

Plan Change 2 to the Canterbury Land and Water Regional Plan

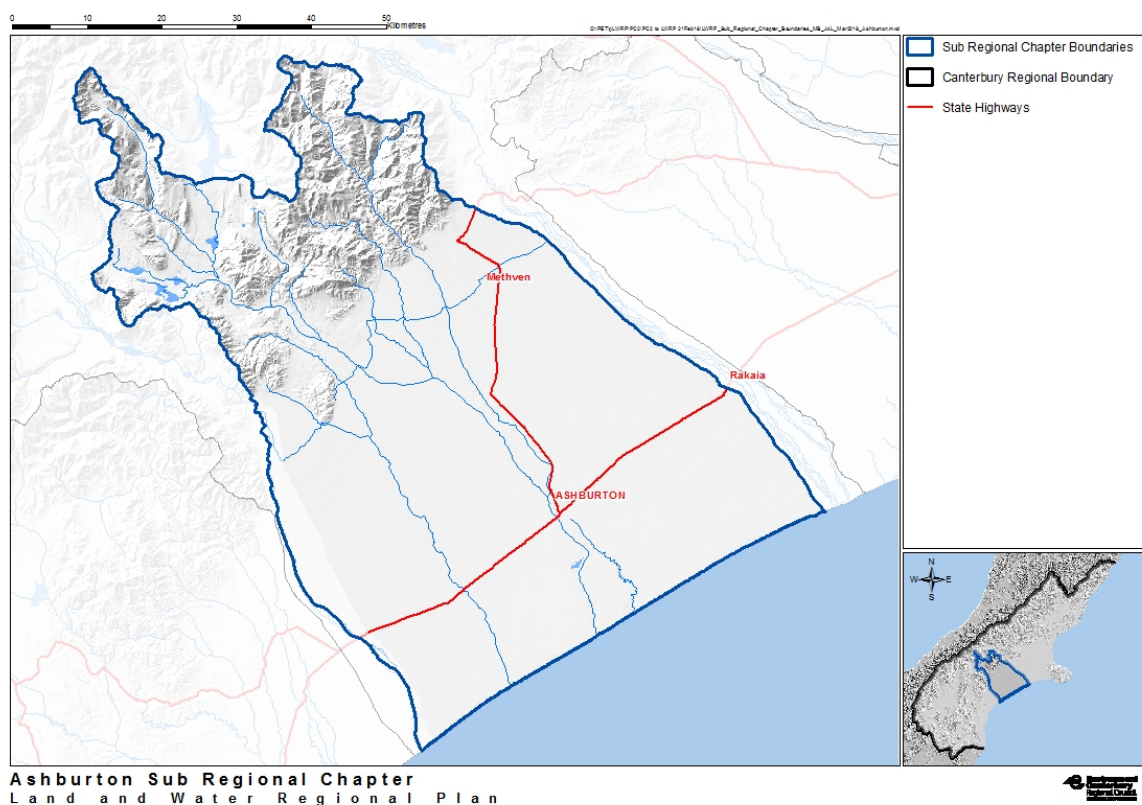
Section 13 Ashburton

The area covered by this section is generally contiguous with the Ashburton District Council boundary and the Ashburton Zone boundary under the CWMS, excluding the Rakaia River and Rangitata River and their headwaters. Included within the boundary of this sub-region are the townships of Ashburton, Rakaia and Methven.

Within this section there are policies and rules for water quantity in the Hakatere/Ashburton River catchment, and policies and rules for water quality and quantity in the Hinds/Hekeao Plains Area. For all other areas within this section only the region-wide policies and rules apply.

The main river in this sub-region is the Ashburton/Hakatere, which has a north and a south branch, and tributaries which include Taylors Stream and Pudding Hill Stream. The Ashburton River/Hakatere provides habitat for rare birds, fish, plants and other species, as well as a wide range of recreational values. A number of other foothill streams with associated bush remnants provide valuable recreational and ecological opportunities. This sub-region also includes part of the Ashburton Lakes Basin (Ō Tū Wharekai), including Lake Clearwater and Lake Emma, but does not include the largest lake in this group, Lake Heron.

Ashburton Sub-region



The following sustainable water management priority outcomes for the Hakatere/Ashburton River catchment have been identified by the Ashburton Zone Committee:

- Improved and protected natural character and mauri of the Ashburton River/Hakatere.
- Ecosystem health and biodiversity are protected and improved.
- Protected and improved water quality.
- Efficiently used, secure and reliable supply of water.

To achieve these outcomes for the Ashburton River, the flow and allocation regime introduces a minimum flow of 6,000 L/s at State Highway 1, and in the longer term a minimum flow of 10,000 L/s. Other outcomes to be achieved by the flow regime include the protection of the North Branch flows, in-stream habitats, facilitation of alternative water use to reduce pressure on river flows, efficient use of water and management of water permits that are transferred. In achieving these outcomes changes are to occur over time so as to have minimal impact on existing activities. The take from the South Branch of the Ashburton River by Rangitata Diversion Race Management Limited (RDR) is recognised as a relatively large water take which provides reliable water for a number of properties. The regime, therefore, does not restrict its take in the same manner as other takes and it is therefore expected that RDR will play an active role in Water Users' Groups to manage reliability of supply. As part of delivering on the outcomes in the short term it is expected that some surface water abstractors will switch to groundwater, that water sharing will occur and in the longer term that new storage projects will assist to maintain and improve reliability of supply for water users.

The Hinds/Hekeao Plains Area consists of the Hinds River/Hekeao catchment, and the plains between the Rangitata and Hakatere/Ashburton Rivers. The Upper Hinds/Hekeao Area includes the foothills and basins that drain into the north and south branches of the Hinds River/Hekeao. The Lower Hinds/Hekeao Plains Area contains the middle and lower reaches of the Hinds River/Hekeao as it flows out across the Canterbury Plains and contains more than 30 spring-fed lowland water bodies by the coast. Many of the water bodies in the Lower Hinds/Hekeao Plains Area are the remnants of what was once an expansive wetland.

The Hinds/Hekeao Plains Area today is highly modified. Drainage of the wetland area east of State Highway 1 began in the 1850s allowing the establishment of one of Canterbury's most productive agricultural areas. An artificial channel, cut in the 1860s-1870s, created a permanent outlet for the river to flow to the sea. A small hāpua (lagoon) is present at the river mouth, although this is blocked to the sea most of the time. Many of the artificial drains, stock water races and modified channels which replaced the wetlands and waterways, provide substitute habitats for a variety of fish and invertebrate species.

The Hinds/Hekeao Plains Area was historically, and is currently, an important area for food production. It currently provides significant employment in the area, both on-farm and in processing and servicing industries. The social and economic wellbeing of the community is reliant on the agricultural industry and it is important that it is retained so that the communities can thrive.

Agricultural development, however, has had a significant impact on the cultural, ecological and recreational values and opportunities of the area. Today drainage remains a primary function of many of the lowland water bodies, however they continue to be a taonga and source of mahinga kai for Ngāi Tahu and support significant ecological and recreational values.

For Ngāi Tahu water is taonga. The wetlands of the Lower Hinds/Hekeao Plains Area supported a rich and varied mahinga kai resource. The cultural significance of the Hinds River/Hekeao is recognised by its Statutory Acknowledgement status.

There are a number of irrigation schemes in the Hinds/Hekeao Plains Area. There are also individual surface and groundwater takes throughout the area. Agriculture now makes up 98 percent of land

use in the Hinds/Hekeao Plains Area. The availability of plentiful clean water has been one of the critical ingredients to the economic success of the area.

Water resources are now showing signs of stress. Nitrogen concentrations in the 2013/14 year average around 11 milligrams of nitrogen per litre in shallow wells, and are increasing while water availability is decreasing. These trends have not only had an adverse effect on cultural and ecological values but have also adversely affected the reliability of supply for users.

During 2013 and 2014 the Ashburton Zone Committee engaged with the local community and stakeholders to develop a package of actions (the 'Solutions Package') that was considered the most effective to protect cultural values and opportunities to gather mahinga kai safely, maintain water quality and quantity in the Upper Hinds/Hekeao Plains Area, and improve water quality and quantity in Lower Hinds/Hekeao Plains Area while also sustaining a healthy economy and community.

The Committee's Solutions Package consists of four main parts with both regulatory and non-regulatory recommendations:

- catchment scale actions (e.g. on-farm mitigation measures, managed aquifer recharge, and increased irrigation area);
- local scale actions (e.g. riparian fencing, planting, and well-head protection);
- investigations, monitoring and review of the Solutions Package; and
- community engagement.

The Committee's Solutions Package is fully outlined in the Ashburton Zone Implementation Programme Addendum 2014. This section of the Plan includes policies and rules that achieve the outcomes of the Ashburton Zone Implementation Programme Addendum 2014.

The Solutions Package requires a 45 percent reduction in nitrogen losses from farming activities in the Lower Hinds/Hekeao Plains Area by 2035. To achieve this, all farming activities are to operate at good management practice by 2017. Farming is then required to further reduce nitrogen loss rates by 36 percent by 2035. Some change in land use or land use intensification is underway, and further change may be considered once water quality improves.

In conjunction with managed aquifer recharge, on-farm mitigation is anticipated to reduce the concentration of nitrogen in shallow groundwater in the Lower Hinds/Hekeao Plains Area to 6.9 milligrams of nitrogen per litre, and achieve an 80 percent protection level for aquatic species in lowland spring-fed streams and a 90 percent protection level for the Lower Hinds River/Hekeao.

In the Upper Hinds/Hekeao Plains Area water quality is to be maintained through adoption of good management practices to minimise losses of sediment, phosphorus and microbial contamination, and increases in nitrogen losses are restricted to achieve a 99 percent protection level for aquatic species in the hill-fed streams.

The Solutions Package also includes actions to improve flows in the lowland streams and the Hinds River/Hekeao. Provision is made for switching from surface water or hydraulically connected groundwater to deep groundwater. New abstractions of surface water or groundwater from the Valetta and Mayfield-Hinds Groundwater Allocation Zones, beyond domestic and stock needs and

community supplies, is prohibited while allocation limits are not being met. Transfers of surface water consents and groundwater consents within the Valetta Groundwater Allocation Zone are also prohibited while limits are not being met. The Solutions Package also includes the establishment of a Hinds Drains Working Party to develop and recommend revised allocation limits and minimum flows for the spring-fed plains rivers in the Lower Hinds/Hekeao Plains Area by no later than 2020.

13.1 Definitions

13.1A Hinds/Hekeao Definitions

For the Hinds/Hekeao Plains Area the following definitions apply in addition to the definitions contained in Section 2.9.

