

**Proposed Plan Change 4B
(Groundwater allocation)**

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

**Officers' Report on
Decisions Requested**

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Abbreviations

MAL	Maximum Allocation Limit (previously Maximum Allocation Volume (MAV))
MAR	Mean annual recharge
NPSFM	National Policy Statement for Freshwater Management 2014
ORC	Otago Regional Council
Proposed plan change / plan change	Proposed Plan Change 4B (Groundwater allocation) to the Regional Plan: Water for Otago
RMA	Resource Management Act 1991
Section 32 Evaluation Report	The evaluation report assessing alternatives, benefits and costs for proposed plan change 4B to the Water Plan as required by Section 32 of the RMA
SOE	State of the Environment (monitoring undertaken in accordance with Section 35(2) RMA)
Water Plan	Regional Plan: Water for Otago (operative at 1 May 2014)

Note: use of section/Section:

section	A reference to another section in this report. A reference to a section of the Water Plan.
Section	A Section of the RMA.

Note: text marking

Operative word / <u>notified word</u>	Notified change, showing change proposed from the Water Plan
Notified word / <u>amended word</u>	Amendment recommended in Officers' report

1. BACKGROUND

The National Policy Statement for Freshwater Management (NPSFM), first released by Government in May 2011 and amended on 31 July 2014, requires the Otago Regional Council (ORC) to establish freshwater objectives and set freshwater allocation limits, amongst other matters.

In terms of Section 5 of the Resource Management Act 1991 (RMA) the Regional Plan: Water for Otago (Water Plan) manages water allocation in Otago in a way that enables activities that use water, while avoiding, remedying or mitigating adverse effects of use. The Water Plan has a stated preference in Policies 5.4.2 and 5.4.3 for avoiding adverse effects on the water resource and on existing lawful users. In keeping with this preference and subsequent national policy, the over-allocation of groundwater in Otago aquifers needs to be avoided.

The physical properties of any aquifer, its water quality, uses made of it and natural values that depend on both it and any surface outflows, can all be adversely affected by the unrestricted taking of water.

Previous plan changes

Plan Changes 1C (Water Allocation and Use) and 4A (Groundwater and North Otago Volcanic Aquifer) introduced the following new principles to the Water Plan:

- To prohibit applications for new groundwater takes from fully allocated aquifers;
- To restrict the volumes for which existing consents from a fully- or over-allocated aquifer would be replaced, to the volumes that have been taken under the existing consent.

Recent review of groundwater provisions

A 2012 review of the Water Plan provisions relating to groundwater allocation was undertaken in accordance with RMA Section 35(2)(b). This review showed that the clarity of the Plan provisions and their efficiency and effectiveness for implementing the two principles described above needed improvement.

Particular attention was given to provisions relating to when the prohibition regime in Rule 12.0 applies and how the transition is made from “over-allocation” to the allocation limit identified in Schedule 4A, or the default of 50% of the mean annual recharge (MAR). The calculated MAR for an aquifer needs certainty and should be stable as taking groundwater supports economic activity.

Key aspects of the proposed plan change

Proposed Plan Change 4B (Groundwater allocation) to the Water Plan clarifies the controls in the Water Plan for avoiding over-allocation of groundwater in Otago, while retaining the established principles of groundwater allocation.

The plan change affects all water managed as groundwater under Policy 6.4.1A.

Notification process

The proposed plan change was publicly notified in the Otago Daily Times on Saturday 17 May 2014 and submissions closed on Tuesday 17 June 2014. A total of 16 submissions were received (2 of which were received after the formal submission period).

The *Summary of Decisions Requested*, which requested further submissions, was notified on Saturday 28 June 2014, with further submissions closing on Friday 11 July 2014. There were 8 further submissions received.

The Summary of Decisions Requested which is attached as Appendix 1, shows decisions requested in all submissions and further submissions, sorted by Water Plan provision.

The purpose of this report

This report considers decisions requested by submitters and further submitters, and recommends amendment of certain plan change provisions to the Hearing Committee to give better effect to the plan change intent. Provisions with amendments that did not receive submissions are not discussed, so these changes should be approved as proposed, subject to any minor changes for consistency purposes.

