

Why is erosion and sediment a problem?

Stormwater runoff can cause significant erosion of soil, sand, gravel and other materials if they are not stabilised or protected. Materials that are eroded are carried away via runoff into the stormwater system often ending up in a receiving waterbody (ie. a local creek, wetland, estuary or ocean).

Although soil is a 'natural' material, it can cause significant harm to aquatic plants and animals, smother habitat, reduce visual appeal and affect processes such as photosynthesis. Nutrients and heavy metals also bond to soil particles and can be transported downstream, further impacting upon aquatic environments. To prevent negative impacts on the city's waterways and avoid incurring a fine always practice best on-site management.

GOOD ON-SITE PRACTICES ARE WORTH THE EFFORT



Sediment fences

Install sediment fences down slope of all disturbed areas and stockpiles to capture sediment before its gets into the gutters, drains and watercourses.
ENSURE THEY ARE MAINTAINED.



Stockpiles and Storage

Stockpiles and waste should be stored away from drainage, within the development site, not on footpaths or within other public areas. Erodible materials such as soil or sand should be placed behind a sediment barrier and covered at the end of each day.



Vehicle Access

Restrict all vehicle movements onto the site through use of a stabilised access. This allows an all-weather entry/exit and reduces soil being tracked onto the street.



Vegetation Controls

Preserve as much vegetated area as possible during and post construction. Vegetation improves the appearance of the site, greatly reduces the erosion hazard and can be an effective natural sediment filter. Maintain a well vegetated (grassed) footpath.

ADDITIONAL PRACTICES TO IMPROVE ON-SITE MANAGEMENT

Wash equipment in a designated area

Wash all equipment, including that of concrete waste in a designated area that does not drain to the stormwater system.

Divert up-slope runoff

Where possible, divert up-slope stormwater around all areas that do not have a well established vegetation cover. Water sheeting over the ground is one of the most common causes of soil erosion.

Undertake site rehabilitation quickly

Rehabilitation of construction sites should be carried out quickly and progressively. Stabilise all disturbed areas with vegetation or landscaping.



Compulsory Signage for all Construction Sites

This sign must be displayed on-site at all times. The sign is provided by Council upon approval of a development application.

MAINTENANCE

All erosion and sediment control works should be checked daily (at a minimum weekly) and after every rainfall event to ensure they are working properly.

AFTER CONSTRUCTION



Residential Landscaping

Prompt landscaping of disturbed areas to minimise soil loss is highly recommended. To be water smart and assist in reducing future pollution and runoff from your property there are several things that you can do:

- Install a rainwater tank
- Create a rain garden
- Use porous paving
- Establish a native garden using plants found in your local area

Council has several Water Smart fact sheets outlining landscaping ideas that provide cost savings and environmental benefits. The fact sheets can be obtained by contacting 4974 2863 or visit: www.newcastle.nsw.gov.au/go/water.

Example of a water sensitive garden

BENEFITS OF ON-SITE EROSION PREVENTION

- Reduced on-site clean up costs
- Improved site planning of day-to-day operations
- Improved on-site drainage
- Cleaner site providing improved working conditions, especially in wet weather
- Better site presentation to the public
- Reduction in the number of complaints by the community
- Improved water quality and visual amenity of our waterways
- Reduced impact on aquatic and marine ecosystems and improved waterway health
- Less sedimentation in our waterways and reduced dredging costs
- Improved environment for surfing, fishing, boating and other recreational activities



For more information contact:
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