partly improve on the

<sup>164</sup> *Maniototo Environmental Society Incorporated and others v Central Otago District Council and Otago Regional Council* Decision C103/2009 at paragraphs [202] to [204].

<sup>165</sup> *Maniototo Environmental Society Incorporated and others v Central Otago District Council and Otago Regional Council* Decision C103/2009 at para [204].

<sup>166</sup> *Kircher v Marlborough District Council* Decision C90/2009 (Judge McElrea) at para [76].

<sup>167</sup> M L Steven, evidence-in-chief [Environment Court document 24].

<sup>168</sup> M L Steven, evidence-in-chief Schedules B and C [Environment Court document 24].



*Lammermoor* lists. In future cases it would be useful to hear more about the derivations and application of Dr Steven's (derived)<sup>169</sup> lists. However his Schedules were not tested in these proceedings and Dr Steven did not apply them in detail to the Mackenzie Basin or constituent parts of it except for the areas around Pukaki Downs and Rhoborough Downs in which his clients were interested. So we take potential improvements to *Lammermoor* no further in these proceedings.

[81] It was only when considering the role of views in landscape assessment that Dr Steven considered the Mackenzie Basin as a whole. He commenced by making the rather simplistic point that views of or to outstanding landscapes should be distinguished<sup>170</sup> from outstanding landscapes in themselves. We agree – and consider that the role of views is, for lack of a better description, adequately set out in the third set of factors in *Lammermoor* quoted above.

[82] Dr Steven wrote that<sup>171</sup>:

[t]he relatively flat, open character of the Mackenzie Basin and the scale of the enclosing mountains create a situation in which the mountains are pervasive elements in views and vistas throughout the ... [b]asin. However, a view or a vista is not necessarily a singular landscape, as understood for resource management purposes. While at one level, the view can be perceived as a singular landscape, for management purposes it can be regarded as including multiple landscapes.

We accept Dr Steven's first sentence : so far as it goes it accurately describes the basin. However, his second sentence shows that he is using "landscapes" for a specific purpose – as a unit of land for purposes of resource management under the Act. He seems to be implying that if an area can be sufficiently distinguished from a neighbouring area by reference to its elements, patterns and processes then it is a different landscape. We can see why landscape architects might want to take that approach – it makes application of their discipline to the RMA easy.

[83] However, there is little or no other reference to landscapes in the RMA apart from section 6(b). That has caused so much difficulty that we are reluctant to encourage analysis of the whole country in terms of landscapes as units of land. In our view a much more useful and scientifically based unit of land is the hydrological catchment, and that should be the starting point of most analyses. Only when considering areas where there may be an "outstanding natural landscape [or feature]"

<sup>169</sup> His Schedule B came from Mackey, Nix and Hitchcock (2001) The natural heritage significance of Cape York Peninsula. ANU Tech Ltd, Canberra ACT; and his Schedule C from Alessa, Kliskey and Brown (2008) Social-ecological hotspots mapping... in "Landscape and Urban Planning" 85, 27-39.

<sup>170</sup> M L Steven, evidence-in-chief para 49 [Environment Court document 24].

<sup>171</sup> M L Steven, evidence-in-chief para 50 [Environment Court document 24].



should the concept of a “landscape” be the starting point for resource management purposes. And when deciding that issue in any case where it is raised, the first question is “what is the relevant landscape?”.

[84] Using “landscape” as a management unit, Dr Steven considers there is a number (indeterminate in his evidence) of different landscapes “... of lesser significance”<sup>172</sup> in the Mackenzie Basin. He does not identify where they are in his general statement, although in his later specific evidence<sup>173</sup> he identifies Pukaki Downs as not being an outstanding natural landscape.

[85] As it happens the first two *Lammermoor* lists were derived from two earlier decisions of the Environment Court : *Pigeon Bay*<sup>174</sup> and *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council*<sup>175</sup> – and Mr Densem as the only expert witness to give subzone-wide evidence applied those.

[86] In his November 2007 report Mr G H Densem, the landscape architect called for the Council, stated that “... virtually the entire Basin is ‘outstanding’ in terms of landscape values”<sup>176</sup>. While that statement is consistent with the basin containing more than one landscape, when his 2007 report identifying the basin’s landscape values is read as a whole it is clear that he is referring to the basin as a single landscape<sup>177</sup>. For example, when the 2007 report described different landscape character areas (as we noted in part 2.1 of this decision) he did not suggest that any of these character areas are separate landscapes for the purposes of section 6 of the RMA. Certainly that was his 2010 understanding<sup>178</sup> of his 2007 report.