<u>Word</u>	<u>Definition</u>
<u>Adaptive Management Conditions</u>	<u>means a condition or conditions on a resource consent to take groundwater that specifies an annually variable volume dependent on the annually assessed volume of the groundwater resource in a zone.</u>
<u>Augmenting</u>	<u>means the addition of water to surface water or groundwater specifically for the purpose of reducing the concentration of nitrate nitrogen in groundwater, or increasing flows in lowland streams.</u>
<u>Baseline Land Use</u>	<u>means the land use, or uses, on a property between 1 July 2009 and 30 June 2013 used to determine the property's 'nitrogen baseline' as defined in Section 13 of this Plan.</u>
<u>Deep groundwater</u>	<u>means groundwater that is abstracted from a depth of at least 80 m below ground level.</u>
<u>Hinds/Hekeao Plains Area</u>	<u>means the area identified as the 'Hinds/Hekeao Plains Area' on the Planning Maps.</u>
<u>Lower Hinds/Hekeao Plains Area</u>	<u>means the area identified as the 'Lower Hinds/Hekeao Plains Area' on the Planning Maps.</u>
<u>Lower Hinds River/Hekeao</u>	<u>means the Hinds River/Hekeao in the Lower Hinds/Hekeao Plains Area.</u>
<u>Nitrogen Baseline</u>	<p><u>(a) in the 'Hinds-Rangitata Area' as shown on the Planning Maps means:</u></p> <ul style="list-style-type: none"> <u>(i) the maximum annual discharge of nitrogen below the root zone, as modelled with OVERSEER® (where the required data is inputted into the model in accordance with OVERSEER® Best Practice Data Input Standards), or an equivalent model approved by the Chief Executive of Environment Canterbury, over any 01 July to 30 June period in any single year between 2009 to 2015, and expressed in kg per hectare per annum; and</u> <u>(ii) if OVERSEER® is updated, the most recent version is to be used to recalculate the nitrogen baseline using the same input data;</u> <p><u>(b) in all other areas within the Hinds/Hekeao Plains Area has the meaning set out in Section 2.9 of this Plan.</u></p>
<u>Upper Hinds/Hekeao Plains Area</u>	<u>means the area identified as the 'Upper Hinds/Hekeao Plains Area' on the Planning Maps.</u>

13.2 Other Plans and Instruments that apply to the Ashburton Sub-region

13.2.1 Other Regional Plans that apply to the Ashburton Sub-region.

Nil

13.2.2 Water Conservation Orders that apply to the Ashburton Sub-region

National Water Conservation (Rakaia River) Amendment Order 2013.

National Water Conservation (Rangitata River) Order 2006.

13.2.3 Iwi Management Plans that apply to the Ashburton Sub-region

Hinds/Hekeao Plains Area

Te Rūnanga o Ngāi Tahu Freshwater Policy Statement 1999.

Iwi Management Plan of Kāti Huirapa for the area Rakaia to Waitaki July 1992.

13.3 Freshwater Outcomes

For the Hinds/Hekeao Plains area see Objectives in Section 3, and freshwater outcomes in Table 13(a).

For the Ashburton sub-region except for Hinds/Hekeao Plains Area see Objectives in Section 3 and Policies 4.1, 4.2, 4.3 and 4.4.

13.4 Policies

The following policies apply in the Ashburton sub-region, in addition to those set out in Section 4 of this Plan.

- 13.4.1 In order to increase the amount of water in the river that is available to meet the proposed increased minimum flows, the taking of water for community stock water supplies from the Ashburton River/Hakatere will progressively decrease so that as soon as possible, but by no later than 1 July 2023, that taking will not exceed 2,900 L/s in total.
- 13.4.2 No new surface or stream depleting groundwater permits will be granted in the Ashburton River/Hakatere catchment until the minimum flow at the State Highway 1 recorder site is raised to 10,000 L/s, except that replacement permits for water permits that expire may be granted, however in those cases consideration must be given to the practicality of using alternative supplies of water.
- 13.4.3 To address over-allocation in the Ashburton/Hakatere catchment, no additional rate or volume of water above that authorised under existing water permits will be granted when those existing permits are sought to be replaced upon their expiry.

- 13.4.4 To avoid over-allocation of the Ashburton River Groundwater Allocation Zone, it is limited to a total of 104.7 million m³ per annum of which:
- (a) 69.7 million m³ per annum is available for existing lawfully established groundwater takes; and
 - (b) 35 million m³ per annum is available for applicants who surrender surface water and/or stream depleting groundwater takes in accordance with Policies 13.4.5 and 13.4.67.
- 13.4.5 To address over-allocation of surface water in the Hakatere/Ashburton catchment and the Lower Hinds/Hekeao Plains Area, enable ~~an applicant to take~~ taking deep groundwater provided the applicant holds a lawfully established surface water take or stream depleting groundwater take for an equal or greater rate and volume than is sought from the deep groundwater, and the surface water take or stream depleting groundwater take is surrendered.
- 13.4.6 In the Valetta and Mayfield-Hinds Groundwater Allocation Zones avoid allocating groundwater from the T-Allocation Block in Table 13(f), unless the proposed groundwater take will substitute for an existing surface water take, and the proposed take is from deep groundwater, or the take will not have a direct, high or moderate stream depletion effect.
- 13.4.67 The water resulting from any surrendered surface water and stream depleting groundwater takes in the Ashburton River/Hakatere catchment and in the Hinds/Hekeao Plains Area will not be reallocated and will be left in the river, until such time as the catchment is no longer over allocated.
- 13.4.78 For the Ashburton River/Hakatere, the following restrictions shall be applied in respect of the abstraction of surface water and stream depleting groundwater in the Ashburton River/Hakatere catchment:
- (a) between 1 July 2023 and until 30 June 2033 Rangitata Diversion Race A and B allocations shall be subject to the residual flow restrictions specified in Table ~~12~~13(b).
 - (b) between 1 July 2023 and until 30 June 2033 all abstractions except Rangitata Diversion Race intake shall be subject to the State Highway 1 minimum flow in addition to the relevant tributary minimum flow as per Table ~~12~~13(b).
 - (c) from 1 July 2033, all abstractions shall only be subject to the State Highway 1 minimum flow as per Table ~~12~~13(b).
 - (d) any Water Users' Group will be subject to pro rata reductions.
 - (e) all abstractions except Rangitata Diversion Race allocations and Water Users' Group takes shall be subject to incremental stepped reductions as per Table 13(c).
- 13.4.89 In accordance with Section 128 of the RMA, Canterbury Regional Council may complete a review of all existing water permits in the Ashburton Catchment prior to 1 July 2023, to ensure the abstractions comply with the allocation limits and minimum flow requirements specified in Table ~~12~~13(b).
- 13.4.10 Improve the overall water quality in the Hinds/Hekeao Plains Area by:
- (a) establishing two management areas the Upper Hinds/Hekeao Plains Area and Lower Hinds/Hekeao Plains Area;

- (b) improving management of nitrogen, microbial contaminants, phosphorus and sediment in both areas;
- (c) restricting increases in nitrogen losses in the Upper Hinds/Hekeao Plains Area;
- (d) reducing overall nitrogen losses by 45¹ percent in the Lower Hinds/Hekeao Plains Area; and
- (e) adopting the use of managed aquifer recharge and targeted stream augmentation to augment groundwater and/or surface water.

13.4.11 Reduce discharges of microbial contaminants, phosphorus and sediments in the Hinds/Hekeao Plains Area by:

- (a) implementing the region-wide stock exclusion rules; and
- (b) excluding cattle, pigs and deer from drains; and
- (c) establishing phosphorus limits for 'Hill-fed Upland' surface water bodies; and
- (d) implementing the farm practices in Schedule 24a; or
- (e) preparing and implementing Farm Environment Plans, in accordance with Schedule 7.

13.4.12 Recognise the cultural significance of the Hekeao/Hinds River to Ngāi Tahu and enable Ngāi Tahu to exercise kaitiakitanga and mahinga kai in the catchment through:

- (a) continual improvement in the flows in lowland streams and springs over time;
- (b) continual reductions in the concentrations of nitrogen in groundwater over time;
- (c) minimising the potential discharge of contaminants into water through land use practices, riparian management, and waterway and drain maintenance; and
- (d) encouraging the protection or restoration of natural wetland areas and other mahinga kai.

13.4.13 Manage surface water quality, particularly in-stream nitrate-nitrogen and dissolved reactive phosphorus concentrations², in the Upper Hinds/Hekeao Plains Area by:

- (a) requiring, from 1 January 2017, all farming activities to operate at good management practice while allowing farming activities that have a nitrogen loss calculation less than 15 kgN³ per hectare per year at 1 September 2015 to increase their nitrogen losses up to but not exceeding 15 kgN³ per hectare per year; and
- (b) requiring that if at 1 September 2015 a property's nitrogen loss calculation is greater than 15kgN³ per hectare per year, there are further reductions in nitrogen loss over time (beyond any reduction that could be reasonably expected from the implementation of good management practices) that result in reductions in nitrogen loss, relative to the property's 1 September 2015 nitrogen loss calculation, of not less than:
 - (i) 15% by 1 January 2025
 - (ii) 25% by 1 January 2030
 - (iii) 36% by 1 January 2035provided that these nitrogen loss reductions do not require the property's nitrogen loss calculation to reduce below 20 kgN³ per hectare per year.

¹ The policy of reducing nitrogen losses by 45% is based on the methodology explained in the Hinds/Hekeao Plains Technical Overview – CRC Report R14/79

² As set out in Table 13(g) and Table 13(h) respectively.

³ Calculated using Overseer version 6.0

13.4.14 By 2035, improve water quality in the Lower Hinds/Hekeao Plains Area to achieve the target nitrate toxicity limits set out in Table 13(g) for ‘Hill-fed Lower’ and ‘Spring-fed Plains’ surface waterbodies, and an annual average groundwater nitrate-nitrogen concentration of 6.9 mg/L⁴ by:

- (a) reducing the discharge of nitrogen from farming activities in fulfilment of Policy 13.4.15; and
- (b) implementing Managed Aquifer Recharge and Targeted Stream Augmentation.

