

What can householders do?

Updated March 2011¹

EPA 865/11: This information sheet is part of a series of Fact Sheets on the Adelaide coastal waters and findings of the Adelaide Coastal Waters Study (ACWS).

Introduction

Nutrients, suspended solids (sediments) and coloured dissolved organic matter (from leaf litter) discharged to Adelaide's coastal waters in stormwater and treated wastewater have been found to be the main cause of seagrass loss along Adelaide's metropolitan coastline.

There are a number of actions we can take around the household and garden to reduce the volume of nutrients, sediments and water leaving our properties to help improve the health of Adelaide's coastal waters. Improving the quality of water which enters household drains and stormwater systems will improve the health of Adelaide's coastal waters. Sending less water into these drains and systems will also improve the health of our marine waters.

Small changes in the way we manage our households are a cheap and simple way to help improve the health of Adelaide's coastal waters. Other actions which require more money are supported by initiatives such as the South Australian Government's H₂OME Rebate scheme which provides financial incentives for those improving the water efficiency of their home. Improving the water efficiency of your home not only saves water but reduces the volume sent to wastewater treatment plants and stormwater systems, ultimately reducing the volume of water discharged to the coast.



Adelaide metropolitan coastline. *Courtesy SATC*

¹ Issued July 2010

Improving the quality of water discharged to Adelaide's coastal waters

Stormwater

There are simple actions you can take around the garden which don't cost money and will help improve the quality of water entering stormwater systems. These include:

- **Cleaning up all leaf litter and lawn clippings**

Rainfall can cause garden waste to wash from your property into stormwater systems. Garden waste which enters stormwater systems adds nutrients and coloured dissolved organic matter to Adelaide's coastal waters which have a negative impact on marine ecosystems. Planting locally native species rather than deciduous exotic plants is a good idea to prevent excess leaf litter in your yard.

- **Cleaning up after pets**

Rainfall can cause your pet's faeces to wash into stormwater systems. Faeces from pets which enter stormwater systems contribute nutrients to Adelaide's coastal waters which have a negative impact on seagrass and aquatic ecosystems. Significant volumes of faeces in Adelaide's coastal waters can also cause health risks to humans who use these waters for recreation.

- **Using fertilisers, pesticides and herbicides sparingly**

Rainfall can cause these products to wash from your property into stormwater systems. Fertilisers and combined weed/feed products are high in nutrients and have a negative impact on aquatic ecosystems in Adelaide's coastal waters. Pesticides and herbicides can contain toxins which pollute stormwater, affecting its ability for reuse. Herbicides containing Simazine have presented problems for Adelaide's stormwater reuse schemes in the past.

- **Adopting garden designs which trap sediments**

Rainfall can cause sediments to wash from your property into stormwater systems. Fine sediments in stormwater systems can smother seagrasses and make the water murky, preventing adequate sunlight reaching them.

- **Washing cars on grassy areas**

This allows water and any detergents to soak into the ground rather than flow into stormwater systems. Detergents are often high in nutrients and have a negative impact on aquatic ecosystems in Adelaide's coastal waters.



Cleaning up leaf litter



Dog waste bags



Washing car on grass

Wastewater

There are simple actions you can take in the household to improve the quality of water entering household drains which don't cost money and will make it easier for wastewater treatment plants to treat it. These include:

- **Disposing of chemicals responsibly**

Some chemicals cannot be treated by wastewater treatment plants and may prevent the proper treatment of other pollutants. Contact your local council or visit <www.recyclingnearyou.com.au> for information about chemical waste disposal services in your area.

- **Disposing of food scraps responsibly**

Avoid using 'Insinkerators' and clear food scraps from dirty dishes before washing to prevent them entering household drains. Food scraps contain nutrients which have a negative impact on aquatic ecosystems in Adelaide's coastal waters. Composting food scraps is better for the environment and creates a natural fertiliser for your garden.

- **Be mindful using cleaning products**

Many cleaning products contain phosphates which are difficult to remove during the wastewater treatment process. However, many detergents, cleaning agents and washing powders are available to purchase which are low in phosphates. Alternatively, look for pure soap or soap-based dishwashing and laundry substances. Also, common non-toxic household products such as baking soda, vinegar and lemon make great environmentally friendly cleaners.

