

Practice Note - Supplementary Allocation

Introduction

The operative Regional Plan Water (RPW) provides a framework for managing water takes including primary and supplementary allocation of water. The take and use of water may be subject to minimum and residual flows that prioritise the health and well-being of water bodies and freshwater ecosystems. There are also catchments where no allocation regime exists. This guidance note focuses on supplementary allocation and supplementary minimum flows. More general guidance on processing water takes can be found here: [Practice Note - Technical advice for applying for consent to take and use water](#) and here: [FAQs for PC7](#).

| Allocation | Minimum and Residual Flows |
|---|--|
| <p><u>Primary allocation (Policy 6.4.2):</u></p> <p>(a) That specified in Schedule 2A but where no limit is specified in Schedule 2A, 50% of the 7-day mean annual low flow; or</p> <p>(b) The sum of consented maximum instantaneous, or consented 7-day, takes of surface water or connected groundwater¹.</p> | <p>For catchments identified in Schedule 2A, minimum flows are set for the purpose of restricting primary allocation takes of water (Policy 6.4.3).^{2,3}</p> <p>For catchments outside Schedule 2A, minimum flows are to be applied to new takes on a case-by-case basis recognising the water use needs of the community while providing for the aquatic ecosystems and natural character of the waterbodies of the catchment (Policy 6.4.4)</p> <p>A residual flow condition may be applied in addition to a minimum flow. The need to maintain a residual flow at the point of take will be considered to provide for the aquatic ecosystem and natural character of the source water body (Policy 6.4.7).</p> |
| <p><u>Supplementary allocation (Policy 6.4.9, Policy 6.4.10, and Schedule 2B):</u></p> <p>To provide for supplementary allocation for the taking of water, in blocks of allocation where that is appropriate, on a flow sharing basis between instream and out of stream use.</p> | <p>A minimum flow is set to ensure that no less than 50% of the natural flow remains instream (Policy 6.4.9 (a) and Schedule 2B).</p> <p>Where a supplementary minimum flow is not identified in Schedule 2B, the formula in Method 15.8.1A.1 is used:</p> |

¹ Full details of what is summed for this calculation are detailed in Policy 6.4.2.

² Minimum flows and residual flows can only be applied to replacement takes where this condition is on the consent being replaced in accordance with Chapter 10A.

³ Exceptions to the imposition of minimum flows for new takes are outlined in Policy 6.4.3.

| | |
|---|---|
| <p>Supplementary allocation blocks are determined using Methods 15.8.1A.1 and 15.8.1A.2.</p> | <p><i>Supplementary minimum flow = Assessed actual take + supplementary allocation block(s) (Method 15.8.1A.1)</i></p> <p>Where the actual take is unable to be calculated for the main stem or tributary, the minimum flow is calculated using Method 15.8.1A.2:</p> <p><i>Supplementary minimum flow = Primary allocation (Policy 6.4.2) + Supplementary allocation block(s) (Method 15.8.1A.2)</i></p> |
| <p><u>No allocation</u> regime as per Policy 6.4.1.</p> <p>As per Policy 6.4.1 and the explanation to Policy 6.4.2, any surface water or connected groundwater take from the main stem of the Clutha/Mata-Au or Kawarau Rivers or the lakes that form part of their catchments (Lakes Roxburgh, Dunstan, Hawea, Wanaka, Wakatipu)</p> <p>Non-consumptive takes.</p> <p>Augmented takes – water being taken which has been delivered to the source water body for the purpose of that subsequent take.</p> | <p>No minimum flows apply.</p> |

Table 1: Allocation limits and minimum flows

Example: Waiwera at Maws Farm (1 October – 30 April)

| Minimum Flow | Primary Allocation | Supplementary Minimum Flow | Supplementary Allocation Block |
|---------------------|---|-----------------------------------|---|
| 280 l/s | 150 l/s available at flows above 280 l/s | 600 l/s | 100 l/s available at flows above 600 l/s |

What is Supplementary Allocation?

Supplementary allocation is a volume of water that can be taken from a catchment that is only available at higher flows. The minimum flow for a supplementary allocation take is higher than for a primary allocation take, and the policies in the RPW require that at least as much water must be left in the river as is taken out of it. This requirement is

intended to maintain aquatic ecosystems and natural character, and to provide for flow variability.

