

# **SUMMARY OF DECISIONS REQUESTED**

**(original submissions and further submissions)**

**on  
Proposed Plan Change 4A  
(Groundwater and  
North Otago Volcanic Aquifer)**

**to the  
Regional Plan: Water for Otago**



**8 April 2011**



## **Preface**

Proposed Plan Change 4A (Groundwater and North Otago Volcanic Aquifer) to the Regional Plan: Water for Otago was publicly notified on Saturday 18 September 2010 in accordance with Clause 5 of the First Schedule of the Resource Management Act 1991 (RMA).

The Otago Regional Council received a total of nine submissions and two further submissions on the Proposed Plan Change from a range of groups, organisations and individuals.

This document summarises the decisions requested in the nine submissions and two further submissions received, by both issue and submitter.

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**Submitter Number**      **Submitter Name** (Last Name, First Name or Organisation)

### Original Submitters

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- 2      Dunedin City Council
- 3      Waitaki Coastal Care
- 4      The Director-General of Conservation
- 5      Contact Energy Limited
- 6      Clutha District Council
- 7      Horticulture New Zealand
- 8      Wilson, Max Stuart and Cheryl Anne (*late submission*)
- 9      Keen, Kenneth John (*late submission*)

### Further Submitters

- 11     The Director-General of Conservation
- 12     Horticulture New Zealand

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### Connected groundwater community supplies and minimum flows: Policy 6.4.8

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Dunedin City Council	2	2	Support	Retain Policy 6.4.8 as proposed.	Provides an improved degree of certainty to DCC's ability to continue to supply water to residents during periods of low flow or reduced aquifer levels.
Clutha District Council	6	2	Support	We support the provision for "connected" groundwater takes for community supply as per Schedule 3B to be exempt from minimum flow requirements.	Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.
Clutha District Council	6	2	Amend	Add " <u>Where a community water supply intake is relocated to a point where the same or more water is available for allocation, then the existing rights under Schedules 1B or 3B shall transfer to the new location.</u> "	Rule 12.2.2A.1 limits the volume/rate of a community water supply to that authorised as at 28 February 1998. The S32 report says that for the Clydevale/Pomahaka scheme this would be the combined total of the two previous consents, but this is not carried through into the rule. To address this issue in a more general way, where a take is relocated to a new source where there is less allocation pressure, then the existing rights to exemption from a minimum flow should be retained. This would cover Clydevale/Pomahaka and facilitate any future similar moves.
<i>Horticulture NZ</i>	<i>12</i>	<i>6/2</i>	<i>Oppose in part</i>	<i>No decision requested.</i>	<i>While the transferred volume may be the same, or if more water is available for allocation, there is the potential for effects on other users which require assessment. The efficient use of water should also be assessed.</i>
Clutha District Council	6	2	Oppose	Retain the phrase "while ensuring sufficient supply under low flow conditions so that human health and safety are not compromised" in the explanation.	The key purpose of community water supplies is to provide for health and safety, and it would be dangerous and inappropriate to try to ignore this.
<i>Horticulture NZ</i>	<i>12</i>	<i>6/2</i>	<i>Support</i>	<i>No decision requested.</i>	<i>It is accepted that takes for community supply should be exempt from minimum flow requirements for human health and sanitation purposes.</i>

### Purpose and use of restriction levels: New Policy 6.4.10AB

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Dunedin City Council	2	4	Amend	Recognition of the adverse impact restriction will have upon community water supplies, and an exemption from the requirement to adhere to restriction levels in order to provide water for human	While the intent of the policy to protect aquifers from over-depletion during periods of low recharge is understood and supported in principle, the proposed policy may adversely impact upon a community water



NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
				<p>health and sanitation during periods when restrictions are in force.</p> <p>Such an exemption would only be applicable if all practicable water conservation measures (as agreed with the Territorial Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to provide water for human health and sanitation during periods when restrictions are in force. This may entail the requirement to create a new policy. The following wording for a new policy is suggested:</p> <p><i>"Community water supply takes listed in Schedule 4B will be exempt from the requirement to adhere to restriction levels in order to provide water for human health and sanitation purposes during periods when restrictions are in force. Such an exemption is only applicable if all practicable water conservation measures (as agreed with the Consenting Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to provide water for human health and during periods of restriction."</i></p>	<p>supplier's ability to provide water for human health and safety.</p>
<i>Horticulture NZ</i>	<i>12</i>	<i>2/4</i>	<i>Support in part</i>	<i>No decision requested.</i>	<i>It is reasonable to exempt community water supply takes from restriction levels if the exemption is limited to human health and sanitation purposes.</i>
The Director-General of Conservation	4	4	Amend	<p>The following amendment be made to Policy 6.4.10AB Explanation.</p> <p>Groundwater restriction levels can be useful.... They can assist in avoiding land subsidence, aquifer compression, <del>and</del> reduced outflows to surface water <u>and sustaining the life supporting capacity of aquifers.</u></p>	<p>Groundwater restriction levels also have a significant role in sustaining the life supporting capacity of aquifers.</p>

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				That any other consequential amendments to the Regional Plan: Water for Otago required to explain or give full effect to these changes be made.	
<i>Horticulture NZ</i>	<i>12</i>	<i>4/4</i>	<i>Oppose</i>	<i>No decision requested.</i>	<i>It is unclear as to what the submitter is seeking to protect through this addition.</i>
Horticulture New Zealand and North Otago Vegetable Growers Association	7	4	Amend	Add to the Explanation that the extent of the aquifer recharge volumes will be an important part of establishing restriction levels.	The key to setting a minimum level, and hence restrictions, is the extent of the recharge. While an aquifer may be reduced during summer, recharge will return it to higher levels. There needs to be clear reasons why a restriction would be set significantly higher than the extent of the recharge volume.

#### Managing risk of aquifer contamination due to take: New Policy 6.4.10AC

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
James Robert O'Gorman	1	5	Amend	Increase quality measurements of soil and water throughout the catchment, test at least monthly.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
Dunedin City Council	2	5	Amend	Recognition of the adverse impact restriction will have upon community water supplies, and an exemption from the requirement to adhere to restriction levels in order to provide water for human health and sanitation during periods when restrictions are in force.  Such an exemption would only be applicable if all practicable water conservation measures (as agreed with the Territorial Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to provide water for human health and sanitation during periods when restrictions are in force. This may entail the requirement to create a new policy.	While the intent of the policy to protect aquifers from contamination and seawater intrusion is understood and supported in principle, provisions within the policy advocating for the setting of aquifer restriction levels and restricting takes may adversely impact upon a community water supplier's ability to provide water for human health and safety.

