

**BEFORE THE CANTERBURY REGIONAL COUNCIL**

**In the matter of**            The Resource Management Act 1991

**and**

**In the matter of**            The Proposed Canterbury Land and Water Regional Plan

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**BRIEF OF EVIDENCE OF DANIEL JAMES MURRAY**

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## INTRODUCTION

1. My full name is Daniel James Murray.
2. I hold a Bachelor of Resource Studies with First Class Honours, majoring in Natural Resources Engineering, obtained from Lincoln University in 1997. In 1999 I obtained a Certificate of Proficiency in Advanced Planning Theory and Practice from the University of Auckland. I am a Full Member of the New Zealand Planning Institute, a Member of the Resource Management Law Association (RMLA), and Secretary of the Canterbury RMLA branch.
3. Currently I am a Principal with URS New Zealand Limited and have been with that company in its Christchurch office for nearly eight years. In the preceding five years I was employed as a consultant planner with the Christchurch office of Opus International Consultants Limited. Prior to that, I worked for two years as a planner at a territorial authority.
4. I have worked throughout the South Island, assisting both private and public sector clients with statutory approvals, environmental impact assessment, policy analysis, and other resource management matters. I have assisted in a planning role on numerous projects involving mining, quarrying or gravel extraction activities, both for commercial purposes and to support infrastructure construction or maintenance. Clients for these activities have included Solid Energy Limited, Meridian Energy Limited, the New Zealand Transport Agency, and local authorities.
5. I provided expert planning evidence on behalf of Fulton Hogan Limited, Winstone Aggregates Limited, and the Aggregate and Quarry Association of New Zealand for the (now operative) Canterbury Regional Policy Statement 2013 (**RPS**). I prepared the submissions and further submissions to the Proposed Canterbury Land and Water Regional Plan (2012) (**PLWRP**) on behalf of Fulton Hogan Limited and the Canterbury Aggregate Producers Group.
6. I confirm I have read and agree to comply with the Code of Conduct of Expert Witnesses (November 2011). This evidence is within my area of expertise, except where I state I am relying on what I have been told by other persons. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## SUBMITTERS REPRESENTED

7. I have been asked to present this planning evidence on behalf of:
  - 7.1 Fulton Hogan Limited (**FH**);
  - 7.2 The Canterbury Aggregate Producers Group (**CAPG**)<sup>1</sup>;
  - 7.3 Winstone Aggregates (**WA**); and
  - 7.4 Holcim New Zealand Limited (**HNZ**).
  
8. The submitters have diverse interests within the Canterbury Region, which are identified in their primary submissions. These interests include:
  - 8.1 extraction of minerals (principally rock, gravel, and sand) from land and river based sources;
  - 8.2 storage, sorting, and processing of the minerals – the resulting product of which is often referred to as “aggregate” – including combining aggregates with other materials to form new products, e.g. concrete or asphalt;
  - 8.3 use of aggregates and land for development and infrastructure/asset construction and maintenance; and
  - 8.4 related activities often include:
    - (a) buildings, workshops, depots, processing plants, and staff offices (including wastewater, stormwater and potable water infrastructure);
    - (b) use of vehicles, plant and machinery, and associated refuelling activities;
    - (c) construction of roads and access ways;
    - (d) hazardous substance use, storage, and transport;
    - (e) earthworks, drainage and erosion-protection infrastructure, both river and land-based;
    - (f) abstraction, diversion, damming and discharges of water; and
    - (g) discharges of contaminants to land, water and air.

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<sup>1</sup> A collective of Blackstone Quarries, Christchurch Readymix Concrete Limited, Fulton Hogan Limited, Isaac Construction Co Limited, KB Contracting & Quarries Limited, Road Metals Limited, Selwyn Quarries Limited, Taggart Earthmoving Limited, and Winstone Aggregates Limited.

## **SCOPE OF EVIDENCE**

9. My primary focus will be on addressing the planning issues arising from the submissions. Unless stated explicitly otherwise, a reference in my submissions to the 'submitters' is a reference to the collective.
10. I have grouped my discussion according to common planning themes raised by the submissions, namely:
  - 10.1 Whether the PLWRP provides appropriate recognition of the social and economic benefits derived from the submitters' activities;
  - 10.2 In relative terms, whether the PLWRP appropriately addresses the management of adverse effects and protection of natural resources in the overall broad judgment;
  - 10.3 Whether certain objectives and policies are appropriate, and changes which have been suggested to improve the objective and policy framework;
  - 10.4 Whether activity status for certain activities is appropriate.
11. In the final sections of my evidence I discuss PLWRP provisions as they relate to two key topic areas of interest to the submitters, namely: (1) activities in the beds of lakes and rivers, and (2) taking and use of water.
12. In preparing this evidence I have read and familiarised myself with:
  - 12.1 The RPS and PLWRP;
  - 12.2 The predecessor to the PLRWP, the Natural Resources Regional Plan (**NRRP**);
  - 12.3 The Section 32 and 42A reports;
  - 12.4 The National Policy Statement Freshwater Management 2011 (**NPS**);
  - 12.5 The evidence prepared by Mr English and Mr Willis.

## **ISSUE 1: RECOGNITION OF SOCIAL AND ECONOMIC BENEFITS**

### ***Introduction***

13. Mr Willis has provided an overview of Fulton Hogan's operations and their contribution to employment and the economy in Canterbury. The social and economic benefits of aggregates have also been discussed at length by Mr English. That evidence addresses the important role of aggregates to enabling development

and infrastructure, its contribution to the national and regional economies, and the wellbeing of people and communities.

14. In my opinion aggregates are of sufficient importance to require the Regional Council, in achieving integrated management of natural and physical resources in the region<sup>2</sup>, and in accordance with the provisions of Part 2 of the Act<sup>3</sup>, to specifically turn its mind to the issue, and promote objectives, policies, and methods which seek to enable people and communities to provide for their social and economic wellbeing.
15. The RPS, under Issue 5.1.1, acknowledges the importance of development to enabling people and communities to provide for their social and economic wellbeing. Objectives and policies which stem from this issue are very much focussed on enabling development, subject to the appropriate management of adverse effects and protection of significant natural and physical resources. The PLWRP must give effect to the RPS<sup>4</sup>.
16. In my opinion, the PLWRP, relative to the NRRP, has a more appropriate balance across all the matters expressed in Part 2 of the Act. Nevertheless, there are some provisions where, in my opinion, improvement is needed.

***Introductory chapter (Section 1)***

17. As already detailed in the submissions of FH and CAPG, a number of small improvements were suggested to various paragraphs within Sections 1.2.3 and 1.2.4 of the PLWRP to better align the text with the purpose of the Act<sup>5</sup>. These suggestions largely seek the inclusion of statements explicitly identifying that extraction of minerals provides social and economic benefits to people and communities<sup>6</sup>.
18. In my opinion the introductory text indicates a weighting towards environmental issues and the management of adverse effects, and fails to appropriately reference the social and economic benefits to be attained from development. In my opinion, the suggestions made, while minor, assist in appropriately redressing that imbalance.
19. It appears that the S42A officers agreed to an extent but they have only supported the relief sought in part. In particular, while there has been support to add text on

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<sup>2</sup> Section 30 of the RMA

<sup>3</sup> Section 66(1) of the RMA

<sup>4</sup> Section 67(3) of the RMA

<sup>5</sup> See submission points 245.2-4, 282.2-4

<sup>6</sup> Relief was also sought for statements dealing with adverse effects, which I discuss in the next section of my evidence.

social and economic benefits to extractive activities in river beds (in Section 1.2.4)<sup>7</sup>, the same has not been supported for those same activities outside of river beds (in Section 1.2.3)<sup>8</sup>. In my opinion, the important social and economic benefits of land based extraction should also be recognised in the introductory text.