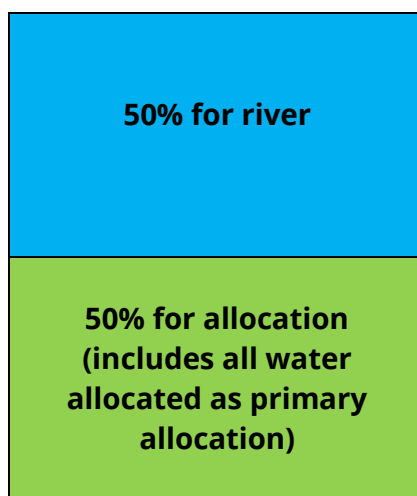
Policy 6.4.9 of the RPW provides the basis for supplementary allocation. The default position is contained in Policy 6.4.9(a):

“To provide for supplementary allocation for the taking of water, in blocks of allocation where that is appropriate:

(a) Such that up to 50% of flow at the catchment main stem, minus the assessed actual take, is available for allocation subject to a minimum flow set to ensure that no less than 50% of the natural flow remains instream.....”

So, what does this mean? Policy 6.4.9(a) is stating that for supplementary allocation, 50% of the available water flowing in the river can be allocated, and 50% of it must be left to flow in the river. An important point is that the 50% available to be allocated must include the existing primary allocation from the catchment (that’s what the reference to the assessed actual take⁴ is about). In some catchments the assessed actual take is already high and may limit supplementary allocation availability.

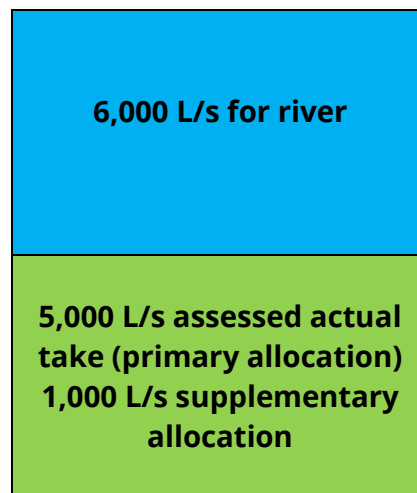
Supplementary allocation Policy 6.4.9(a)



For example, let’s consider a river that has an assessed actual take of 5,000 litres per second (i.e. 5,000 l/s is currently taken from the river or is consented to be taken from the river if accurate data on actual takes are not accurate). If an applicant sought to take 1,000 litres per second as supplementary allocation, then 6,000 l/s would be allocated from the catchment, and that means that 6,000 l/s of water will need to be left to flow in the river as well. Therefore,

⁴ Assessed actual take is the volume of water in primary allocation that is actually being taken, as calculated under Method 15.8.1.1 of the RPW

12,000 l/s of water would need to be flowing in the river to provide for both the allocation and the ecosystems in the river.



=Total of 12,000 L/s in river

Calculations for supplementary allocation are made on a catchment basis. Policy 6.4.9 directs that the reference site for minimum flows is on the main stem of the catchment. (It is typically at the bottom end of the main stem).

Catchments listed in Schedule 2A are mapped in Section B of the RPW planning maps: [RPW](#). Outside of Schedule 2A, the reference site for the catchment is the point at which each catchment enters the Clutha/Mata-Au or Kawarau main stems, Lakes Roxburgh, Dunstan, Hawea, Wanaka, Wakatipu, or the coastal marine area.

In many catchments, supplementary allocation permits often do not have access to water during dry periods. However, the availability of supplementary allocation and the frequency of the use of the take will depend on the nature of each catchment, existing consented takes and their use, and the climate conditions of any particular year.

What is a Supplementary Minimum Flow?

Supplementary allocation takes are often subject to a minimum flow. The RPW defines a minimum flow as

“The flow below which the holder of any resource consent to take water must cease taking water from that river.”

A minimum flow is the flow in a river below which abstractions must cease. Supplementary minimum flows are always higher than primary minimum flows.

Calculating supplementary minimum flows is addressed by Policy 6.4.9 and Method 15.8.1 A.2 and reflect the equation below.

Supplementary minimum flow = assessed actual take + supplementary allocation(s)

In the example above, the supplementary minimum flow would be 6,000 L/s if there were no other supplementary takers. This would mean that water could only start to be taken when flows were above this at a flow reference site on the catchment main stem.

