

**Proposed Plan Change 3A
(Minimum Flow
for Taieri River at Tiroiti)
to the Regional Plan: Water for
Otago**

**Officer's Report
on Decisions Requested**

Introduction

The Otago Regional Council prepared Proposed Plan Change 3A (Minimum Flow for Taieri River at Tiroiti) to the Regional Plan: Water for Otago, detailed in the document *Table of Proposed Changes*, dated 26 June 2010. The changes proposed are:

- An addition to Schedule 2A of a minimum flow and monitoring site for the Taieri River at the existing Tiroiti flow recorder. A minimum flow of 1150 l/s is proposed.
- A new area for the Taieri River catchment upstream of Tiroiti, downstream of Waipiata, is added to Map B3. This shows also in Maps B2, B4 and the Map B Index. A drafting error with respect to the Cap Burn catchment is proposed for correction.
- Resultant amendment is made to Policy 6.4.5 and Rule 12.1.4.4, to refer to the new minimum flow and monitoring site.
- Further consequential and minor changes are made including noting this plan change process in the Water Plan's section 1.4 "Process of Plan preparation".

Proposed Plan Change 3A (Minimum Flow for Taieri River at Tiroiti) was publicly notified in the Otago Daily Times on Saturday 26 June 2010 and submissions closed on Monday 26 July 2010. A total of six submissions were received, one of which was received after the submission closing time set.

The *Summary of Decisions Requested*, which requested further submissions, was notified on Saturday 14 August 2010, with further submissions closing on Friday 27 August 2010. There were two further submissions received.

This document, *Officer's Report on Decisions Requested to Proposed Plan Change 3A (Minimum Flow for Taieri River at Tiroiti) to the Regional Plan: Water for Otago* (15 September 2010) evaluates the decisions that were requested by submitters and further submitters, and makes recommendations to the Hearing Committee by matter.

This document should be read in conjunction with the *Table of Proposed Changes* and the 14 August 2010 document *Summary of Decisions Requested*.

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Abbreviations

l/s	Litres per second
Proposed plan change / plan change	Proposed Plan Change 3A (Minimum Flow for Taieri River at Tiroiti) to the Regional Plan: Water for Otago
RMA	Resource Management Act 1991
Water Plan	Regional Plan: Water for Otago

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.

SECTION 1: ARRANGEMENTS FOR A NEW MINIMUM FLOW

Introduction

This section evaluates submissions regarding the proposed new map area and monitoring site, and the adjustments to Policy 6.4.5 and Rule 12.1.4.4. These provisions lay the foundations for specifying a new minimum flow.

Plan provisions affected:

- Policy 6.4.5 – application of minimum flows.
- Rule 12.1.4.4 - restricted discretionary activity for taking water in Schedule 2A catchments.
- Map B3 – Minimum flow catchment boundaries and monitoring sites.

Refer to

Table of Proposed Changes, References 1, 2, 4: pages 1, 3, 4

Summary of Decisions Requested: pages 9, 12

1.1 Overview

The submissions and further submissions received all related in varying degrees to the arrangements for the inclusion of a new minimum flow.

- Two submissions specifically supported the proposed new area, its monitoring site and the provision of a minimum flow; and three submissions appear to also support.
- One submitter did not specify a position.
- Although one further submission opposed a supporting submission, there was no opposition to the principle of establishing a Tiroiti minimum flow.

1.2 Evaluation

All of the proposed changes to these provisions were supported by those submitters who addressed them. These provisions must be amended for the minimum flow for the Taieri River at Tiroiti to be added to the Water Plan.

1.3 Recommendation

Adopt Policy 6.4.5, Rule 12.1.4.4 and Map B3, as proposed.

Reason:

- These provisions require amendment for the additional minimum flow to be added to the Water Plan.

SECTION 2: DETERMINING THE NEW MINIMUM FLOW

Introduction

This section evaluates submissions regarding the proposed new minimum flow itself, to be specified in Schedule 2A, and the level at which it should be set.

Plan provision affected:

Schedule 2A, for Taieri River at Tiroiti.

Refer to:

Table of Proposed Changes, Reference 3: page 4.

Summary of Decisions Requested: pages 9 - 12

2.1 Overview

There were six submissions and 2 further submissions on determining the minimum flow.

- One submission supported establishing the proposed minimum flow for Schedule 2A as proposed. A further submission opposes this.
- One submission requested a much higher minimum flow (8000 l/s) to provide for kayaking. A further submission opposes this.
- One submission requested a much lower minimum flow (0 l/s), until further investigation is undertaken.
- One submission requested a slightly lower minimum flow (1075 l/s), or that a plan be suggested to support that proposed figure.
- One submission did not oppose the proposed 1150 l/s, but felt that it is at the extreme upper range of potential figures.
- One submission requested a minimum flow set to achieve river health (particularly water quality) outcomes. A further submission opposes this.

2.2 Evaluation

There is a marked divergence of views about what is an appropriate and acceptable minimum flow.

Existing minimum flows in Water Plan

Such extremes in views were encountered in the preparation of the Water Plan, and the Taieri's existing regime of minimum flows was the result of compromises and arbitration. It is to be expected that those representing irrigation interests believe minimum flows proposed should be lower to reduce impact on use of their farmland in the catchment, and that those representing recreational activities or those suggesting better river health would request that their interests be considered in setting minimum flows.

There was no intention to reopen these catchment-wide management arguments through this narrow-scoped plan change.

No submitter on this proposed plan change has suggested an alternative to the proposed minimum flow of 1150 l/s at Tiroiti, using an argument that can be substantiated. As the investigations of catchment hydrology reveal, the proposed minimum flow allows irrigators in the Kye Burn and Swin Burn to make use of local higher flows, in a manner that is consistent with the existing minimum flow regime.