### **Objective 3.16**

20. Objective 3.16 (as notified) expresses the important contribution of infrastructure to the economy. It provides:

*3.16 Infrastructure of national or regional significance is resilient and positively contributes to economic, cultural and social wellbeing through its efficient and effective operation, ongoing maintenance, repair, development and upgrading.*

21. The reporting officers have recommended modification and renumbering to read<sup>9</sup>:

*3.9 Infrastructure is resilient and positively contributes to economic, cultural and social wellbeing through its efficient and effective operation, on-going maintenance, repair, development and upgrading.*

22. In my opinion the above recommendations are appropriate, insofar as the objective now recognises the importance of infrastructure generally. There remains however, no appropriate recognition as to the importance of minerals, and aggregates in particular, to enable that infrastructure to be built and provide the positive contribution to economic, cultural and social wellbeing as sought. I discuss this matter further in relation to Objective 3.20 (below) and Policy 4.90 (discussed in the next section of my evidence).

### **Objective 3.20**

23. Objective 3.20 (as notified) partly deals with the matter of enabling extractive activities:

*3.20 Extraction of gravel from riverbeds maintains flood carrying capacity, protects infrastructure and provides a resource to enable development.*

24. Under the S42A recommendations it has been modified and renumbered<sup>10</sup>:

*3.22 Gravel in riverbeds is extracted to maintain floodway capacity and to provide resources for building and construction, while maintaining the natural character of*

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<sup>7</sup> p52 of S42A report

<sup>8</sup> p52 of S42A report

<sup>9</sup> p87-88 and 98 of S42A report

<sup>10</sup> p89 and 99of s42A report

*braided rivers and not adversely affecting water quality, ecosystems or their habitats, access to or the quality of mahinga kai or causing or exacerbating erosion.*

25. The objective as notified and the proposed modifications are both restricted only to the gravel resource in river beds.
26. Furthermore, in my opinion, the additional wording suggested by the officer - “not adversely affecting...” - are inappropriate as they suggest no adverse effects are possible. While I address this issue in detail later in this evidence, in my opinion wording which more appropriately reflects the Act, and the RPS, should be included. In my opinion, this could be addressed by deletion of the words “not adversely affecting” and replacing those with “minimising adverse effects on”, or similar.
27. In FH’s original submission it was suggested that Objective 3.20 remain<sup>11</sup> and retain its focus on gravel in river beds, and that a new objective be included to cover minerals generally:

3.x     *Recognise and provide for the development of mineral resources (including gravel) while avoiding, remedying, or mitigating any adverse effects.*

28. The S42A report provides no analysis of this submission point and no such objective (or similar) appears in the revised provisions.
29. In the absence of any objective dealing with land-based extraction and other minerals, and given the importance of such an objective to enabling people and communities to provide for their social and economic wellbeing, I consider the above-suggested new objective is an appropriate way to achieve the purpose of the Act.

## **ISSUE 2: ADVERSE EFFECTS AND PROTECTION OF RESOURCES**

### ***Introduction***

30. The social and economic benefits of activities are, of course, only one part of the broad judgment and need to be considered with the potential impacts of those activities when developing statutory documents and making decisions under the Act. While the submitters’ activities do have demonstrable social and economic benefits, they undoubtedly also have the potential to generate adverse effects, which cannot always be avoided. These must be appropriately managed.
31. The PLWRP must of course address adverse effects. However the RMA is not a “no effects” Act.

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<sup>11</sup> Submission 245.27. The submission also sought the inclusion of “enhancement” in addition to “maintenance” of flood carrying capacity.

32. My understanding of case law which has developed around this issue is that the words “avoid, remedy and mitigate” follow a continuum, but they are to be read conjunctively and with equal importance<sup>12</sup>. I also understand that there are circumstances where a hierarchy can be seen as appropriate, particularly where there are significant natural resources, or significant adverse effects, involved. Indeed, the objectives and policies of the RPS indicate avoidance as a first priority in some instances. That may be appropriate in some circumstances, but should not translate to a blanket requirement that all adverse effects are avoided.
33. In addition to the management of adverse effects, statutory documents also have a role to play in protecting natural and physical resources. However, protection is not absolute either.
34. Under the definition of sustainable management in Section 5 of the Act, protection (along with development and use) of natural and physical resources needs to be considered alongside the matters found in ss5(2)(a)-(c). Achieving the purpose of the Act requires an overall broad judgement, rather than achieving every element within the definition.
35. The principles contained in Sections 6-8 of the Act inform the overall broad judgment as to whether the purpose of the Act is achieved.
36. In Section 6, the term “protection” is used several times in relation to specifically identified resources (**emphasis** added):
- 36.1 the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the **protection** of them from inappropriate subdivision, use, and development (clause (a));
  - 36.2 the **protection** of outstanding natural features and landscapes from inappropriate subdivision, use, and development (clause (b));
  - 36.3 the **protection** of areas of significant indigenous vegetation and significant habitats of indigenous fauna (clause (c));
  - 36.4 the **protection** of historic heritage from inappropriate subdivision, use, and development (clause (f));
  - 36.5 the **protection** of protected customary rights. (clause (g))
37. Section 7 uses the term “protection” in only one clause (clause (h)), with respect to the habitat of trout and salmon.

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<sup>12</sup> *Winstone Aggregates Ltd v Papakura DC* A049.02.



38. It is my understanding that the term “protection” is not to be interpreted in absolute terms, but rather in terms of whether such protection would achieve the purpose of the Act<sup>13</sup>.
39. In my opinion there are a large number of instances in the PLWRP where provisions do not appropriately align with Part 2 and the RPS on matters dealing with adverse effects and protection of resources. These are discussed below.

### ***Introductory text (Section 1)***

40. In Section 1.2.3 (of the Introduction section) the PLWRP states that “*Quarrying activities need to....operate without affecting water quality...*”, and similarly in Section 1.2.4 it states that “*....care needs to be taken to ensure gravel removal does not affect water quality, the habitats of aquatic ecosystems and nesting birds, or any cultural, recreational or amenity values of the river*”. The aggregates industry may strive to minimise its impact, but such unequivocal statements seeking “to ensure” no effects are not appropriate.
41. FH and CAPG both made submission points on this matter<sup>14</sup>: they did not request wholesale changes, but simply a better alignment of the text with Part 2 (which in these cases amounts to a ‘softening’ of the language used). It appears the S42A officers do not agree:

*“Part 2-type” wording has been avoided in the objectives and policies in order to provide certainty, plain-English wording and clear direction for resource users and decision makers in the Canterbury region.” – Page 80*

42. While I understand the desire to avoid reproducing Part 2 verbatim within statutory planning documents, I do not agree the wording in the Act needs to be completely avoided, particularly when alternative wording may lead to inconsistencies with the overall purpose of the Act. In my opinion, the language of avoidance, remediation and mitigation can be most appropriate. I consider the suggestions made in the submissions of FH and CAPG in this regard are appropriate.

### ***Objective 3.3***

43. Objective 3.3 states:

*3.3 The relationship of Ngāi Tahu and their culture and traditions with the water and land of Canterbury is protected.*

<sup>13</sup> *Trio Holdings v Marlborough DC* (1996) 2 ELRNZ 353, [1997] NZRMA 97 (PT).