Reducing the amount of water discharged to Adelaide's coastal waters

Stormwater

The less stormwater which leaves your property, the less likely it will collect and transport pollutants into stormwater systems and ultimately Adelaide's coastal waters. You can reduce stormwater runoff from your property by:

- **Installing a rainwater tank**

This will reduce the volume of stormwater leaving your property and provide a new water source for your household. Generally, rainwater is safe for drinking and unlikely to cause any illness for most users providing it is clear, has little taste or smell and is from a well-maintained system. Rainwater can also be used for gardening or can even be plumbed into your home for use in washing machines and toilets. Rebates are available through the South Australian Government H₂OME Rebate scheme to subsidise costs associated with the purchase/retrofit of a rainwater tank.

- **Water retention**

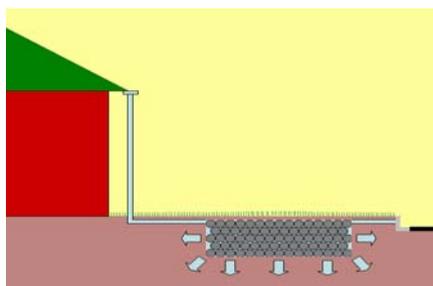
Garden surfaces can be modified to better retain water, allowing greater time for it to soak into the ground (e.g. terraces, contour furrows and basins around trees/shrubs). Also, stormwater from roofs and overflow from rainwater tanks can be directed to a retention trench, a shallow excavated trench filled with gravel or crushed stone which allows time for stormwater to soak into the ground.

- **Constructing pervious driveways and paths**

Pervious surfaces allow water to seep through to the soil below. You can construct pervious driveways and paths simply by using gravel, or more specialised products such as pervious pavers.



Rainwater tank



Retention trench



Gravel driveway

Wastewater

Reducing the volume of water which enters household drains can be cost-effective and will ultimately reduce the volume of water to be processed by wastewater treatment plants. You can cut down water entering household drains by:

- Reducing:
 - half filling the sink when doing the dishes and taking shorter showers.
 - using water efficient products (eg water saving showerheads, toilets and washing machines plus hot water re-circulators). Each attracts a rebate through the South Australian Government H₂OME Rebate scheme.
- Re-using:
 - directing washing machine rinse water onto ornamental plants in the garden.

Get involved

You can get involved with coast and marine community groups. Many are linked to local government, the Adelaide and Mount Lofty Ranges Natural Resource Management Board and the Conservation Council of SA and raise awareness of issues relating to Adelaide's coast and marine environment. These groups also provide a voice for community views on progress toward a healthy Adelaide coastline.

References

EPA 2011, *Adelaide Coastal Water Quality Improvement Plan for public comment*, Environment Protection Authority, Adelaide <www.epa.sa.gov.au>.

Useful websites

Environment Protection Authority (SA) Water Quality pages <www.epa.sa.gov.au/water_quality.html>

SA Water – H₂OME Rebates Overview

<www.sawater.com.au/SAWater/YourHome/SaveWaterInYourHome/rebates_overview.htm>

Disclaimer

This publication is a guide only and does not necessarily provide adequate information in relation to every situation. This publication seeks to explain your possible obligations in a helpful and accessible way. In doing so, however, some detail may not be captured. It is important, therefore, that you seek information from the EPA itself regarding your possible obligations and, where appropriate, that you seek your own legal advice.

Further information

Legislation

Legislation may be viewed on the Internet at: <www.legislation.sa.gov.au>

Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet
Adelaide Service SA Centre
108 North Terrace
Adelaide SA 5000

Telephone: 13 23 24
Facsimile: (08) 8204 1909
Website: <shop.service.sa.gov.au>

For general information please contact:

Environment Protection Authority
GPO Box 2607
Adelaide SA 5001

Telephone: (08) 8204 2004
Facsimile: (08) 8124 4670
Freecall (country): 1800 623 445
Website: <www.epa.sa.gov.au>
Email: <epainfo@epa.sa.gov.au>