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
				<p>The following wording for a new policy is suggested:</p> <p><i>"Community water supply takes listed in Schedule 4B will be exempt from the requirement to adhere to restriction levels in order to provide water for human health and sanitation purposes during periods when restrictions are in force. Such an exemption is only applicable if all practicable water conservation measures (as agreed with the Consenting Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to provide water for human health and during periods of restriction."</i></p>	
Waitaki Coastal Care	3	5	Support	Supports [management of] seawater intrusion risk.	Notes section 8.1 of the North Otago Volcanic Aquifer Study.
Horticulture New Zealand and North Otago Vegetable Growers Association	7	5	Amend	Amend Policy 6.4.10AC(d) to read: Setting aquifer restriction levels <u>where needed</u> .	This better reflects Policy 6.4.10AB, to define restriction levels where needed.
Horticulture New Zealand and North Otago Vegetable Growers Association	7	5	Amend	Amend Policy 6.4.10AC Explanation by adding a new sentence as follows:  <u>Monitoring of groundwater quality and levels will be undertaken by the Otago Regional Council.</u>	Policy 6.4.10AC(f) requires monitoring of groundwater quality and levels, but the explanation provides no guidance as to who is to undertake this monitoring.

### Management of the Deborah and Waiareka Aquifers: Policy 9.4.23

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
James Robert O'Gorman	1	8	Amend	Increase quality measurements of soil and water throughout the catchment, test at least monthly.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.

### Simplify permitted groundwater take: Rule 12.2.2.2

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Horticulture New Zealand and North Otago Vegetable Growers Association	7	10	Amend	<p>Retain Rule 12.2.2.2(b) and (c) and (e) as currently provided for in the Regional Plan: Water for Otago; or</p> <p>Amend Proposed Rule 12.2.2.2(e) to 30,000 litres per day and relocate the clause as clause (a), and renumber subsequent clauses.</p>	<p>The effects on an aquifer are different to surface water and there should be effects-based reasons for the change, rather than a desire for consistency. Those areas where the current volume is 10 m<sup>3</sup>/day will benefit, while those where the current volume is 30 m<sup>3</sup>/day will be penalised. Those currently using 30 m<sup>3</sup>/day will need to apply for a consent at considerable cost, for no demonstrated resource management reason.</p> <p>The structure of the Rule would be clearer if clause (e) was renumbered as (a) so it is clear from the outset what the permitted volume is.</p>

### Community water supplies and restriction levels: Rule 12.2.2A.1

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Dunedin City Council	2	12	Amend	<p>Amend the wording Policy 12.2.2A.1 as follows:</p> <p>"The taking and use of groundwater for community water supply, up to any volume or rate authorised as at <del>28 February 1998</del> <u>18 September 2010</u>, by any take identified in Schedule 3B is a controlled activity".</p> <p>Consequential amendments to Rule 12.2.2A.1 resulting from the repealing of Section 93 and 94(1) of the Resource Management Act 1991 by Section 76 of the Resource Management (Simplifying and Streamlining) Amendment Act 2009.</p>	<p>Since notification of the Water Plan on 28 February 1998, consents held by the DCC to take and use groundwater for community water supplies have been renewed (i.e. the Mosgiel community water supply in 2007) resulting in an increase in the volume of water granted as primary allocation to account for population growth.</p> <p>Policy 6.4.2A, added by Plan Change 1C, allows for existing primary allocation takes of water used for community water supplies to be granted more water than has been allocated in the past where there is evidence that growth is reasonably anticipated, acknowledging that irrespective of measures to improve efficiency, demand on community water supplies can increase due to population growth. Consequently it is appropriate to acknowledge that the volume of water consented to be taken by community supplies listed in Schedule 3B is unlikely to be less than the volume required at the time</p>

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
					Plan Change 4A was notified.
Clutha District Council	6	12	Amend	Paragraph 1, delete ", up to any volume or rate authorised as at 28 February 1998".	The rule limits the volume/rate to that authorised as at 28 February 1998. The background information says that for the Clydevale/Pomahaka scheme this would be the combined total of the two previous consents, but this is not carried through into the rule. This should be made explicit in the rule, or preferably, the restriction removed.
Horticulture New Zealand and North Otago Vegetable Growers Association	7	12	Amend	Amend Rule 12.2.2A.1 (a) to read: The need to observe a restriction level <u>and how that level may be met.</u>	Supports the need to consider a restriction level, but the matter of control should enable the ORC to consider how the restriction level should be met. An application for community water supply should specify measures that would be taken to meet restrictions that may be imposed.
Kenneth John Keen	9	12	Amend	The Maheno Water Committee Incorporated bore to be exempt from such a harsh regime as indicated in Schedule 4B.	Restriction levels should not apply to community water supplies. A community cannot dry off their cows and not use as much water as they were accustomed to, even though they can and do conserve water if requested.

#### Considering effects of take on aquifer properties: Rule 12.2.3.4

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Horticulture New Zealand and North Otago Vegetable Growers Association	7	13	Amend	Amend Rule 12.2.3.4 as follows: (a) Maximum allocation volume for the aquifer; <del>and</del> <u>or</u> (b) Mean annual recharge of that aquifer; and (c) The effect of the take on the physical properties of the aquifer.  Specify the physical properties that would be considered under clause (c).	Unless a maximum allocation volume is specified in the Plan the current default is 50% mean annual recharge. It is unclear why both need to be considered as part of a consent application.  The effect of the take on the physical properties of that aquifer could lead to extensive requirements as part of a consent application. The S32 report identifies that restriction levels and maximum allocation volumes protect the physical properties of an aquifer. Where there is not a restriction level and the default maximum allocation volume applies, the ORC should be able to consider the effect of an individual take on the physical properties of an aquifer. However, the current wording of Rule 12.2.3.4(c) does not limit it to this.  The matters that would be considered under Rule

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
					12.2.3.4(c) should be specified, so it is clear to an applicant the extent of information required. "Physical properties of the aquifer" is open to interpretation.
<i>The Director-General of Conservation</i>	11	7/13	<i>Oppose</i>	<i>Oppose and retain the relevant wording in the proposed plan change.</i>	<i>The maximum allocation volume for an aquifer is not always the mean annual recharge. The ability to consider both matters should be retained.</i>

### Calculation of consented take: New Method 15.8.3

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Horticulture New Zealand and North Otago Vegetable Growers Association	7	14	Amend	<p>Add an additional point (d) to Method 15.8.3 as follows:</p> <p><u>Where volumes have been calculated on weekly or litres/second the volumes will be ground-truthed and adjusted if required to reflect actual usage volumes.</u></p> <p>Add to the Explanation:</p> <p><u>The purpose of the method is to establish the assessed maximum annual take and will not be used to limit an individual consent.</u></p>	<p>The proposed methodology is supported to the extent it does not take the 'worst case' scenario which would severely limit the amounts available for allocation. However, there are concerns extrapolating potentially inaccurate litres/second into an annual volume, making a small error a large error. There should be provision for adjustment from unrealistic figures.</p> <p>When applied in conjunction with restriction levels the physical properties of an aquifer are protected, so this 'balanced' approach is supported.</p>

### Identification of groundwater takes used for community supply: Schedule 3B

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Dunedin City Council	2	15	Support	Retain Schedule 3B as proposed.	The DCC supports the inclusion of the "Mosgiel Water Supply" in Schedule 3B.
Clutha District Council	6	15	Support	We support the addition of the Clydevale/Pomahaka take to Schedule 3B.	Community water schemes need security of supply, as they provide for the health of communities and stock. Rural water supplies also have environmental benefit (more efficient supply and direct stock access to waterways is avoided). Such supplies should have absolute protection under the Water Plan.
Clutha District Council	6	15	Amend	We request that Schedule 3B apply to all identified community water supplies and that all references to it only applying to supplies in place at 28 February 1998 be deleted.	To reflect community water supply values appropriately. Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
				Schedule 3B - amend reference 13, Clydevale-Pomahaka Water Supply by deleting "volume as at 28/2/98: 2082 m <sup>3</sup> /day".	Water Plan.