<sup>14</sup> Submission points 245.2-4, 282.2-4

44. Neither the RMA or RPS requires that Ngāi Tahu's relationship with all water and land in Canterbury be protected. Section 6(e) of the Act only requires that the relationship shall be recognised and provided for as a matter of national importance. Policy 13.3.2 in the RPS identifies a level of protection, but this is couched in terms of adverse effects from inappropriate subdivision, use and development on significant places:

*Policy 13.3.2 – Recognise places of cultural heritage significance to Ngāi Tahu*

*To recognise places of historic and cultural heritage significance to Ngāi Tahu and protect their relationship and culture and traditions with these places from the adverse effects of inappropriate subdivision, use and development.*

45. The S42A report has recommended a modification to (and renumbering of) the objective<sup>15</sup>:

*3.17 The relationship of Ngāi Tahu and their culture and traditions with the water and land of Canterbury is recognised and enabled.*

46. With “protection” removed, and notwithstanding that the objective is still not completely aligned with Part 2 (through use of the term “enabled” rather than “provided for”), the officers recommendation is appropriate.

### **Objective 3.9**

47. Objectives 3.9 states:

*3.9 The existing natural character values of alpine rivers are protected.*

48. In my view there are two potential issues to evaluate: firstly, do the ‘higher’ statutory documents provide for such protection, and secondly, should natural character be protected along the full length of Canterbury’s alpine rivers?
49. Section 6(a) of the Act does not recognise and provide for the protection of the natural character of rivers *per se*, but rather their preservation. It does, however, require protection of rivers (insofar as their natural character is concerned) against inappropriate subdivision, use and development.
50. The NPS does not contain any explicit references to protecting natural character, although it does deal with water quality and quantity insofar as matters such as life-supporting capacity and ecosystem processes are concerned.

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<sup>15</sup> p98 of S42A report

51. Objective 7.2.1(2) (“Sustainable management of fresh water”) of the RPS is consistent with Part 2 of the Act, when it provides for:

*(2) the natural character values of wetlands, lakes and rivers and their margins are preserved and these areas are protected from inappropriate subdivision, use and development and where appropriate restored or enhanced; and [...]*

52. Policy 7.3.2 of the RPS states that the natural character of braided rivers and natural lakes is to be “maintained” rather than protected.

53. Turning to whether protection should apply along the full length of an alpine river, the degree of natural character differs vastly across a catchment. Policy 7.3.1 of the RPS, which is linked to Objective 7.2.1, recognises that the natural character of fresh water can and does differ from place to place. This recognition is achieved by providing for different tiers of management: “preserve” where there is a high state of natural character; “maintain” where natural character is modified but highly valued, and; “improved” where natural character has been degraded to unacceptable levels. The policy does not use the term “protection” in any instance.

54. Policy 10.3.2 “Protection and enhancement of areas of river and lake beds and their riparian zones” of the RPS also uses wording more aligned with the Act, and prioritises protection according to listed criteria:

*To preserve the natural character of river and lake beds and their margins and protect them from inappropriate subdivision, use and development, and where appropriate to maintain and/or enhance areas of river and lake beds and their margins and riparian zones where:*  
[criteria listed in sub-clauses]

55. Based on the above evaluation, in my Objective 3.3 is inconsistent with the RPS and Act.

56. As a result of the reworking of the objectives in the S42A report, an objective for alpine rivers no longer features in the recommended set of provisions, and instead a similar provision with wider application appears<sup>16</sup>:

*3.14 Natural character values of freshwater bodies, including braided rivers and their margins, wetlands, hāpua and coastal lagoons, are protected.*

57. Not only does this suggestion not address the inappropriate use of the term “protected” and its inconsistency with the higher documents, but it also seeks to broaden its application to all braided rivers and some other freshwater bodies.

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<sup>16</sup> p98 of S42A report

58. I have been unable to find support within the NPS or the RPS for the “protection” of the natural character of these resources on a blanket basis. The RPS in particular provides for different tiers for management.
59. I consider that the following amendment would give effect to Objective 7.2.1 and Policy 7.3.1 of the RPS and is more appropriate to achieve the purpose of the RMA:

*3.14 Natural character values of freshwater bodies, including braided rivers and their margins, wetlands, hāpua and coastal lagoons, are ~~protected~~ preserved where there is a high state of natural character, maintained where they are modified but highly valued, and improved where they have been degraded to unacceptable levels.*

### **Objective 3.10**

60. Objectives 3.10 states:

*3.10 The significant indigenous biodiversity values, mahinga kai values, and natural processes of rivers are protected.*

61. Recommendations in the S42A report suggest that it be expanded and renumbered as follows<sup>17</sup>:

*3.13 The significant indigenous biodiversity values of rivers, natural wetlands and hāpua are protected and wetlands that contribute to cultural and community values, biodiversity, water quality, mahinga kai, water cleansing and flood retention properties are maintained.*

62. One of the functions of regional council’s is “the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity”<sup>18</sup>. “Maintaining” (rather than “protecting”) being the operative word.
63. Section 6(c) of the Act does recognise and provide for the protection of “*areas of significant indigenous vegetation and significant habitats of indigenous fauna*”. However, the protection of the other matters in both the notified and recommended versions of the objective is of considerably wider application.
64. Policy 7.3.3 of the RPS does not afford absolute protection to fresh water environments and biodiversity, but rather prefaces protection (and restoration and improvement) with “where appropriate”. Sub-clause (1) of the policy, when referring specially to protection, is also particular in only referring to significant and outstanding resources.

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<sup>17</sup> p98 of S42A report

<sup>18</sup> Section 30(ga) of the Act

65. Objective 9.2.3 of the RPS, in dealing with ecosystems and indigenous biodiversity in terrestrial areas, uses similar wording to the Act. The related policy (9.3.2) sets priorities for protection, but again does not afford absolute protection to a wide range of values.
66. On the foregoing basis it is my view that the objective in its notified form, and in the S42A recommendations, does not give effect to the RPS. My suggested amendment to address this matter, and more appropriately achieve the purpose of the Act, is:

*3.x The significant indigenous ~~biodiversity values~~ vegetation and significant habitats of indigenous fauna of rivers, natural wetlands and hāpua are where appropriate protected, and wetlands that contribute to cultural and community values, biodiversity, water quality, mahinga kai, water cleansing and flood retention properties are maintained.*

### **Policy 4.3**

67. Policy 4.3 states:

*4.3 The discharge of contaminants to water or the damming, diversion or abstraction of any water or disturbance to the bed of a fresh water body shall not diminish any values of cultural significance to Ngāi Tahu.*

68. A significant change to this policy, as a result of the submission of Ngā Rūnanga, is suggested in the officer recommendations<sup>19</sup>:

*4.3 The cultural values of each catchment shall be identified and provided for in the subregional sections of the plan.*

69. I support the recommendation, in particular because it removes the phrasing “shall not diminish”, which is not provided for in the RMA, NPS or RPS.

