



SCOUT ENVIRONMENT AWARENESS PROGRAM



The Catchment Story

Increase knowledge and awareness of catchment use and water quality issues.

Suitable for Cubs and Scouts.

Award Scheme Links:

Cubs:

- Bronze Boomerang – Natural Environment
- Silver Boomerang – Natural Environment
- Waterwise Badge – Protecting our Wetlands

Scouts:

- Pioneer - Environment
- Explorer - Environment
- Adventurer - Environment
- World Conservation Badge – Knowledge
- World Conservation Badge - Research

Outcomes:

- Discover the environmental concerns facing our waterways.
- Discover that everything that happens within a catchment will affect the water body.
- Learn how an individual can reduce the impact on waterways.
- Understand that catchment management is a complex process.

Materials:

- 14 canisters or cups with name labels and contents as outlined below (you can double up if needed)
- Catchment story (attached)
- A medium sized aquarium or similar large clear container half filled with water
- A clear cup or glass

Character Name	Canister Contents	Story Content
Nic	Streamers	Streamers
Jamie	Soil	Soil
Peta / Peter	Dynamic lifter, roo poo or similar	Dog poo
Jo	Detergent mixed with water	Car washing detergent
Billie	Grass clippings or shredded leaves	Lawn clippings
Frances / Francis	Baking soda	Fertiliser
Dani / Danny	Dark coloured vinegar	Pool chemicals
Toni / Tony	Plastic bag	Plastic bag
Jessie	Few drops red food colouring in water	Paint
Sam	Cling wrap	Sandwich wrapper
Terri / Terry	Cigarette butts	Cigarette butts
Lesley	Glass shards (large are best)	Glass shards
Kim	Water and soy sauce	Mechanical oil
Chris	Fishing line	Fishing line

Activity

1. Today I am going to tell you a story about a very important part of our environment – the river. The story talks about how each of us, and everyone else along the river, affects the rivers health.
2. This aquarium full of water is going to be our river today. This tank is quite different to a real river, which is very hard to re-create. What are some of the differences between this and a real river? (shape, slope, depth colour, plants, animals etc)
3. Before I start the story about our river and its catchment, let us have a think about what a catchment is. Ask for suggestions then demonstrate by getting everyone to cup their hands and pretend that they are standing in the rain. What would happen? The rain would land on the hills and mountains (your thumbs) and run down the slope (palm and fingers) into the river (where your two hands meet).
4. This is a small example of a catchment and the Earth's surface is divided into lots of bowls just like that, with a river in the bottom of each bowl. A catchment includes a river and all the creeks, streams and other smaller rivers that run into it. But the catchment also includes the land around these waterways. This means that although you and I may live 20 minutes or even more from the river, we are still a part of the catchment. Even from this distance we can have an effect on the quality of the water in the river.
5. Can anyone tell me some ways in which we are linked to the river from our houses?

Stormwater Drains – there are no filters in the drains and they do not go through the seage plant. Whatever we put down the drain goes straight in to the river.

Sewage System – everything that goes down the toilet, sink or bath goes to the sewage plant, where most of it can be treated. Some however, such as fat, detergents and chemicals are difficult to remove from the water before it is sent into our waterways and ocean. This is bad news for our fish and plants.

Streets – litter on the road and in gutters can be either washed into the stormwater drain or washed or blown down the street into the river.

6. Hand out the canisters to the participants. If there is not enough to go around, you can double up on names. Stress that they can not open the lids until they here their name in the story and are standing next to the aquarium.
7. Fill one large glass with water out of the aquarium and set aside for comparison at the end.
8. Read the Catchment Story pausing to allow participants to pour their canister contents into the aquarium. The story can be modified however necessary to suit your catchment.
9. Fill a glass with this unhealthy water and pass around for the participants to see and smell the pollution. Ask them how it makes them feel. Could you imagine being a fish or plant and living in that water?
10. Can anyone tell me some ways by which we might be able to reduce our impact on the river?
Run through each event of the story and discuss the correct options, as well as any others that participants can think of. There are so many things we can do to reduce the pollution in the river and most of them are so easy.
11. Even if you don't mention it, someone is sure to ask 'what are you going to do with the water now?' The answer is 'behave like a sewage treatment plant and do the best that I can to clean and dispose of the water safely'. Strain and filter solids. Dispose of the water to a sewer or safe place in order to minimise harm to the environment. Keep any items that can be re-used such as the plastic bag, cling wrap, fishing line and glass shards.
12. It is also a good idea to explain what the products were that you used and that they were not harmful.

