

Stockwater Races

Information Book



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This brochure provides information for Stockwater Race owners in the Waimakariri District.

Find the ‘Stockwater Race Bylaw 2021’ with all of the rules designed to protect the water race network on our website waimakariri.govt.nz



The indicative extent of the Waimakariri stockwater and irrigation race network
(Map credit: Waimakariri Irrigation Ltd)

An Introduction to Stockwater Races

The Council's stock water network is a system of approximately 758km of open races that run through the Waimakariri District, servicing about 1,670 properties to provide water to stock.

The race network has its main intake point at Browns Rock on the Waimakariri River, and has operated since 1896.

The stockwater is distributed to farmers on land situated between the Ashley (Rakahuri) and the Waimakariri rivers, east of Burnt Hill and Oxford, and west of Rangiora and Eyreton.

Irrigation water is also distributed through some of the race network by Waimakariri Irrigation Ltd.

Water from stockwater races may be used by landowners for:

- Stock water
- Domestic irrigation (only with Council approval).

But not for:

- Irrigation other than domestic irrigation, unless from designated irrigation races and approved by Waimakariri Irrigation Ltd
- Any use that would lead to the contamination of the water race by chemicals, hazardous substances and unwanted organisms, nutrients or any backflow from irrigation equipment.



The Canterbury Land and Water Regional Plan sets out livestock exclusion rules for artificial watercourses, including water races, which also need to be complied with.

Maintenance of races on private property is the responsibility of the property owner.

Penalties

Breaches of the Bylaw may be penalised with a fine of up to \$20,000.

Written permission of the Council is required to:

- Widen, deepen, alter, or close a water race
- Draw off or divert any water (for example to create a pond)
- Plant or grow any trees or other plants, or erect a building of any kind within 10m from either side of a water race.

Your responsibilities

The Council owns the water race structure, but it's the responsibility of the owner, or occupier of the land, through which the water race runs to keep it clear of silt, weeds, rubbish and obstructions.

As the owner, you must also maintain the banks of the races, all culverts and bridges.

Maintenance required on neighbouring properties should be addressed to the property owners in the first instance.

Protecting the network

The Stockwater Race Bylaw 2021 details the rules that protect the water race network.

No one is to destroy or damage any part of the water race. This means you cannot obstruct the flow of water either wilfully or through neglect.

Chemicals or herbicides use should be limited and not be used in such a way as to destabilise the banks of the race or detrimentally affect aquatic organisms.

Stock (specifically farmed cattle, deer or pigs) shouldn't be allowed to disturb a water race or its banks.

Maintenance of part of the Council's stock water race network is contracted out to Waimakariri Irrigation Ltd, on behalf of Council.



Landowners can apply for permission to alter a stockwater race using the Stockwater Application Form available at waimakariri.govt.nz

Status updates on supply

Check the Waimakariri Irrigation Ltd website wil.co.nz for status updates on supply.

Contact waimakariri.govt.nz/have-a-say/report-an-issue or call us on 0800 965 468 to report problems of water supply such as low flows.

Funding

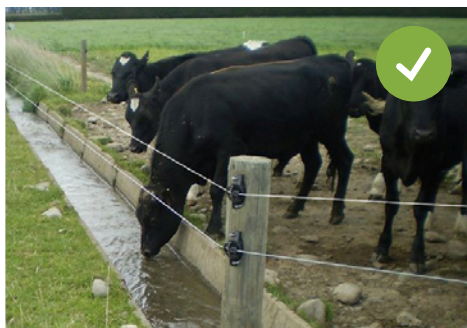
Every property with access to the water race network pays an annual rate to the Council that covers the cost of their operation.

This is a combination of a fixed charge and per hectare rate and is included in the annual rates assessment.

Access is generally defined as being on the property or along the boundary, whether piped or open, and includes the other side of a boundary fence.



Stock polluting a water race



Stock using a good drinking bay

Photo credit: Ashburton District Council

Fencing and Stock Access

Water races can become polluted from stock and other farming activities. Appropriate stock access improves water quality for your stock, downstream water users, and freshwater biodiversity.

Water races can easily be polluted by everyday farming activities. Contamination can potentially make the water unsafe for stock to drink.

The Stockwater Race Bylaw 2021 doesn't allow contamination of the water race by chemicals, nutrients or by backflow from irrigation equipment. Discharging any animal effluent or agricultural fertiliser within 10m of a stockwater race isn't permitted.