### **Policy 4.10**

70. Many of the policies institute a hierarchy of priorities in regards to the management of adverse effects, placing avoidance ahead of remediation or mitigation. An example of this is Policy 4.10:

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<sup>19</sup> p102-103 of S42A report

4.10 *For other discharges of contaminants to surface waterbodies or groundwater, the effects of any discharge are minimised by the use of measures that:*

- (a) first, avoids the production of the contaminant;*
- (b) secondly, reuses, recovers or recycles the contaminant;*
- (c) thirdly, reduce the volume or amount of the discharge; or*
- (d) finally, wherever practical utilise land-based treatment, a wetland constructed to treat contaminants or a designed treatment system prior to discharge; and*
- (e) meets the receiving water standards in Schedule 5.*

71. Many of the submitters' discharge-related activities produce adverse effects which are either impossible to avoid, or cost prohibitive to avoid relative to the minor level of adverse effect generated and/or benefit gained.
72. My greatest concern, in terms of the potential application of Policy 4.90, is with respect to the generation of sediment during disturbance and excavation activities within water in river beds and lakes. In these circumstances production of sediment can not usually be avoided, cannot be reused, recovered or recycled, and cannot be managed through a land-based system. Yet in a resource consent process the applicant would need to demonstrate that they have considered these matters, and the consent authority could potentially rely on the policy to enforce avoidance (even where there are significant costs to the applicant or other aspects of the environment from doing so).
73. Because the policy does not recognise any particular significant resource or value (instead only referring generally to surface waterbodies and groundwater), in my view this is a circumstance where avoid, remedy and mitigate are of equal weight (as discussed previously). The RPS, under Policy 7.3.6, also does not give avoidance prioritisation, unless water quality standards are not being met or an integrated solution for the catchment is being developed.
74. FH's original submission requested that prioritisation be completely removed from Policy 4.10<sup>20</sup>. The S42A report does not support this approach, and states that all three management options are still available under the policy<sup>21</sup>. However, in my view this approach still does not give effect to the RPS. Upon further reflection, and taking on board some of the officer recommendations, I consider the following to be a more appropriate way to achieve the purpose of the Act and give effect to the RPS (officer recommendation used as the foundation text):

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<sup>20</sup> Submission 245.33

<sup>21</sup> p143 of S42A report

- 4.10 *For other discharges of contaminants to surface waterbodies or groundwater, the effects of any discharge are minimised by the use of measures that:*
- (a) *first, where the water quality of the receiving water body is below the minimum water quality standard set for that water body, avoid the production of the contaminant;*
  - (b) *secondly, where practicable reuses, recovers or recycles the contaminant;*
  - (c) *thirdly, minimise the volume or amount of the discharge; or*
  - (d) *finally, wherever practical utilise land-based treatment, a wetland constructed to treat contaminants or a designed treatment system prior to discharge; and*
  - (e) *in the case of surface water result in a discharge that meets the receiving water standards in Schedule 5.*

#### **Policy 4.19**

75. Policy 4.19 states:

4.19 *Sedimentation of waterbodies as a result of land clearance, earthworks and cultivation is prevented by maintaining continuous vegetation cover adjacent to waterbodies, or capturing surface run-off to remove sediment and other contaminants.*

76. This policy requires that sedimentation of waterbodies be “prevented”. This is an idealistic goal, which in practice is difficult if not impossible to achieve in totality. This has been recognised in the officer recommendation by modifying the term to “avoided or minimised”<sup>22</sup>. I agree that this approach is appropriate, along with the other minor amendments recommended by the officer.

#### **Policies 4.41 and 4.52**

77. Policy 4.41 requires that the damming and diversion of any alpine or hill-fed river “does not adversely affect” a range of values. Similarly, Policy 4.52 uses the same terminology in relation to various values which could be affected by inter-catchment water transfers. Again, this terminology is too absolute and does not reflect what is practically achievable.

78. The solution promoted in the officer recommendations is to use the phrasing “*does not have a more than a negligible adverse effect*”<sup>23</sup>. However, in my opinion this only takes a very minor step from the original wording and does not alter the basic principle that such outcomes are in most cases likely to be unachievable.

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<sup>22</sup> p409-410 of S42A report

<sup>23</sup> p336-337 and p231-232 of S42A report

79. In my opinion the terminology “does not” or “does not adversely affect”, as used in Policies 4.41 and 4.52, should include the words “to the extent practicable”, or alternatively, any mention of adverse effects should be expressed such that they be “minimised”.

**Policy 4.90**

80. Policy 4.90 states:

*4.90 Recognise the value of gravel extraction for regionally significant infrastructure, for economic activity and for the rebuild of Christchurch and enable the maximum extraction from land without affecting groundwater quality and require remediation to avoid the risk of contamination.*

81. The S42A report has made some amendments and has split the policy in two<sup>24</sup>:

*4.90 Recognise the value of gravel extraction for ~~regionally significant~~ construction and maintenance of infrastructure, for economic activity, for flood management purposes and for the re-build of Christchurch.*

*4.90A Enable the maximum extraction of gravel from land without affecting groundwater quality and require remediation to avoid the risk of contamination.*

82. I support the changes which have been suggested to formulate the new Policy 4.90. However, the use of the phrases “without affecting groundwater” and “avoid the risk of contamination” in Policy 4.90A is too absolute.

83. The types of extractive activities undertaken by the submitters, even at best practice, cannot offer a cast-iron guarantee that extraction will not affect groundwater quality and that remediation will avoid contamination. There is unlikely to be any other industry or activity that could offer such absolute outcomes either.

84. Policy 7.3.7 of the RPS, when discussing water quality and land uses, speaks only of managing adverse effects in terms of “avoid, remedy or mitigate”, and requiring maintenance or improvement to water bodies according to the circumstances described.

85. To be realistic and achievable, and to provide better alignment with the RPS, in my opinion Policy 4.90A should read as follows:

*4.90A Enable the maximum extraction of gravel from land ~~without affecting~~ while minimising adverse effects on groundwater quality and require remediation to ~~avoid~~ minimise the risk of contamination.*

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<sup>24</sup> p353 of S42A report



### **Policy 4.91**

86. Clause (b) of Policy 4.91, in relation to all gravel removal from the beds of rivers, states:
- (b) *the activity is undertaken in ways which do not induce erosion, adversely affect water quality, significant indigenous biodiversity, disturb wildlife habitat or sites of cultural significance to Ngāi Tahu, or affect access and recreational values.*
87. The S42A report suggests minor changes to clause (a) of the policy (which I support), however, no changes have been recommended to clause (b)<sup>25</sup>.
88. At the risk of sounding repetitive, clause (b) is too restrictive. Firstly, erosion of river beds is sometimes induced intentionally for flood management purposes. For example, gravel can be removed to create a narrower channel to encourage further gravel transport and the lowering of bed levels. Therefore on a practical level the policy should not prohibit it. Secondly, the clause places a blanket prohibition on adverse effects.
89. Under Objective 10.2.1 of the RPS, which deals with the provision for activities in beds and riparian zones and protection and enhancement of bed and riparian zone values, protection only applies to significant values (as well as enhancement in appropriate locations). The supporting policy (10.3.1) provides for activities in river beds with the requirement that significant adverse effects are avoided (unless necessary for particular purposes relating to structures), but again with no absolute prohibition on impacts.
90. For the same reasons expressed above, I suggest the following amendments to clause (b) of Policy 4.91 will give effect to the RPS and is appropriate to achieve Objective 3.20<sup>26</sup> of the PLWRP:
- (b) *the activity is undertaken in ways which do not induce erosion (except for flood management purposes), adversely affect and minimise adverse effects on water quality, significant indigenous biodiversity, disturb wildlife habitat, or sites of cultural significance to Ngāi Tahu, or affect and access and recreational values.*

## **ISSUE 3: APPROPRIATENESS OF CERTAIN OBJECTIVES AND POLICIES**

### **Introduction**

91. At their most fundamental level, an objective seeks to address an issue and achieve a future outcome, and a policy is a course of action to achieve the objective. In both

<sup>25</sup> p354 of S42A report

<sup>26</sup> Subject to my suggested amendment to Objective 3.20 in Section 1 of my evidence.

cases, to aid understanding and application the language and structure of provisions should be certain, clear, and as concise as possible.