13.4.15 By 2035, farming activities and farming enterprises in the Lower Hinds/Hekeao Plains Area, whether or not they are supplied with water by an irrigation scheme or a principal water supplier, collectively achieve Policy 13.4.14 by:

- (a) requiring, from 1 January 2017, all existing farming activities to discharge no more nitrogen than the loss rate that could be reasonably expected from the implementation of good management practices, calculated on the baseline land use taking into account:
 - (i) The type of farming activity; and
 - (ii) The drainage characteristics of the soil; and
 - (iii) The climatic conditions and topography of the property; and
 - (iv) The type of irrigation system used (if any); and
 - (v) Whether the practices set out in Schedule 24a have been fully adopted; and
- (b) subject to Policy 13.4.15(a), allowing farming activities that have a nitrogen loss calculation less than 15 kgN⁵ per hectare per year at 1 September 2015 to increase their nitrogen losses up to but not exceeding 15 kgN⁵ per hectare per year; and
- (c) subject to Policy 13.4.15(a), enabling farming activities that have a nitrogen loss calculation between 15 kgN⁵ per hectare per year and 20 kgN⁵ per hectare per year at 1 September 2015 to apply for resource consent to increase their nitrogen losses up to but not exceeding 20 kgN⁵ per hectare per year; and
- (d) requiring that if at 1 September 2015 a property's nitrogen loss calculation is greater than 20 kgN⁵ per hectare per year, further reductions (beyond any reduction resulting from Policy 13.4.15(a)) are applied to the nitrogen loss calculation (relative to the property's 1 September 2015 nitrogen loss calculation) of not less than:
 - (i) 15% by 1 January 2025
 - (ii) 25% by 1 January 2030
 - (iii) 36% by 1 January 2035provided these reductions do not require the property's nitrogen loss calculation to reduce below 20 kgN⁵ per hectare per year; and
- (e) requiring that the total aggregated nitrogen losses from properties where the nitrogen losses are managed by an irrigation scheme or principal water supplier be limited as follows:
 - (i) land either:
 - (a) irrigated with water first lawfully supplied by an irrigation scheme or principal water supplier before the granting of CRC121664 or CRC162882;
 - or

⁴ As determined by the median concentration across the Canterbury Regional Council's quarterly groundwater monitoring bores (screened <30 metres below water table)

⁵ Calculated using Overseer version 6.0

- (b) not irrigated but where the nitrogen losses are accounted for under a resource consent held by an irrigation scheme or principal water supplier;
is subject to Policies 13.4.15(a) and 13.4.15(d) except if Policies 13.4.15(b) or 13.4.15(c) apply;
- (ii) land first irrigated with water lawfully supplied by an irrigation scheme or principal water supplier for irrigation authorised and established under and prior to the expiry of resource consent CRC121664 or CRC162882 is limited to a nitrogen loss calculation of 27 kgN⁶ per hectare per year;
- (iii) land otherwise irrigated with water supplied by an irrigation scheme or principal water supplier for irrigation is subject to Policies 13.1.15(a) and 13.4.15(d) except if Policies 13.4.15(b) or 13.4.15(c) apply;
- (f) except as provided for by Policies 13.4.15(b), (c) and (e), not allowing any land use intensification, changes in land use, or new irrigation that would increase the nitrogen loss above the land's nitrogen baseline until the average groundwater nitrogen concentration in the Lower Hinds/Hekeao Plains sub-region is below 6.9 mg /L.

13.4.16 If the separate nitrogen loss rate reductions in fulfilment of Policy 13.4.13(b)(i) to (iii) and Policy 13.4.15(d)(i) to (iii) are unable to be achieved by their target dates, any proposed extension of time to achieve the reductions will be assessed having regard, among other matters, to:

- (a) the nitrogen baseline and the level of any enduring nitrogen loss rate reduction already achieved from that baseline; and
- (b) the implications for fully achieving the target nitrate-nitrogen concentrations in Policy 13.4.14 by 2035; and
- (c) the capital and operational costs of making nitrogen loss rate reductions and the benefit (in terms of maintaining a farming activity's financial viability) of spreading that investment over time; and
- (d) the nature, sequencing, measurability and enforceability of any steps proposed to achieve the nitrogen loss rate reductions.

13.4.17⁷(1) Enable the establishment of farming enterprises in circumstances where, for the purpose of nutrient management, the nitrogen loss from the total farming activity does not exceed the aggregate of the nitrogen baselines of all the land used in the enterprise, and any time-framed reductions set out in Policy 13.4.15 are achieved (whether or not the land is held in single, multiple, or common ownership).

(2) Enable the disestablishment of farming enterprises, provided the land formerly used in the enterprise does not exceed either:

- (a) the individual nitrogen baseline of the land, taking account of any applicable time-framed reductions set out in Policy 13.4.15; or
- (b) a nitrogen baseline limit, to be determined so that the aggregate of the baselines of all the land formerly used in the enterprise, following any time-framed reductions set out in Policy 13.4.15, is not exceeded.

⁶ Calculated using Overseer version 6.0.3.

⁷ Although, due to the order of their development in the Plan, Policies 13.4.17 and 11.4.17 use slightly different language to express the policies, no different interpretation is intended.

13.4.18 Improve flows in spring-fed waterbodies and/or decrease nitrate nitrogen concentrations in the Hinds River/Hekeao spring-fed waterbodies and groundwater in the Lower Hinds/Hekeao Plains Area by enabling managed aquifer recharge and targeted stream augmentation, where:

- (a) adverse effects on cultural values, including those associated with unnatural mixing of water are avoided as the first preference, and where avoidance is not practicable, they are remedied or mitigated;
- (b) adverse effects on the availability and quality of community drinking water supplies are avoided;
- (c) adverse effects on fish passage are avoided or mitigated;
- (d) inundation of existing wetlands is avoided, remedied or mitigated through scheme design, construction and operation;
- (e) there is no net loss, including through inundation, of significant biodiversity habitat of indigenous biodiversity; and
- (f) adverse effects on people and property from raised groundwater levels and higher flows are avoided as the first preference, and where avoidance is not practicable, they are remedied or mitigated.

13.4.19 Enable catchment restoration activities that protect springheads; protect, establish or enhance planted riparian margins; create, restore or enhance wetlands; and target removal of fine sediment from water ways.

13.4.20 Improve flows in spring-fed waterbodies and the Lower Hinds River/Hekeao to meet economic, cultural, social and environmental outcomes in the Hinds/Hekeao Plains Area by requiring adherence to flow and allocation limits, limiting the volume and rate of abstraction on replacement water permits to reasonable use calculated in accordance with Schedule 10 and restricting increased use arising from the transfer of consented volumes of water within surface water catchments and the Valetta Groundwater Allocation Zone.

13.4.21 Until such time as the Valetta Groundwater Allocation Zone limits in Table 13(f) are no longer exceeded apply adaptive management conditions upon replacement of any groundwater permits that have previously been subject to adaptive management conditions on the same or similar terms as the pre-existing conditions.

13.4.22 In the Lower Hinds/Hekeao Plains Area, with the exception of the Lower Hinds River/Hekeao, and until 30 June 2025, any water permit granted to replace an existing water permit will be subject to the minimum flow and allocation limits in Table 13(e).

13.4.23 After 1 July 2025 a minimum flow of 50% 7DMALF and an allocation limit of 20% 7DMALF will be applied to all water permits granted to abstract surface water from the waterbodies listed in Table 13(e), or to abstract groundwater with a direct, high or moderate stream depletion effect on those waterbodies, unless there is a collaboratively developed flow and allocation regime that has been included in this Plan through a Schedule 1 RMA process.

13.5 Rules

The following rules apply in the Ashburton sub-region, in addition to those set out in Section 5 of this Plan.

Ashburton Sub-region

13.5.1 The taking of surface water from the Ashburton River catchment by a Water Users' Group formed by two or more existing abstractors within the same A permit allocation limit or B permit allocation limit is a restricted discretionary activity, provided that the following conditions are met:

1. The take does not reduce the reliability of supply for any other abstractor or cause the minimum flow in any catchment or sub-catchment (Table ~~12~~13(b)) to be breached; and
2. All members of an A permit allocation limit Water Users' Group have water abstraction points located within the same river or stream as set out in Table ~~12~~13(b); and
3. All abstractors have installed telemetered water use measuring devices; and
4. Individual water take permits subject to the Water Users' Group shall not be exercised concurrently with the Water Users' Group water permit.

The exercise of discretion is restricted to the following matters:

1. The terms and conditions of the operating agreement between the members of the Water Users' Group; and
2. The reduction in the rate of take in times of low flow and restrictions as set out in Policy 13.4.78; and
3. Whether the proposed activity will prevent or compromise the attainment of the environmental outcomes sought by, or is inconsistent with, the objectives and policies in the Plan in respect of water allocation, flow regimes, and in-stream values.

13.5.2 The take and use of groundwater within the B permit allocation limit of the Ashburton River Groundwater Allocation Zone is a restricted discretionary activity, provided that the following conditions are met:

1. The annual volume of the groundwater take, in addition to all existing consented takes, does not exceed the B permit allocation limit as set out in Table ~~14~~13(f); and
2. The bore interference effects are “acceptable”, as set out in Schedule 12; and
3. The abstraction depth is greater than 40 m below ground level; and
4. The applicant holds a lawfully established surface water take or stream depleting groundwater take for an equal or greater rate and volume than is sought and the surface water take or stream depleting groundwater take is surrendered concurrently with the application.

The exercise of discretion is restricted to the following matters:

1. Whether the amount of water to be taken and used is reasonable for the proposed use. In assessing reasonable use for irrigation purposes, the CRC will consider the matters set out in Schedule 10; and
2. The maximum rate of take, including the capacity of the bore or bore field and any irrigation system; and

3. The effects the take has on any other authorised takes, including interference effects as set out in Schedule 12.

13.5.3 The taking and use of groundwater within the B permit allocation limit of the Ashburton River Groundwater Allocation Zone as set out in Table 1413(f) that does not meet one or more of conditions 2 or 3 of Rule 13.5.2 is a non-complying activity.

13.5.4 The taking and use of groundwater within the B permit allocation limit of the Ashburton River Groundwater Allocation Zone that does not meet condition 1 of Rule 13.5.2 is a prohibited activity.

13.5.5 The taking and use of surface water and stream depleting groundwater in the Ashburton River/Hakatere catchment is a discretionary activity, provided either of the following conditions are met:

1. The proposed take is the replacement of a lawfully established take affected by the provisions of s124 to 124C of the RMA; or
2. The proposed take, in addition to all existing consented takes, meets a flow regime with an A Block minimum flow of 10,000 L/s and an A Block allocation limit of 15,100 L/s, or a B Block minimum flow of 14,000 L/s and a B Block allocation limit of 5,000 L/s.

13.5.6 The taking and use of surface water and stream depleting groundwater in the Ashburton River/Hakatere catchment that does not meet either of the conditions of Rule 13.5.5 is a prohibited activity.

Hinds/Hekeao Plains Area

The following index identifies region-wide rules that are modified by the Hinds/Hekeao Plains Area rules introduced into this section.

<u>Topic</u>		<u>Region-wide Rule</u>	<u>Additions to Region-wide Rules¹</u>	<u>Sub-regional Rules that prevail over Region-wide Rules</u>	<u>New Sub-region Rules</u>
<u>Pest Control and Agrichemicals</u>		<u>5.22</u>	<u>13.5.7</u>	=	=
<u>Nutrient Management²</u>	<u>Red, Lake Zone, Orange, Green or light Blue</u>	<u>5.41-5.59</u>	=	<u>13.5.8-13.5.20</u>	=
	<u>Irrigation Scheme</u>	<u>5.60-5.62</u>	=	<u>13.5.21-13.5.23</u>	=
	<u>Incidental Nutrient Discharges</u>	<u>5.63-5.64</u>	=	<u>13.5.24-13.5.25</u>	=
<u>Stock Exclusion</u>		<u>5.68-5.71</u>	<u>13.5.26</u>	=	=
<u>Sediment Removal from Rivers and Streams</u>		=	=	=	<u>13.5.27-13.5.28</u>
<u>Small and Community Water takes</u>		<u>5.111</u>	=	<u>13.5.29</u>	=

<u>Topic</u>	<u>Region-wide Rule</u>	<u>Additions to Region-wide Rules¹</u>	<u>Sub-regional Rules that prevail over Region-wide Rules</u>	<u>New Sub-region Rules</u>
<u>Take and use Surface Water</u>	<u>5.123-5.127</u>	:-	:-	:-
<u>Take and use of Groundwater</u>	<u>5.128-5.132</u>	:-	:-	<u>13.5.30-13.5.31</u>
<u>Transfer of Water Permits</u>	<u>5.133-5.134</u>	:-	<u>13.5.32-13.5.34</u>	:-
<u>Augmenting Groundwater or surface water</u>	:-	:-	:-	<u>13.5.35-13.5.37</u>

¹ Additional conditions or matter of discretion to region-wide rules that apply to the Hinds/Hekeao Plains Area only.

