

ESC

Key principles

Fundamentals

Get your site right





Construction sites expose a lot of soil which washes off during rain and pollutes our waterways.

Installing best practice erosion and sediment control measures on construction sites reduces sediment runoff and helps keep our creeks and oceans healthy.



Benefits

Best practice erosion and sediment control helps:

-  Reduce sediment pollution.
-  Protect our waterways.
-  Reduce risk of fines.
-  Save time and money after rain events by getting you back on site sooner.



Plan it

A good erosion and sediment control plan sets the site up for success.

- Engage a qualified professional in erosion and sediment control to plan your site.
- Make sure your plan is staged with a separate plan for bulk earthworks and operational works and includes **drainage** controls, **erosion** controls and **sediment** controls appropriate to the size and erosion risk of your site.



Time it

Avoid works during wet periods.

- Heavy, intense rainfall increases erosion risk and dirty water runoff.
- Avoid undertaking earthworks during the wet season and ensure exposed soil is well stabilised during this time.
- If rain is forecast, ensure your site is well stabilised and erosion and sediment control measures are in place and maintained.



Stage it

Minimise open areas.

- Reduce area exposed to reduce soil erosion.
- Work progressively in smaller sections, rather than clearing and working across the whole site at once.
- Work in stages, reducing area exposed to <10 hectares at once.

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Prep it

Put controls in place before starting earthworks.

- Install drainage and sediment controls, including sediment fences and sediment basins, prior to vegetation clearing and commencing earthworks.
- Arrange a pre-start meeting with local government prior to commencing earthworks to review planned erosion and sediment control measures.



Drain it

Divert clean water away from exposed soil and direct dirty water to a sediment basin.

- The more water that comes across your site, the more the soil will erode and the harder and more costly it will be to manage and treat.
- Reduce the amount of water coming onto your site by diverting it away from exposed areas.
- Direct dirty water to a sediment basin for treatment via lined drains.



Cover it

Cover exposed areas.

- Protect exposed surfaces from wind and rain with erosion controls such as grass, hydromulch, polymers, geomattng and mulch.
- Stabilise temporary drains, steep slopes, stockpiles and areas of high erosion risk.
- Stabilise cleared areas not being actively worked on for longer than 10 days.



Detain it, test it, treat it

Detain dirty water in a sediment basin.

- Install a suitably sized and designed high efficiency sediment basin. High efficiency sediment basins are best practice because they automatically treat inflowing water.
- Direct all dirty water from the site to the basin.
- Treat dirty water using an approved flocculant/coagulant (seek professional advice on the most appropriate type and concentration).
- Test water quality prior to offsite release to ensure it meets regulatory requirements (i.e. total suspended solids 50 mg/L and pH 6.5 – 8.5).

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Monitor & maintain it

Monitor and maintain all erosion and sediment control measures.

- Inspect erosion and sediment control measures regularly.
- Remove built up sediment in controls.
- Fix all damaged controls.
- Maintain all controls in good working order.



Adapt it

Adapt erosion and sediment control plans to changing site conditions.

- As the site topography and conditions change, adapt erosion and sediment control plans to match the site and install controls in accordance with the updated plans.
- Continue to seek expert advice from a suitably qualified professional when reviewing and updating erosion and sediment control plans.



Stabilise it

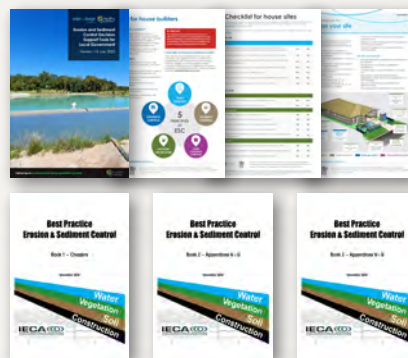
Stabilise all finished lots and surfaces.

- Adequately stabilise all finished surfaces.
- Stabilise all finished lots with sufficient grass cover to prevent erosion.
- Stabilise the area from the kerb to the lot boundary with turf.

Find out more

For further guidance on best practice erosion and sediment control, check out these helpful resources:

- **Healthy Land & Water ESC tools and factsheets**
<https://waterbydesign.com.au/>
- **IECA Best Practice Erosion and Sediment Control**
<https://www.austieca.com.au/>
- **Queensland Department of Environment, Science and Innovation Procedural guide**
<https://environment.desi.qld.gov.au/>



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