92. At various points in the Section 32 analysis the desire to draft provisions in accordance with these principles is acknowledged. The S42A report also addresses these points, as well as providing commentary which provides some context for the chosen structure of the objectives and policies:

*“...the original [notified version of the PLWRP] objectives were drafted to identify a future state, and are very much outcome driven objectives. On this basis, there were no objectives in the pLWRP, as notified, that identified processes to be followed, or objectives that merely required “management” – Page 97*

*“...the style of the pLWRP is different to many regional and district plans, and this has caused discomfort for some people. The objectives, policies and rules have been written to be clear, certain and definitive. It is through reading the objectives and policies as a group, rather than individually, that any required balancing will be seen, rather than within individual objectives or policies”. – Page 100*

93. Relative to the NRRP, the reduction in complexity and wordiness in the PLWRP, and the integration of multiple provisions (previously spread across multiple chapters) dealing with similar subject matter, is in my opinion to be commended. This approach has gone a long way to improving clarity and readability and hence increasing certainty. However, there are several instances within the objectives and policies where, in my opinion, the desire to be “clear, certain and definitive” has still not been achieved. I discuss these below.

### **Objective 3.13**

94. Objective 3.13, which remains unchanged in the S42A recommendations (albeit renumbered to 3.18), states<sup>27</sup>:

*3.13 Those parts of lakes and rivers that are valued by the community for recreation are suitable for contact recreation.*

95. This objective does seek a “future state”, however, it is uncertain how it will be achieved. The uncertainty derives from a lack of definition around what is “valued by the community” and what is “suitable for contact recreation”. There does not appear to be any policies which provide further guidance.
96. Value is a subjective matter, with views on what is valued differing across the members of a community. The implication of using the term “valued by the community” is that some form of community engagement has been undertaken (or

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<sup>27</sup> p98 of S42A report

will be required) and some form of consensus obtained. Neither the PLWRP and underlying Section 32 evaluation, or the Section 42A report, make any attempt to identify how “value” has been or will be determined. There is no data, no schedule of valued parts of lakes and rivers, and no policies or methods which seek to obtain this information. A resource user is then left with no comprehension as to how the objective is to be achieved.

97. Tables 1a and 1b (Outcomes for Canterbury lakes and rivers respectively), which is referred to in Policy 1, do use microbiological indicators as a measure of suitability for contact recreation, but these apply at particular types of rivers and lakes (e.g. “natural state”, “hill-fed upland”, etc) and not to particular parts of lakes and rivers (as specified in the objective). Schedule 6 of the Plan contains areas suitable for freshwater bathing, which may well have some applicability (but is obviously not referred to in the objective, nor any policies). However, freshwater bathing is only a subset of “contact recreation” (as defined in the Plan<sup>28</sup>) and therefore is only partially relevant.
98. To be certain and remain as an objective appropriate to achieve the purpose of the Act, it and other relevant parts of the Plan should identify, subject to passing through an appropriate Section 32 analysis, what parts of rivers are valuable and what standards are expected. Otherwise, in my opinion Objective 3.13 should be deleted.

#### **Policy 4.17**

99. Policy 4.17 states:

*4.17 On erosion-prone land, any medium and large-scale earthworks, harvesting of forestry or other clearance of vegetation is undertaken in a manner which minimises the exposure of soil to erosion, controls sediment run-off and re-establishes vegetation cover as quickly as possible.*

100. The term “erosion-prone land”, as used in Policy 4.17, is not defined in the Plan. It is therefore unclear what parts of the region the policy applies to, or what parameters

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<sup>28</sup> Contact recreation means “human recreation activity where people have direct contact with, or are partly or fully immersed in, the water of a river or lake. It includes activities such as boating, bathing, paddling, swimming, and fishing” (Section 2.10 of the PLRWP).

make a particular piece of land vulnerable to erosion (e.g. slope angle, vegetative cover, etc). In the S42A report the officer considers the heading of the section dealing with the relevant rules (“Vegetation Clearance and Earthworks in Erosion-prone areas”), and references to Planning Maps as LH1 and LH2 within the rules, is sufficient to define the policy’s scope<sup>29</sup>. But with no cross-referencing between the rules and policies (at least currently) I do not agree.

101. While dealing with Policy 4.17, I also note that it partly reads as method, by stating that vegetation be re-established as quickly as possible. In my view the method prescribed may not always be desirable or necessary to achieve the outcome sought (i.e. minimise erosion). For example, a road cutting may use netting or shotcrete to minimise erosion. In my opinion the policy will achieve its aims without the inclusion of the method.

102. In summary, I consider Policy 4.17 should be amended as follows:

*4.17 On erosion-prone land, any medium and large-scale earthworks, harvesting of forestry or other clearance of vegetation is undertaken in a manner which minimises the exposure of soil to erosion, and controls sediment run-off and re-establishes vegetation cover as quickly as possible.*

103. The policy should be cross-referenced to the relevant rules, or a new definition of “erosion-prone land” inserted into Section 2.10:

*Erosion-prone land means land shown on the Planning Maps as Area LH1 and LH2.*

104. However, I do note that the Officer recommendation (on page 423) is to delete the LH1 layer and that LH2 be amended to only cover land over 20 degrees or with soil types susceptible to deep-seated erosion. I consider that recommendation appropriate, and if it is adopted the definition should be updated accordingly.

## **ISSUE 4: ACTIVITY STATUS**

### ***Introduction***

105. Commendable improvements have been made relative to the NRRP to streamline and simplify rules and ensure activities do not face an unnecessarily restrictive status of activity, in particular through the introduction of a greater range of permitted activities where the environmental effects can be managed to the extent that they

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<sup>29</sup> p408 of S42A report

are minor. However, in my opinion there are still some instances where the status is still overly restrictive.

### **Rules 5.72 and 5.73**

106. Rule 5.72 deals with the discharge of stormwater onto or into land as a permitted activity, and relative to its counterpart in the NRRP (Rule WQL7), is vastly improved in terms of its reduction in complexity of conditions. However, this appears<sup>30</sup> to have come at the cost of making any infringement a non-complying activity (under Rule 5.73), as opposed to having discretionary activity status for various types of infringements under the NRRP.
107. The Section 32 report notes that only stormwater discharges that will have “a very low level of environmental effect are permitted” (page 73). However, in my opinion there are many instances where breaches of the permitted activity conditions in Rule 5.72 may still only result in ‘a very low level’ of adverse effect<sup>31</sup>. To have such minor infringements considered under the ‘gateway’ tests of Section 104D of the Act seems unreasonable, and places an undue burden on both consent applicants and the Council in preparing and auditing AEEs respectively. In my view a discretionary activity status for Rule 5.73 would be much more appropriate for infringements of Rule 5.72.
108. Recommendations in the S42A report suggests that Rules 5.72 be split into two, dealing with discharges to surface waters and land separately<sup>32</sup>. A discretionary activity status for breaches of both rules has been suggested. In my opinion these recommendations are appropriate.

### **Rules 5.76 and 5.77**

109. Within Section 5 of the PLWRP the rules are generally grouped by activity, and within each subset, follow a progression from permitted through to discretionary or non-complying. This approach is appropriate. However, somewhat confusingly, in at least two instances particular types of activity are listed as permitted but then do

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<sup>30</sup> I say ‘appears’, as the Section 32 report, while acknowledging the activity status change relative to the NRRP, provides no rationale, evaluation or explanation as to why the activity leaps all the way from permitted to non-complying.

<sup>31</sup> To use but two examples: the calculated duration of ponding could potentially 1 or 2 hours longer than 48 hours (condition 5(b)), and the highest groundwater level could be slightly less than the required 1.0 m (Condition 5(c)).

