Department of Planning, Housing and Infrastructure

Erosion and sediment control

For building sites between 250–2,500 m²

Everyone on a building or construction site is responsible for installing and maintaining controls to stop erosion and keep sediment on site and out of waterways.

Why erosion and sediment control matters

When erosion is not properly managed on site, sediment can wash into stormwater drains resulting in the pollution of waterways.

This can negatively impact water quality, harm wildlife and degrade the environment, affecting the water you drink and the places you swim, surf, fish, and play. It can also put the health and safety of the community at risk.

It's the law. Under the *Protection of the Environment Operations Act 1997*, anyone working on a construction or building site can be fined or penalised for polluting waters, even if the pollution is accidental. This may also be a condition of your development consent.

To report a pollution incident, contact your local council or the Environment Protection Authority's 24/7 line on **131 555.**

Top 5 tips to help you on site:

1. Plan early and plan well

Make erosion and sediment control part of your site and construction planning. If possible, submit a draft Erosion and Sediment Control Plan with your development application.

2. Have a site-specific control plan and keep it on site

All building and construction sites between 250-2,500 m² should have an Erosion and Sediment Control Plan. Tailor the plan to your site's soil, slope, weather, and construction activities and always keep a copy on site.

3. Make sure everyone understands their role

Ensure everyone on site understands their legal obligations and where to find the Erosion and Sediment Control Plan.

4. Protect the site before and during works

Leave existing vegetation where possible, identify and clearly mark **'no-go areas'** to protect environmentally sensitive areas, and install erosion and sediment controls before work starts.

5. Maintain, monitor, and update controls

Keep controls in good working order until the site is fully stabilised, prevent erosion as a priority, and update plans and controls if site conditions change.

How to control erosion and sediment runoff

1. Stabilise site entry and exit points

Make sure site entry and exit points are stabilised so vehicles don't cause erosion or transfer soil offsite. Use rough material (like gravel, aggregate, or recycled concrete) for entry and exit points to reduce erosion and help clean mud and water off vehicle wheels.

A good example of a stabilised site entry/exit point. Source: Catchments and Creeks Pty Ltd.

2. Identify environmentally sensitive areas

Mark any environmentally sensitive areas on your site as **'no-go' areas**. This means that no one should enter these areas or disturb anything within them. **'No-go' areas** might include creeks, heritage items, trees, or vegetation that you want to protect.

A good example of a 'no-go' area where access has been restricted to protect an environmentally sensitive area. Source: Department of Primary Industries and Regional Development – Fisheries.

3. Keep vegetation and ground cover

Avoid clearing vegetation and ground cover. Vegetation is one of the best ways to minimise erosion as it slows runoff, stabilises soils, and filters out sediment which protects the existing environment and our waterways. Where possible, install grass strips around the construction site to filter dirty water before it reaches stormwater drains.

A poor example of unstabilised ground with exposed soils.

A good example of ground stabilised with appropriate vegetation cover.

Remember – Check erosion and sediment controls before and after rain or strong winds and replace any that are damaged.

4. Divert clean water and control drainage

Divert clean water around the construction site to prevent it from mixing with sediment and becoming dirty. This could include using diversion drains or graded bunds. Do not use straw bales to divert water, as these can introduce seeds into waterways and fall apart quickly. When diverting water around your site, think about where it will flow. If possible, the water should flow into designated basins or vegetated areas which will slow runoff and reduce the potential for erosion.

5. Manage stockpiles

Keep stockpiles away from drains, driveways, and **'no-go' areas** to prevent sediment and dust polluting waterways. Limit the stockpiles to under 2 metres high, cover them during rain, wind or when the site is unattended, and make sure all workers and drivers know where stockpiles must go.

A poor example of stockpile management, where a sediment stockpile is left exposed.

A good example of stockpile management, where a sediment stockpile has been securely covered and a bund installed downhill. Source: Department of Primary Industries and Regional Development – Fisheries.

6. Install sediment fencing

Before construction starts, install sediment or silt fences made from geotextile fabric to stop dirty water and sediment from leaving the site. Install sediment fences correctly by securely placing pickets along the slope's contour and attaching the fabric tightly. Bury the bottom of the fabric in a 15 cm trench and angle the ends of the sediment fence uphill to prevent water flowing under or around it. Check and maintain the sediment fences regularly particularly after rain.

A poor example of a sediment fence that has been inappropriately managed. Source: Catchments and Creeks Pty Ltd.

A good example of a sediment fence that has been appropriately installed.

Remember – Even if construction has finished, do not remove any erosion and sediment controls until the ground is fully stabilised and disturbed areas are revegetated.

7. Manage service trenches

Manage service trenches effectively by coordinating service connections to avoid multiple trenches. Aim to keep trenches open for less than 3 days and try to avoid working during strong winds or rain. Place the soil or temporary bunds on the uphill side to direct runoff around the trench and stabilise the area as soon as services are installed.

A good example of a construction worker installing a service trench.

8. Manage construction activity areas

Manage areas used for equipment laydown, washdown, cutting, and material delivery so that sediment and hazardous materials do not enter the stormwater drain. Locate designated construction activity areas away from **'no-go' areas**. Use bunds and remove excess dirt from equipment before wash down. Any spills should be contained and cleaned up promptly to prevent contaminants entering waterways.

Inappropriate and appropriate washdown areas.

9. Protect gutter and stormwater drains

Consult with your local council and consider installing gravel barriers or sandbags around drains and gutters downhill from the site. This provides an extra layer of protection by capturing and filtering sediment from dirty water before it enters drains and pollutes stormwater. Where possible, place cones around the controls to prevent damage from moving vehicles.

A poor example of gutter protection as sediment enters a stormwater drain.

A good example of gutter protection using a sandbag. Source: Catchments and Creeks Pty Ltd.

For more information, scan the QR code:

Guidelines for erosion and sediment control on building sites