Is it Possible to Have a Lower Supplementary Minimum Flow?

Supplementary minimum flows can be very high, meaning that access to water is typically limited for supplementary allocation permit holders especially during the irrigation season. Policy 6.4.9 does provide an alternative to this, in part (b), as follows:

“Policy 6.4.9 – To provide for supplementary allocation for the taking of water, in blocks of allocation where that is appropriate:

...

(b) On an alternative basis provided:

- (i) The take has no measurable effect on the flow at any Schedule 2 monitoring site, or any site established in terms of Policy 6.4.4, at flows at or below any minimum flow applying to primary allocation; and*
- (ii) Any adverse effect on any aquatic ecosystem value or natural character of the source water body is no more than minor; and*
- (iii) There is no adverse effect on any lawful existing take of water.”*

This is a stringent test to pass and will require a comprehensive evidential basis. The application will need to clearly assess and provide factual supporting evidence assessing adverse environmental effects on ecosystem values and natural character, and on lawful existing takes.

What are Supplementary Allocation Blocks?

How much supplementary allocation is available in a specific catchment is outlined in the explanation to Policy 6.4.9. Where the Council thinks that there may be more than one application for supplementary allocation over the next few years, allocation ‘blocks’ can be provided for by a plan change. These are detailed in Schedule 2B to the RPW and currently apply to takes in the following catchments:

- Welcome Creek catchment,
- Kakanui catchment,
- Waianakarua catchment,
- Trotters catchment,
- Waihemo/ Shag catchment,
- Pomahaka catchment.

- Waiwera catchment; and
- Lindis River catchment.

For takes outside of Schedule 2B, [Method 15.8.1A1](#) of the RPW is used to determine the supplementary block size. For some catchments these supplementary blocks will have already been calculated if there are existing supplementary takes in the catchment. For others, this will need to be undertaken when the application is lodged.

Note: An application for supplementary allocation under Policy 6.4.9 (a) should include details on the supplementary allocation block that is being applied under and minimum flow that will apply to the take.

The block provides a set quantity of water (l/s) that can be granted with the same minimum flow. The size of the block is related to the 7-day mean annual low flow of the catchment. Once the first block is full then a block of the same size becomes available (but with a higher supplementary minimum flow).

Table 2: Determining supplementary allocation blocks under Method 15.8.1A1

| 7 day mean annual low flow of catchment (litres per second) | Supplementary allocation block (litres per second) |
|--|---|
| < 10 | 50 |
| 10 – 299 | 100 |
| 300 – 999 | 250 |
| > 1000 | 500 |

The Council can provide advice on whether there is supplementary allocation remaining in a Schedule 2B block or what supplementary allocation block applies to your catchment.

What is Further Supplementary Allocation?

There is one other option in terms of allocation and minimum flows for supplementary allocation, and that is outlined in Policy 6.4.10 of the RPW. The policy states:

'In addition to Policy 6.4.9, to provide for further supplementary allocation without any restriction on the volume taken, where the minimum flow applied is equal to the natural mean flow.'

Essentially, Policy 6.4.10 is designed to facilitate water harvesting (storage) when flows in catchments are very high (i.e. during flood flows). It is anticipated that an application made under Policy 6.4.10 will demonstrate that water storage is available or will be constructed. An exception would be where the purpose of use is one where high volumes of water can be used immediately.

The natural mean flow typically relates to the natural mean flow at the point of take.

What is the difference between a Supplementary Minimum Flow and a Residual Flow?

Supplementary minimum flow:

Minimum flows are (generally) set at a point at or near the bottom of a catchment⁵. There are two reasons for this – first, by setting a minimum flow at the bottom of a catchment it is assumed that if there is sufficient water flowing at this point in the river or stream, then there will also be enough water upstream to maintain life-supporting capacity and natural character. Second, the point where the minimum flow applies should be below all the water permits to take water from a catchment, because if there are water permits taking water below that point in the catchment their exercise would mean that the flow in the river would decrease below the desired minimum.

Policy 6.4.9(a) provides for supplementary takes subject to a minimum flow being imposed to ensure that no less than 50% of the natural flow remains instream. To implement that approach a flow monitoring station would logically be required in the catchment below the take.

