

From the lakes to the sea: managing the amount of water in the Clutha River/Mata-au



Frequently asked questions

Developing a water quantity plan change for the Clutha River/Mata-au, Kawarau and Hawea Rivers and Lakes Wakatipu, Wanaka, Hawea, Dunstan and Roxburgh

What is the purpose of developing the Clutha River/Mata-au Plan Change?

The purpose of developing this change to the Regional Plan: Water for Otago (Water Plan) is to manage the amount of water in the Clutha River/Mata-au. It will set minimum flows and water allocation limits for the main stems of the Clutha River/Mata-au, Kawarau and Hawea Rivers, and levels and allocation limits for Lakes Wakatipu, Wanaka, Hawea, Dunstan and Roxburgh.

Why we are doing this plan change?

The Clutha River/Mata-au, the Kawarau and Hawea Rivers and Lakes Wakatipu, Wanaka, Hawea, Dunstan and Roxburgh support unique and diverse values. At the same time, these rivers and lakes are also becoming increasingly important in supporting the growth of the region's tourism and primary industries and the expansion of urban areas in the Southern Lakes area and Central Otago. Lakes Hawea, Dunstan and Roxburgh are hydro lakes.

With this plan change ORC wants to provide more certainty around the availability of water for new and existing users and ensure the values of these rivers and lakes are maintained into the future.

The Resource Management Act 1991 (RMA) recognises that setting minimum flows and minimum water levels is a function that ORC has to achieve the sustainable management of our natural and physical resources. The National Policy Statement for Freshwater Management 2017 (NPSFM) requires ORC to set minimum flows/levels and allocation limits for all freshwater bodies, avoid over-allocation and ensure efficient water use.

ORC has committed to the above in its regional planning instruments: the Regional Plan Water for Otago (Water Plan) and (Proposed) Regional Policy Statement.

How does the Water Plan manage surface water?

The Water Plan currently sets out tools for managing the taking of water through the use of a resource consent or as a permitted activity. These tools include stating minimum flow levels and allocation limits for rivers and connected groundwater.

What are minimum flows?

A minimum flow is a water flow in a river, set to maintain the river's aquatic ecosystems and its natural character during low flow conditions. When the river flow in a catchment's main stem drops below the minimum flow, water permit holders and some permitted takes must stop taking water.

Some water takes are exempt from a minimum flow. These are:

- consented community water supplies listed in the Water Plan;
 - deemed permits (Although any resource consent granted to replace a deemed permit will be subject to the catchment's minimum flow);
 - Water takes for firefighting, stock drinking and domestic use, provided the taking does not have an adverse effect on the environment; and
 - Some water takes permitted under the Water Plan.
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What is an allocation limit?

An allocation limit is the total amount of water that permit holders are allowed to take from a catchment. There are two types of allocation in the Water Plan for surface water: primary and supplementary.

A primary allocation limit is the total amount of water that can be taken from a surface water body by persons with a water permit (resource consent or deemed permit) classed as primary. It is set to maintain environmental values supported by this water body, but also to provide certainty around water availability for existing consent holders. The Water Plan identifies primary allocation limits for specified catchments in a Schedule. Catchments that are not listed in this schedule are given a "default" primary allocation limit under the provisions Water Plan, which is 50% of the river's mean annual low flow. A primary allocation limit is expressed in litres per second (L/s). This "default" primary allocation limit, however, does not apply to the Clutha River/Mata-au and Kawarua River main stems and the Lakes Wakatipu, Wanaka, Hawea, Roxburgh and Dunstan at present.

In fully or over-allocated catchments (where the amount of water that has been allocated as primary allocation has reached or exceeds the primary allocation limit) no new consents for the taking of water as primary allocation can be granted, unless the application is made by a person holding an existing water permit or if the proposed take is non-consumptive (i.e. the water taken is immediately returned to the water body that it was taken from).

When no new consents for the taking of water as primary allocation can be granted, further water may be granted consent as supplementary allocation. Supplementary allocation consents have a higher minimum flow level (when compared to the primary allocation level) and water is usually only able to be taken in winter and spring, to store for later use.

What is a minimum water level for a lake or aquifer?

A minimum water level is a specified level below which taking of water cannot occur, or is limited by a stated percentage, as in a rationing regime. Minimum water levels can be set for lakes or aquifers (in relation to an aquifer, see *aquifer restriction level* below).

Minimum water levels for lakes may be set to manage particular values or uses of the water.

How does the Water Plan manage groundwater?

If groundwater is 'connected' to a permanently flowing surface water body, then it is managed as surface water, and would be subject to any relevant minimum flow and allocation limit. If groundwater is not connected to a permanently flowing surface water body, it is managed as groundwater by setting a maximum allocation limit, and sometimes restriction levels.

What is a maximum allocation limit?

The maximum allocation limit sets a limit to the total volume of water able to be taken annually from an aquifer across all water permits. It is set to maintain groundwater levels and avoid aquifer compaction (Aquifer compaction occurs when the structure of the aquifer collapses due to overabstraction. It causes an aquifer to lose its storage capacity).

The Water Plan lists the maximum allocation limit for some aquifers in a Schedule. If an aquifer is not specified in this Schedule, the maximum allocation limit is automatically determined as 50% of the mean annual recharge of the aquifer. A maximum allocation limit is expressed in million cubic metres per year (Mm³/yr).

How will the maximum allocation limit affect water takers?

Where an aquifer is fully or over-allocated (where the amount of water that has been allocated for water permits has reached or exceeds the maximum allocation limit) no new consents for the taking of groundwater from this aquifer can be granted. The exception being an application made by a person holding an existing consent to take that water or if the proposed take is for temporary dewatering or is non-consumptive.

The Water Plan provides for the replacement of existing consents in fully allocated or over-allocated aquifers. Where an aquifer is fully or over-allocated the volume of water that is granted under a new consent will take account of how much water has been taken in the preceding 5 years.

What are aquifer restrictions and aquifer restriction levels?

Groundwater restrictions limit the taking of water from an aquifer during extended periods of low recharge, or assist with managing the values and uses supported by groundwater or connected surface waters in localised areas. Restrictions seek to maintain the health of aquifers and protect them from over-depletion and compaction.

The Water Plan identifies the aquifer restriction levels at which the taking of groundwater will be increasingly restricted. Typically, those restrictions will be by a stated percentage of the consented take, as in a rationing regime. When the water level in the aquifer reaches a restriction level, all consented groundwater takes must be restricted or cease.

For some aquifers the Water Plan also imposes restrictions on irrigation takes during certain times of the year, rather than being based on levels.

Aquifer restriction levels and periodic restrictions for other aquifers may be added to the Water Plan through a plan change process, usually alongside setting the maximum allocation limit.