#### A maximum allocation volume for the North Otago Volcanic Aquifer: Schedule 4A

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
James Robert O'Gorman	1	17	Oppose	Do not increase any allocations at all, throughout the catchment.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
Waitaki Coastal Care	3	17	Oppose	Before considering any allocation limit increase collection of aquifer data so a precise and correct decision is made.	Present water extractors need to be better monitored on what they are taking. Recharge patterns are complex and irregular (as reported in section 4.3 of the North Otago Aquifer Study). Kakanui township draws water supply from the Kakanui River within the aquifer (as reported in section 5.2.1 of the North Otago Aquifer Study). Monitoring is integral in groundwater management (as reported in section 5.3.1 of the North Otago Aquifer Study). Science promoted by ORC doesn't match the opinions, feedback, stories, observations, anecdotes and issues expressed at community workshops held in Kakanui. If more water is allocated for 35 year terms, on little data, there is a good chance the aquifer could become over-allocated.
The Director-General of Conservation	4	17	Support	The Director-General supports the proposed maximum allocation of 5 million cubic metres per year from the North Otago Volcanic Aquifer.	This allocation will sustain the aquifer's life supporting capacity. The proposed allocation is consistent with the relevant allocations in the proposed National Environmental Standard on Ecological Flows and Water Levels.
<i>Horticulture NZ</i>	<i>12</i>	<i>4/17</i>	<i>Oppose</i>	<i>No decision requested.</i>	<i>There is a discussion document on Ecological Flows and Water Levels but no National Environmental Standard (NES) has been proposed, and any NES would be different to that discussion document. Policy should not be</i>

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
					<i>promulgated on the discussion document which has no legal status.</i>
Horticulture New Zealand and North Otago Vegetable Growers Association	7	17	Amend	Amend Schedule 4A North Otago Volcanic Aquifer to 7 Mm <sup>3</sup> /year.	<p>The justification for not using the technical recommendation of 7 Mm<sup>3</sup>/year is that it does not consider wider matters such as social and economic benefits of taking and using water. However, 7 Mm<sup>3</sup>/year would provide greater economic benefit.</p> <p>The recommended 5 Mm<sup>3</sup>/year is seen to balance community concerns with the technical recommendation. However, the nature of community concerns seem to relate to the ability to fully exercise a consent because of shallow or poorly constructed bores, rather than insufficient water, and this should not penalise future water users. Limiting the volume for that reason provides no incentive for shallow or poorly constructed bores to be better constructed.</p> <p>The technical group has in all likelihood already struck a balance in making their recommendation that the sustainable allocation limit should be set at 7 Mm<sup>3</sup>/year, as these groups often err on the side of caution. Adding a further level of caution seems to be overly conservative in the guise of taking a balanced approach. A balanced approach would be assessing current consented levels (4 Mm<sup>3</sup>/year) against the maximum sustainable yield (10 Mm<sup>3</sup>/year) and recommending 7 Mm<sup>3</sup>/year. The technical recommendation is already 30% below the aquifer's 50% mean annual recharge.</p> <p>The volume available to be taken is dependent on how assessed maximum annual take is established (Method 15.8.3). If a worst case scenario is used, there would be no scope for new takes in the area.</p>
<i>The Director-General of Conservation</i>	<i>11</i>	<i>7/17</i>	<i>Oppose</i>	<i>Oppose and retain proposed allocation of 5 Mm<sup>3</sup>/year.</i>	<i>5 Mm<sup>3</sup>/year will better sustain the life-supporting capacity of the North Otago Volcanic Aquifer.</i>
Max Stuart and Cheryl Anne	8	17	Amend	Fall from option 5 in paragraph 3.1.3 [of the Section	Option 5 as recommended (5 Mm <sup>3</sup> /year) is unnecessary



NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Wilson				32 report] and implement option 2. I support option 2 where the allocation is set at 7 Mm <sup>3</sup> /year.	when the other changes are made.
<i>The Director-General of Conservation</i>	11	8/17	<i>Oppose</i>	<i>Oppose and retain proposed allocation of 5 Mm<sup>3</sup>/year.</i>	<i>5 Mm<sup>3</sup>/year will better sustain the life-supporting capacity of the North Otago Volcanic Aquifer.</i>

#### Restriction levels in Webster's Well: Schedule 4B

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Waitaki Coastal Care	3	18	Oppose	Strongly oppose any relaxing of restrictions.	Notes section 8.2 of the North Otago Volcanic Aquifer Study.
Horticulture New Zealand and North Otago Vegetable Growers Association	7	18	Amend	Provide rationale for restriction levels for groundwater takes in Schedule 4B for the North Otago Volcanic Aquifer and amend if technical rationale supports lower levels.	The S32 report does not provide details as to how the restriction levels in the North Otago Volcanic Aquifer have been established. In the absence of rationale it is difficult to determine whether they are appropriate. How often will levels be reached given current consented and assessed maximum allocation volumes, and the relationship of the restriction levels to annual recharge volumes?

#### Setting maximum allocation volumes and restriction levels: New Schedule 4C

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Contact Energy Limited	5	19	Amend	Add to Schedule 4C as follows or to like effect (new text underlined):  4C.1 When setting maximum allocation volumes in Schedule 4A for an aquifer, consideration will be given to the following matters: ... <u>(d) Interaction with surface water bodies and their values, including the potential for groundwater takes to have a cumulative adverse effect on existing lawful surface water uses such as hydro-electric generation.</u>  Any other consequential changes as are necessary to give effect to the relief sought above.	Groundwater takes can cumulatively impact the quantity of water available in surface water bodies where hydrologically connected. Although Schedule 4C.1 identifies the interaction with surface water bodies as an issue, this could be read as relating solely to the ecological values of such water bodies.  Ensuring water is available for hydro-generation is appropriate and necessary as section 7(j) of the RMA provides for the generation of renewable energy as a matter of national importance. The Regional Policy Statement for Otago, which the ORC must give effect to, also recognises the importance of existing and potential hydro-generation from the region.
<i>The Director-General of</i>	11	5/19	<i>Oppose</i>	<i>Oppose and retain the relevant wording in the</i>	<i>Renewable energy is but one of eleven RMA section 7</i>

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Conservation				<i>proposed plan change.</i>	<i>matters, and therefore should not be given preference over any other such matters.</i>
Horticulture NZ	12	5/19	<i>Oppose in part</i>	<i>No decision requested.</i>	<i>The Schedule already provides for consideration of interaction with surface water bodies and their values, so specific provision for hydroelectric generation is not necessary.</i>
Horticulture New Zealand and North Otago Vegetable Growers Association	7	19	Amend	Retain matters identified in Schedules 4C.1 and 4C.2 but amend 4C.2(c) by adding " <u>and the extent to which the aquifer recovers from maximum allocation volumes</u> ".	Generally the matters listed are supported, but there should be greater consideration of the relationship between the annual recharge volume and the minimum volume before restrictions apply. As stated in respect to Policy 6.4.10AB the key to setting a minimum level, and hence restrictions, is the extent of recharge. While an aquifer level may be reduced during summer, recharge will return it to higher levels. There needs to be clear reasons why a restriction [level] would be set significantly higher than the extent of the recharge volume. Of note is the consideration of physical properties in the aquifer, on which comment has been made in relation to Rule 12.2.3.4.