² Hinds/Hekeao Plains Area rules cover nutrients, sediment and microbial contaminants.

Pest Control and Agrichemicals

Note: Rule 13.5.7 applies as an addition to Region-wide Rule 5.22 in the Hinds/Hekeao Plains Area.

13.5.7 Within the Hinds/Hekeao Plains Area, Region-wide Rule 5.22 shall include the following condition:

1. For discharges to surface water signs are erected:
 - (a) in accordance with HSNO regulations, if such regulations require signage for the chemical being applied; or
 - (b) if HSNO regulations do not require signage for the chemical being applied or if no HSNO regulations exist for the chemical, at all public access points within 2 km of the discharge location, or for waterways on privately held land, at the main vehicular entrance to the property, at least 48 hours prior to commencement of the discharge, and shall remain in place for at least 48 hours following the discharge. Signs shall include the following information:
 - (i) the name of the agrichemical discharged, the date and time the discharge will commence and a description of the application area; and
 - (ii) a warning to avoid contact with surface water, and to avoid collection of shellfish or mahinga kai; and
 - (iii) a contact name and phone number for the person carrying out the discharge.

Nutrient Management, Sediment and Microbial Contaminants

Note: Rules 13.5.8 to 13.5.20 prevail over Region-wide Rules 5.41 and 5.43 to 5.59 (Nutrient Management - Red, Orange and Green and Light Blue Zones) in the Hinds/Hekeao Plains Area.

Upper Hinds/Hekeao Plains Area

13.5.8 Despite any of Rules 13.5.9 to 13.5.13 the use of land for a farming activity in the Upper Hinds/Hekeao Plains Area on a property of less than 5 ha is a permitted activity.

13.5.9 The use of land for a farming activity in the Upper Hinds/Hekeao Plains Area is a permitted activity, provided the following conditions are met:

1. The nitrogen loss calculation for the property does not exceed 15kg per hectare per year; and
2. The practices in Schedule 24a are being implemented and the information required is recorded in accordance with Schedule 24a, and supplied to the Canterbury Regional Council on request.

13.5.10 The use of land for a farming activity in the Upper Hinds/Hekeao Plains Area that does not meet conditions 1 or 2 of Rule 13.5.9 is a restricted discretionary activity, provided the following conditions are met:

1. The nitrogen loss calculation for the property does not exceed 15 kg per hectare per year or the nitrogen baseline, whichever is the greater; and
2. A Farm Environment Plan has been prepared in accordance with Part A of Schedule 7.

The exercise of discretion is restricted to the following matters:

1. The nitrogen loss rate reductions applicable to the property to fulfil Policy 13.4.13; and
2. The quality of, compliance with, and auditing of the Farm Environment Plan; and
3. The potential benefits of the activity to the applicant, the community, and the environment; and
4. The potential effects, including cumulative effects, of the activity on surface water and groundwater quality, sources of drinking-water, and aquatic ecosystems.

13.5.11 The use of land for a farming activity as part of a farming enterprise in the Upper Hinds/Hekeao Plains Area is a discretionary activity, provided the following conditions are met:

1. The aggregated nitrogen loss calculation for the parcels of land held in single or multiple ownership (whether or not held in common ownership) forming the farming enterprise does not increase above the greater of 15 kg/ha/yr or the aggregated nitrogen baseline for those parcels of land; and
2. The farming enterprise is solely in the Upper Hinds/Hekeao Plains Area; and
3. A Farm Environment Plan for the parcels of land held in single or multiple ownership (whether or not held in common ownership) forming the farming enterprise has been prepared in accordance with Part A of Schedule 7.

13.5.12 The use of land for a farming activity that does not comply with condition 2 of Rule 13.5.10 or conditions 2 or 3 of Rule 13.5.11 is a non-complying activity.

13.5.13 The use of land for a farming activity that does not comply with condition 1 of Rule 13.5.10 or condition 1 of Rule 13.5.11 is a prohibited activity.

Lower Hinds/Hekeao Plains Area

13.5.14 Despite any of Rules 13.5.15 to 13.5.20 the use of land for a farming activity in the Lower Hinds/Hekeao Plains Area on a property of less than 5 ha is a permitted activity.

13.5.15 The use of land for a farming activity in the Lower Hinds/Hekeao Plains Area where the nitrogen loss calculation does not exceed 15 kg per hectare per year is a permitted activity, provided the following condition is met:

1. The practices in Schedule 24a are being implemented and the information required is recorded in accordance with Schedule 24a, and supplied to the Canterbury Regional Council on request.

13.5.16 The use of land for a farming activity in the Lower Hinds/Hekeao Plains Area where the nitrogen loss calculation does not exceed 15 kg per hectare per year that does not meet condition 1 of Rule 13.5.15 is a restricted discretionary activity, provided the following condition is met:

1. A Farm Environment Plan has been prepared in accordance with Part A of Schedule 7.

The exercise of discretion is restricted to the following matters:

1. The quality of, compliance with, and auditing of the Farm Environment Plan; and
2. The potential benefits of the activity to the applicant, the community, and the environment; and
3. The potential effects, including cumulative effects, of the activity on surface water and groundwater quality, and aquatic ecosystems.

13.5.17 The use of land for a farming activity in the Lower Hinds/Hekeao Plains Area where the nitrogen loss calculation exceeds 15 kg per hectare per year is a restricted discretionary activity, provided the following conditions are met:

1. The nitrogen loss calculation for the property:
 - (a) does not exceed 20 kg/ha/yr, and the nitrogen loss calculation has not increased by more than 5 kg/ha/yr above the nitrogen baseline; or
 - (b) exceeds 20 kg/ha/yr but does not exceed the nitrogen baseline; and
2. A Farm Environment Plan has been prepared in accordance with Part A of Schedule 7.

The exercise of discretion is restricted to the following matters:

1. The quality of, compliance with, and auditing of the Farm Environment Plan; and
2. The nitrogen loss rate reductions applicable to the property to fulfil Policy 13.4.15; and
3. The potential benefits of the activity to the applicant, the community and the environment; and
4. The potential effects, including cumulative effects, of the activity on surface water and groundwater quality, sources of drinking-water, and aquatic ecosystems.

13.5.18 The use of land for a farming activity as part of a farming enterprise in the Lower Hinds/Hekeao Plains Area is a discretionary activity, provided the following conditions are met:

1. The farming enterprise is solely in the Lower Hinds/Hekeao Plains Area; and
2. The aggregated nitrogen loss calculation for the parcels of land held in single or multiple ownership (whether or not held in common ownership) forming the farming enterprise, does not increase above the greater of 15kg/ha/yr or the aggregated nitrogen baseline for those parcels of land; and
3. A Farm Environment Plan for the parcels of land held in single or multiple ownership

(whether or not held in common ownership) forming the farming enterprise has been prepared in accordance with Part A of Schedule 7.

13.5.19 The use of land for a farming activity that does not comply with condition 1 of Rule 13.5.16 or condition 2 of Rule 13.5.17, or the use of land for a farming activity as part of a farming enterprise that does not comply with condition 3 of Rule 13.5.18, is a non-complying activity.

13.5.20 The use of land for a farming activity that does not comply with condition 1 of Rule 13.5.17 or conditions 1 or 2 of Rule 13.5.18, is a prohibited activity.

Irrigation Schemes

Note: Rules 13.5.21, 13.5.22 and 13.5.23 prevail over Region-wide Rules 5.60, 5.61 and 5.62 in the Hinds/Hekeao Plains Area.

13.5.21 Despite Rules 13.5.14 to 13.5.20, the use of land for a farming activity in the Lower Hinds/Hekeao Plains Area where the property is fully or partially irrigated with water from an irrigation scheme or principal water supplier and the irrigation scheme or principal water supplier:

- (a) holds a discharge permit that was granted under Rule 5.62 prior to 1 August 2014; or**
 - (b) holds a resource consent that meets the conditions of Rule 5.61; or**
 - (c) holds a discharge permit that has been granted under Rule 13.5.22;**
- is a permitted activity.**

13.5.22 The discharge of nutrients onto or into land in circumstances that may result in a contaminant entering water in the Lower Hinds/Hekeao Plains Area that would otherwise contravene s15(1) of the RMA is a discretionary activity, provided the following conditions are met:

- 1. The applicant is an irrigation scheme or a principal water supplier, or the holder of the discharge permit will be an irrigation scheme or a principal water supplier; and**
- 2. The aggregated nitrogen loss calculation for land irrigated with water that was first lawfully supplied by an irrigation scheme or principal water supplier, but prior to CRC121664 or CRC162882 being granted, is limited to the nitrogen loss rate that corresponds with the aggregated baseline land use for that land; and**
- 3. The aggregated nitrogen loss calculation for land first irrigated with water where nitrogen losses were authorised by CRC121664 or CRC162882, and where the irrigation was established after the applicable resource consent was granted but prior to the expiry of that resource consent, is limited to 27 kgN⁸ per hectare per year; and**
- 4. The nitrogen loss calculation for land otherwise irrigated with water fully or partially supplied by an irrigation scheme or principal water supplier for irrigation, is:**
 - (a) limited in accordance with Policies 13.4.15(a) and 13.4.15(d) except if Policies 13.4.15(b) or 13.4.15(c) apply;**
 - (b) if Policies 13.4.15(b) or 13.4.15(c) apply, the nitrogen loss calculation is limited to:**
 - (i) up to but not exceeding 15 kgN per hectare per year, for any property that**

⁸ Calculated using Overseer version 6.0.3.

- had a nitrogen loss calculation of less than 15 kgN per hectare per year as at 1 September 2015; and
- (ii) up to but not exceeding 20 kgN per hectare per year, for any property that had a nitrogen loss calculation between 15 kgN per hectare per year and 20 kgN per hectare per year as at 1 September 2015; and
5. Except as provided for by conditions 2, 3 or 4(a) of this rule, for land where irrigation was not authorised and established under either CRC121664 or CRC162882, the nitrogen loss calculation that applies to those properties is not aggregated and redistributed for use on other land, but can be aggregated and redistributed within the property itself. For the avoidance of doubt, the aggregated nitrogen loss calculations in conditions 2, 3 and 4(a) may be combined to form the total aggregated nitrogen loss calculation.
6. The application for resource consent is accompanied by a legally binding obligation running with the land to achieve in full any applicable future nitrogen loss reductions in Policy 13.4.15.

Notification

Pursuant to section 95A and 95B of the RMA an application for resource consent under this rule will be processed and considered without public or limited notification.

Note that limited notification to affected order holders in terms of section 95F of the RMA will be necessary, where relevant under section 95B(3) of the RMA.

13.5.23 The discharge of nutrients onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene s15(1) of the RMA that does not meet one or more of the conditions in Rule 13.5.22 is a prohibited activity.