There are some easy steps that should be taken to help prevent pollution:

1. Fence off water races and provide drinking stations or troughs – especially for

farmed cattle, pigs and deer if a race discharges to a river, lake or wetland. Stock can cause soil pugging and bank collapse, as well as affect water quality downstream. This is a Canterbury Land and Water Regional Plan requirement.

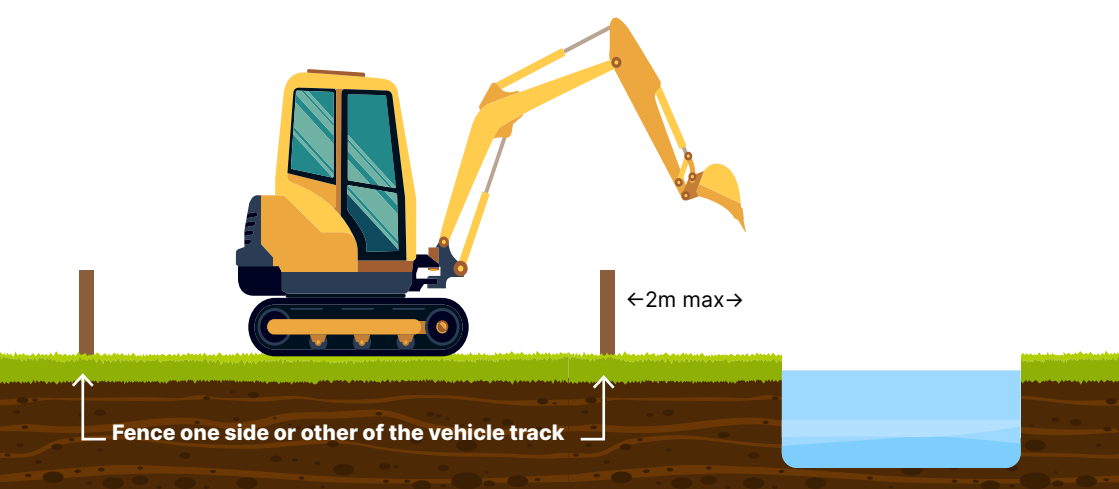
2. Use another source of water for mixing up spray or sheep dip.
3. Make sure effluent or fertiliser do not flow into the race, by discharging at least 10m away.

Fencing

The Stockwater Race Bylaw 2021 does not permit disturbance of a water race (including its banks) by farmed cattle, deer or pigs. Fencing is a good way to achieve this.

When planning fencing, it's important to keep sufficient access for excavators or other vehicles to maintain the water races.

This includes installing gates in boundary and internal fences and careful planning of fence



setbacks and height beside water races. Note that high fencing, such as deer fencing, can prevent excavator access.

Ensure fences are an appropriate distance from the top of the water race bank, particularly for the side that is used for race cleaning.

Trees, hedges and other vegetation must not impede access or the ability for people or machinery to enter the drain. Refer to the Council policy 'Planting of Trees and Shrubs Alongside Stockwater Races' for more details.

Stock drinking stations

Drinking stations that keep stock hooves out of the race (for farmed cattle, pigs and deer) or a reticulated trough are required to avoid damage to the water race banks.

When choosing a drinking station location, avoid culverts, gateways, weirs, steep banks, and the outside of a bend where the water flows faster and the bank is prone to erosion.

Banks on the inside of bends or a straight reach with good flow are usually suitable locations.

At the drinking station, you must place the fence so that stock can reach their heads under the fence to drink, but not place their hooves in the water. A hard raised edge, such as wooden boards, can be inserted to protect the bank. Gravel can also be added to the ground that the stock will be standing on.

Crossing water races

Animals and vehicles should cross water races at bridges or culverts provided by the Council, Waimakariri Irrigation Ltd, or constructed with written permission from the Council or Waimakariri Irrigation Ltd.

Landowners must apply for permission to construct a bridge or culvert, to plant and/or erect a building of any kind within 10m from either side of a water race using the Stockwater Application Form available at waimakariri.govt.nz

Maintenance and Biodiversity

Maintenance of stockwater races on private property is the responsibility of the property owner. Good maintenance and design will keep stockwater flowing through a race, and can also help minimise impacts on indigenous biodiversity.