#### Managing risk of aquifer contamination due to take: Map C10 (seawater intrusion risk zone)

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Waitaki Coastal Care	3	22	Support	Supports [management of] seawater intrusion risk.	Notes section 8.1 of the North Otago Volcanic Aquifer Study.

#### Managing risk of aquifer contamination due to take: Map C10a (seawater intrusion risk zone)

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Waitaki Coastal Care	3	23	Support	Supports [management of] seawater intrusion risk.	Notes section 8.1 of the North Otago Volcanic Aquifer Study.

#### General support for plan change

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Dunedin City Council	2	28	Support	The DCC is generally supportive of Proposed Plan Change 4A.	The DCC is generally supportive insofar as it appreciates that such a change is necessary for achieving the purposes of the RMA and ensuring sustainable development and

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
					protection of groundwater resources. However, DCC is concerned about the potential impact of the proposed changes upon its lawfully established groundwater takes used for community water supplies.

### General opposition to plan change

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
James Robert O'Gorman	1	29	Oppose	Abandon the plan change and wait until you have cleaned the river systems throughout Otago before any further water allocation.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.

### Matters beyond the scope of the plan change

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
James Robert O'Gorman	1	30	Not Applicable	Follow the guidance (when it is available) of the Land and Water Forum report; this plan does not.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment.
James Robert O'Gorman	1	30	Not Applicable	Remove from office those officers whose decisions continue to bring toxic outcomes to the environment.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment.
James Robert O'Gorman	1	30	Not Applicable	Do not give rights for 35 years in resource consents.	The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
James Robert O'Gorman	1	30	Not Applicable	Educate the farmers that high salt index chemical fertilisers are the reason their soil biology is failing and leaching into our groundwater and streams.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
James Robert O'Gorman	1	30	Not Applicable	Bring back the frogs.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment.
Waitaki Coastal Care	3	30	Not Applicable	Support any measure to clean up and reduce pollution of the aquifer.	Notes section 8.4 of the North Otago Aquifer Study. Nitrate-nitrogen concentrations in the aquifer are a health concern (as reported in section 3.2 of the North Otago Aquifer Study). Human activity has raised nitrate-nitrogen concentrations (as reported in section 7.2 of the North Otago Aquifer Study).

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Waitaki Coastal Care	3	30	Not Applicable	Support better management of aquifer [in relation to recommendations regarding bore construction in section 8.5 of the North Otago Aquifer Study].	Notes section 8.5 of the North Otago Volcanic Aquifer Study.
Waitaki Coastal Care	3	30	Not Applicable	Present water extractors need to be better monitored on what they are taking.	Before considering any allocation limit increase collection of aquifer data so a precise and correct decision is made. Data is compromised without declaration of volume used by extractors.
The Director-General of Conservation	4	30	Not Applicable	<p>The Director-General of Conservation (Director-General) requests that the following amendment be made to Policy 6.4.10A:</p> <p>6.4.10A To enable the taking of groundwater by:</p> <p>(a) In each aquifer other than any in Schedule 2C or within 100 metres of a connected perennial surface water body, defining a quantity known as the maximum allocation volume, which is:</p> <p>(a)(i) For aquifers in Schedule 4A, ...</p> <p>(a)(ii) <u>With the exception of those aquifers detailed in (a)(iii),</u> for aquifers other than those in Schedule 4A ...</p> <p>(a)(iii) For the following aquifers:</p> <p><u>(1) Manuherikia claybound aquifer, the Manuherikia alluvium aquifer, the Dunstan Flat aquifer and the Earnsclough Terrace aquifer;</u></p> <p><u>(2) The Maniototo tertiary aquifer; and the</u></p> <p><u>(3) Cardrona alluvial ribbon and Wanaka Basin Cardrona gravel aquifer;</u></p> <p><u>either</u></p> <p><u>A limit which is 35% of the calculated mean annual recharge; or</u></p> <p><u>The sum of the maximum annual take for that aquifer at 10 April 2010, less any quantity in a consent where:</u></p> <p><u>(A) All of the water taken is immediately returned to the aquifer or connected surface water body;</u></p> <p><u>(B) The consent has been surrendered or has expired (except where the quantity has been granted to the</u></p>	So that populations of threatened indigenous fish that inhabit waterways recharged in part from the three aquifers listed are not adversely affected by over-allocation.

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
				<p><u>existing consent holder as a new consent);</u>  <u>(C) The consent has been cancelled (except where the quantity has been transferred to a new consent under Section 136(5));</u>  <u>(D) The consent has lapsed;</u></p> <p>That any other consequential amendments to the Regional Plan: Water for Otago required to explain or give full effect to these changes be made.</p>	
The Director-General of Conservation	4	30	Not Applicable	<p>The Director-General requests the following amendment be made:</p> <p>6.4.10A Explanation (paragraph 2)</p> <p>Sustainable allocation of groundwater will be achieved by considering as restricted discretionary activities, those applications where:</p> <p>(i) The individual take would not cause the cumulative take ...</p> <p>(ii) Relevant aquifer restriction levels (<u>including those in Policy 6.4.10(a)(iii)</u>) are met.</p> <p>That any other consequential amendments to the Regional Plan: Water for Otago required to explain or give full effect to these changes be made.</p>	To enable the carrying through of the amendments sought by the Director-General to Policy 6.4.10A.
Clutha District Council	6	30	Not Applicable	Schedule 1B - Add "Waipahi River Waipahi Water Supply at G45:196488".	To ensure consistency and certainty. Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.
Clutha District Council	6	30	Not Applicable	<p>We request that Schedule 1B apply to all identified community water supplies and that all references to it only applying to supplies in place at 28 February 1998 be deleted.</p> <p>Schedule 1B Water Supply Values:  Paragraph 1, 1st sentence, delete "existing".  Paragraph 1, 2nd sentence, delete "have come to".</p>	To reflect community water supply values appropriately. Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.