Note: If the applicant is not an irrigation scheme or a principal water supplier, or the holder of the discharge permit will not be an irrigation scheme or a principal water supplier, then the discharge is assessed under Rules 13.5.24 and 13.5.25.

Incidental Nutrient Discharges

Note: Rules 13.5.24 and 13.5.25 prevail over Region-wide Rules 5.63 and 5.64.

13.5.24 The discharge of nutrients onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene s15(1) of the RMA is a permitted activity, provided the following condition is met:

1. The land use activity associated with the discharge is authorised under Rules 13.5.8 to 13.5.12 or 13.5.14 to 13.5.19.

13.5.25 The discharge of nutrients onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene s15(1) of the RMA and does not meet condition 1 of Rule 13.5.24 is a non-complying activity.

Stock Exclusion

Notes:

1. Rules 5.68, 5.69, 5.70 and 5.71 (Stock Exclusion) apply in the Hinds/Hekeao Plains Area. Rule 13.5.26 applies as an addition to Rules 5.68, 5.69, 5.70 and 5.71.
2. For all activities in or near waterways, refer also to the Canterbury Flood Protection and Drainage Bylaw 2013.

13.5.26 Within the Hinds/Hekeao Plains Area any reference to the bed of a lake, river or wetland in Rules 5.68, 5.69, 5.70 and 5.71 also includes a drain, but does not include any sub-surface drain, or drain that does not have water in it.

Sediment Removal from Rivers and Streams

Notes:

1. Rules 13.5.27 and 13.5.28 are new rules
2. For all activities in or near waterways, refer also to the Canterbury Flood Protection and Drainage Bylaw 2013.
3. In addition to the provisions of this Plan and any relevant district plan, any activity which may modify damage or destroy any pre 1900 archaeological sites is subject to the archaeological authority process under the Heritage New Zealand Pouhere Taonga Act 2014. An archaeological authority is required from Heritage New Zealand Pouhere Taonga to modify, damage or destroy any archaeological site, whether recorded or not in the New Zealand Archaeological Association Site Recording Scheme website.

13.5.27 Within the Hinds/Hekeao Plains Area the taking and use of water from a river and the disturbance of the bed of a river to remove fine sediment less than 2 mm in diameter for the sole purpose of habitat restoration is a restricted discretionary activity, provided the following conditions are met:

1. A management plan has been prepared that includes the location, timeframe and method of sediment removal, management and disposal, erosion control methodology, an inventory of sensitive ecological habitats and species, and an assessment of the environmental risks including effects downstream; and
2. The activity does not occur when the river is at or below the minimum flow in Table 13(d) or 13(e); and
3. Following removal of fine sediment any abstracted water is returned to the river not more than 250 m from the point of take; and
4. The maximum instantaneous rate of water abstraction shall not exceed 50% of the flow in the stream to the site being remediated; and
5. The activity does not take place on a site listed as an archaeological site on the New Zealand Archaeological Association Site Recording Scheme website; and
6. The activity is not undertaken within a Community Drinking Water Protection Zone as set out in Schedule 1; and
7. The activity is undertaken at a distance greater than 50 m from any lawfully established surface water intake.

The exercise of discretion is restricted to the following matters:

1. The content and adequacy of the management plan; and
2. The location, method and timing of sediment removal with respect to the life stage and habitat of sensitive ecological communities including fish and invertebrates; and
3. The adverse effects of the activity on downstream water quality, flows and significant habitats of indigenous fauna and flora; and
4. The effect of the activity on reliability for any authorised surface water take; and
5. The volume and rate at which water is abstracted and returned to the river, including the effects of erosion, bank stability and waterway capacity; and
6. Any adverse effects on mahinga kai, wāhi tapu or wāhi taonga; and
7. The benefits of the activity to the community and the environment.

13.5.28 Within the Hinds/Hekeao Plains Area the taking and use of water from a river and the disturbance of the bed of a river to remove fine sediment less than 2 mm in diameter for the sole purpose of habitat restoration that does not meet one or more of the conditions in Rule 13.5.27 is a discretionary activity.

Small and Community Water Takes

Note: Rules 5.112, 5.113, 5.114, 5.114A and 5.115 apply in the Hinds/Hekeao Plains Area. Rule 13.5.29 prevails over Rule 5.111.

13.5.29 Within the Lower Hinds/Hekeao Plains Area Region-wide Rule 5.111 does not apply.

Take and Use of Ground and Surface Water

Notes:

1. *Region-wide Rules 5.123 to 5.127 ‘Surface Water’ and Rules 5.128 to 5.132 ‘Groundwater’ apply in the Hinds/Hekeao Plains Area. Rules 13.5.30 and 13.5.31 are additional rules in the Valetta and Mayfield-Hinds Groundwater Allocation Zones.*
2. *Nothing in this Plan affects a person’s right to take water in accordance with section 14(3)(b) of the RMA.*

13.5.30 The taking and use of groundwater within the Valetta and Mayfield-Hinds Groundwater Allocation Zones that will substitute an existing surface water or groundwater permit with a direct, high or moderate stream depletion effect is a restricted discretionary activity, provided the following conditions are met:

1. The use of groundwater is on the same property as the existing resource consent and there is no increase in the annual volume, or is for the sole purpose of augmenting a surface waterbody; and
2. The groundwater take will not have a direct or high stream depletion effect; and
3. The bore interference effects are acceptable, as determined in accordance with Schedule 12; and
4. The proposed take, in combination with all other resource consents granted under this Rule, will not exceed the T allocation limits in Table 13(f); and

5. The take is from deep groundwater or the application for resource consent demonstrates that the take is not from stream depleting groundwater.

The exercise of discretion is restricted to the following matters:

1. Whether the volume and abstraction rate of water to be taken and used is reasonable for the proposed use assessed in accordance with Schedule 10; and
2. The timing of the surrender of the existing surface water or groundwater permit or permits; and
3. The effects the take has on any other authorised abstraction, including interference effects as indicated by an Aquifer Test undertaken in accordance with the requirements of Schedule 11 and well interference calculated in accordance with the method in Schedule 12; and
4. Where the take is less than 2 km from the coast, whether salt-intrusion into the aquifer or inland movement of the salt water/fresh water interface is prevented; and
5. The protection of groundwater from contamination, including the prevention of backflow of water or contaminants.

13.5.31 The taking and use of groundwater that does not meet one or more of the conditions of Rule 13.5.30 is a prohibited activity.

Transfer of Water Permits

Note: Rules 13.5.32, 13.5.33 and 13.5.34 prevail over Region-wide Rules 5.133 and 5.134 in the Hinds/Hekeao Plains Area

13.5.32 The temporary or permanent transfer, in whole or in part, (other than to the new owner of the site to which the take and use of water relates and where the location of the take and use of water does not change) of a water permit to take or use surface water or groundwater within the Hinds/Hekeao Plains Area, is to be considered as if it is a restricted discretionary activity, provided the following conditions are met:

1. The reliability of supply for any other lawfully established water take is not reduced; and
2. In the case of surface water:
 - (a) the point of take remains within the same surface water catchment and the take complies with the minimum flow and restriction regime in Tables 13(d) and 13(e); and
 - (b) 50 percent of the volume of transferred water is to be surrendered; or
3. In the case of groundwater:
 - (a) the point of take is within the same groundwater allocation zone or combined surface and groundwater allocation zone; and
 - (b) the bore interference effects as set out in Schedule 12 are acceptable; and
 - (c) in addition for stream depleting groundwater takes:
 - (i) the transfer is within the same surface water catchment; and
 - (ii) the take complies with the minimum flow and restriction regime in Table 13(d) and 13(e); and

- (iii) the stream depletion effect is no greater in the transferred location than in the original location, unless at least an equivalent volume of surface water allocation from the affected water body can be surrendered alongside the transfer, for at least the duration of the transferred take; and
- (d) If the transfer is within the Valetta Groundwater Allocation Zone, 50 percent of the volume of transferred water is to be surrendered.

The exercise of discretion is restricted to the following matters:

1. The nature of the transfer, whether short term, long term, partial or full, and the apportioning of the maximum rate of take and annual volume in the case of a partial transfer; and
2. The appropriateness of conditions, including conditions on minimum flow, annual volume and other restrictions to mitigate effects; and
3. The reasonable need for the quantities of water sought, the intended use of the water and the ability of the applicant to abstract and use those quantities; and
4. The efficiency of the exercise of the resource consent; and
5. The reduction in the rate of take in times of low flow; and
6. The method of preventing fish from entering any water intake.

13.5.33 Despite Rule 13.5.32, the temporary or permanent site-to-site transfer, in whole or in part, of a water permit to take or use water for gravel extraction (and ancillary activities), is to be considered as if it is a discretionary activity, provided the following condition is met:

1. The water continues to be used only for gravel extraction and ancillary activities.

13.5.34 The temporary or permanent transfer, in whole or in part, (other than to the new owner of the site to which the take and use of water relates and where the location of the take and use of water does not change) of a water permit that does not meet one of the conditions of Rule 13.5.32 or Rule 13.5.33 must not be approved under section 136 of the RMA, in the same way as if it were a prohibited activity.

Augmenting Groundwater or Surface Water

Notes:

1. For all activities in or near waterways, refer also to the Canterbury Flood Protection and Drainage Bylaw 2013.
2. Rules 13.5.35 to 13.5.37 are new rules that apply in the Hinds/Hekeao Plains Area

13.5.35 The taking and use of surface water or groundwater in the Lower Hinds/Hekeao Plains Area for the sole purpose of augmenting surface water or groundwater to reduce concentrations of nitrate nitrogen in surface water or groundwater and/or increase flows in lowland streams is a discretionary activity.

13.5.36 The discharge of water into water, or onto land in circumstances where it may enter water (where that water contains contaminants), that is for the purpose of augmenting

groundwater or surface water within the Hinds/Hekeao Plains Area, is a restricted discretionary activity, provided the following conditions are met:

1. The discharge is part of a trial for investigative purposes and the duration of the trial will not exceed 5 years; and
2. The activity does not take place on a site listed as an archaeological site; and
3. The discharge is not within a Community Drinking Water Protection Zone as set out in Schedule 1; and
4. The discharge is not within 100 m of any well used to supply potable water; and
5. The discharge is for the purpose of reducing the concentration of nitrate nitrogen in surface water or groundwater, or increasing flows in lowland streams for ecological or cultural benefits.

The exercise of discretion is restricted to the following matters:

1. The location, method and timing of the discharge to groundwater or surface water; and
2. The adequacy of the scheme design, construction, operation, monitoring, reporting; and
3. The appropriateness of integration with existing or planned infrastructure and water conveyance systems; and
4. Any adverse effects on people and property from raised groundwater levels and reduced drainage capacity in the drainage system; and
5. Any adverse effects on water quality in the receiving aquifer or river or significant habitats of indigenous flora and fauna; and
6. Any adverse effects on sites or values of importance to Ngāi Tahu from moving water from one catchment or water body to another; and
7. Any adverse effects on sites or areas of wāhi tapu, wāhi taonga or mahinga kai; and
8. The potential benefits of the activity to the community and the environment.