[87] In preparation for the appeal hearing Mr Densem reviewed his 2007 study<sup>179</sup>. He divided the basin into 39 landscape units<sup>180</sup> and concluded<sup>181</sup> that all except three

<sup>172</sup> M L Steven, evidence-in-chief para 51 [Environment Court document 24].

<sup>173</sup> M L Steven, evidence-in-chief para 30 [Environment Court document 24A].

<sup>174</sup> *Pigeon Bay Aquaculture Ltd v Canterbury Regional Council* [1999] NZRMA 209 at (56).

<sup>175</sup> *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council* [2000] NZRMA 59 at 74.

<sup>176</sup> G H Densem “The Mackenzie Basin Landscape ...” (November 2007) Attachment 3 to his evidence-in-chief [Environment Court document 3].

<sup>177</sup> G H Densem, evidence-in-chief “The Mackenzie Basin Landscape : character and capacities” –

- “... a modified and managed landscape ...” para 3.1;
- “... the landscape value of the Mackenzie Basin ...” para 3.3;
- “... the Mackenzie’s landscape value ...” para 3.6;
- “... the Basin was a very special place” para 3.9;
- “... the Mackenzie Basin landscape has high coherence levels” para 3.11;
- “My opinion is that at a district level the entire Basin constitutes an outstanding landscape ...” para 3.17

Attachment 3 [Environment Court document 3].

<sup>178</sup> G H Densem, evidence-in-chief para 3.1 [Environment Court document 3].

<sup>179</sup> G H Densem, evidence-in-chief “The Mackenzie Basin Landscape : character and capacities” – Attachment 3 [Environment Court document 3].

<sup>180</sup> G H Densem, evidence-in-chief para 3.2 [Environment Court document 3].

<sup>181</sup> G H Densem, evidence-in-chief para 3.5 [Environment Court document 3].



units within the Mackenzie Basin are “outstanding natural landscapes”. The unit of least landscape value is the Twizel unit. That has now been removed from the Mackenzie Basin Subzone and so is not subject to PC13 or these proceedings. It is now subject only to the Rural zone provisions. The other two units (S4 Ohau River and P8 Pukaki Outlet) are assessed as “significant” landscapes, because as Mr Densem wrote<sup>182</sup>:

The landscape values in these areas, while not outstanding, are still important and rural residential subdivision practices of lowland Canterbury have the same potential to cause major change in character by subdivision of the open, natural surfaces. I consider therefore that these landscape units should be subject to a similar or the same regime as outstanding landscapes in terms of managing impacts on their values and character.

That was a convenient outcome since it meant that mapping of the landscapes was not necessary. The difficulty with Mr Densem’s later approach is that the units he has distinguished – at Pukaki outlet<sup>183</sup> and Ohau river flats<sup>184</sup> are, we find, far too small and undifferentiated, given the overall scale and homogeneity of the Basin, to be considered as “landscapes” by themselves. In our view this is the only time that Mr Densem has lost sight of the landscape as a whole. We consider that the slide from his 39 “assessment units” to 39 landscapes is unjustified.

[88] We prefer Mr Densem’s 2007 report which identifies one landscape(s). That report is consistent with the results of the CRC’s recent study which finds that the Basin is a regionally outstanding landscape. Dr Y Pflüger, a landscape architect who was one of the authors of the report “Canterbury Regional Landscape Study Review”<sup>185</sup> was called before us by the Council to produce the report and answer any questions about it. She confirmed<sup>186</sup> that the report has not (yet) been adopted by the Canterbury Regional Council. However, we can give the report some weight as her expert opinion records of the “Mackenzie Basin”<sup>187</sup> that:

The entire Mackenzie Basin ... has been identified as an Outstanding Natural Feature and Landscape. This landscape contains areas of exceptional legibility, aesthetic, transcendent, shared and recognised, very high natural science and tangata whenua and historic landscape values. It is acknowledged that landscape qualities vary across an area of this size, which contains areas of human modification ...

<sup>182</sup> G H Densem, evidence-in-chief [Environment Court document 3].

<sup>183</sup> G H Densem’s unit P8.