NAME	NUMBER	REF	POSITION	DECISION REQUESTED	REASON FOR DECISION REQUESTED
Clutha District Council	6	30	Not Applicable	<p>Rule 12.1.3.1:</p> <p>Paragraph 1, delete ", up to any volume or rate authorised as at 28 February 1998".</p> <p>Principal reasons for adopting [Rules in section 12.1] - Paragraph 4 [6 in version of Water Plan incorporating Council's decisions on proposed plan change 1C], delete "existing".</p> <p>Principal reasons for adopting [Rules in section 12.2] - Paragraph 5 [6 in version of Water Plan incorporating Council's decisions on proposed plan change 1C], delete "existing", amend "1B" to "3B".</p>	<p>Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.</p>

**SUMMARY OF DECISIONS REQUESTED BY SUBMITTER**

**1 James Robert O'Gorman**

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
5	Managing risk of aquifer contamination due to take	New Policy 6.4.10AC	Amend	Increase quality measurements of soil and water throughout the catchment, test at least monthly.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
8	Management of the Deborah and Waiareka Aquifers	Policy 9.4.23	Amend	Increase quality measurements of soil and water throughout the catchment, test at least monthly.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
17	A maximum allocation volume for the North Otago Volcanic Aquifer	Schedule 4A	Oppose	Do not increase any allocations at all, throughout the catchment.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
29	General opposition to plan change	General opposition	Oppose	Abandon the plan change and wait until you have cleaned the river systems throughout Otago before any further water allocation.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
30	Matters beyond the scope of the plan change		Not Applicable	Follow the guidance (when it is available) of the Land and Water Forum report; this plan does not.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment.
30	Matters beyond the scope of the plan change		Not Applicable	Remove from office those officers whose decisions continue to bring toxic outcomes to the environment.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment.
30	Matters beyond the scope of the plan change		Not Applicable	Do not give rights for 35 years in resource consents.	The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.
30	Matters beyond the scope of the plan change		Not Applicable	Educate the farmers that high salt index chemical fertilisers are the reason their soil biology is failing and leaching into our groundwater and streams.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment. Stop and reassess that which you have first. Clean up what you have already before you abuse the environment further. The water from these aquifers is already heavily contaminated. Clean it up before you allocate it.



Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
30	Matters beyond the scope of the plan change		Not Applicable	Bring back the frogs.	The entire plan is flawed in that it is guaranteed to increase contamination in soil and water in the catchment.

## 2 Dunedin City Council

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
2	Connected groundwater community supplies and minimum flows	Policy 6.4.8	Support	Retain Policy 6.4.8 as proposed.	Provides an improved degree of certainty to DCC's ability to continue to supply water to residents during periods of low flow or reduced aquifer levels.
4	Purpose and use of restriction levels	New Policy 6.4.10AB	Amend	<p>Recognition of the adverse impact restriction will have upon community water supplies, and an exemption from the requirement to adhere to restriction levels in order to provide water for human health and sanitation during periods when restrictions are in force.</p> <p>Such an exemption would only be applicable if all practicable water conservation measures (as agreed with the Territorial Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to provide water for human health and sanitation during periods when restrictions are in force. This may entail the requirement to create a new policy. The following wording for a new policy is suggested:</p> <p><i>"Community water supply takes listed in Schedule 4B will be exempt from the requirement to adhere to restriction levels in order to provide water for human health and sanitation purposes during periods when restrictions are in force. Such an exemption is only applicable if all practicable water conservation measures (as agreed with the Consenting Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to</i></p>	While the intent of the policy to protect aquifers from over-depletion during periods of low recharge is understood and supported in principle, the proposed policy may adversely impact upon a community water supplier's ability to provide water for human health and safety.

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
				<i>provide water for human health and during periods of restriction."</i>	
5	Managing risk of aquifer contamination due to take	New Policy 6.4.10AC	Amend	<p>Recognition of the adverse impact restriction will have upon community water supplies, and an exemption from the requirement to adhere to restriction levels in order to provide water for human health and sanitation during periods when restrictions are in force.</p> <p>Such an exemption would only be applicable if all practicable water conservation measures (as agreed with the Territorial Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to provide water for human health and sanitation during periods when restrictions are in force. This may entail the requirement to create a new policy. The following wording for a new policy is suggested:</p> <p><i>"Community water supply takes listed in Schedule 4B will be exempt from the requirement to adhere to restriction levels in order to provide water for human health and sanitation purposes during periods when restrictions are in force. Such an exemption is only applicable if all practicable water conservation measures (as agreed with the Consenting Authority) are implemented and no alternative source of water supply of equivalent quality and quantity can be practicably utilised to provide water for human health and during periods of restriction."</i></p>	While the intent of the policy to protect aquifers from contamination and seawater intrusion is understood and supported in principle, provisions within the policy advocating for the setting of aquifer restriction levels and restricting takes may adversely impact upon a community water supplier's ability to provide water for human health and safety.
12	Community water supplies and restriction levels	Rule 12.2.2A.1	Amend	<p>Amend the wording Policy 12.2.2A.1 as follows:</p> <p>"The taking and use of groundwater for community water supply, up to any volume or rate authorised as at 28 February 1998 <del>18 September 2010</del>, by any take</p>	Since notification of the Water Plan on 28 February 1998, consents held by the DCC to take and use groundwater for community water supplies have been renewed (i.e. the Mosgiel community water supply in 2007) resulting in an increase in the volume of water granted as primary

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
				identified in Schedule 3B is a controlled activity".  Consequential amendments to Rule 12.2.2A.1 resulting from the repealing of Section 93 and 94(1) of the Resource Management Act 1991 by Section 76 of the Resource Management (Simplifying and Streamlining) Amendment Act 2009.	allocation to account for population growth.  Policy 6.4.2A, added by Plan Change 1C, allows for existing primary allocation takes of water used for community water supplies to be granted more water than has been allocated in the past where there is evidence that growth is reasonably anticipated, acknowledging that irrespective of measures to improve efficiency, demand on community water supplies can increase due to population growth. Consequently it is appropriate to acknowledge that the volume of water consented to be taken by community supplies listed in Schedule 3B is unlikely to be less than the volume required at the time Plan Change 4A was notified.
15	Identification of groundwater takes used for community supply	Schedule 3B	Support	Retain Schedule 3B as proposed.	The DCC supports the inclusion of the "Mosgiel Water Supply" in Schedule 3B.
28	General support for plan change	General support	Support	The DCC is generally supportive of Proposed Plan Change 4A.	The DCC is generally supportive insofar as it appreciates that such a change is necessary for achieving the purposes of the RMA and ensuring sustainable development and protection of groundwater resources. However, DCC is concerned about the potential impact of the proposed changes upon its lawfully established groundwater takes used for community water supplies.

### 3 Waitaki Coastal Care

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
5	Managing risk of aquifer contamination due to take	New Policy 6.4.10AC	Support	Supports [management of] seawater intrusion risk.	Notes section 8.1 of the North Otago Volcanic Aquifer Study.
17	A maximum allocation volume for the North Otago Volcanic Aquifer	Schedule 4A	Oppose	Before considering any allocation limit increase collection of aquifer data so a precise and correct decision is made.	Present water extractors need to be better monitored on what they are taking. Recharge patterns are complex and irregular (as reported in section 4.3 of the North Otago Aquifer Study). Kakanui township draws water supply from the Kakanui River within the aquifer (as reported in section 5.2.1 of the North Otago Aquifer Study). Monitoring is integral in groundwater management (as

