



Vegetation to Manage Erosion 5.3 Applying Mulch



Spreading *mulch* made, for example, of bark, jute coconut fibre matting, woody material or hay intercepts rain and protects the soil from sheet erosion and *rill* erosion. Its effect is immediate.

Mulch also retains soil moisture, which helps a vegetative cover to quickly establish. It can be used in conjunction with grassing and will usually improve the germination rate and extend the period in which grass can be used.



Mulch applied to a road edge providing protection and support for grass seeding.

This guide is provided as a reference document and does not constitute a statutory obligation under the Resource Management Act 1991 or the National Environmental Standards for Plantation Forestry.

Please refer to the 'how to use' section of the introduction at <u>http://docs.nzfoa.org.nz/forest-practice-guides/</u> for advice on how to use this guide.

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A Where and when to use

- 1. Where an instant barrier is necessary to reduce surface erosion on sites where there is high risk of soil erosion that would cause problems to the site infrastructure or sensitive areas such as *water bodies*.
- 2. Where hydro-seeding would be too costly.
- 3. When seasonal timing will not allow conventional sowing or hydro-seeding methods.
- 4. Around *fills* on road/track 'in-bends' where there is flowing water or a risk of direct connection of *sediment* to flowing water or on earthworks for *river* crossings.
- 5. Use *mulch* once road or track construction, stormwater control, and erosion and *sediment* control measures are completed.
- 6. Jute is effective in highly sensitive environments and can be combined with other sediment control methods.

B Where not to use

- 1. On steep and exposed earthworks where wind and rain may blow or wash the *mulch* away.
- 2. If the *mulch* contains pest plant seeds.

C Application

- 1. Spread hay *mulch* evenly by hand for smaller areas.
- 2. Apply hay ensuring exposed soil cannot be seen through the *mulch* (this typically requires about 6000 kg/ha).
- 3. Bark or woody chip *mulch* can be applied with an excavator.

D Maintenance

- 1. Prepare a routine maintenance plan including heavy rainfall response measures.
- 2. Re-apply after one month in specific areas (high risk) if grass seed germination is normally expected and/or ground cover vegetation has not established well.
- 3. If the *mulch* cover has been lost reapply it immediately on high risk sites. The target should be to an 80%+ maintenance free cover.

Other methods

1. Hay *mulch* followed by grassing generally improves the strike rate.

Technical specification guidelines

Not applicable to this guide.

National Environmental Standards for Plantation Forestry

Particular relevant regulations for soil *stabilisation* are 32, 55, 60.





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Examples



Examples of jute in use.

Contact

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Other Practice Guides in this series 5.1 Grassing

- https://docs.nzfoa.org.nz/ forest-practice-guides/ to view all guides
- 5.2 Hydro-seeding
- 5.3 Applying Mulch
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