<sup>184</sup> G H Densem’s unit S4.

<sup>185</sup> Environment Court document 4.

<sup>186</sup> Transcript pp 152-153.

<sup>187</sup> Defined so as to include land in the Waitaki District down to Te Kopi o Opihi/Burkes Pass but excluding the strip of land between Twizel and Omarama. See “Canterbury Regional Landscape Study Review” at p. 142 [Environment Court document 4].



[89] Dr Steven simply assumed that the Mackenzie Basin comprises a number of different landscapes<sup>188</sup>. For example, he wrote that in his opinion<sup>189</sup>:

There is no doubt that the Mackenzie Basin contains outstanding natural landscapes. Indeed it may be fairly stated that the Basin contains the 'gold standard' for outstanding natural landscapes in New Zealand. Most of this land is already protected within the conservation estate (e.g., Aoraki-Mt Cook National Park, Ruataniwha Conservation Park) and needs no further protection through the Mackenzie District Plan. In my opinion there are areas of the Mackenzie Basin that cannot, with any credibility, be regarded as outstanding, particularly when considered in comparison to the landscapes of the Basin as a whole, including those that are already part of the conservation estate.

As we have stated, Dr Steven appears to assume that because areas within the Mackenzie Basin have different characters they are therefore different landscapes.

[90] We have given serious thought to whether the Tekapo and Pukaki Canals divide the Mackenzie Basin in two landscapes – one either side of the infrastructure corridors. However, there is no specific evidence suggesting that is a valid approach, and it does seem to smash the basin into two pieces which are rather less than a whole. Based on Mr Densem's 2007 report and Dr Pflüger's report, we find that the Mackenzie Basin is one large intact basin. From many points within the basin its rim can be seen more or less all around. Obviously the people who first called this area "the Mackenzie Basin" recognised that it is perceived as a unified whole, and the name has stuck. It is impossible to have the bottom (plains) of a basin without the (mountain) sides. We find that the Mackenzie Basin is the epitome of a large landscape which can be and is meaningfully perceived as a whole.

*How natural is the Mackenzie Basin landscape?*

[91] The next question is "how natural is the Mackenzie Basin's landscape?" Perceptions of the "naturalness" of the basin vary with the beholder. We suspect that many visitors to the Mackenzie Country find the area inspiringly natural. They drive over Te Kopi o Opihi/Burkes Pass from the greenness of the Fairlie area and abruptly enter the dun plains south of Tekapo township, with views of mountains all around. They are then surrounded by this landscape – mainly open, but dotted with conifers or lined with some shelterbelts – for the next two to three hours. Farmers and residents of the townships at Tekapo and Twizel are likely to be more aware<sup>190</sup> of the reductions in naturalness – the energy infrastructure, the wilding pines, hieracium, and the desertification of lower areas. Farmers, of course, are even more aware of how modified the landscapes are since they are at the forefront of controlling the weeds and pests, and of attempts to change ground cover to make their land more profitable.



<sup>188</sup> See for example : M L Steven, evidence-in-chief para [17] [Environment Court document 23].  
<sup>189</sup> M L Steven, evidence-in-chief para [17] [Environment Court document 23].  
<sup>190</sup> R F W Krüger, evidence-in-chief para 28 [Environment Court document 5].

[92] In his 2007 study leading to PC13 Mr Densem described "... virtually the entire Basin [as] outstanding in terms of landscape values"<sup>191</sup>. He wrote that this was "... particularly from its natural landscape character ..." <sup>192</sup> and despite the modifications<sup>193</sup>.

[93] The issues became rather more academic in the evidence of Dr Steven. On the question of the naturalness of landscapes he wrote<sup>194</sup>:

An explicit, standard scale of naturalness has not been agreed by the New Zealand landscape architectural profession, nor recognised by the Court, and so neither has the naturalness threshold for ONL status been determined.

He proposed this scale<sup>195</sup>:

Natural enough		←————→ Not natural enough				
VERY HIGH	HIGH	MODERATE- HIGH	MODERATE	MODERATE- LOW	LOW	VERY LOW

**7-Point Scale of Naturalness, or Natural Character, indicating proposed threshold for ONL**

— and introduced it by writing:

While my scale indicates the threshold as being between Moderate-High and High, the reality is that there is no sharp line of demarcation, rather there is a fuzzy zone of transition between the ranges indicated on the scale. As such, there will likely be landscapes within the Moderate-High range of naturalness that could be regarded as natural enough for ONL status.