Documents referred to in this report

This report should be read in conjunction with the following documents:

- *Proposed Plan Change 4B (Groundwater allocation) to the Regional Plan: Water for Otago (17 May 2014).*
- *Summary of Decisions Requested by Provision, including Submitters and Further Submitters (29 August 2014). (Appendix 1)*
- *Section 32 Evaluation Report (17 May 2014)*

2. A LIMIT ON GROUNDWATER ALLOCATION

This section provides recommendations applied to specific requests on the principles of groundwater allocation, being modified by the Plan Change.

2.1 Limiting total annual groundwater allocation

The first two policies amended in the Plan Change, 6.4.10A and 6.4.10A1, set up the groundwater allocation framework, by establishing the concept of a maximum allocation limit (MAL). This gives an annual volume for sustainable taking, consistent with the NPSFM. If water is already allocated to consents, any quantity remaining available is the MAL less what is currently estimated to be the assessed maximum annual take (AMAT). Method 15.8.3.1 is used to estimate this aggregated quantity being taken under consents.

Where MAL for a specific aquifer has been determined through a RMA Schedule 1 process, it is shown in Plan Schedule 4A. A default MAL can be determined on a case-by-case basis as 50% of the mean annual recharge (MAR). MAR is estimated by a calculation guided by the factors in Plan Schedule 4D. Once MAR is calculated, the default MAL is a fixed quantity used for determining consents. It may change when a MAL is specified in Schedule 4A, through a subsequent plan change process.

For detail of the proposed amended policies and associated provisions and the submissions received relating to this matter, refer to:

<i>Provision code</i>	<i>Provision</i>	<i>Page(s) of Proposed Plan Change 4B</i>	<i>Page(s) of Summary of Decisions Requested</i>
1	<i>Policy 6.4.10A</i>	2	11-13
2	<i>Policy 6.4.10A1</i>	2-3	13-16
5	<i>Note box in 12.0</i>	8	22-23
3	<i>Method 15.8.3.1</i>	12-13	16-21
4	<i>Schedule 4D</i>	16	21-22
7	<i>Rule 12.0.1.3</i>	8	25-30
11	<i>Definition of AMAT & MAL</i>	18	36
13	<i>Miscellaneous</i>	-	37
15	<i>Whole of plan change</i>	-	38

2.1.1 Main Issues

Most submitters supported the overall objective of sustainable allocation and use of Otago groundwater. The following are the main issues raised:

- Allocation status should be available on-line and should make clear what quantity is available, as opposed to the total that can be allocated.

- Allocation should be based on demand, considering location, soils and the nature of the activity, rather than on the aquifer’s supply, and take account of permitted activity takes, avoiding over-estimating actual takes, and the method used for quantity estimation to be confirmed through ground-truthing.
- The Plan should express how over-allocation will be managed through phased reduction to MAL.
- Delay policies coming into effect while consent holders measure water usage and collect data including measuring consumptive and non-consumptive aspects of take.
- Abandon the plan change until ORC knows Otago aquifers thoroughly.

2.1.2 Recommendation

Amend Note box in 12.0 as shown below

The Otago Regional Council will use its website www.orc.govt.nz to notify an up-to-date allocation status for aquifers, showing how current allocation compares to the scheduled or default maximum allocation limit (MAL) and will, upon request, advise the applicant of the aquifer’s current allocation status before any application is made.

2.1.3 Reasons

- Clarifying groundwater availability and permitted takes

There is no need to further amend these policies because the heading “Groundwater Takes” before Policy 6.4.10A means this section cannot relate to anything but the *groundwater* in an aquifer. If there is any water currently allocated to consents, that will be deducted to quantify how much remains available.

The quantity of water available in an aquifer is a matter of physical supply, not a matter of demand.

Takes with no more than minor effect are permitted under Rules in 12.2.2, and information about the quantity taken is not provided to ORC. Permitted activity takes are not included in the calculation of take volumes under consents.

- Making the aquifer status available on-line

Publicly-available on-line data on aquifer status can be revisited periodically as investigation and calculations become more thorough or sophisticated.

- Calculating aquifer allocation limits, using the interim Method 15.8.3.1

Method 15.8.3.1 is designed to calculate a maximum annual consented allocation volume for an aquifer until all consents stipulate a maximum annual volume. It

represents the potential annual maximum volume taken by all consents, and is not an estimate of actual water use which needs “ground-truthing”. Consented volume is the starting point because it could potentially all be used, for example if the consent allows for transfer of location of use, or land use activity changes to greater reliance on irrigation. In the short term, prohibition may occur because of over-estimation using this method, but this will be rectified once all consents have a maximum annual volume.