In cases where a take is located below the minimum flow recorder site, such as in the Waianakarua River, the consent holder's instantaneous rate of take is added to the river's supplementary minimum flow to ensure the minimum flow remains in the river below their intake.

Residual flows

Policy 6.4.7 states that:

"The need to maintain a residual flow at the point of take will be considered with respect to any take of water, in order to provide for the aquatic ecosystem and natural character of the source water body."

Residual flows are a rate or volume of water that is required to be left below a point of take. They are designed to look after the aquatic ecosystems and natural character of the river at and immediately downstream of the point of take. This requires understanding the specific natural values at the point of take and within the river downstream and the characteristics of the river (for example, would it naturally dry up at some point in summer). Residual flows recognise that tributaries can have different flow characteristics from main stems.

A residual flow has the same sort of effect on the exercise of a water permit that a minimum flow does. This is because the residual flow needs to be maintained downstream of the point of take. As flows in the tributary decrease naturally the water permit holder will have to start to restrict the volume of water taken to ensure that there

⁵ Note that for larger catchments, a number of minimum flows may be set on the catchment main stem, in order to provide a greater level of control. For example, there are four minimum flow points for the Taieri River.

is enough water left to meet the residual flow requirement. In low flow conditions, the take may have to cease.

Residual flows only relate to the water permit to which they are attached, so each permit in a catchment might have a different residual flow. The residual flow will be specific to the values that exist in the watercourse at the different points where water is being taken.

Residual flows primary allocation takes where the point of take is a tributary of a main stem. They can be set for a supplementary allocation take as well. It is important to remember that the natural character and ecosystem functions of a water body may differ between high and low flows. An applicant will need to demonstrate how a given supplementary residual flow will provide for these factors. Supplementary residual flows are likely to be higher than those set for a primary allocation take.

Technical science advice is sought on the appropriateness of a residual flow for each water permit. This occurs on a site-specific basis. There is no schedule or guidance in the RPW currently. Residual flows are set after taking into account the flow characteristics of the stream, the organisms living in the stream and the conditions that are suitable to protect the habitat for stream life. This may include use of the IFIM method, looking to various databases for species information and/or modelling flows if the river flow has not been recorded.

Where residual flows are low (typically less than 20 l/s) it can be difficult for the consent holder and Council staff to effectively measure and monitor the flow. There are some options available to the applicant in this situation, but any options considered would need to align with the NPS-FM 2020 and the requirement to provide for the health and wellbeing of the waterbodies. Options that could be considered, but may not necessarily be applied in all situations, include the potential for conditions relating to visually connected flows. It is recognised that mana whenua holds concerns about this approach. The appropriateness of any residual flow proposed will be assessed on a case-by-case basis.

Residual flow monitoring is likely to be required for takes that have residual flows on them, including the establishment of residual flow monitoring stations, where necessary.

Note: any replacement supplementary consent applications will not have a minimum or residual flow imposed on them unless these take cessation restrictions are already on the consent being replaced. See PC 7 below.

Is Te mana o te wai relevant for supplementary takes?

Te mana o te wai is a fundamental concept of the NPS-FM 2020. All applications to take and use water need to be consistent with the NPS-FM 2020 - More details on this concept and relationship to consent applications can be found here: [consideration-of-nes-fw-and-nps-fm-in-consent-applications.pdf \(orc.govt.nz\)](https://www.orc.govt.nz/assets/Uploads/consideration-of-nes-fw-and-nps-fm-in-consent-applications.pdf).

It is noted that applications made under Chapter 10A will require less detail and consideration of this concept as the Plan Change 7 decision was made taking into consideration the NPS-FM 2020.

What rules apply to my taking and use of supplementary water?

For **new** supplementary water permits (take and use):

- An application made under Schedule 2B or in accordance with Policy 6.4.9 (a) is a ***restricted discretionary activity*** under Rule 12.1.4.7 of the RPW.
- An application that seeks a lower minimum flow than required by Policy 6.4.9(a) or for water that is in addition to the first supplementary block provided for by Schedule 2B, becomes a ***discretionary activity*** under Rule 12.1.5.1 of the RPW.
- An application under Policy 6.4.10 is processed under Rule 12.1.4.7 of the RPW, as a ***restricted discretionary activity***.