<sup>32</sup> p190-195 of S42A report

not follow through with a rule requiring resource consent where the conditions of those activities are not met.

110. That is why in FH's submission it was raised, in relation to permitted activity rules 5.76 and 5.77, that a further rule was required<sup>33</sup>. However, it has now been confirmed through the Council's own submission that Rule 5.6 is a "catch-all" for such circumstances. While I accept this, it does seem at odds with the structure of much of the remainder of Section 5, as well as an officer recommendation to support a new "catch-all" diversion rule (Rule 5.121A) for the same type of circumstances<sup>34</sup>. The Commissioners may wish to consider a consistent approach to these matters.

### ***Rule 5.115***

111. Rule 5.115 permits various activities associated with bridges and culverts. In my opinion this rule needs to include the removal of debris from the inlet and outlets of culverts, and immediately upstream and downstream of bridge abutments, for the purposes of maintaining hydraulic capacity through/under the structure. While it could be argued that this constitutes "maintenance" and is already provided for under the rule – which incidentally is the sentiment expressed by the Council officer<sup>35</sup> – in the absence of a definition of maintenance my preference is that the activity be explicitly stated, as submitted by FH.

### ***Rules 5.155-5.160***

112. Rules 5.155 and 5.157 permit the excavation of material over aquifers, with Rules 5.156 and 5.158 setting a discretionary activity status where conditions are not met. Due to the confined scope of the activities and their environmental effects in question, it would seem reasonable that any non-compliance could be treated as a restricted discretionary activity, with discretion limited to any adverse effects associated with the non-compliance.
113. Recommendations in the S42A report suggest a combining and simplification of Rules 5.155 – 5.159<sup>36</sup>. I consider these suggestions appropriate, including the restricted discretionary activity status where permitted activity conditions are not met.
114. Rule 5.160 requires resource consent for deposition of material, with some qualifiers, into excavations over unconfined or semi-confined aquifers. I support the officer recommendations to add a definition of cleanfill to Section 2.10, as well as

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<sup>33</sup> Submission 245.85

<sup>34</sup> p350 of S42A report

<sup>35</sup> p342 of S42A report

<sup>36</sup> p418-420 of S42A report

requiring that the separation between the excavation and groundwater be measured from the lowest point of the excavation and not the natural land surface.

## **ISSUE 5: RIVER BED ACTIVITIES**

### ***Introduction***

115. The submitters have strong interests in river beds for the extraction and processing of gravels. Mr Willis has discussed in his evidence, with respect to Fulton Hogan, that they hold over 100 resource consents are held for river-bed activities in Canterbury, and have made significant contributions to the statutory processes for establishing the *Canterbury Regional River Gravel Management Strategy* and *Proposed Canterbury Flood Protection and Drainage Bylaw (the Bylaw)*.
116. In this section I will discuss some duplication issues with respect to the Bylaw and PLRWP in relation to flood protection and defences against water, and then focus on some issues on rules regulating river bed activities.

### ***Duplication with the Bylaw***

117. The Bylaw, notified in August 2012, was prepared by the Council under the Local Government Act 2002. As explained in the Bylaw, its purpose is to “*provide for the on-going management and efficient operation of flood protection and flood control works that are owned or controlled by the Canterbury Regional Council*”.
118. FH invested considerable time and effort in the submission and hearing process for the Bylaw. They argued that the bylaw was unnecessary and should be rejected, for the primary reasons that it was an inappropriate way to address the issue, and that it duplicated the functions of other existing legislation and statutory documents. Particular concern was expressed that it may, at least in part, duplicate the functions of the PLWRP, so that resource users may require approval from the Council under both the Bylaw and RMA for essentially the same resource use. This would be inefficient and unnecessary. Mr Willis has discussed the duplication issue in more detail (including with respect to district plans).
119. Beyond the duplication issue, concern was also expressed that the Bylaw and PLWRP may deal with the same issue in inconsistent ways, leading to uncertainty for both the resource user and Council.
120. At the time of writing this evidence the decision from the Bylaw has not yet been released. However, based on feedback at the hearing it would appear the rejection of the bylaw is an unlikely outcome. On this basis the focus becomes ensuring that the PLWRP avoids as much duplication and inconsistency with the Bylaw.

121. One of the biggest inconsistencies is the way in which certain types of structures in river and lake beds are defined, as will now be discussed.

***Defences against water***

122. The Bylaw defines and uses the term ‘defence against water’ to encompass a large range of erosion and flood protection works, which serve the purpose of protecting land and infrastructure against water in a water body, artificial water course or artificial lake. (Definition provided later in this section).
123. The Bylaw also defines the terms “erosion protection planting”, “flood protection vegetation”, and “flood protection and flood control works”, the latter of which incorporates the previous two definitions as well as “defences against water”. Leaving aside the issue of whether the Bylaw itself has too much internal duplication, the term “defence against water” serves a useful role in encompassing a wider range of structures and works for defending against floods and erosion. Clearly the bylaw only uses the term within the scope of its power, which is those structures and works owned or controlled by the Council.
124. The Proposed Plan does not use the term “defence against water” and instead collates similar types of works under the terms “flood control structure”, “flood control vegetation”, and “flood control works” (the latter simply encompassing both of the previous terms):

***Flood control structure***

*means any structure designed and built for the purpose of directing the passage of water away from land.*

***Flood control vegetation***

*means trees or shrubs planted for the purpose of defending against erosion of a riverbank, berm, or structure.*

***Flood protection works***

*means any flood control structure or flood control vegetation.*

125. My principle concern is with the definition of “flood control structure”. This term provides for only one purpose – directing (flood) water away from land – and does not allow for other potential roles for river bed structures or works such as absorbing or dissipating energy, deflecting water (not necessarily flood water), preventing or minimising erosion, or providing access (e.g. a ramp). This issue comes into sharp focus in the rules, where structures and works serving those roles are not explicitly provided for (in particular under Rule 5.116), and therefore are captured as a discretionary activity under Rules 5.6 or 5.121.



126. In addition, the term “flood control structure” refers to its purpose as being to direct the passage of water away from land. Putting aside whether “control” and “direct” are one and the same thing, the directing of flood waters away from land is inappropriate. This is because “land”, as defined in the RMA, includes land in a river bed<sup>37</sup>. If this definition were to remain in any form it would need to be clear that such structures are seeking to retain water within the bed of the water body in question (within the “banks” for an artificial watercourse).
127. All three terms add, in my view, unnecessary complexity to the plan and cause a number of potentially minor activities to fall outside the permitted activity rules. With that in mind, I consider it is appropriate that a more streamlined definition, and one that is more consistent with the Bylaw, be used. The “defence against water” definition in the Bylaw is an excellent starting point, but it too needs some tweaking to encompass the full range of structures and works that could be anticipated, and of course have application beyond the Bylaw.
128. I suggest the following amendments to the Bylaw definition for usage in Section 2.10 of the PLWRP:

***Defence against water***

*Means any structure or equipment, including any ~~dam~~, bund, weir, spillway, floodgate, bank, stopbank, retaining wall, rock or erosion protection structure, groyne, vegetation (including anchored tree protection) or reservoir, that is designed to have the effect of stopping, diverting, controlling, restricting or otherwise regulating the flow, energy or spread of water, including floodwaters, in or out of a water body~~course~~, artificial watercourse, or artificial lake for the purpose of flood mitigation and/or drainage. For the purposes of this definition, dams are excluded.*

*~~For the purposes of this Bylaw, means any defence against water that is owned or controlled by the Canterbury Regional Council. This includes all defences located between the flood protection vegetation lines, the floodway lines, and along the drains and small watercourses as shown in Schedules 1-3.~~*

129. The Officer has supported the inclusion of this amendment, and the deletion of the definitions of “Flood Control Structure”, “Flood Control Vegetation” and “Flood Protection Works”<sup>38</sup>. The officer goes on to note that there will need to be consequential amendments to the rules to update the relevant terms, and as such has recommended amendments to Rules 5.113 and 5.116. However, some of what are now undefined terms remain in recommended amendments to Rule 5.114

<sup>37</sup> Land (a) includes land covered by water and the air space above land (Section 2 of the RMA).