- Volume of water taken historically

This is dealt with more fully in section 3.1.

A distinction needs to be made between an aquifer’s allocation limit and the limits on a consent.

All of the matters listed in Rule 12.2.3.4 are used to determine a consent for a new or re-consented take, and in setting appropriate conditions. Volume of water taken historically is just one consideration, requiring a formal policy direction on which to base consent decisions. The National Environmental Standard on Ecological Flows and Water Levels will provide data on takes where no such requirement is within current consent conditions.

- A potential new policy for reducing taking to the maximum allocation limit

The Plan provides the mechanisms of consent surrender, expiry, cancellation or lapse, with no further allocation until taking is under the limit again; reduction to that actually used historically (Policy 6.4.10A2); takes cannot exceed quantity required for the purpose of use (Policy 6.4.0A). This policy framework has been in place for over ten years. In any plan change introducing a new MAL to Schedule 4A, the extent of any over-allocation in the particular aquifer will be considered, as set out in Schedule 4C.

- Timely action to avoid or address over-allocation

No water source should be adversely affected while consent holders carry out legally-required measurement of takes.

A programme of adding the MAL for aquifers to the Water Plan should continue if required and as sufficient information is obtained to validate the work.

Any delay in implementing this plan change would not meet NPSFM requirements.

2.2 New consents – consumptiveness of takes

Consumptiveness is a measure of the degree to which water use results in a net loss of water from a source water body.

For detail of the proposed amended policies and associated provisions and the submissions received relating to this matter, refer to:

<i>Provision code</i>	<i>Provision</i>	<i>Page(s) of Proposed Plan Change 4B</i>	<i>Page(s) of Summary of Decisions Requested</i>
7	Rule 12.0.1.3	8	25-30
3	Method 15.8.3.1	12-13	16-21

2.2.1 Main Issues

The following is the main issue raised, regarding how Rule 12.0.1.3 addresses the degree of consumptiveness of a take from an aquifer:

- Allocation status should exclude non-consumptive taking, temporary dewatering, and any quantity which returns water to the aquifer.

2.2.2 Recommendations

- (a) Amend Rule 12.0.1.3 as shown below

(2) Is taken for dewatering at a site to allow a construction or structure ~~maintenance~~ repair activity.

- (b) Amend Method 15.8.3.1 as shown below

(c) less any quantity specified in a consent as non-consumptive
~~where all of the water taken is immediately returned to the aquifer or connected surface water body.~~

2.2.3 Reasons

- Managing consumptive and non-consumptive takes; return flow

Non-consumptive takes are excluded from aquifer allocation by Policy 6.4.10A1, and Method 15.8.3.1. Non-consumptive uses of water, or temporary takes, cannot deplete the volume available for annual allocation. Depletion of an aquifer's annual volume is not sustainable, although short-term fluctuations may be acceptable, where a restriction level is in place and is not breached.

Takes associated with structure repair work are expected to result in no significant net loss of water to the aquifer, so it is appropriate to excluded them in Rule 12.0.1.3(2).

Consumptiveness will be examined through case-by-case consideration of applications, where the applicant can demonstrate non-consumptiveness, and the duration of temporary effects. Degree of consumptiveness will be investigated to ensure that no user or value reliant on the groundwater levels in an aquifer is affected by the take. This therefore needs to be reflected under (c) in Method 15.8.3.1 regarding return of water to an aquifer. With respect to Schedule 4D, ORC in calculating MAR will include consideration of efficient irrigation return flows where they are known with sufficient certainty.

3. CONSENTS IN OVER-ALLOCATED AQUIFERS

This section provides recommendations regarding specific requests about how replacement consents are considered. Water take and use records may give a reliable indication of future efficient use. Evidence of taking over at least five years is used in considering replacement surface water take consents.