13.5.37 The discharge of water into water, or onto land in circumstances where that may enter water (where that water contains contaminants), that is for the purpose of augmenting groundwater or surface water in the Hinds/Hekeao Plains Area, that does not meet one or more of the conditions of Rule 13.5.36 is a discretionary activity.

13.6 Freshwater Outcomes

The following table sets out, in combination with Policies 4.3 and 4.4 the freshwater outcomes for the Hinds/Hekeao Plains Area. These freshwater outcomes are to be maintained where they are already being met, or achieved by 2035 where they are not currently met. Achievement of these freshwater outcomes will be through a combination of the implementation of this Plan along with implementation of the recommendations of the Ashburton Zone Implementation Programme Addendum: Hinds Plains Area, 2014.

Table 13(a): Freshwater Outcomes for Hinds/Hekeao Plains Area Rivers

Management Unit	River	Ecological health indicators			Macrophyte indicators		Periphyton indicators			Siltation indicator	Microbial indicator	Cultural Indicator
		QMCi [min Score]	Dissolved oxygen [min saturation %]	Temperature [max] (°c)	Emergent Macrophytes [max cover of bed] (%)	Total Macrophytes [max cover of bed] (%)	Chlorophyll a [max biomass] (mg/m ³)	Filamentous algae > 20mm [max cover of bed] (%)	Cyanobacteria [max cover of bed] (%)	Fine sediment, 2 mm diameter [max cover of bed] (%)	Microbial indicator for contact recreation [SFRG]	
Hill-fed – Upland	Upper Hinds River/Hekeao ¹	6	90	20	No value set	No value set	50	10	20	15	Good	Freshwater mahinga kai species are sufficiently abundant for customary gathering, water quality is suitable for their safe harvesting, and they are safe to eat.
Hill-fed - Lower	Lower Hinds River/Hekeao ¹	6	90	20	No value set	No value set	200	30	50	15	Good-Fair	
Spring-fed Plains	Including but not limited to: Blees Drain Flemington Drain Parakanoi Drain Windermere Drain Boundary Drain Stormy Drain Spicers Creek Dawson Drain Home Paddock Drain Deals Drain O'Shaughnessys Drain Taylors Drain	5	70	20	30	50	200	30	50	20	No value set	

Northern Drain												
Griggs Drain												
Dobsons Drain												
Twenty One Drain												
Crows Drain												
Harris Drain												
Yeatmans Drain												
Oakdale Drain												
McLeans Swamp												
Road Drain												
Montgomerys												
Drain												
Pyes Drain												

Key:

QMCI = Quantitative Macroinvertebrate Community Index

SFRG = Suitability for Recreation Grade – from Microbiological water quality guidelines for Marine and Freshwater Recreational Areas 2003

Footnotes:

¹ Upstream of the Rangitata Diversion Race siphon on both North and South branches of the Hinds River.

For freshwater outcomes for all other areas within the Ashburton sub-region refer to Policies 4.3, 4.4 and Tables 1a and 1b.

13.6 Allocation Limits

13.6.1 Environmental Flow and Allocation Limits

13.7 Environmental Flow and Allocation and Water Quality Targets/Limits

13.7.1 Environmental Flow and Allocation Limits

Table 1213(b): Hakatere/Ashburton River Catchment Environmental Flow and Allocation Limits

River or stream (see Planning Maps)	Location of recorder site, or site where flow is measured	Topo 50 Map Reference	From 1 July 2023	From 1 July 2033						
			Minimum flow for A permits (L/s)	Allocation limit for A permits (L/s)	Minimum flow for B permits (L/s)	Allocation limit for B permits (L/s)	Minimum flow for A permits (L/s)	Allocation limit for A permits (L/s) for the whole catchment	Minimum flow for B permits (L/s)	Allocation limit for B permits (L/s)
Ashburton River mainstem	State Highway 1 Bridge	BY21:999-351	6,000	253	14,000	500	10,000 at State Highway 1 Bridge (map reference (BY21:999- 351))	15,100	14,000	5,000
South Branch	Residual flow site immediately downstream of the RDR intake point	BX20:721-576	3,200 (February – April) 2,300 (May – January)	5,100	4,000	2,000				
	South Branch at North Branch confluence	BY21:976-399	4,650	3,905	10,500	100				
North Branch	above confluence	BY21:976-401	1,000	2,194	4,000	540				
Pudding Hill	below ADC water race	BY21:976-404	80	528	1,600	-				
Taylor's Stream	above South Branch Confluence	BX20:808-742	500	4,465	3,700	800				
O'Shea Creek	bywash to North Ashburton	BY20:885-527	450	556	1,000	-				
Mt. Harding Creek	Aitkens Road	BY21:926-502	500	1562	1,000	-				
Lagmhor Creek	Frasers Road	BY21:962-366	100	295	-	-				

For all other areas see Rule 5.123.

Table 13(c): Hakatere/Ashburton River Restriction Regime

Flow at SH1 (L/s)	Reduction in Take
7,700	0%
7,275	25%
6,850	50%
6,425	75%
6,000	100%

Note: Table 13(c) applies from 1 July 2023.

Table 13(d) Hinds River/Hekeao Environmental Flow and Allocation Limits

River	Minimum flow sites	Topo 50 Map reference	Minimum flow (L/s)		Allocation (L/s)	Restriction regime ¹	
			1 October 2014 – 30 June 2020	From 1 July 2020		1 October 2014 – 30 June 2025	From 1 July 2025
South Branch	Not applicable	Not applicable	No minimum flow		32	No restriction regime	
North Branch	Not applicable	Not applicable	No minimum flow		0	No restriction regime	
Lower	Poplar Road	BY20:9080-1949	700	770	1522	No restriction regime	1973

¹ Flows at which pro-rata restrictions start (L/s)

Table 13(e): Lower Hinds/Hekeao Plains Area Environmental Flow and Allocation Limits

Spring-fed Plains Rivers ¹	Minimum flow sites	Topo 50 Map reference	1 October 2014 – 30 June 2025	
			Minimum flow (L/s)	Allocation (L/s) ²
Blees Drain	Lower Beach Road	BY21:0132-2104	As per existing minimum flow and partial restriction conditions on existing resource consents	349
Flemington Drain	Lower Beach Road	BY21:0112-2059	As per existing minimum flow and partial restriction conditions on existing resource consents	547
Parakanoi Drain	Lower Beach Road	BZ21:9575-1779	As per existing minimum flow and partial restriction conditions on existing resource consents	588
Windermere Drain	Poplar Road	BY21:9369-1968	As per existing minimum flow and partial restriction conditions on existing resource consents	668
Boundary Drain	Trigpole Road	BZ20:8982-1672	As per existing minimum flow and partial restriction conditions on existing resource consents	987
Stormy Drain	Lower Beach Road	BZ20:8764-1178	As per existing minimum flow and partial restriction	436

<u>Spring-fed Plains</u>	<u>Minimum</u>	<u>Topo 50 Map</u>	<u>1 October 2014 – 30 June 2025</u>	
			<u>conditions on existing resource consents</u>	
<u>Spicers Drain</u>	<u>Lower Beach Road</u>	<u>BY21:0012-2019</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>184</u>
<u>Dawson Drain</u>	<u>Twenty One Drains Road</u>	<u>BY21:9773-1919</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>35</u>
<u>Home Paddock Drain</u>	<u>Poplar Road</u>	<u>BZ21:9443-1679</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>333</u>
<u>Deals Drain</u>	<u>Poplar Road</u>	<u>BZ21:9273-1599</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>347</u>
<u>O 'Shaughessys Drain</u>	<u>Poplar Road</u>	<u>BY20:9123-1969</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>426</u>
<u>Taylors Drain</u>	<u>At corner Hinds River Road and Newpark Road</u>	<u>BY20:9033-2189</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>513</u>
<u>Northern Drain</u>	<u>Surveyors Road</u>	<u>BY20:8863-2164</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>634</u>
<u>Griggs Drain</u>	<u>Lower Beach Road</u>	<u>BZ20:9173-1479</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>100</u>
<u>Dobson Drain</u>	<u>Twenty One Drains Road</u>	<u>BZ20:8953-1449</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>447</u>
<u>Twenty One Drain</u>	<u>Twenty One Drains Road</u>	<u>BZ20:8933-1299</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>351</u>
<u>Crows Drain</u>	<u>Lower Beach Road</u>	<u>BZ20:8603-1059</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>314</u>
<u>Harris Drain</u>	<u>Lower Beach Road</u>	<u>BZ20:8504-0979</u>	<u>As per existing minimum flow and partial restriction conditions on existing resource consents</u>	<u>260</u>
<u>Yeatmans Drain</u>	<u>-</u>	<u>BZ20:8588-1048</u>	<u>As per existing minimum flow and partial restriction</u>	<u>72</u>

Spring-fed Plains	Minimum	Topo 50 Map	1 October 2014 – 30 June 2025
			conditions on existing resource consents
Oakdale Drain	Rangitata Mouth Road	BZ20:8276-1004	As per existing minimum flow and partial restriction conditions on existing resource consents
McLeans Swamp Road Drain	Windermere cut off	B Y20:8673-2799	As per existing minimum flow and partial restriction conditions on existing resource consents
Moffats Drain	Boundary Road	-	As per existing minimum flow and partial restriction conditions on existing resource consents
Montgomerys Drain	At confluence with Hinds River	BZ21:9223-1569	As per existing minimum flow and partial restriction conditions on existing resource consents
Pyes Drain	Lower Beach Road	BZ20:8893-1249	As per existing minimum flow and partial restriction conditions on existing resource consents

¹ The drains referred to in this column are considered to be modified watercourses for the purposes of the Resource Management Act 1991.

² Existing rates of allocation

13.6.2 Groundwater Allocation limits

Nil. See Rules 5.41 to 5.64.

13.7.2 Groundwater Allocation Limits/Targets

The following groundwater allocation limits are to be applied when reading relevant policies and rules in Sections 4, 5 and 13

Table 14: Ashburton Groundwater Limits

Table 13(f): Ashburton Section Groundwater Limits/Targets

Groundwater Allocation Zone (see Planning Maps)	A Allocation Limit (million m ³ /yr)	B Allocation Limit (million m ³ /yr)	T Allocation Limit (million m ³ /yr) ¹
Chertsey	112.4	0	0
Ashburton Lyndhurst	126.60	0	0
Hakatere/Ashburton River	69.7	35*	0
Valetta	96.6	0	33
Mayfield-Hinds	148126.1	0	28.3

¹ Taking of groundwater within the T-Allocation limit is governed by Rule 13.5.30

* Refer to Policies 13.4.5, 13.4.7 and 13.4.8.

For all other areas see Rule 5.128.

13.6.3 Catchment Nutrient Load Limits and Allowances.

Nil See Rules 5.1 to 5.64.

13.7.3 Water Quality Limits and Targets

In the Hinds/Hekeao Plains Area the water quality limits in Tables 13(g) 13(h) and 13(i) prevail over the region-wide limits in Schedule 8.