Race Cleaning

Races can be cleaned by hand, or by mechanical means such as a weed rake or an excavator. A weed rake or a bucket with holes is preferred to a closed bucket, as it disturbs the bed less and provides escape for fish, such as eels. A wide and rounded bucket edge is best to not disturb the bed.

Restricting herbicide usage

The Council recommends minimising spraying of banks, and does not recommend that landowners spray banks or directly into water, as this can cause banks to slump and collapse, as well as potentially contaminating the water.

Destabilisation of banks is a breach of the Stockwater Race Bylaw 2021.

Short-medium grass or low shrubs are preferable to a bare surface, which can erode easily.

Water should be consumable by stock downstream and possibly also used for irrigation of plants that might be affected by the spray, therefore avoid any spray entering the water race.

Planting for biodiversity and water quality

Planting along a water race is an opportunity to create riparian buffers; providing habitat and food supply for native insects, birds, skinks, and fish.

However, any planting needs to carefully consider the effect on on-going race maintenance.

No cuttings, clippings, twigs or branches should fall into a water race.

Refer to the planting table for suggestions of suitable plants. Note that other plants may be permitted - the table is indicative only.



A weed rake is best for minimising disturbance to aquatic species



Herbicide spray causing unstable banks



A tidy stockwater race – clear of weeds, rubbish and obstructions



Suitable plants for planting on stockwater race banks

Unsuitable species that will not be permitted by the Council include cabbage trees (*Cordyline australis*) and other species that shed large amounts of durable leaves, causing potential blockages.

Council does not allow large trees such as gum, pine, willow, poplar or cypress within 10m either side of the water race.

The Council also does not allow planting within 10m of a water race structure such as a culvert or weir.

Refer to the Council policy 'Planting of Trees and Shrubs Alongside Stockwater Races' for more details.

Landowners must apply for permission to plant or erect a building and structures of any kind within 10m from either side of a water race, whether piped or open, using the Stockwater Application Form, available at waimakariri.govt.nz.

Scientific name	Common name	Plant type	Min distance from edge	Heavy frost	Light frost	Boggy soils	Dry soils	Full sun	Recommended spacing between plants
With Council permission the plant suggestions below may be planted on the maintenance side. Plants must be less than 1.5m high and not obscure sides for the race cleaning operator.									
<i>Carex dipsacea</i>	Tussock sedge	Grass	0-0.5m	●	●	●		●	0.5-1m
<i>Carex secta</i>	Tussock sedge	Grass	0-0.5m	●	●	●		●	0.5-1m
<i>Carex virgata</i>	Tussock sedge	Grass	0-0.5m	●	●	●	●	●	0.5-1m
<i>Cyperus ustulatus</i>	Umbrella sedge, upoko tangata	Grass	0-0.5m		●	●		●	0.5-1m
<i>Libertia ixioides</i>	NZ iriis	Grass	0.5-1m		●	●		●	0.5-1m
<i>Poa cita</i>	Silver tussock	Grass	0.5-1m		●	●		●	0.5-1m
<i>Anamanthele lessoniana</i>	Wind grass	Grass	0.5-1m		●			●	0.5-1m
In addition to the plants above, here are suggestions for the non-race maintenance side. Plants over 1.5m high can only be permitted by Waimakariri District Council if kept trimmed and not obscuring the water race.									
<i>Veronica salicifolia</i> (formerly <i>Hebe salicifolia</i>)	Koromiko	Shrub	0.5-1m				●		1-1.5m
<i>Coprosma propinqua</i> and other small-leaved <i>Coprosma</i> species	Mikimiki	Shrub	0.5-1m		●	●	●	●	1-1.5m
<i>Lophomyrtus obcordata</i>	Rohutu, NZ myrtle	Tree	0.5-1m			●	●	●	1-1.5m
<i>Coprosma lucida</i>	Shining karamu	Tree	0.5-1m		●	●	●	●	1-1.5m
<i>Coprosma robusta</i>	Karamu	Tree	1-2.5m		●	●	●	●	1-1.5m
Permission to plant within 10m of the stockwater race can be made via the Council Stockwater Application Form found on the website.									

More information

This booklet is a quick guide.

The Stockwater Race Bylaw 2021 details the rules to protect the water race network.

Find the 'Stockwater Race Bylaw 2021' with all of the rules designed to protect the water race network on our website waimakariri.govt.nz

**Find out more at waimakariri.govt.nz,
or contact 0800 965 468.**