3.1 Replacement consents

For detail of the proposed amended Policy 6.4.10A2 and the submissions received relating to this matter, refer to:

<i>Provision code</i>	<i>Provision</i>	<i>Page(s) of Proposed Plan Change 4B</i>	<i>Page(s) of Summary of Decisions Requested</i>
9	<i>Policy 6.4.10A2</i>	4-5	30-36
15	<i>Whole of plan change</i>	-	38

3.1.1 Main Issues

While several submitters supported the need to limit taking under replacement consents, some submitters sought:

- Reconsideration of reliance on historical use over at least the preceding five years.
- Consideration of the needs of private residential development with expansion plans, or those who can justify being granted a higher volume.
- Allowance for consents to be renewed and extended.
- Consideration of the highest actual uses in the past 10 years.
- Reduction to 2 years of record as 5 years is an onerous information requirement.
- Other considerations be used when determining re-consented amount.
- Different measures be used to assess how much water is appropriate to grant.
- An equitable cut-back for all permit holders.

3.1.2 Recommendation

Make no amendment to Policy 6.4.10A2 as notified.

3.1.3 Reasons

- Reasonably anticipated growth

Increase in actual taking within reasonably anticipated growth can be described in an application for consent replacement, and considered. Residential development may be able to qualify for registration as a community drinking water supply, if the supply serves a community of more than 25 people for more than 60 days a year.

- Wet or dry seasons, realistic requirements

If there have been no very wet or very dry years in the 5 years, an applicant can always furnish evidence from a longer period of typical usage, to make their case. The ORC will have records of wet or dry years. Users who can demonstrate best industry practice efficiency in a typical dry season may be in a strong position to justify applying for water volumes considered necessary for their activity.

The Policy is about considering evidence of need for water (including information about climate, soil and crops), not about a potential requirement for water (which is dealt with in justifying a take application).

Two years of evidence may not be enough to give a realistic picture of typical taking. It is up to the applicant to provide sufficient evidence to justify an application. The National Environmental Standard on Ecological Flows and Water Levels will ensure take data is collected and provided.

- Consistent implementation of groundwater taking provisions

Replacement consents to take need consistent treatment. Increases to existing taking under current consented takes may adversely affect values and uses of aquifers that are fully- or over-allocated. Consents in other aquifers can be renewed and extended, if justified. Policies such as 6.4.10A2 follow basic principles that have been established for some years and remain the foundation for the consistent implementation of the Water Plan.

- Equitable treatment of applicants

All applicants for replacement consents in an over-allocated aquifer will be treated equitably, as the same considerations will be applied and each, over time, will eventually be subjected to the same need to justify their application.

- Matters of discretion

All of the matters listed in Rule 12.2.3.4 are used to determine a consent for a new or re-consented take, and in setting appropriate conditions. Volume of water taken historically is just one consideration, but it requires the direction of Policy 6.4.10A2 on which to base consent decisions.

3.2 Prohibiting unsustainable taking

For detail of the proposed amended policies and associated provisions and the submissions received relating to these matters, refer to:

<i>Provision code</i>	<i>Provision</i>	<i>Page(s) of Proposed Plan Change 4B</i>	<i>Page(s) of Summary of Decisions Requested</i>
7, 8	<i>Rule 12.0.1.3</i>	8	25-30
6	<i>Rules in 12.2</i>	8-9	24-25

3.2.1 Main Issues

While several submitters supported the need to avoid new or further over-allocation situations, some submitters sought:

- A resource consent option to allow consideration of a take that could go beyond the allocation limit for an aquifer, e.g. when there is doubt over the degree of consumptiveness of a take.
- A policy on phased reduction to MAL in over-allocated aquifers, with extra matters of discretion added to Rule 12.2.3.4 to allow consideration of: the volume taken in the last 5 years; effects of take on surface flows; any Schedule 4A MAL.

3.2.2 Recommendation

Make no amendment to Rules in 12.0 or 12.2 to affect prohibition status of rules.

3.2.3 Reasons

- Prohibit taking from an aquifer that is or would become over-allocated.

It would be inconsistent with the NPSFM to grant taking which is not sustainable. The ORC would not grant an application for a take that would reduce the annual volume of an aquifer, so there is little point applying for, or considering one, and the prohibited activity status sends a clear message to the community that over-allocation will not be perpetuated.

- Non-consumptive takes

An application to take that is totally non-consumptive can be considered. In considering the degree of consumptiveness, some minor losses such as through evaporation may be considered insignificant.

- Sampling or other investigation wells, pits and bores

Bores, under the Plan definition, do not include sampling bores or piezometers, and small takes are permitted by Rule 12.2.2.