Table 13(g): Limits/Targets for the Hinds/Hekeao Plains Area surface waterbodies¹

<u>Surface Waterbody type</u>	<u>Type</u>	<u>Measurement</u>	<u>Limit/Target</u> <u>Nitrate-nitrogen concentration</u> <u>(mg/L)</u>
<u>Hill-fed Upland²</u>	<u>Nitrate toxicity</u>	<u>Annual median</u>	<u>1.0 (Limit)</u>
		<u>Annual 95th percentile</u>	<u>1.5 (Limit)</u>
<u>Hill-fed Lower</u>	<u>Nitrate toxicity</u>	<u>Annual median</u>	<u>3.8 (Target to be met by 2035)</u>
		<u>Annual 95th percentile</u>	<u>5.6 (Target to be met by 2035)</u>
<u>Spring-fed Plains</u>	<u>Nitrate toxicity</u>	<u>Annual median</u>	<u>6.9 (Target to be met by 2035)</u>
		<u>Annual 95th percentile</u>	<u>9.8 (Target to be met by 2035)</u>

¹ *Waterbodies are to meet both (annual median and 95th percentile) limits/targets*

² *Monitoring of Hill-fed Upland rivers occurs at the Canterbury Regional Council's monthly surface waterbodies monitoring sites, upstream of the Rangitata Diversion Race siphon on both North and South branches of the Hinds River. For other surface waterbodies monitoring occurs at the Canterbury Regional council's monthly surface waterbodies monitoring sites.*

Table 13(h): Limits for Hinds/Hekeao Plains Area surface waterbodies

<u>Surface Waterbody type</u>	<u>Type</u>	<u>Measurement</u>	<u>Limit (mg/L)</u>
<u>Hill-fed Upland¹</u>	<u>Dissolved Reactive Phosphorus (DRP)</u>	<u>Annual median</u>	<u>0.02</u>

¹ *Measured immediately upstream of the Rangitata Diversion Race siphon on both the North and South branches of the Hinds River.*

Table 13(i): Limits/Targets for Groundwater

<u>Contaminant</u>	<u>Measurement</u>	<u>Limits/Targets</u>
<u>Nitrate-N</u>	<u>Annual average concentration¹</u>	<u>6.9 mg /L (Target to be met by 2035)</u>
<u>E. coli</u>	<u>Annual median concentration¹</u>	<u>< 1 organism/100 millilitres (Limit)</u>
<u>Other contaminants ²</u>	<u>Any sample¹</u>	<u><50% MAV ³ (Limit)</u>

¹ *Groundwater quality is determined as the median concentration across the Canterbury Regional Council's quarterly groundwater monitoring bores (screened <30 m below the ground level).*

² *Other contaminants of health significance as listed in NZ Drinking-water Standards*

³ *Maximum acceptable value (as listed ² above)*

13.7.8 Flow Sensitive Catchments

Nil.

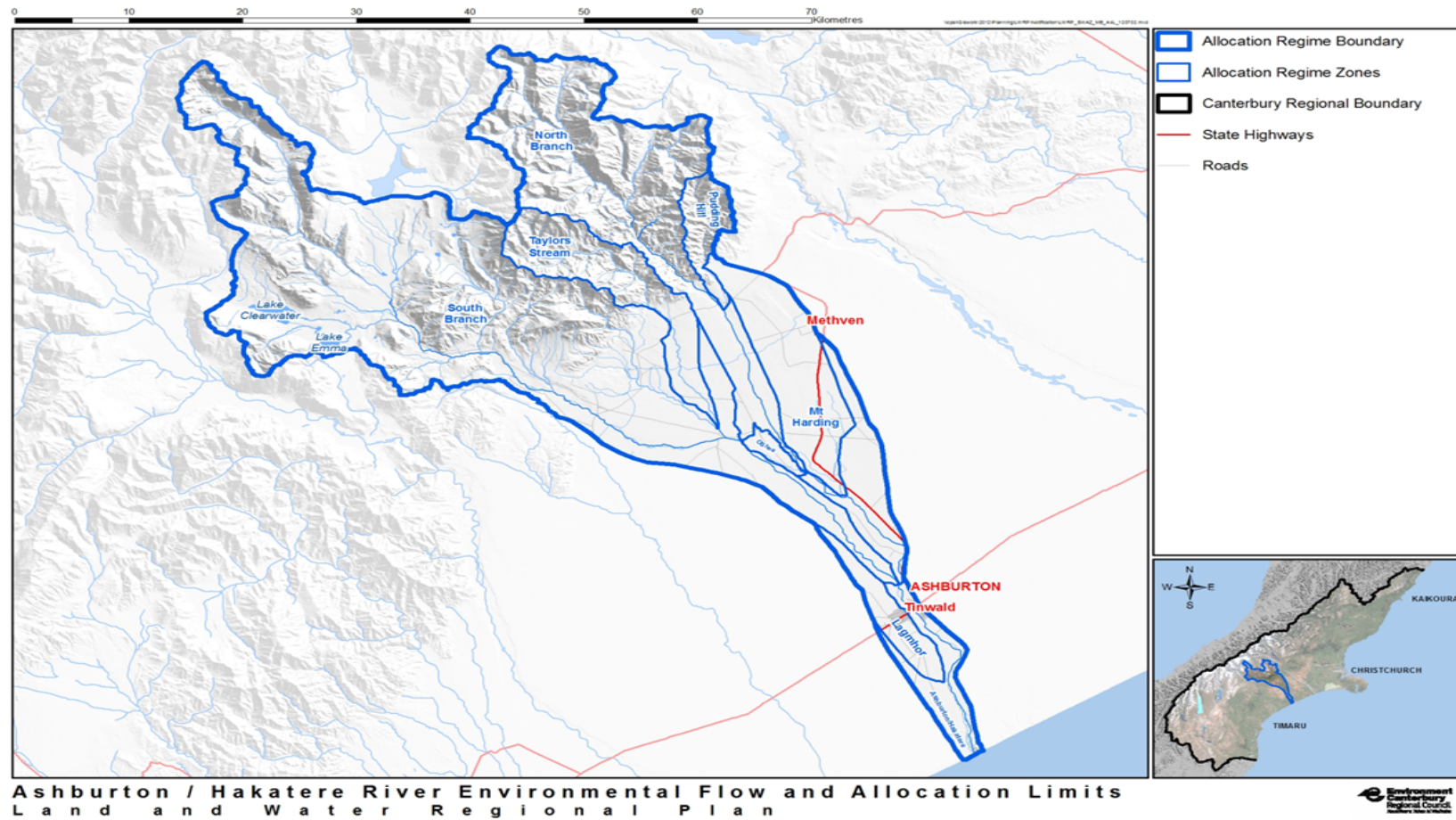
13.89 High Naturalness Water Bodies

The following are to be applied when reading relevant policies and rules in Sections 4 and 5.

Table 1413(j): High Naturalness Water Bodies

Main Lake/River (see Planning Maps)	Topo 50 Map Reference	Outstanding and Significant Characteristics
Manuka Lake	BX19:582-786	Outstanding natural features and landscapes. Habitat of threatened/endangered indigenous birds. High visual amenity value.
Lake Emily	BX19:577-773	Outstanding natural features and landscapes that includes a regionally significant wetland complex. Habitat of threatened/endangered indigenous birds and fresh water species including eel and fresh water mussel. High visual amenity value.
Maori Lakes	BX19:526-741	Outstanding natural features and landscapes. Habitat of threatened/endangered indigenous birds, including crested grebe and Australasian bittern. Inflows and outflows high habitat value for maintaining longfinned and shortfinned eel and galaxidae and the sport fish, brown trout. Outflows high habitat value Chinook salmon spawning and fresh water mussels. High visual amenity value.
Spider Lakes	BX19:480-701	Habitat of threatened/endangered indigenous birds. High visual amenity value. Lake Donne - most natural macrophyte/charophyte assemblage in Ashburton Basin. Small lakes support the macroinvertebrates - Notostracans (rare and threatened).
Lake Trinity	BX19:512-673	Outstanding natural features and landscapes. High visual amenity value.
Lake Clearwater	BX18:422-704	Outstanding natural features and landscapes including a regionally significant red tussock wetland. Habitat of threatened/endangered indigenous birds and Recommended Area for Protection. High habitat value for indigenous fish such as galaxidae, eel, fresh water mussels and the sports fish brown trout. High visual amenity value.
Lake Camp	BX18:431-891	Outstanding natural features and landscapes. High habitat value for Longfinned eel, fresh water mussel, Crested grebe and the sports fish Rainbow trout.
Lake Roundabout	BX19:463-683	Outstanding natural features and landscapes. Habitat of threatened/endangered indigenous birds. High visual amenity value.
Lake Emma	BX19:471-668	Outstanding natural features and landscapes including pedestal Carex secta and schoenus wetlands. Habitat of threatened/endangered indigenous birds. High habitat value for indigenous fish such as galaxidae, eel, fresh water mussels and the sports fish brown trout. High visual amenity value.

Ashburton River/ Hakatere Environmental Flow and Allocation Limits

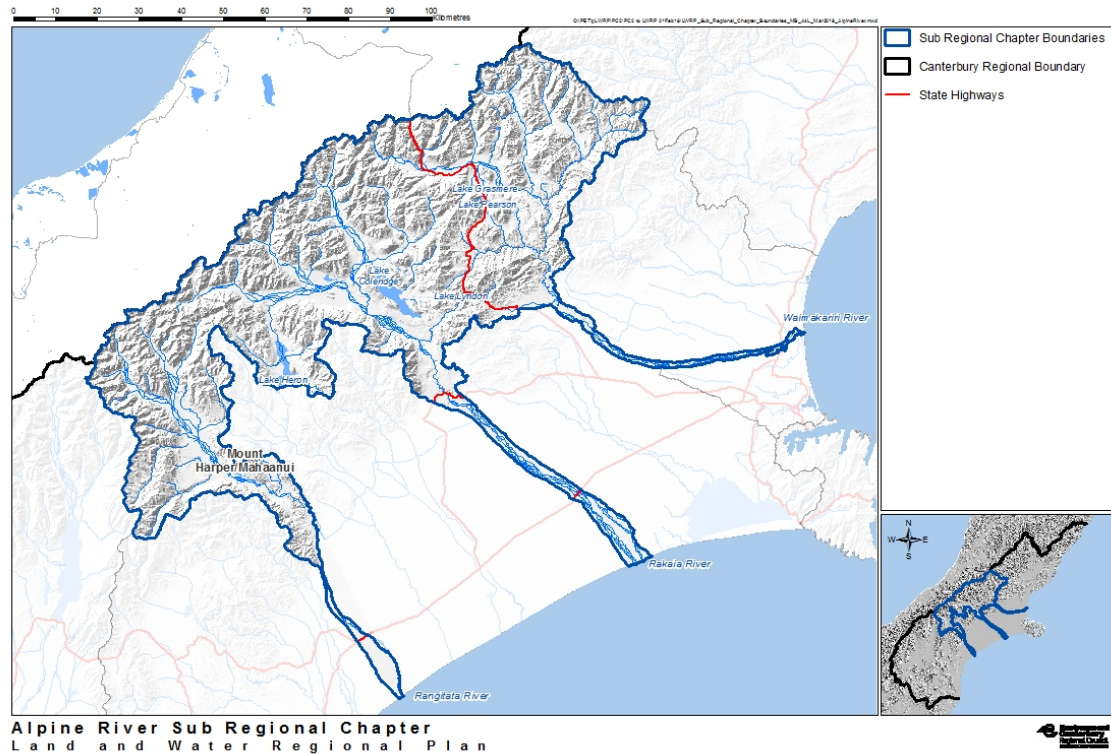


Ashburton / Hakatere River Environmental Flow and Allocation Limits
 Land and Water Regional Plan

Amendments to Section 5 of the Canterbury Land and Water Regional Plan

5.124 The taking and use of surface water from a river or lake that does not meet ~~condition 2 or 3 in Rule 5.123~~ one or more of the conditions of Rule 5.123, excluding condition 1, is a non-complying activity.