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
					reported in section 5.3.1 of the North Otago Aquifer Study). Science promoted by ORC doesn't match the opinions, feedback, stories, observations, anecdotes and issues expressed at community workshops held in Kakanui. If more water is allocated for 35 year terms, on little data, there is a good chance the aquifer could become over-allocated.
18	Restriction levels in Webster's Well	Schedule 4B	Oppose	Strongly oppose any relaxing of restrictions.	Notes section 8.2 of the North Otago Volcanic Aquifer Study.
22	Managing risk of aquifer contamination due to take	Map C10 (seawater intrusion risk zone)	Support	Supports [management of] seawater intrusion risk.	Notes section 8.1 of the North Otago Volcanic Aquifer Study.
23	Managing risk of aquifer contamination due to take	Map C10a (seawater intrusion risk zone)	Support	Supports [management of] seawater intrusion risk.	Notes section 8.1 of the North Otago Volcanic Aquifer Study.
30	Matters beyond the scope of the plan change		Not Applicable	Support any measure to clean up and reduce pollution of the aquifer.	Notes section 8.4 of the North Otago Aquifer Study. Nitrate-nitrogen concentrations in the aquifer are a health concern (as reported in section 3.2 of the North Otago Aquifer Study). Human activity has raised nitrate-nitrogen concentrations (as reported in section 7.2 of the North Otago Aquifer Study).
30	Matters beyond the scope of the plan change		Not Applicable	Support better management of aquifer [in relation to recommendations regarding bore construction in section 8.5 of the North Otago Aquifer Study].	Notes section 8.5 of the North Otago Volcanic Aquifer Study.
30	Matters beyond the scope of the plan change		Not Applicable	Present water extractors need to be better monitored on what they are taking.	Before considering any allocation limit increase collection of aquifer data so a precise and correct decision is made. Data is compromised without declaration of volume used by extractors.

#### 4 The Director-General of Conservation

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
4	Purpose and use of restriction levels	New Policy 6.4.10AB	Amend	The following amendment be made to Policy 6.4.10AB Explanation.	Groundwater restriction levels also have a significant role in sustaining the life supporting capacity of aquifers.

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
				<p>Groundwater restriction levels can be useful... They can assist in avoiding land subsidence, aquifer compression, and reduced outflows to surface water <u>and sustaining the life supporting capacity of aquifers.</u></p> <p>That any other consequential amendments to the Regional Plan: Water for Otago required to explain or give full effect to these changes be made.</p>	
17	A maximum allocation volume for the North Otago Volcanic Aquifer	Schedule 4A	Support	The Director-General supports the proposed maximum allocation of 5 million cubic metres per year from the North Otago Volcanic Aquifer.	This allocation will sustain the aquifer's life supporting capacity. The proposed allocation is consistent with the relevant allocations in the proposed National Environmental Standard on Ecological Flows and Water Levels.
30	Matters beyond the scope of the plan change		Not Applicable	<p>The Director-General of Conservation (Director-General) requests that the following amendment be made to Policy 6.4.10A:</p> <p>6.4.10A To enable the taking of groundwater by:</p> <p>(a) In each aquifer other than any in Schedule 2C or within 100 metres of a connected perennial surface water body, defining a quantity known as the maximum allocation volume, which is:</p> <p>(a)(i) For aquifers in Schedule 4A, ...</p> <p>(a)(ii) <u>With the exception of those aquifers detailed in (a)(iii), for aquifers other than those in Schedule 4A ...</u></p> <p>(a)(iii) <u>For the following aquifers:</u></p> <p><u>(1) Manuherikia claybound aquifer, the Manuherikia alluvium aquifer, the Dunstan Flat aquifer and the Earnscleugh Terrace aquifer;</u></p> <p><u>(2) The Maniototo tertiary aquifer; and the</u></p> <p><u>(3) Cardrona alluvial ribbon and Wanaka Basin Cardrona gravel aquifer;</u></p> <p><u>either</u></p> <p><u>A limit which is 35% of the calculated mean annual</u></p>	So that populations of threatened indigenous fish that inhabit waterways recharged in part from the three aquifers listed are not adversely affected by over-allocation.

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
				<p><u>recharge: or</u>  <u>The sum of the maximum annual take for that aquifer at 10 April 2010, less any quantity in a consent where:</u>  <u>(A) All of the water taken is immediately returned to the aquifer or connected surface water body;</u>  <u>(B) The consent has been surrendered or has expired (except where the quantity has been granted to the existing consent holder as a new consent);</u>  <u>(C) The consent has been cancelled (except where the quantity has been transferred to a new consent under Section 136(5));</u>  <u>(D) The consent has lapsed:</u></p> <p>That any other consequential amendments to the Regional Plan: Water for Otago required to explain or give full effect to these changes be made.</p>	
30	Matters beyond the scope of the plan change		Not Applicable	<p>The Director-General requests the following amendment be made:</p> <p>6.4.10A Explanation (paragraph 2)</p> <p>Sustainable allocation of groundwater will be achieved by considering as restricted discretionary activities, those applications where:</p> <p>(i) The individual take would not cause the cumulative take ...</p> <p>(ii) Relevant aquifer restriction levels <u>(including those in Policy 6.4.10(a)(iii))</u> are met.</p> <p>That any other consequential amendments to the Regional Plan: Water for Otago required to explain or give full effect to these changes be made.</p>	To enable the carrying through of the amendments sought by the Director-General to Policy 6.4.10A.

## 5 Contact Energy Limited

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
19	Setting maximum allocation volumes and restriction levels	New Schedule 4C	Amend	<p>Add to Schedule 4C as follows or to like effect (new text underlined):</p> <p>4C.1 When setting maximum allocation volumes in Schedule 4A for an aquifer, consideration will be given to the following matters:</p> <p>...</p> <p>(d) Interaction with surface water bodies and their values, <u>including the potential for groundwater takes to have a cumulative adverse effect on existing lawful surface water uses such as hydro-electric generation.</u></p> <p>Any other consequential changes as are necessary to give effect to the relief sought above.</p>	<p>Groundwater takes can cumulatively impact the quantity of water available in surface water bodies where hydrologically connected. Although Schedule 4C.1 identifies the interaction with surface water bodies as an issue, this could be read as relating solely to the ecological values of such water bodies.</p> <p>Ensuring water is available for hydro-generation is appropriate and necessary as section 7(j) of the RMA provides for the generation of renewable energy as a matter of national importance. The Regional Policy Statement for Otago, which the ORC must give effect to, also recognises the importance of existing and potential hydro-generation from the region.</p>

## 6 Clutha District Council

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
2	Connected groundwater community supplies and minimum flows	Policy 6.4.8	Support	We support the provision for "connected" groundwater takes for community supply as per Schedule 3B to be exempt from minimum flow requirements.	Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.
2	Connected groundwater community supplies and minimum flows	Policy 6.4.8	Amend	Add " <u>Where a community water supply intake is relocated to a point where the same or more water is available for allocation, then the existing rights under Schedules 1B or 3B shall transfer to the new location.</u> "	Rule 12.2.2A.1 limits the volume/rate of a community water supply to that authorised as at 28 February 1998. The S32 report says that for the Clydevale/Pomahaka scheme this would be the combined total of the two previous consents, but this is not carried through into the rule. To address this issue in a more general way, where a take is relocated to a new source where there is less allocation pressure, then the existing rights to exemption from a minimum flow should be retained. This would cover Clydevale/Pomahaka and facilitate any future similar moves.
2	Connected groundwater	Policy 6.4.8	Oppose	Retain the phrase "while ensuring sufficient supply	The key purpose of community water supplies is to