A new supplementary water permit can only be granted for a consent term of 6 years (see below). [Form 4E](#) can be used to make an application for a new take.

Rules for **replacement** supplementary takes are detailed below.

What about PC 7/Chapter 10A to the RPW?

Plan Change 7 to the Regional Plan Water for Otago establishes a policy and consenting framework to replace water permits that expire before 31 December 2025.

It does not distinguish between primary allocation and supplementary allocation takes.

Replacement of a supplementary allocation permit

Any replacement of a supplementary allocation water permit prior to 31 December 2025 will need to make an application under the rules in Chapter 10A of the RPW. The objective and policies direct that the replacement permit will have a consent term of no more than 6 years.

[Form 4C](#) can be used to make an application under Chapter 10A.

In short, the application:

- Needs to replace a valid permit.
- Cannot result in an increase in the area under irrigation.
- Must include any existing residual flow, minimum flow or take cessation conditions.
- Must result in no increase in the historical instantaneous rates of abstraction
- Must result in no increase in the historical volume of water taken.

New supplementary allocation application

For new supplementary takes, the rules in Chapter 12 of the RPW apply [see above sections on how to determine rules]. Policy 10A.2.2 of Chapter 10A also applies, which limits the consent duration to no more than 6 years.

The maximum 6 year term enables the activity to be reassessed under a new Land and Water Plan (to be notified by the end of 2023) which will establish a future framework for managing water takes in the region that is consistent with the NPS-FM 2020.

Will there be any affected parties to my supplementary take?

If your application is for a **replacement** of a supplementary take under Chapter 10A and it can meet the controlled activity or restricted discretionary rules, then there is preclusion on limited notification and public notification. This means there will be no affected parties to your application.

If you are making an application for a **new** supplementary take, then the application will be processed under Rule 12.1.4.7 (as a restricted discretionary activity) or 12.1.5.1 (as a discretionary activity).

For applications processed under Rule 12.1.4.7, the following applies under Rule 12.1.4.8 (matters that discretion restricted to):

- (i) Applications for resource consent to which this rule applies, to take and use water from a river, the Consent Authority is precluded from giving public notification, if the application is to take and use water from:
 - a. A river for which a minimum flow has been set by or under this Plan; or*
 - b. A river for which it is not necessary for the Council to consider whether, if consent is granted, the taking should be subject to a condition requiring a residual flow to remain in the river at the point of take, or a condition requiring other provision for native fish, other than a conditions requiring fish screening.**

As a supplementary minimum flow will be set under the RPW then public notification will often be precluded for processing under Rule 12.1.4.7. An assessment will still need to be made on limited notification and affected parties.

Notification (including limited notification to affected parties) is made in accordance with s95 of the RMA. The application will need to have effects that are less than minor on all person(s) for there to be no affected parties. If there are minor or more than minor effects on a person then they will be identified as affected. More details on this can be found here: [The Notification Process | Otago Regional Council \(orc.govt.nz\)](https://www.otago.govt.nz/the-notification-process) The consent duration will be taken into consideration when determining the extent of effects.

How do I measure my supplementary take?

A supplementary take may have a supplementary minimum flow (which could be the mean flow at the point of take) and/or a supplementary residual flow.

Supplementary minimum flows are normally based on an ORC flow monitoring site established at the bottom of the catchment. The flow data from these sites is available on the Council's website and it is the Consent Holder's responsibility to check this and only operate their take when the flows in the main stem are above the supplementary minimum flow.

Some catchments do not have an ORC flow monitoring site and the applicant may have a flow monitoring station site that their application was assessed against. There would need to be sufficient data from the site to enable consideration of the application and to determine the appropriate minimum flow based on the mean flow or seven day mean annual low flow (MALF).

If the residual flow is imposed, it is likely to be required to be measured. This often requires a flow measuring station to be installed.

What conditions may be imposed on a supplementary take?

Conditions imposed on a supplementary take will be similar to those imposed on a new or replacement surface water take. [An example of these can be found here](#). Differences may include:

- No monthly volume limit if there are no additional effects to taking all of the seasonal water in one month and water will be taken at high flows
- Requirement for the establishment and maintenance of a flow monitoring station/recorder to measure a residual flow.
- If the water measuring device is being used for both primary and supplementary takes, conditions imposed to distinguish when water is being used under different consents.