<sup>38</sup> p328 of S42A report

(Condition 2) and Rule 5.115 (Condition 2), and in my view, these should also be updated to “defences against water”.

130. Lastly, and as I will shortly discuss in more detail, it is important that Rule 5.116, which currently provides for permitted activity status to flood protection works but only where undertaken by local authorities and network utility operators, have that exclusivity removed. Otherwise there is no permitted activity rule providing for defences against water erected by other parties for purposes other than flood management. Given other potential activities other than flood management, the use of the term “flood protection plan” also needs to be deleted from Condition 3 of the rule, as per FH’s submission<sup>39</sup> and the officer recommendations<sup>40</sup>.

### ***Rules 5.116 and 5.120***

131. Rules 5.116 and 5.120, relating to flood protection works and diversion of surface flooding, have been prepared by the Council in a way that grants exclusive permitted activity rights to themselves and other local authorities, and/or network utility operators. These rules are subject to conditions, including the preparation of a flood protection plan which needs to be certified by the Council.
132. The Section 32 evaluation does not provide any strong explanation for the exclusivity. Furthermore, I am unable to evaluate the method’s appropriateness for achieving the objectives of the PLWRP as I have been unable to locate any such provisions (both notified and in the officer recommendations) which speak to this issue. The RPS also does not give any direction on exclusivity.
133. I presume the underlying rationale is that the rules are likely to assist the Council in implementing the Canterbury Regional River Gravel Management Strategy (October 2012). One of the key principles of the Strategy is flood management. I also acknowledge that works and structures managed by these particular parties serve a valuable function in providing for the health and safety of people and communities and enabling them to provide for their social and economic wellbeing. However, my concern is that there are other parties, such as the submitters, who could propose to undertake works of similar value but yet would need to apply for resource consent and be subject to the associated cost, preparation and processing time, and the risk that it could potentially be declined.
134. In my opinion these rules are unfair, inequitable, and not effects-based. Similar works could potentially be carried out by the likes of the submitters either in association with or independently of their core activities, and serve a similar function

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<sup>39</sup> Submission 245.71

<sup>40</sup> p346 of S42A report

and be of similar importance. The submitters are also equally capable of preparing a plan for certification.

135. Within the S42A analysis, the exclusivity of Rules 5.116 and 5.120 appears to have only been considered in terms of allowing the activities “on behalf” of the parties, rather than removing the exclusivity altogether<sup>41</sup>. My opinion is that the suggested changes in the S42A report do not address the concerns expressed in paragraph 134 above, and that the two rules should recognise the potential benefits of activities by other parties by removing all exclusivity. This would also eliminate the issue of the methods not being informed by any objectives in the PLWRP, and allow for the rule to cater for other defence against water activities (as discussed in the previous section).

## **ISSUE 6: GROUNDWATER TAKE AND USE ACTIVITIES**

### ***Introduction***

136. As explained by Mr English, the primary use of groundwater by the extractive industry is with respect to dust suppression and product washing. In both instances the volumes are relatively small, and in the case of product washing, largely non-consumptive.
137. In my view the provisions of the PLWRP need to provide for a degree of flexibility within allocation regimes to provide for activities, which provide important social and economic benefits, to operate and apply for increased takes where necessary (to respond to demand for minerals in the case of the submitters).
138. Having said that, I do acknowledge that the NPS does, through Objective B2, seek to avoid further allocation of fresh water and phase out existing over-allocation. Objective B3 also seeks to improve and maximise the efficient allocation and efficient use of water. Policies within the NPS support regional councils in seeking these outcomes, as does the RPS through a number of provisions, in particular Policy 7.3.4. I discuss these matters further below.

### ***Prohibited activity status in fully allocated groundwater zones***

139. In reference to the sub-regional chapters, FH submitted that they oppose any provision which has the effect of preventing any further allocation of water in fully allocated zones where such use would be for activities with important social and economic benefits, such as mineral extraction activities<sup>42</sup>.

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<sup>41</sup> p345 and p349 of S42A report

<sup>42</sup> Submission 245.84

140. I acknowledge that the sub-regional chapters are to be subject to a further section 42A report and hearing, but I address these issues in this evidence as there is a relationship between the provisions in the sub-regional chapters, and the prohibited activity status in Rules 5.98 (surface water) and 5.104 (groundwater). Further evidence may be required at the third stage of this hearing process.
141. Clearly prohibition does not provide for the flexibility discussed above, nor does it recognise the small volumes of water involved or the potential social and economic benefits to be gained.
142. My understanding is that the test for whether prohibited activity status is appropriate is whether or not the allocation of that status is the most appropriate of the options available<sup>43</sup>. Section 32(3)(b) of the Act reinforces this when it states that an evaluation must examine whether the rules are the most appropriate for achieving the objectives.
143. In my view the Section 32 evaluation undertaken by the Council does not appear to fully consider the social and economic benefits and costs of prohibition on activities such as the submitters.
144. Furthermore, neither has the evaluation established that prohibition is necessary to give effect to the RPS or NPS. In particular, although the NPS seeks that “over-allocation” be avoided, the definition of over-allocation in the NPS is not necessarily based strictly on a numeric limit (as typically used in the PLWRP), but also allows for over-allocation to be considered in terms of whether a freshwater objective is no longer being met. Therefore, in my view, a prohibition on over-allocation based on numeric limits alone does not give full effect to the NPS. In addition, there are no objectives or policies in the PLWRP (either notified or in the officer recommendations) which provide any direction on prohibition.
145. As a general comment, in my opinion prohibited activity status is not an appropriate tool to deal with issues of over-allocation as it rules out all opportunities to weigh social and economic benefits against impacts, in particular where the benefits could potentially be very significant and the adverse effects readily managed. For example, FH’s Pound Road quarry is coming to the end of its productive life and a new source will soon be required. New development may require more water than is available via transfers alone (further discussion on this shortly). Prohibited activity status could mean that a new quarry is not able to establish, and that related social and economic benefits and opportunities are lost.

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<sup>43</sup> *Coromandel Watchdog of Hauraki Inc v Ministry of Economic Development* [2008] 1 NZLR 562

146. I have some sympathy with the Council's position that the previous non-complying activity status in the NRRP simply resulted in a continued large number of applications being received, and continued costs and inefficiencies for all parties in continued debate over whether the allocation limits were correct. However, in my opinion, in light of the stronger direction now provided in the objectives and policies of the NPS and RPS to deal with over-allocation, and the inappropriateness of foreclosing potentially beneficial social and economic activities where adverse effects can be appropriately managed, I consider non-complying status is still appropriate for any proposed take exceeding the allocation limits, and that Rules 5.98 and 5.104 should reflect this. This allows for an application for a water take to be properly assessed on its merits, while still providing the opportunity for the consent authority to decline any application where the proposal is contrary to objectives and policies or where the adverse effects are more than minor.
147. An alternative to non-complying status is to exclude aggregate based activities from needing to comply with the limits either within rules in Section 5 or throughout the sub-regional chapters (as sought in FH's submission), and instead make such takes a restricted discretionary activity (in a similar vein as Rule 5.88, which deals with community or group water supplies). This would recognise the important social and economic benefits of the activities, the relatively small volumes involved, and the largely non-consumptive nature of the uses.

