

Diversion of Upslope Water



'Do it right on site' is a project to help the construction industry protect the environment and achieve the many benefits that come from doing so.

Diversion of Upslope Water What is it?

This refers to placing controls around the disturbed work area and on the road gutters above your site to divert rainwater from travelling through the work site

Why is it important?

Preventing water from above the site reaching the development area will ensure that it doesn't get contaminated and reduces the amount of water you need to deal with. This means less mud problems on site and less sediment being washed into the stormwater system. The environmental impact of sediment such as mud and dirt is significant. They smother animals and plants that live on the bottom of creek beds. They settle and make the creeks shallower. This results in the sun's rays heating the water. Many native plants and animals can not survive in this hotter water and die. Even though mud and dirt are natural they are still serious pollutants that must be prevented from entering our waterways.

What do I need to do?

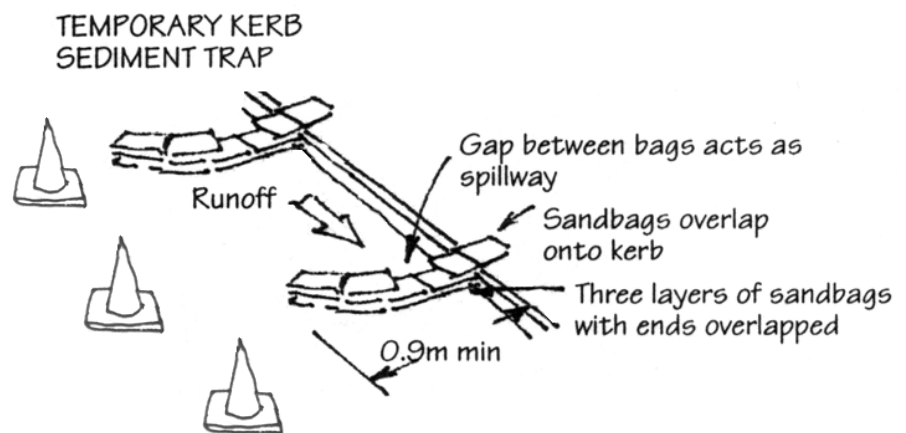
Before building commences:

Look at the construction plans to identify areas on site where water can be diverted around the disturbed or active work area. Identify the relevant street gutters and drains up slope of the site. Decide on diversion methods and install them. Document these on your Soil and Water Management Plan and ensure that staff are aware of their importance.

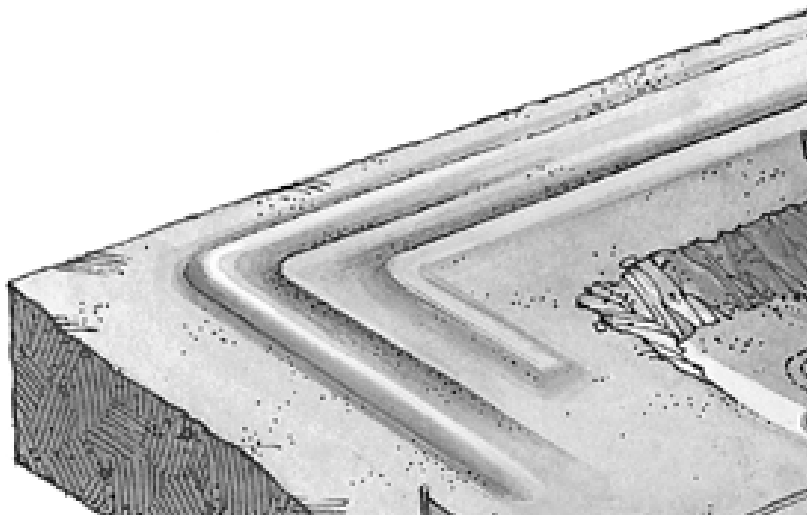
Installing the controls:

Street Gutters: Install a gravel sausage or sand bag barrier downslope of the roadside gully pit that is immediately upslope of the worksite. Make the barrier big enough and sufficiently well attached to divert low and medium flows into the gully pit. Fashion a low point on the barrier, near the kerb, so that high flows spill to the gutter rather than flood the roadway.

Two or three of these traps in a row may be required to allow sediment to drop out. Place safety cones around the area so that cars do not damage them.



On Site: Construct a bund, graded to one end so that clean water flows around your work site without making contact with your construction activities. It can then flow safely to council stormwater drains without any need for pollution control. This bund can be made from soil stabilised with grass, sand bags or 'continuous berm'. Avoid directing stormwater towards the site's entry/exit point as this makes controlling tracking of mud on vehicle wheels more difficult. Also ensure water is not diverted into adjoining properties as this may cause damage and result in a civil lawsuit.



Maintenance of the controls:

Check that controls are in place at the end of the day's operations and when ever rain is forecast. Check diversion channels and bunds for erosion. Ideally they should be lined with geotextile material to ensure that they do not erode.

Remember:

Everyone has a responsibility to protect the environment. The site supervisor is required to make sure that all workers, including sub-contractors are doing the right thing and all workers are required to notify their supervisors and Council if they see pollution occurring.

It is illegal for any substance other than rainwater to enter the stormwater system. If you do have an accident and pollution occurs you are required by law to notify the Council so that they can work with you to minimise any harm to the environment.

Penalties for polluting the stormwater system range from \$750 on the spot fines to \$1 million and seven years in gaol. Both companies and individuals can be fined.

Council Officers and the EPA enforce the environmental legislation and do routine inspections of building sites. They can issue notices to make companies clean up sites, change the way they are managing the sites and if necessary, cease work. They will attempt to work with you but penalties will be issued if a satisfactory environmental outcome is not achieved.

List of fact sheets available from Council:

1. **Diversion of Upslope Water**
2. Dust Control
3. Early installation of Roof Drainage
4. Excavation Pump Out
5. Protected Concrete, Brick and Tile Cutting
6. Protected Concrete Delivery
7. Protected Service Trenches
8. Protected Stockpiles
9. Protected Wash Areas
10. Protected Waste Management and Chemical Storage
11. Protecting Vegetation
12. Protection of Gutter and Street Stormwater Drains
13. Protection of Site Stormwater Pits
14. Sediment Controls
15. Soil and Water Management Plans
16. Stabilised Site Access

For further information on preventing pollution from building and construction sites contact your local council:

'Do it right on site' is funded by the Natural Heritage Trust and the Southern Sydney Regional Organisation of Councils – Bankstown, Botany Bay, Canterbury, Hurstville, Kogarah, Marrickville, Randwick, Rockdale, South Sydney, Sutherland Shire, Waverley and Woollahra.

THE DRAIN IS JUST FOR RAIN



Southern Sydney Regional
Organisation of Councils