

Site Revegetation



What is it?

All areas disturbed by building and construction activities should be promptly and progressively stabilised through revegetation and landscaping to reduce the potential for erosion.

Why is it important?

Sediment generated from erosion on building and construction sites can be a major source of pollution to local waterways. Follow the management practices discussed in this fact sheet and you will minimise erosion from your site, meet your legal requirements and help protect our waterways.

WHAT DO I NEED TO DO?

Installing the control measures:

As you finish works in one part of the site, revegetate it. Vegetation is an ideal and usually inexpensive method of stabilisation because it reduces soil erosion by:

- 1) Absorbing the impact of raindrops.
- 2) Reducing the volume and velocity of runoff.
- 3) Binding the soil with the roots.
- 4) Protecting the soil from the erosive effects of the wind.

Note: Revegetation should not be expected to provide all the soil erosion protection required on your site. Other erosion control measures will be required if the soil is not stable due to its composition or slope. Erosion control mats and blankets should be used on steep slopes to provide temporary protection until the vegetation is fully established (**see Fact Sheet 8**).

Temporary revegetation: annual grass species (e.g. rye) are effective temporary ground cover because they are fast growing and can quickly establish a root system. They can be planted to prevent erosion where:

- 1) Exposed soil needs to be stabilised until permanent revegetation grows.
- 2) Temporary protection (between 6-8 months) is required until landscaping occurs.
- 3) A disturbed area will be left and then be re-disturbed as part of the site works (e.g. topsoil stockpiles).

Note: These annual grasses do not provide effective erosion control during their early growth phase (first few weeks) unless the soil is prepared with a mulch layer. Annual grasses die within one season providing limited soil coverage after about 6-8 months. They require watering until established, and may need mowing (without the collection of the cut grass) at least once before they can provide adequate soil coverage.

Permanent revegetation: options include seeding with perennial grasses (that will over time succeed the annual species), installing turf strips, and planting of native plants from seed, tube stock or invasion from surrounding bushland. If local seed stock is to be used for propagation it needs to be collected in advance. Advice on native plants and/or sources of seed stock can be obtained from your local council.

Seed the exposed topsoil, not the subsoil as the biological, physical and chemical characteristics of many subsoil materials inhibit the establishment of plants. Where practical to do so, a seedbed should be cultivated and

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moistened before sowing seed (see Figure 19A). This may require deep ripping to 300 mm where there is a compacted layer.

Include native species endemic to the region to enhance the ecological values and create an aesthetically pleasing environment. Native species have evolved to local environment and can establish themselves more quickly and vigorously than exotic species.

Some revegetation options may require mulching. Planting trees and shrubs tends to be more successful if combined with weed suppressing mulching and installation of tree guards and stakes. Apply mulch at a depth between 75-100 mm.

Note: Seeding, turf strips and native plants require sufficient irrigation for germination and to sustain plant growth if rainfall is poor. If the plants are slow growing other erosion control measures may be required until the vegetation is established and is able to prevent erosion.

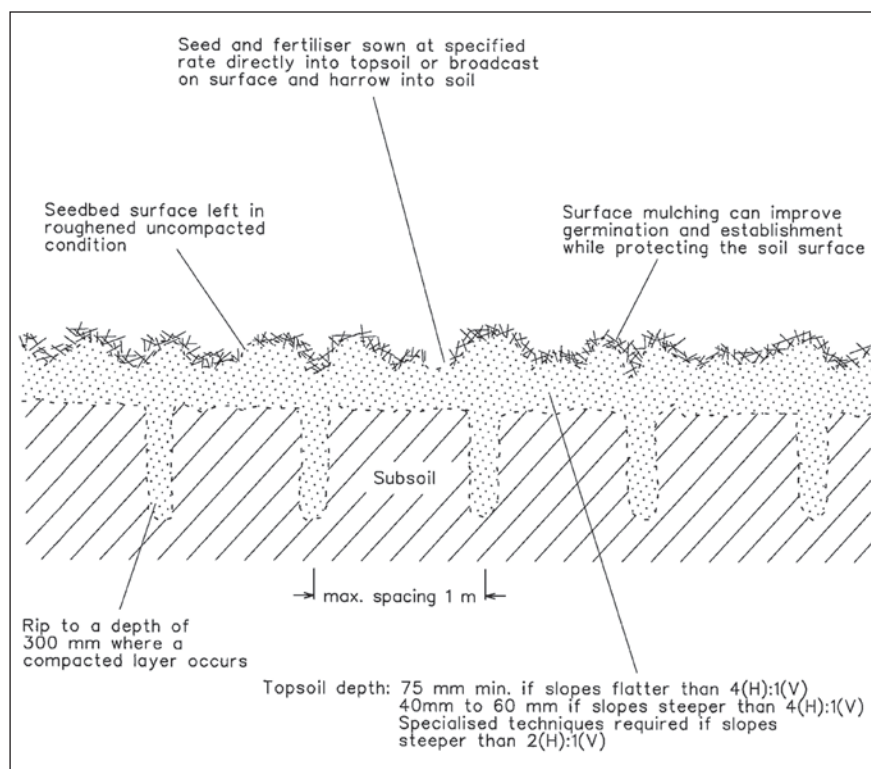


Figure 19A: Seedbed preparation.

Maintaining the control measures:

A monitoring and maintenance program for site revegetation should be developed and implemented. It needs to include irrigation, mowing, weeding and appropriate remedial action such as replacing any lost topsoil and re-sowing the site. Once the site has been revegetated and is established to the satisfaction of the council it can be handed over to the new homeowner.

List of fact sheets

1. Soil & Water Management on Large Building & Construction Sites
2. Soil & Water Management on Standard Building & Construction Sites
3. Soil & Water Management Plans
4. Dispersive Soils – High Risk of Tunnel Erosion
5. Minimise Soil Disturbance
6. Preserve Vegetation
7. Divert Up-slope Water
8. Erosion Control Mats & Blankets
9. Protect Service Trenches & Stockpiles
10. Early Roof Drainage Connection
11. Scour Protection – Stormwater Pipe Outfalls & Check Dams
12. Stabilised Site Access
13. Wheel Wash
14. Sediment Fences & Fibre Rolls
15. Protection of Stormwater Pits
16. Manage Concrete, Brick & Tile Cutting
17. Sediment Basins
18. Dust Control

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Remember:

Everyone working on building and construction sites has a responsibility to prevent pollution. If you do have an accident and pollution occurs you are required by law to notify the site supervisor. If the site supervisor cannot be contacted, workers should immediately notify the local council so they can work with you to minimise any harm to the environment.

Acknowledgement:

Figure 19A from Landcom 2004 "Soils & Construction Volume I Managing Urban Stormwater (4th edition)". Text in this brochure has been obtained and modified from the "Do It Right On Site" brochure series, kindly provided by the Southern Sydney Regional Organisation of Councils.

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