

Cultivation

Cultivation is an important activity for most farms and requires a lot of forward planning. If it's not managed well, there is potential for sediment and nutrient losses to impact local waterways. The paddock location and characteristics, and the cultivation methods influence the risk of contaminant loss.

Cultivation includes mechanical tillage, direct drilling, herbicide spraying, or herbicide spraying followed by over-sowing for pasture or forage crops. It doesn't include any spraying undertaken solely for the control of pest plant species or for the establishment or maintenance of plantation forestry, and also does not include stick raking or slash raking associated with a plantation forest.

If you are establishing winter grazing crops, or renewing or establishing pasture, the cultivation rules outlined in Rule 25 of the Southland Water and Land Plan apply.

There are several permitted activity pathways available depending on the type of cultivation method you are using.

These methods are:

- ▶ Mechanical tillage on sloping land under 20-degrees
- ▶ Direct drilling regardless of slope
- ▶ Over-sowing and/or spraying with assistance of animals regardless of slope
- ▶ Over-sowing and/or spraying without assistance of animals regardless of slope

Each of these different cultivation methods has its own conditions which need to be met to be a permitted activity, meaning a resource consent isn't required. These are outlined in the table. We've also provided a quick guide to help you discuss your needs with any contractors you may be engaging for cultivating.

Definitions

Cultivation – preparing land for growing pasture or a crop by mechanical tillage, direct drilling, herbicide spraying, or herbicide spraying followed by over-sowing for pasture or forage crops (colloquially referred to as 'spray and pray').

Critical source area – Landscape feature, such as a gully, swale or depression, that accumulates runoff from adjacent land and delivers (or has the potential to deliver) contaminants to a waterway or subsurface drain.

Please read the plan for full definitions.

The information provided is based on Rule 25 in the proposed Southland Water and Land Plan | Published by Environment Southland, May 2024.

Variable	Cultivation by mechanical tillage	Cultivation by direct drilling	Cultivation by over-sowing and/or spraying with assistance from animals	Cultivation by over-sowing and/or spraying without the assistance from animals
Elevation	All cultivation must be below 800m above sea level			
Farm Environmental Management Plan	Paddock specific erosion and sediment control measures must be set out in your Farm Environmental Management Plan (FEMP).			
Critical source areas	Critical source areas need to be identified in the Farm Environmental Management Plan, and: <ul style="list-style-type: none"> ▶ Not be cultivated with forage crops for intensive winter grazing ▶ If cultivating for any other purpose, establish sediment detention prior to cultivation ▶ Implement any other CSA management measures that are in your FEMP 			
Slope	Cultivation by mechanical tillage is not permitted on land with slopes greater than 20 degrees.	Cultivation by direct drilling on slopes over 20 degrees needs to meet conditions listed in the rows below.	Cultivation by over-sowing and/or spraying with the assistance of animals on slopes over 20 degrees to renew or establish pasture need to meet the conditions listed in the rows below.	Cultivation by over-sowing and/or spraying without the assistance of animals on slopes over 20 degrees to renew or establish pasture need to meet the conditions listed in the rows below.
Buffers / Setbacks	For slopes less than 10 degrees a 5m setback from a waterbody or natural wetland is required.* For slopes between 10-20 degrees a 10m setback from a waterbody or natural wetland is required.	Setback at least 10m from a waterbody or natural wetland.	Setback at least 20m from a waterbody or wetland.	
Frequency	N/A	Cultivation can only occur once in a 5-year period and is only for the purpose of renewing or establishing pasture (not forage crop for intensive winter grazing).		
Grazing	N/A	During establishment of pasture to 10 weeks or if ground remains bare, the land must not be grazed except as follows: <ul style="list-style-type: none"> ▶ An initial 48hr grazing period to assist in establishing seed ▶ No grazing for 6 weeks ▶ One additional grazing period at 6-10 weeks ▶ If ground is bare after 10 weeks there is to be no grazing until pasture is re-established 		No grazing until pasture is established. If ground is bare following 10 weeks, there is to be no grazing until pasture is re-established.
Exceptions to be permitted	If the setback distance of 10m can't be met on land with slopes between 10-20 degrees, the following conditions need to be met: <ul style="list-style-type: none"> ▶ setback of at least 5m from waterbodies and wetlands ▶ Cultivation can only occur once in a 5-year period and is only for the purpose of renewing or establishing pasture (not forage crop for intensive winter grazing). 	N/A		

*In specific circumstances Regulation 50 of the National Environmental Standards for Freshwater may apply, which requires a 10m setback from natural inland wetlands. Please contact the consents team at Environment Southland if you are unsure if you need to meet this setback.