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
	community supplies and minimum flows			under low flow conditions so that human health and safety are not compromised" in the explanation.	provide for health and safety, and it would be dangerous and inappropriate to try to ignore this.
12	Community water supplies and restriction levels	Rule 12.2.2A.1	Amend	Paragraph 1, delete ", up to any volume or rate authorised as at 28 February 1998".	The rule limits the volume/rate to that authorised as at 28 February 1998. The background information says that for the Clydevale/Pomahaka scheme this would be the combined total of the two previous consents, but this is not carried through into the rule. This should be made explicit in the rule, or preferably, the restriction removed.
15	Identification of groundwater takes used for community supply	Schedule 3B	Support	We support the addition of the Clydevale/Pomahaka take to Schedule 3B.	Community water schemes need security of supply, as they provide for the health of communities and stock. Rural water supplies also have environmental benefit (more efficient supply and direct stock access to waterways is avoided). Such supplies should have absolute protection under the Water Plan.
15	Identification of groundwater takes used for community supply	Schedule 3B	Amend	We request that Schedule 3B apply to all identified community water supplies and that all references to it only applying to supplies in place at 28 February 1998 be deleted.  Schedule 3B - amend reference 13, Clydevale-Pomahaka Water Supply by deleting "volume as at 28/2/98: 2082 m <sup>3</sup> /day".	To reflect community water supply values appropriately. Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.
30	Matters beyond the scope of the plan change		Not Applicable	Schedule 1B - Add "Waipahi River Waipahi Water Supply at G45:196488".	To ensure consistency and certainty. Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.
30	Matters beyond the scope of the plan change		Not Applicable	We request that Schedule 1B apply to all identified community water supplies and that all references to it only applying to supplies in place at 28 February 1998 be deleted.  Schedule 1B Water Supply Values: Paragraph 1, 1st sentence, delete "existing". Paragraph 1, 2nd sentence, delete "have come to".	To reflect community water supply values appropriately. Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the Water Plan.
30	Matters beyond the scope of the plan change		Not Applicable	Rule 12.1.3.1:  Paragraph 1, delete ", up to any volume or rate	Community water schemes need security of supply, as they provide for the health of communities and stock. Such supplies should have absolute protection under the



Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
				<p>authorised as at 28 February 1998".</p> <p>Principal reasons for adopting [Rules in section 12.1] - Paragraph 4 [6 in version of Water Plan incorporating Council's decisions on proposed plan change 1C], delete "existing".</p> <p>Principal reasons for adopting [Rules in section 12.2] - Paragraph 5 [6 in version of Water Plan incorporating Council's decisions on proposed plan change 1C], delete "existing", amend "1B" to "3B".</p>	Water Plan.

## 7 Horticulture New Zealand and North Otago Vegetable Growers Association

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
4	Purpose and use of restriction levels	New Policy 6.4.10AB	Amend	Add to the Explanation that the extent of the aquifer recharge volumes will be an important part of establishing restriction levels.	The key to setting a minimum level, and hence restrictions, is the extent of the recharge. While an aquifer may be reduced during summer, recharge will return it to higher levels. There needs to be clear reasons why a restriction would be set significantly higher than the extent of the recharge volume.
5	Managing risk of aquifer contamination due to take	New Policy 6.4.10AC	Amend	Amend Policy 6.4.10AC(d) to read: Setting aquifer restriction levels <u>where needed</u> .	This better reflects Policy 6.4.10AB, to define restriction levels where needed.
5	Managing risk of aquifer contamination due to take	New Policy 6.4.10AC	Amend	Amend Policy 6.4.10AC Explanation by adding a new sentence as follows:  <u>Monitoring of groundwater quality and levels will be undertaken by the Otago Regional Council.</u>	Policy 6.4.10AC(f) requires monitoring of groundwater quality and levels, but the explanation provides no guidance as to who is to undertake this monitoring.
10	Simplify permitted groundwater take	Rule 12.2.2.2	Amend	<p>Retain Rule 12.2.2.2(b) and (c) and (e) as currently provided for in the Regional Plan: Water for Otago; or</p> <p>Amend Proposed Rule 12.2.2.2(e) to 30,000 litres per day and relocate the clause as clause (a), and renumber</p>	The effects on an aquifer are different to surface water and there should be effects-based reasons for the change, rather than a desire for consistency. Those areas where the current volume is 10 m <sup>3</sup> /day will benefit, while those where the current volume is 30 m <sup>3</sup> /day will be penalised. Those currently using 30 m <sup>3</sup> /day will need to apply for a consent at considerable cost, for no demonstrated

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
				subsequent clauses.	resource management reason.  The structure of the Rule would be clearer if clause (e) was renumbered as (a) so it is clear from the outset what the permitted volume is.
12	Community water supplies and restriction levels	Rule 12.2.2A.1	Amend	Amend Rule 12.2.2A.1 (a) to read: The need to observe a restriction level <u>and how that level may be met.</u>	Supports the need to consider a restriction level, but the matter of control should enable the ORC to consider how the restriction level should be met. An application for community water supply should specify measures that would be taken to meet restrictions that may be imposed.
13	Considering effects of take on aquifer properties	Rule 12.2.3.4	Amend	Amend Rule 12.2.3.4 as follows: (a) Maximum allocation volume for the aquifer; and <u>or</u> (b) Mean annual recharge of that aquifer; and (c) The effect of the take on the physical properties of the aquifer.  Specify the physical properties that would be considered under clause (c).	Unless a maximum allocation volume is specified in the Plan the current default is 50% mean annual recharge. It is unclear why both need to be considered as part of a consent application.  The effect of the take on the physical properties of that aquifer could lead to extensive requirements as part of a consent application. The S32 report identifies that restriction levels and maximum allocation volumes protect the physical properties of an aquifer. Where there is not a restriction level and the default maximum allocation volume applies, the ORC should be able to consider the effect of an individual take on the physical properties of an aquifer. However, the current wording of Rule 12.2.3.4(c) does not limit it to this.  The matters that would be considered under Rule 12.2.3.4(c) should be specified, so it is clear to an applicant the extent of information required. "Physical properties of the aquifer" is open to interpretation.
14	Calculation of consented take	New Method 15.8.3	Amend	Add an additional point (d) to Method 15.8.3 as follows:  <u>Where volumes have been calculated on weekly or litres/second the volumes will be ground-truthed and adjusted if required to reflect actual usage volumes.</u>	The proposed methodology is supported to the extent it does not take the 'worst case' scenario which would severely limit the amounts available for allocation. However, there are concerns extrapolating potentially inaccurate litres/second into an annual volume, making a small error a large error. There should be provision for adjustment from unrealistic figures.