We agree with his last sentence and consider its implications below. We should also state that his seven-point scale might work. It is a modified version of a scale he suggested in evidence in proceedings about a golf resort near Wanaka : see *Upper Clutha Tracks Trust v Queenstown Lakes District Council*<sup>196</sup>. His evidence here appeared to be written after he gave his evidence in those proceedings but before the court issued its decision, and showed that he had thought more about the issues in the meantime anyway. In case it is useful to other landscape experts, we provisionally approve his seven-point scale as shown above, but subject to a caveat about naturalness being a cultural construct as pointed out elsewhere, for example in *Upper Clutha Tracks Trust v Queenstown Lakes District Council*<sup>197</sup>.

<sup>191</sup> G H Densem : "The Mackenzie Basin Landscape ..." para 3.2 [Attachment 3 to Environment Court document 2].

<sup>192</sup> G H Densem : "The Mackenzie Basin Landscape ..." para 3.3 [Attachment 3 to Environment Court document 2].

<sup>193</sup> G H Densem : "The Mackenzie Basin Landscape ..." paragraphs 3.1, 3.2 and 3.3 [Attachment 3 to Environment Court document 2].

<sup>194</sup> M L Steven, evidence-in-chief para 61 [Environment Court document 24].

<sup>195</sup> M L Steven, evidence-in-chief para 63 [Environment Court document 24].

<sup>196</sup> *Upper Clutha Tracks Trust v Queenstown Lakes District Council* [2010] NZEnvC 432 at paragraphs [57] and [58].

<sup>197</sup> *Upper Clutha Tracks Trust v Queenstown Lakes District Council* [2010] NZEnvC 432 at para [62].



[94] Of course, when the scale is applied the reader still has the problem as to the difference between “high” and a “moderate-high” naturalness of a landscape. As to indicia of naturalness Dr Steven wrote<sup>198</sup>:

It is my opinion that values based upon a picturesque aesthetic have an undue influence in resource management and landscape protection within New Zealand. The picturesque aesthetic model, with its visual quality indicators, overlooks more complex and less visible aspects of the landscape, such as the functioning of ecological and geomorphological processes and systems, and the ecological health of the land.

With respect to Dr Steven, while he is correct to analyse all components of landscape – and especially geomorphological patterns and processes and ecosystems and their intactness and health – he is placing too much weight on them when analysing the naturalness of a landscape. More importantly, he is confusing description of the characteristics of a landscape with the more evaluative elements which go towards its “naturalness”.

[95] The court has, after the same initial conflation of the analytic tools for identifying a landscape with those used for assessing its naturalness and outstandingness, more recently distinguished those steps – see for example *Long Bay-Okura Great Park Society Incorporated v North Shore City Council*<sup>199</sup> or the *Lammermoor* decision<sup>200</sup>. The court pointed out in the *Long Bay-Okura Great Park* case<sup>201</sup> that surveys on naturalness show that criteria of “naturalness” normally include<sup>202</sup>:

- relatively unmodified and legible physical landform and relief;
- the landscape being uncluttered by structures and/or obvious human influence;
- the presence of water<sup>203</sup> (lake, river, sea);
- the presence of vegetation (especially native vegetation) and other ecological patterns.

In other words naturalness needs to be considered in relation to more factors than simply the floral or wider ecological and/or geomorphological character of an area.

<sup>198</sup> M L Steven, evidence-in-chief para 65 [Environment Court document 24].

<sup>199</sup> *Long Bay-Okura Great Park Society Incorporated v North Shore City Council* Decision A78/2008.

<sup>200</sup> *Maniototo Environmental Society Incorporated and others v Central Otago District Council and Otago Regional Council* Decision C103/2009.

<sup>201</sup> *Long Bay-Okura Great Park Society Incorporated v North Shore City Council* Decision A78/2008.

<sup>202</sup> *Long Bay-Okura Great Park Society Incorporated v North Shore City Council* Decision A78/2008 at para [55].

<sup>203</sup> In passing we note that these proceedings have highlighted for us that, in relation to the third bullet point, snow is an important form of water. In a landscape such as the Mackenzie Basin the presence of snow may have a dramatic influence in increasing the perception of naturalness.