Section 32 report on alternatives, benefits and costs

The existing minimum flow at Sutton already impacts on the use of farmland in the catchment. As expressed in the Section 32 report, it is considered that the impacts on taking water at typical

low flows, of a minimum flow of 1150 l/s at Tiroiti will be virtually indistinguishable from current impacts of the minimum flow of 1250 l/s at Sutton, while providing for better management of high flow harvesting in the Kye Burn and Swin Burn. Higher flow freshes will be able to be harvested locally, rather than waiting for a remote monitoring site to register the extra water's availability, which will help build community wellbeing.

The two approximately equal areas of catchment that would be formed by this new minimum flow site replace the current single area between Waipiata and Sutton, which is subject to the minimum flow at Sutton.

Supporting investigations of catchment hydrology

The minimum flow proposed is not simply an arithmetical calculation, but has been based on the study of more than ten years' actual measured flows. While this reflects rainfall patterns, it is not a study of rainfall. The flow measurements were made when takes in the Kye Burn and Swin Burn were not reduced by rostering. Nevertheless, the proposed minimum flow is based on a good understanding of the hydrological characteristics, at both high and low flows, of the Taieri catchment and the observed contributions from these two tributaries.

The Kye Burn is the single biggest tributary upstream of Sutton, and the importance of the Kye Burn and Swin Burn to supporting natural and human use values downstream is recognised. These tributaries naturally contribute a significant amount of water, which helps to meet the needs and interests of the community dependent on the water of the Taieri catchment. Any mechanism that allows greater taking by any group in periods of typical low flows, would adversely affect others relying on flows downstream.

Correlations with Waipiata are essential because those upstream of that site have to meet a minimum flow of 1000 l/s. This provides certainty about the contribution from tributaries between Waipiata and Tiroiti and the correlation, at times of low flow when weather conditions are uniform, becomes an important aspect of that.

Sufficient information is held on catchment hydrology to support the proposed minimum flow of 1150 l/s.

Future opportunity for re-examination of issues and values

In due course, when all minimum flows in the Taieri catchment are reviewed, there will be the opportunity to reconsider community values including economic impacts, recreational requirements and stream health (including water quality) factors. Rivers that naturally experience low flows may, however, not be optimum venues for activities such as kayaking year-round. When flows are naturally low, stopping takes for irrigation will not bring about a realistic flow for kayaking.

Non-regulatory mechanisms

The Water Plan contains methods for assisting landholders to farm through droughts, including provision for local-based rationing, developing new infrastructure, indicating opportunities for storage, waste reduction and other efficiencies in water use, and development and use of codes of practice. ORC's Land Resources unit is experienced in such assistance.

2.3 Recommendation

Adopt the minimum flow of 1150 l/s at Tiroiti, in Schedule 2A, as proposed.

Reasons:

- The Plan does not favour one group of irrigators over another.
- The proposed minimum flow was derived following sufficient observation of flows to understand the hydrological characteristics and behaviour of the tributaries, at different levels of flow.
- The water in any one tributary is an essential component of the flows in the catchment, which support natural and human use values of the catchment, and meet the wider community's needs and interests.
- Waipiata is the only site with which to make useful correlations, because it is the minimum flow upstream that sets the benchmark.
- Impacts on water taking at typical low flows would be very similar whether the minimum flow was set at Tiroiti or Sutton, while the additional site allows for more responsive high flow harvesting opportunities.

SECTION 3: OTHER PLAN CHANGE MATTERS

Introduction

Section 3 evaluates any submissions made regarding minor and consequential matters.

MINOR AND CONSEQUENTIAL CHANGES

Refer to

Table of Proposed Changes; Reference 5: pages 7-8

Summary of Decisions Requested: N/A

3.1 Overview

The proposed plan change proposes to adjust a number of elements in the Plan to be consistent with and give effect to the proposed provisions. No submissions were received.

3.2 Recommendation

Make minor and consequential changes, including those referred to above, as required to give effect to the final decision.

SECTION 4: MATTERS BEYOND THE SCOPE OF THE PROPOSED PLAN CHANGE

Introduction

Section 4 evaluates the submission received in response to Proposed Plan Change 3A, which is considered to be beyond the scope of the proposed plan change.

Refer to:

Summary of Decisions Requested: page 15

4.1 Overview

One submission requested a review of the minimum flow at Sutton and Outram, to provide for kayaking.

4.2 Staff evaluation

The nature of this submission means that the comments made and decision requested are matters beyond the scope of Proposed Plan Change 3A. The purpose of this plan change is to set an additional minimum flow and monitoring site at Tiroiti. It does not review all of the minimum flows in the Taieri catchment.

Giving consideration to any of these matters would require a variation to the plan change, or a new plan change, to ensure persons potentially affected by these matters are consulted and heard.

In due course, when all minimum flows in the Taieri catchment are reviewed, there will be the opportunity to consider catchment-wide community values including economic impacts, recreational requirements and stream health (including water quality) factors.

4.3 Recommendation

Reject the submission.

Reason:

The request relates to matters which are beyond the scope of this proposed plan change.

SECTION 5: ADOPTION OF THE PROPOSED PLAN CHANGE

Refer to:

Proposed Plan Change 3A

5.1 Overview

Once the submitters have been heard, and this officer's report received, the committee needs to consider the proposed plan change as a whole.

5.2 Recommendation

That the Council adopt Plan Change 3A (Minimum Flow for Taieri River at Tiroiti) as proposed.