### ***Christchurch-West Melton Groundwater Allocation Zone***

148. A number of the submitters, including FH and WA, operate quarries in the Christchurch-West Melton Groundwater Allocation Zone<sup>44</sup>. Under Rule 9.6.2:

*No additional water is to be allocated from the Christchurch West Melton Groundwater Allocation Zone shown on the Planning Maps except for group or community drinking water supply set out in Rule 5.88.*

149. This rule does not contain a numeric allocation limit, but does restrict allocation to group or community drinking water supply. This situation creates ambiguity in assessing compliance with Conditions 2 and 3 of Rule 5.101, and Condition 4(c)(ii) and 5 of Rule 5.107, where terms such as "complies" with the limits or "exceeding" the limits is used. To place this in context, a new water take in the above zone for

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<sup>44</sup> The Christchurch City Plan specifically provides for quarry zones, all of which fall within the Christchurch-West Melton Groundwater Allocation Zone. As noted in Section 1.10 of the City Plan:  
*"The Rural Quarry Zone comprises two areas. The first is between the Old West Coast Road and State Highway 73 and is referred to as the Miners Road area. The second is between Pound Road and Hasketts Road and adjacent to Leggett Road, referred to as the Pound Road area. Outside of the Quarry Zone, other quarry operations and processing takes place within the bed of the Waimakariri River (Conservation 3W Zone), the Open Space 3D (Isaac Conservation Park) Zone and in the Business 6 Zone.*

industrial use would not comply with (in conjunction with other takes) or exceed any limit, but then again the rule also says that no water can be allocated to it.

150. In my opinion, if the word limit is to be used in the take and use rules in Section 5, and in the sub-regional rules, then it should be consistent with the NPS, where it is defined as “...*the maximum amount of resource use available, which allows a freshwater objective to be met.*” The National Policy Statement for Freshwater Management 2011: Implementation Guide, produced by the Ministry for the Environment, notes on page 10 that a limit is a “specific quantifiable amount”. I note the PLWRP uses a different definition of limit.
151. To remove the ambiguity I suggest that Rule 9.6.2 uses a specific quantifiable limit (subject to appropriate Section 32 analysis and a plan variation/change process), or in the alternative, adopts amendments with the same effect as the following:

*9.6.2 Groundwater Allocation Limits*

*The following groundwater allocation limits and/or restrictions are to be applied when reading policies and rules in Sections 4 and 5.*

*No additional water is to be allocated from the Christchurch West-Melton Groundwater Allocation Zone shown on the Planning Maps, except for group or community water supply as set out in Rule 5.88, or for those takes granted resource consent under Rule 5.104.*

152. This suggested amendment is also subject to the acceptance of relief sought earlier, namely that Rule 5.104 has a non-complying status.

**Transfers**

153. Section 136 of the RMA sets out a process for transfers of water permits. The PLWRP has taken a modified approach which I understand may have some legal implications. I address only the planning matters.
154. Condition 5 of Rule 5.107 requires that a transfer of water shall surrender a particular percentage (depending on the circumstances) in over-allocated catchments. These percentages appear to be completely arbitrary. While I again acknowledge that the NPS and RPS provide for over-allocation to be addressed in a regional plan, I have not found any justification for, or assessment of, these volumes in the NPS, RPS, and PLWRP (including Section 32 and Section 42A reports).
155. The submitters, where they have operations in fully allocated groundwater zones, will be subject to surrendering up to 50% of the water, unless an application for a non-complying activity is granted under Rule 5.108). Neither of these options is

likely to be an attractive proposition and therefore potentially the transfer rules are not a useful mechanism for the Council to claw back over-allocated water.

156. In my view approaches other than surrendering are possible. This could include review of consents when they are due for renewal, or through encouraging takes from alternative water sources (e.g. regional water supply and storage schemes) as they become available.
157. FH submitted that Rules 5.107 and 5.108 be entirely deleted and the process revert to that described under Section 136 of the Act<sup>45</sup>. This has not been accepted in the S42A report. Upon reflection, and taking on board the direction provided by the NPS and RPS, my view is that the rules are appropriate to achieve the purpose of the Act, but subject to the deletion of Condition 5 in Rule 5.107. I do not consider inclusion of the surrender percentages is appropriate until such time that the Council is able make sufficient justification, through a full and complete Section 32 analysis, which would give submitters a full and proper opportunity to assess and respond.

### ***Non-consumptive takes***

158. Policy 4.55 recognises that non-consumptive groundwater takes are not subject to groundwater allocation limits, but that water should be returned to the same aquifer within 24 hours. Rule 5.105 implements the policy by providing for non-consumptive takes as a permitted activity subject to conditions (including that it is used for non-commercial purposes).
159. As noted, water abstracted by the submitters is typically used for processing purposes and dust suppression. The Environment Court has recently considered this issue of whether such takes are consumptive or non-consumptive in the context of quarry operations, and came to the conclusion that due to an overall positive water balance the use was non-consumptive<sup>46</sup>. While the circumstances of this case may not necessarily apply to all quarry operations, it does signal that the plan could, in the absence of a definition of “non-consumptive” in the PLRWP<sup>47</sup>, allow for takes to be considered non-consumptive where in conjunction with other activities there is an overall neutral or positive water balance.
160. On this basis my suggested wording for Policy 4.55 is as follows:

*4.55 Non-consumptive groundwater takes, including the taking of heat from or adding heat to groundwater, and any take which in conjunction with other activities on a site results in a neutral or positive water balance, will not be subject to any groundwater*

<sup>45</sup> Submission 245.64 and 245.65

<sup>46</sup> *Road Metals Company Limited v Selwyn District Council and Canterbury Regional Council* [2012] NZEnvC 214

<sup>47</sup> The S42A report considers such a definition unnecessary as Rule 5.105 is self-explanatory.

*allocation zone limits, and will generally be supported, provided the water either remains in the aquifer, or is returned to the same aquifer as far as practicable within 24hrs and is protected from contamination.*

### **Dewatering**

161. Rules 5.92 and 5.93 deal with dewatering and are limited to excavation, construction and geotechnical testing. However, there may be other reasons for dewatering which are not recognised (e.g. maintenance of a permanent gravel pit which is no longer being excavated) and therefore such specificity is not needed. The definition of dewatering in the PLWRP already acknowledges the activities covered, and this includes to “sustain a lower localised water table”.
162. Deletion of the description of activities from Rule 5.92 is therefore appropriate. However, the S42A officer does not agree with this approach, citing that the rule should be limited to the specifically listed activities rather than the broader definition of “dewatering”, with the implication being that other dewatering activities may have greater impacts (i.e. should not be a permitted activity)<sup>48</sup>. I do not agree, and consider the permitted activity conditions manage the impacts, irrespective of the type of dewatering activity being carried out. I support the original submissions made by FH in that regard.

### **CONCLUSIONS**

163. In my opinion the notified PLWRP is a significant improvement to the NRRP in nearly all facets. However, there are still many aspects which in my opinion need to be altered to better align the document with the RPS, NPS and Part 2 of the Act. In particular this can be achieved through improved recognition of social and economic benefits of activities, and not dealing in absolutes when it comes to matters of protecting resources and values and avoiding adverse effects.

Daniel Murray  
4 February 2013

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<sup>48</sup> p272-273 of S42A report