Replace the existing map in Section 12 (Alpine River Sub-Region Section) of the LWRP with the map shown below.



Amendments to Section 16 of the Canterbury Land and Water Regional Plan

Schedule 7 Farm Environment Plan

Part A – Farm Environment Plans

A Farm Environment Plan can be based on either of:

1. The material set out in Part B below;

OR

2. Industry prepared Farm Environment Plan templates and guidance material that:
 - (a) Include the following minimum components:
 - (i) The matters set out in 1, 2, and 3 of Part B below;
 - (ii) Contains a methodology that will enable development of a plan that will identify actual and potential environmental effects and risks specific to the property, addresses those effects and risks and has a high likelihood of appropriately avoiding, remedying or mitigating those effects;
 - (iii) Performance measures that are capable of being audited as set out in Part C below; and:
 - (b) Has been approved as meeting the criteria in (a) and being acceptable to the Canterbury Regional Council by the Chief Executive of the Canterbury Regional Council.

Part B – Farm Environment Plan Default Content

The plan requirements will apply to:

1. a plan prepared for an individual property or farm enterprise; or
2. a plan prepared for an individual property which is part of a collective of properties, including an irrigation scheme, principal water supplier, or an Industry Certification Scheme.

The plan shall contain as a minimum:

1. Property or farm enterprise details
 - (a) Physical address
 - (b) Description of the ownership and name of a contact person
 - (c) Legal description of the land and farm identifier
2. A map(s) or aerial photograph at a scale that clearly shows:
 - (a) The boundaries of the property or land areas comprising the farm enterprise.
 - (b) The boundaries of the main land management units on the property or within the farm enterprise.
 - (c) The location of permanent or intermittent rivers, streams, lakes, drains, ponds or wetlands.
 - (d) The location of riparian vegetation and fences adjacent to water bodies.
 - (e) The location on all waterways where stock access or crossing occurs.

- (f) The location of any areas within or adjoining the property that are identified in a District Plan as “significant indigenous biodiversity”.
- 3. A list of all Canterbury Regional Council resource consents held for the property or farm enterprise.
- 4. An assessment of the adverse environmental effects and risks associated with the farming activities and how the identified effects and risks will be managed, including irrigation, application of nutrients, effluent application, stock exclusion from waterways, offal pits and farm rubbish pits.
- 5. A description of how each of the following objectives will, where relevant, be met.

- (a) Nutrient management: To maximise nutrient use efficiency while minimising nutrient losses to water.

Within the Hinds/Hekeao Plains Area Part B clause 5(a) shall also include the following:

- Achieve from 2017 the loss rates that could reasonably be expected from implementing good management practices
- In the Upper and Lower Hinds/Hekeao Plains Area further reduce the nitrogen loss rate in accordance with Policies 13.4.13 and 13.4.15.
- (b) Irrigation management: To operate irrigation systems efficiently and ensuring that the actual use of water is monitored and is efficient.
- (c) Soils management: To maintain or improve the physical and biological condition of soils in order to minimise the movement of sediment, phosphorus and other contaminants to waterways.
- (d) Collected animal effluent management: To manage the risks associated with the operation of effluent systems to ensure effluent systems are compliant 365 days of the year.
- (e) Livestock management: To manage wetlands and water bodies so that stock are excluded as far as practicable from water, to avoid damage to the bed and margins of a waterbody, and to avoid the direct input of nutrients, sediment, and microbial pathogens.
- (f) Offal pits: To manage the numbers and locations of pits to minimise risks to health and water quality.

The plan shall include for each objective in 5 above;

- (a) detail commensurate with the scale of the environmental effects and risks;
 - (b) defined measurable targets that clearly set a pathway and timeframe for achievement and set out defined and auditable “pass/fail” criteria
 - (c) a description of the good management practices together with actions required
 - (d) the records required to be kept for measuring performance and achievement of the target.
6. Nutrient budgets, prepared by a suitably qualified person, using the OVERSEER® nutrient budget model, or equivalent model approved by the Chief Executive of Environment Canterbury, for each of the identified land management units and the overall farm or farm enterprise.

7. **Selwyn Te Waihora – Additional Requirements**

Within the Selwyn Te Waihora sub-region the following additional requirements for farm environment plans apply:

1. Include a map(s) or aerial photograph at a scale that clearly shows the location of any known mahinga kai, wāhi tapu or wāhi taonga within any property or farming enterprise located in the Cultural Landscape/Values Management Area.
2. Include a description of how the following objective will be met:

Nutrient management: To maximise nutrient use efficiency while minimising nutrient losses to water by:

- (a) minimising the loss of phosphorus and sediment within the Phosphorus Sediment Risk Area as shown in the planning maps; and
- (b) achieving good management practice in respect of nutrient losses; and
- (c) managing the discharge from drains within the Lake area of the Cultural Landscape/Values Management Area; and
- (d) further reducing the nitrogen loss calculation from 2022 where a property or farming enterprise's nitrogen loss calculation is greater than 15 kg of nitrogen per hectare per annum.

Part C – Farm Environment Plan Audit Requirements

The Farm Environment Plan must be audited by a Farm Environment Plan Auditor who is independent of the farm being audited (i.e. is not a professional adviser for the property) and has not been involved in the preparation of the Farm Environment Plan.

The farming activity occurring on the property will be audited against the following minimum criteria:

1. An assessment of the performance against the objectives, targets, good practices and timeframes in the Farm Environment Plan;
2. An assessment of the robustness of the nutrient budget/s;
3. An assessment of the efficiency of water use (if irrigated).

Part D – Farming Information

Whenever one of Rules 5.41-5.58 requires information to be submitted, the following is to be provided:

1. The OVERSEER®, or equivalent model approved by the Chief Executive of Environment Canterbury, input and output files for the property; or
2. Information detailing:
 - (a) The site area to which the farming activity relates;
 - (b) Monthly stocking rates (numbers, types and classes) including breakdown by stock class;
 - (c) Annual yield of arable or horticultural produce;
 - (d) A description of the farm management practices used on each block including:
 - (i) Ground cover – pasture, crops, fodder crops, non-grazed areas (including forestry, riparian and tree areas) and any crop rotation;
 - (ii) Stock management – lambing/calving/fawning dates and percentages, any purchases and sales and associated dates, types and age of stock;
 - (iii) Fertiliser application – types and quantities per hectare for each identified block, taking into account any crop rotation;

- (iv) Quantities of introduced or exported feed;
- (e) Farm animal effluent, pig farm effluent, feed pad and stand-off pad effluent management including:
 - (i) Area of land used for effluent application;
 - (ii) Annual nitrogen loading rate and nitrogen load rate per application;
 - (iii) Instantaneous application rate;
- (f) Irrigation – areas, rates, monthly volumes and system type.

The information is to be collated for the period 1 July to 30 June in the following year and be provided annually, no later than 31 of October

Schedule 24a - Farm Practices

(a) Nutrient Management:

- (i) A nutrient budget based on soil nutrient tests has been prepared, using OVERSEER in accordance with latest version of the OVERSEER Best Practice Data Input Standards, or an equivalent model approved by the Chief Executive of Canterbury Regional Council.
- (ia) Where a material change in the land use associated with the farming activity occurs (being a change exceeding that resulting from normal crop rotations or variations in climatic or market conditions) the nutrient budget shall be prepared at the end of the year in which the change occurs, and also three years after the change occurs;
- (ib) Where a material change in the land use associated with the farming activity does not occur, the nutrient budget shall be prepared once every three years;
- (ic) An annual review of the input data used to prepare the nutrient budget shall be carried out by or on behalf of the landowner for the purposes of ensuring the nutrient budget accurately reflects the farming system. A record of the review shall be kept by the landowner.
- (ii) Fertiliser is applied in accordance with the Code of Practice for Nutrient Management [2007].
- (iii) Records of soil nutrient tests, nutrient budgets and fertiliser applications are kept and provided to the Canterbury Regional Council upon request.

(b) Irrigation Management:

- (i) All irrigation systems installed or replaced after 1 October 2014 meet the Irrigation New Zealand Piped Irrigation Systems Design Code of Practice [2013], Irrigation New Zealand Piped Irrigation Systems Design Standards [2013] and the Irrigation New Zealand Piped Irrigation Systems Installation Code of Practice [2013].
- (ii) The irrigation system application depth and uniformity are self-checked annually in accordance with the Irrigation New Zealand Piped Irrigation System Performance Assessment Code of Practice [2015].
- (iii) Irrigation applications are undertaken in accordance with property specific soil moisture monitoring, or a soil water budget, or an irrigation scheduling calculator. Soil monitoring means monitoring soil moisture using either volumetric or tension based methodology.
- (iv) Records of irrigation system application depth and uniformity checklists, irrigation applications, soil moisture monitoring or soil water budget or irrigation scheduling calculator results and rainfall are kept and provided to the Canterbury Regional Council upon request.

(c) Winter grazing of intensively farmed stock:

- (i) Winter grazing means grazing of stock between 1 May and 30 September. This is usually associated with break feeding behind temporary fencing.
- (ii) For all winter grazing of intensively farmed stock adjacent to any river, lake, artificial watercourse (excluding irrigation canals or stock water races) or a wetland, a 3 m vegetative strip (measured from the edge of the bed of the river, lake, artificial watercourse, or wetland) from which stock are excluded, is maintained around the water body.

(d) Cultivation:

- (i) Cultivation means the preparation of land for growing pasture or a crop and the planting, tending and harvesting of that pasture or crop, but excludes:

 - direct drilling of seed;
 - no-tillage practices;
 - re-contouring of land; and
 - forestry.
- (ii) For all cultivation adjacent to any river, lake, artificial watercourse (excluding irrigation canals, stock water races or ephemeral drains) or a wetland, a 3 m uncultivated vegetative strip (measured from the edge of the bed of the river, lake, artificial watercourse, or wetland) is maintained around the water body.

(e) Collected Animal Effluent:

- (i) Collection, storage and treatment systems for dairy effluent installed or replaced after 1 October 2014 meet the Dairy NZ Farm Dairy Effluent Design Standard and Code of Practice [2013].
- (ii) The animal effluent disposal system, application, depth, separation distances, depth, uniformity and intensity are self-checked annually in accordance with Section 4 'Land Application' in the guideline "A Farmer's Guide to Managing Farm Dairy Effluent - A Good Practice Guide for Land Application Systems" [2013].
- (iii) Records of the application, depth, separation distances, uniformity and intensity of dairy effluent disposal, in accordance with (e)(ii) above, are kept and provided to the Canterbury Regional Council upon request.