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
				<p>Add to the Explanation:</p> <p><u>The purpose of the method is to establish the assessed maximum annual take and will not be used to limit an individual consent.</u></p>	<p>When applied in conjunction with restriction levels the physical properties of an aquifer are protected, so this 'balanced' approach is supported.</p>
17	A maximum allocation volume for the North Otago Volcanic Aquifer	Schedule 4A	Amend	Amend Schedule 4A North Otago Volcanic Aquifer to 7 Mm <sup>3</sup> /year.	<p>The justification for not using the technical recommendation of 7 Mm<sup>3</sup>/year is that it does not consider wider matters such as social and economic benefits of taking and using water. However, 7 Mm<sup>3</sup>/year would provide greater economic benefit.</p> <p>The recommended 5 Mm<sup>3</sup>/year is seen to balance community concerns with the technical recommendation. However, the nature of community concerns seem to relate to the ability to fully exercise a consent because of shallow or poorly constructed bores, rather than insufficient water, and this should not penalise future water users. Limiting the volume for that reason provides no incentive for shallow or poorly constructed bores to be better constructed.</p> <p>The technical group has in all likelihood already struck a balance in making their recommendation that the sustainable allocation limit should be set at 7 Mm<sup>3</sup>/year, as these groups often err on the side of caution. Adding a further level of caution seems to be overly conservative in the guise of taking a balanced approach. A balanced approach would be assessing current consented levels (4 Mm<sup>3</sup>/year) against the maximum sustainable yield (10 Mm<sup>3</sup>/year) and recommending 7 Mm<sup>3</sup>/year. The technical recommendation is already 30% below the aquifer's 50% mean annual recharge.</p> <p>The volume available to be taken is dependent on how assessed maximum annual take is established (Method</p>

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
					15.8.3). If a worst case scenario is used, there would be no scope for new takes in the area.
18	Restriction levels in Webster's Well	Schedule 4B	Amend	Provide rationale for restriction levels for groundwater takes in Schedule 4B for the North Otago Volcanic Aquifer and amend if technical rationale supports lower levels.	The S32 report does not provide details as to how the restriction levels in the North Otago Volcanic Aquifer have been established. In the absence of rationale it is difficult to determine whether they are appropriate. How often will levels be reached given current consented and assessed maximum allocation volumes, and the relationship of the restriction levels to annual recharge volumes?
19	Setting maximum allocation volumes and restriction levels	New Schedule 4C	Amend	Retain matters identified in Schedules 4C.1 and 4C.2 but amend 4C.2(c) by adding " <u>and the extent to which the aquifer recovers from maximum allocation volumes</u> ".	Generally the matters listed are supported, but there should be greater consideration of the relationship between the annual recharge volume and the minimum volume before restrictions apply. As stated in respect to Policy 6.4.10AB the key to setting a minimum level, and hence restrictions, is the extent of recharge. While an aquifer level may be reduced during summer, recharge will return it to higher levels. There needs to be clear reasons why a restriction [level] would be set significantly higher than the extent of the recharge volume. Of note is the consideration of physical properties in the aquifer, on which comment has been made in relation to Rule 12.2.3.4.

## 8 Max Stuart and Cheryl Anne Wilson

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
17	A maximum allocation volume for the North Otago Volcanic Aquifer	Schedule 4A	Amend	Fall from option 5 in paragraph 3.1.3 [of the Section 32 report] and implement option 2. I support option 2 where the allocation is set at 7 Mm <sup>3</sup> /year.	Option 5 as recommended (5 Mm <sup>3</sup> /year) is unnecessary when the other changes are made.

## 9 Kenneth John Keen

Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
12	Community water supplies and restriction levels	Rule 12.2.2A.1	Amend	The Maheno Water Committee Incorporated bore to be exempt from such a harsh regime as indicated in Schedule 4B.	Restriction levels should not apply to community water supplies. A community cannot dry off their cows and not use as much water as they were accustomed to, even though they can and do conserve water if requested.

## Further submitters

### 11 The Director-General of Conservation

Submitter No/Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
7/13	<i>Considering effects of take on aquifer properties</i>	<i>Rule 12.2.3.4</i>	<i>Oppose</i>	<i>Oppose and retain the relevant wording in the proposed plan change.</i>	<i>The maximum allocation volume for an aquifer is not always the mean annual recharge. The ability to consider both matters should be retained.</i>
7/17	<i>A maximum allocation volume for the North Otago Volcanic Aquifer</i>	<i>Schedule 4A</i>	<i>Oppose</i>	<i>Oppose and retain proposed allocation of 5 Mm<sup>3</sup>/year.</i>	<i>5 Mm<sup>3</sup>/year will better sustain the life-supporting capacity of the North Otago Volcanic Aquifer.</i>
8/17	<i>A maximum allocation volume for the North Otago Volcanic Aquifer</i>	<i>Schedule 4A</i>	<i>Oppose</i>	<i>Oppose and retain proposed allocation of 5 Mm<sup>3</sup>/year.</i>	<i>5 Mm<sup>3</sup>/year will better sustain the life-supporting capacity of the North Otago Volcanic Aquifer.</i>
5/19	<i>Setting maximum allocation volumes and restriction levels</i>	<i>New Schedule 4C</i>	<i>Oppose</i>	<i>Oppose and retain the relevant wording in the proposed plan change.</i>	<i>Renewable energy is but one of eleven RMA section 7 matters, and therefore should not be given preference over any other such matters.</i>

### 12 Horticulture New Zealand

Submitter No/Ref	Issue	Provision	Position	Decision Requested	Reason for Decision Requested
6/2	<i>Connected groundwater community supplies and minimum flows</i>	<i>Policy 6.4.8</i>	<i>Oppose in part</i>	<i>No decision requested.</i>	<i>While the transferred volume may be the same, or if more water is available for allocation, there is the potential for effects on other users which require assessment. The efficient use of water should also be assessed.</i>
6/2	<i>Connected groundwater</i>	<i>Policy 6.4.8</i>	<i>Support</i>	<i>No decision requested.</i>	<i>It is accepted that takes for community supply should be exempt from minimum flow requirements for human</i>

<b>Submitter No/Ref</b>	<b>Issue</b>	<b>Provision</b>	<b>Position</b>	<b>Decision Requested</b>	<b>Reason for Decision Requested</b>
	<i>community supplies and minimum flows</i>				<i>health and sanitation purposes.</i>
<i>2/4</i>	<i>Purpose and use of restriction levels</i>	<i>New Policy 6.4.10AB</i>	<i>Support in part</i>	<i>No decision requested.</i>	<i>It is reasonable to exempt community water supply takes from restriction levels if the exemption is limited to human health and sanitation purposes.</i>
<i>4/4</i>	<i>Purpose and use of restriction levels</i>	<i>New Policy 6.4.10AB</i>	<i>Oppose</i>	<i>No decision requested.</i>	<i>It is unclear as to what the submitter is seeking to protect through this addition.</i>
<i>4/17</i>	<i>A maximum allocation volume for the North Otago Volcanic Aquifer</i>	<i>Schedule 4A</i>	<i>Oppose</i>	<i>No decision requested.</i>	<i>There is a discussion document on Ecological Flows and Water Levels but no National Environmental Standard (NES) has been proposed, and any NES would be different to that discussion document. Policy should not be promulgated on the discussion document which has no legal status.</i>
<i>5/19</i>	<i>Setting maximum allocation volumes and restriction levels</i>	<i>New Schedule 4C</i>	<i>Oppose in part</i>	<i>No decision requested.</i>	<i>The Schedule already provides for consideration of interaction with surface water bodies and their values, so specific provision for hydroelectric generation is not necessary.</i>