- Phased reduction of over-allocation

The Plan provides the mechanisms of consent surrender, expiry, cancellation or lapse, with no further allocation until taking is under the limit again; reduction to that actually used historically (Policy 6.4.10A2); takes cannot exceed quantity required for the purpose of use (Policy 6.4.0A). This policy framework has been in place for over ten years. In any plan change introducing a new MAL to Schedule 4A, the extent of any over-allocation in the particular aquifer will be considered, as set out in Schedule 4C.

The matters of discretion in Rule 12.2.3.4 cover matters for which imposition of a consent condition may need to be considered.

4. OTHER PLAN CHANGE MATTERS

This section provides recommendations regarding specific requests about matters not dealt with elsewhere in this report.

4.1 Policy 6.4.10A3

This provision provides policy guidance on other matters relating to groundwater consenting.

For detail of the proposed amended policies and associated provisions and the submissions received relating to these matters, refer to:

<i>Provision code</i>	<i>Provision</i>	<i>Page(s) of Proposed Plan Change 4B</i>	<i>Page(s) of Summary of Decisions Requested</i>
16	Policy 6.4.10A3	5	23-24

4.1.1 Main Issues

Some submitters sought:

- The need for Policy 6.4.10A3 to clearly relate to groundwater takes only.

4.1.2 Recommendation

Amend Policy 6.4.10A3 as shown below

6.4.10A3 *[Moved from Policy 6.4.10A(c) and (d)]* **In managing the taking of groundwater, avoid in any aquifer:**
(a) Contamination of groundwater or surface water; and
(b) Permanent aquifer compaction.

4.1.3 Reason

Policy 6.4.10A3 sits in the Groundwater Takes section, but for certainty the words that headed former Policy 6.4.10A can be reinstated.

4.2 Simplification and streamlining

Policy explanations, and principal reasons for adopting policies and rules are removed from those parts of the Water Plan affected by this plan change. This has been done to streamline the Plan as provided for by amendments made to the RMA in 2005.

For detail of the proposed changes and the submissions received relating to this matter, refer to:

<i>Provision code</i>	<i>Provision</i>	<i>Page(s) of Proposed Plan Change 4B</i>	<i>Page(s) of Summary of Decisions Requested</i>
10	<i>Removal of explanations and principal reasons</i>	3-5, 8	36

4.2.1 Issue

A submission requested the retention of explanations and principal reasons for adopting due to the helpful information and useful context they provide.

4.2.2 Recommendation

Delete specified explanations and principal reasons for adopting.

4.2.3 Reason

The deletion of these provisions simplifies the Water Plan. Only objectives, policies and rules are required in a regional plan; explanations are optional. Provisions need to be able to be read without the need for explanation. The ORC continues to produce a range of supporting documents, including the SOE reports, brochures and guidelines on using the Water Plan, and website material.

4.3 Minor and consequential amendments

The plan change proposes a number of minor and consequential changes, including changes to the Plan's table of contents, page numbering, and headers and footers.

For detail of the proposed changes and the submissions received relating to this matter, refer to:

<i>Provision code</i>	<i>Provision</i>	<i>Page(s) of Proposed Plan Change 4B</i>	<i>Page(s) of Summary of Decisions Requested</i>
12	<i>Minor and consequential changes</i>	19-20	37

4.3.1 Issue

A submission sought changes consequential to the decisions requested.

4.3.2 Recommendation

Make any further amendments necessary to give effect to the proposed plan change.

4.3.3 Reason

Clause 10(2) of Schedule 1 RMA provides for any necessary consequential alterations.

5. MATTERS NOT ADDRESSED IN THIS PLAN CHANGE

5.1 Matter beyond the scope of the plan change

One submitter requested an aquifer in the Middlemarch area be identified through this Plan Change and that it be a groundwater protection zone.

5.1.1 Recommendation

Make no amendment to address matters beyond the scope of this plan change.

5.1.2 Reasons

This plan change did not undertake a comprehensive evaluation of the need for groundwater protection zones, and land use controls are not relevant to groundwater allocation. The matter of protecting groundwater quality from leachate has been addressed through Plan Change 6A (Water Quality) and any aquifer-specific water quality issues would need to be managed through a separate plan change.