

# FACT SHEET

## Gully erosion on your property

### What is an erosion gully?

Erosion gullies are created when water and wind have washed soil away and created a channel or gully. Erosion gullies can remove valuable soil, dissect properties and create access difficulties. Sediment from the gullies can also fill dams, block culverts and pollute streams and rivers. Erosion can be accelerated when the soils resistance to water and wind is reduced.

### What causes gully erosion?

Gully erosion often begins as a small 'nick point' that slowly gets larger and eventually join to create a larger continuous gully.

*Rainfall* - most erosion is caused during heavy storms where there is more water on the soil surface than the vegetation can handle.

*Soil type* - high clay content soils are generally less susceptible to erosion than coarse particle based soils or sodic soils.

*Slope and topography* – slopes influence the speed of water runoff, in turn increasing erosion potential.

*Land use* – cultivation and grazing can expose the soil surface and increase erosion.

### What can you do about it?

There are several ways to manage gully erosion depending on the site and any approvals required from Council or NSW Office of Water.

Firstly you need to determine if the gully head, floor and sidewalls are 'stable' or 'active'.

### Stable gully heads, floors and sidewalls

**Stable** gully heads and floors generally means there is dense vegetation actively growing.

**Stable** sidewalls generally mean there is no fresh sediment showing.

**Image 1:** Stable gully head and floor



Location: Boambolo Road, Yass, NSW.

### Active gully heads, floors and sidewalls

**Active** gully heads can be managed by diverting run-on water with diversion banks or earthworks to create a gully control structure or flume.

### Image 2: Active gully head



Location: Lade Vale Road, Gunning, NSW.

**Active** gully walls can be managed by diverting run-on water with diversion banks. If stock traffic is causing the erosion then exclude the stock from the area. Gully walls can be shaped to provide better growing conditions for vegetation to stabilise the walls.

**Active** gully floors generally stabilise after the gully head and walls have been stabilised. Gully floors can be revegetated to speed up the stabilisation process.

**Image 3:** Active gully floor and sidewalls



Location: Lade Vale Road, Gunning, NSW.

## Earthworks

Before any earthworks are considered, the size of the contributing catchment needs to be considered. The contributing catchment is the land area that contributes surface runoff into the erosion gully.

Dams, diversion banks, bank pipework, gully shaping, gully filling and flumes are possible earthwork solutions. Contact the Yass Local Land Services Office on 6226 1155 for a copy of the ‘Gully Erosion and Assessment Control Guide’ or contact Council on 6226 1477 for further information.

**Note#** Gully filling is only considered when all surface runoff has been diverted and there is little groundwater on site. Do not fill gullies with dispersible soils or when runoff water still flows through the gully. Gully filling requires professional advice and may need approval from Council and other authorities.

## Council approval for gully filling

Minor erosion protection works including bunding, weed/slope matting and sediment fencing do not generally require Council approval.

Gully filling and earthworks (excavation) which cannot meet the provisions of Subdivision 15, Earthworks, retaining walls and structural support of the [State Environmental Planning Policy \(Exempt and Complying Development Codes\) 2008](#) require Council approval.

Contact Council’s Environment Health Team on 6226 1477 for more information.

## NSW Office of Water approval

If your gully is marked as a ‘blue line’ on a topography map, then you may need a Controlled Activity Approval from the NSW Office of Water for any erosion control works.

Contact NSW Office of Water on 1800 353 104.

## Further information

Contact Council’s Environmental Health team on 6226 1477 or the Yass Local Land Services Office on 6226 1155.

*# Images and information sourced from the Gully Erosion Assessment and Control Guide published by the NSW Government Catchment Management Authority Murrumbidgee*