

Environment and Planning Services

Stormwater Drains and Water Pollution

www.thehills.nsw.gov.au



Stormwater is pure rainwater plus anything the rain carries along with it. Stormwater drains are linked to local creeks. Usually there are no filters in the stormwater and unlike sewage, **stormwater is not normally treated.**

Whatever ends up on the ground has a high potential to get washed into the stormwater drain, whether it is litter, dirt, leaves, paint or detergent. This pollution can have a serious impact on the plants and animals that live in the water and result in the creek having a degraded appearance.

Water Pollutants

Pollutants in runoff commonly include:

- nutrients, e.g. from overuse of fertilisers, and grass clippings and detergents
- sediments, e.g. from soil erosion and stockpiles
- pathogens, e.g. bacteria from leaking septic tanks and animal faeces
- toxicants, e.g. pesticides, building and cleaning products
- salts, e.g. from dryland salinity and swimming pools
- acids, e.g. from acid sulfate soils in drained wetlands
- gross pollutants, e.g. litter.
- grease and oils, e.g. cars, vehicles and machinery

What are some of the things that we can do to help improve our waterways?

There are many things we can do to reduce the pollution in the catchment and most of them are pretty easy.

- Don't rake leaves and grass clippings into the street but rather place them in the 'green' organic waste bins provided by the Hills Shire Council.
- In many cases grass clippings do more damage to creeks and lakes than fertilizers, pesticides and even motor oil! This is because grass clippings are carried through stormwater drainage in larger amounts. Grass clippings harm water quality by adding excess nutrients such as phosphorus and nitrogen into the waterway. These nutrients cause algal blooms and excess weed growth. The breakdown of biological matter causes a decrease in O₂ levels making it hard for native plants & animals to survive in our waterways.
- When washing your car, limit the use of water and detergents.
- Wash the car on the lawn or a grassy area to limit runoff.
- Wash paint brushes on grass avoiding drains of stormwater drains.
- Appropriately dispose of litter in correct bins. Thus will help to avoid litter making its way into stormwater drains.
- Restrain from using or limit the use of fertilisers.
- Ensure that gutters and roofs are routinely checked and cleaned of any leaves branches etc. This will help keep our waterways cleaner and help protect your home from water damage!
- Monitor acidity and chlorine levels as pool chemicals cannot go down into stormwater. Chemicals found in pool water have adverse effects on the environment.

THE HILLS SHIRE COUNCIL

3 Columbia Court, Baulkham Hills NSW 2153
PO Box 7064, Baulkham Hills BC 2153

Phone 02 9843 0555 Email council@thehills.nsw.gov.au
Facsimile 02 9843 0409 www.thehills.nsw.gov.au

- Keep stock piled materials away from the gutters and drains, cover them or use effective erosion control structures. Even a small amount of material may cause severe ecological damage by killing wildlife and silting in streams.
- Make sure when mixing cement mortar or concrete that you do so in an area which prevents all excess water, residues and wastes from entering the stormwater system. An old wheelbarrow or a containment area is ideal.
- When cutting or cleaning concrete, make sure you let concrete or brick slurry dry out then sweep it up for disposal.
- When using water based pressure cleaners to clean the exterior of buildings, structures or paved areas has the potential to create environmental nuisance or harm. The water from these cleaners may contain chemicals and other additive products, dirt, grime removed from the cleaning surface along with new compounds formed between the detergents and materials that are removed. To manage this issue make sure water-blasting is minimised by recycling and reusing wastewater. Spray drift must be prevented from escaping from the immediate zone of the washing surface. Solids and residues produced are to be stored in a sealed container. Adequate reliable equipment must be used in order to prevent leakages.

Water Quality Guidelines

The ANZECC guidelines are used as the key reference for assessing whether the condition of a waterway meets recognised environmental values in Australian and New Zealand. The guidelines provide information for fresh and marine water quality.

The condition of waterways can be gauged by comparing the available data with the ANZECC guidelines. For the physical and chemical assessment of water quality, the ANZECC guidelines provide 'trigger values' – numerical or descriptive criteria for ambient water quality – that help to assess whether community values are being achieved.

Where water quality is well within the trigger values, councils can be reasonably sure that the water quality objectives are being achieved. Where water quality is beyond these trigger values, there is a risk that the environmental value is not being achieved. In this case the ANZECC guidelines recommend action to address the cause or further investigation where appropriate.

For more information about the ANZECC guidelines, see *Using the ANZECC guidelines*

<http://www.environment.nsw.gov.au/water/usinganzeccandwqos.htm>

What are the penalties for polluting water?

Water pollution is prohibited under section 120 of the POEO Act (previously section 16 of the *Clean Waters Act*). There are three penalty levels Tier 1,2&3.

- Tier 1 offences can attract penalties of up to \$5 million and 7 years gaol.
- The maximum penalties for Tier 2 offences are \$1 million in the case of a corporation and \$250,000 in the case of an individual.
- Tier 3 offences are dealt with by penalty notices (sometimes known as 'on-the-spot fines' or 'penalty infringement notices'). These notices impose a fine that can be paid or may be defended in court.

Further Information

Customer Service Centre: 132 090 (24hours)

Hours: 8:30 am to 4:30 pm, Monday to Friday

Phone: 9843 0555

Environmental Health and Sustainability: 9843 0305

Email: council@thehills.nsw.gov.au

Sydney Water: 132 090 (24hours)

DECCW (Department of Environmental Climate Change and Water): 131 555



THE HILLS SHIRE COUNCIL

3 Columbia Court, Baulkham Hills NSW 2153
PO Box 7064, Baulkham Hills BC 2153

Phone 02 9843 0555 Email council@thehills.nsw.gov.au
Facsimile 02 9843 0409 www.thehills.nsw.gov.au