If you can't meet the setback distances listed for any of the cultivation activities, and you are renewing or establishing pasture by direct-drilling, over-sowing or spraying you may still be permitted if you meet the following conditions:

- ▶ Only occurs once in a 5-year period
- ▶ Only occurs after other cultivation activity; and
- ▶ There is already established pasture on the remainder of the paddock.

If you cannot meet one or more of the relevant permitted activity criteria you will need resource consent. Contact the consents team at Environment Southland if you are unsure whether you meet permitted activity criteria or to discuss your consent application.

Common questions and answers

We've listed the answers to some commonly asked questions here. If you're still not sure about what you need to do or have another question you want help with, give our consents team a call on 0800 76 88 45.

▶ What if I want to cultivate beyond 800m above sea level?

This is a non-complying activity. Even if you meet other permitted activity criteria you will need to apply for a resource consent.

▶ I am cultivating to establish crop for intensive winter grazing or to establish or renew pasture, what do I need to do to be a permitted activity?

Depending on the type of cultivation you're doing, and where, the requirements for buffers and other criteria may differ. Check the online cultivation and winter grazing mapping tool on our website - www.es.govt.nz

▶ I use a contractor to do my cultivation work. What if they cultivate in the wrong place?

It's useful to have a detailed cultivation plan which you share with your contractor before cultivation begins to ensure you're both on the same page. Your cultivation plan should include things like critical source areas to avoid, slope and buffers to waterways, cultivation direction e.g. across slopes rather than up or down, and cultivation type. You could also install a semi-permanent fence or mark out with pegs where to avoid during cultivation.

Clinometer slope measuring tool

1. Download the 'Clinometer + Bubble Level' app and the 'Camera Tape Measure' app from the App Store or Google Play.
2. Go to YouTube and search 'Tips on how to measure the slope of your paddocks' ([youtube.com/watch?v=w252co9R_31](https://www.youtube.com/watch?v=w252co9R_31)) to learn how to use the slope measuring tool.



It's important for contractors to know what rules apply. If cultivation doesn't meet the following requirements, then a landowner will likely need to consider a resource consent. Here is a quick guide to the setback and slope requirements of the cultivation rules.

General cultivation

- ✔ Cultivate below 800m altitude
- ✔ Manage critical source areas
- ✘ **No cultivation** of the bed of a river, lake, drain or wetland.

Grass OR crop to grass (under 20° slope)

- ✔ Can cultivate critical source areas
- ✔ 0-20° slope = 5m buffer to waterways
- ✔ Once every five years

Grass to crop (winter grazing)

For cultivation into crop

For winter grazing (1 May - 30 Sept)

	For cultivation into crop	For winter grazing (1 May - 30 Sept)
Critical source areas	✘ No cultivation of critical source areas	✘ No grazing of critical source areas
0-10° slope by waterways	✔ 5m buffer **	✔ 10m buffer **
10-20° slope by waterways	✔ 10m buffer **	✔ 20m buffer **
Over 20° slope	✘ No cultivation over 20° slope	-

**Intensive winter grazing buffers are double the cultivation buffer

Grass to grass (over 20° slope)

- ✔ Can cultivate critical source areas
- ✔ Direct drilling = 10m buffer to waterways
- ✔ Sowing, and/or spraying = 20m buffer to waterways
- ✔ Permitted for pasture renewal/establishment only
- ✔ Once every five years

Re-grassing a buffer

- ✔ Direct drill/over-sow/ spray: only permitted if paddock is in full pasture
- ✔ Once every five years

Arable / other cropping

- ✔ Cultivate below 800m altitude
- ✔ Manage critical source areas
- ✔ 0-10 degree slope = 5m buffer
- ✔ 10-20 degree slope = 10m buffer
- ✘ No cultivation above 20 degree slope
- ✘ No cultivation of the bed of a river, lake, drain or wetland.

Key ✔ Activity permitted ✘ Activity not permitted