

Stormwater savers

Stormwater is rainwater collected in drains, gutters, soak wells, open channels and underground pipes and conveyed through drainage to local water bodies such as lakes, wetlands, rivers and oceans.

It is often water that has fallen on solid surfaces that do not allow water to soak back into the ground, like driveways, roads and footpaths.

If pollutants can be prevented from entering the stormwater systems, we can reduce the impact on the environment. Can you help us work out what these may be and how to dispose of them properly?

Things you will need:

- 1 transparent bucket filled three quarters with water
- Wooden spoon for stirring
- A selection of household items which might enter the stormwater system eg:
 - leaf litter (collect leaves, twigs, sand and lawn clippings)
 - car oil (soy sauce + cooking oil)
 - bread
 - fertiliser (jelly crystals)
 - herbicides/pesticides (brown sugar)
 - dog poo (playdough, plasticine)
 - detergent (dishwashing detergent)
 - litter (plastic, cans, paper, food scraps)



What to do:

1. List the household items to test in the table below.
2. As the items are placed in bucket A, think about how they may have entered the drainage system, writing your ideas in the table.
3. Once all the pollutants have been added to your bucket, observe the water quality and describe the effect it has had on the water, describe this in your table.
4. What effect would this pollutant have on the body of water, such as the wetland and the plants and animals that live there? Explain this in the next column of your table.
5. How could we stop this entering our drainage system and dispose of it correctly? Write your ideas in your table.

Household pollutant	Describe effect on water quality	Describe effect on plants and animals	How should pollutant be correctly disposed of?



> **Activity Sheet**

6. What message would you share with the school community to stop the pollution into our waterways? Design a sign to display. You might like to use a message from below:
- Don't dump litter, motor oil, paint thinner, pesticides, car cleaning products, pool chemicals, garden fertilisers or other wastes in drainage systems.
 - Use less fertiliser, more frequently, on lawns and gardens when they are actively growing. Use slow-release, low-phosphorus fertilisers.
 - Clean up after dogs and cats in the street and at home. Dispose of this litter in the council's waste collection facilities or put it in the bin at home.
 - Sweep up leaves, twigs, clippings and organic waste so they are not washed into drainage systems. Place these in a compost bin.
 - Don't let sand, soil or gravel wash into drainage systems.
 - Wash cars on the lawn, not on the driveway.
 - Use phosphorus-free detergents whenever possible.