The Catchment Story

(Adapted from the Environmental Protection in Australia Workshop Manual)

I am a river and this is my story. I flow from the West Australian wheat belt to the salt water of the Indian Ocean. I see many things on my daily journey as I grow from a tiny seasonal creek to a big, wide river. Some of them will make you sick; all of them should make you think.

My story starts high on the flat Yilgarn Plateau in the vast salt pans of Lake Grace. It was **NIC's** eleventh birthday and **his/her** family was having a party by Lake Kulin. **His/her** Mum had made a big cake, **his/her** Dad was cooking on the BBQ and everyone else was swimming in my water and having fun. Suddenly a big gust of wind picked up some streamers and blew them into me.

JAMIE and **his/her** family live on a small farm in the salt pan area. They have a flock of sheep that need more grazing land. Jamie's Dad has pulled out some trees near my banks to let the grass grow. There was a storm last night and the rain washed all the loose soil into my crystal waters.

Near the farm Jamie's friend **PETA** was taking **his/her** dog Oscar for a walk. Oscar did a poo and Peta didn't have any plastic bags with **him/her** to pick it up so **s/he** left it where it was. The storm washed the poo into my water.

Now I'm winding through the scarp where there is a new housing development. Many of the children who live there like to come and swim in my waters after school. A storm water drain from the development runs into me. On the weekend, **JO** who lives in one of the new houses, helped **his/her** mum wash the car. They washed the car on the driveway and so all the detergent was washed into the gutter and down the storm water drain – straight into me.

Jo's neighbour also washed their car on the weekend, but they washed it on the grass so the water soaked into the ground instead of running down the drain. Well done **BILLIE**. But after Billie washed the car, **s/he** mowed the lawn. Billie doesn't have a compost bin and **his/her** garbage was full so **s/he** put the grass clippings down the storm water drain. You can guess where they ended up.

Lots of people who live in these new houses have compost bins. They use their food scraps and garden waste to make compost to feed the plants in their gardens. **FRANCES**, who lives in the next street, doesn't have a compost bin so **s/he** buys fertiliser from the garden centre to put on **his/her** garden to make the plants grow. The trouble is when it rains, the fertiliser can get washed off the gardens into the drains and then it ends up in my water. Because it isn't organic like compost, it upsets the plants and animals that live in my waters – and it smells terrible!

Frances' cousin **DANI** lives in the next town along the highway. Dani has been helping **his/her** dad clean out the shed. They had some old swimming pool chemicals to throw away. Dani's dad didn't know how to dispose of them properly, so he poured them down the stormwater drain. When the chemicals reached my waters there was a strange smell and some of the fish that lived in me began to look very sick.

At the shopping centre **JESSIE** the painter is painting a shop. Jessie is a bit clumsy and when **s/he** went to answer **his/her** mobile phone **s/he** kicked over a bucket of paint. **S/he** was really embarrassed and hosed the paint into the gutter. That paint went straight from the gutter into me.

Round the bend I run past a school. I can sometimes see **SAM** in the schoolyard. Sam likes to practice **his/her** basketball shots by throwing lunch wrappers into the bin. Sam's a pretty good shot and gets most of them in the bin but sometimes misses. Yesterday **s/he** missed a shot just as lunch ended. The wind blew the wrapper into the drain and you can guess what happened to it. Yep, it ended up in me.

The council has made a big park near my banks so people can enjoy me. **TERI** is having a BBQ in the park with **his/her** family. **S/he** is playing with a Frisbee with **his/her** brothers. **His/her** mum has just finished a cigarette and has squashed it on the ground to put it out. The Frisbee flew past Teri and **s/he** yelled to her mum to catch it. Teri's mum caught the Frisbee but forgot to pick up the cigarette butt. This washed into my waters too.

The other day **LESLEY** was walking in the park, close to my banks, when **s/he** slipped and dropped the bottle **s/he** was carrying. It smashed and the glass went everywhere. **S/he** picked most of it up and put it in the bin but **s/he** must have missed some because it washed into me.

As I get closer to the ocean, I am starting to get really big, big enough to ski on. Every weekend **KIM** and **his/her** friends like to go jet skiing. This weekend Kim decided to clean the engine of the jet ski when **s/he** had finished skiing. All the black greasy water from **his/her** engine washed into me.

I have nearly finished my journey now and I am almost ready to join the ocean. This is a really good place for fishing and **CHRIS** has a favourite spot **s/he** comes every weekend in Fremantle. When **s/he** was last here **s/he** got **his/her** line caught on some rocks and couldn't free it so **s/he** cut the line and left it. Later one of the birds that also fishes in this spot got tangled up in the line and drowned.

As I flow out into the ocean there are people swimming and surfing in my waters. I used to love being a creek, growing into a river and flowing out into the ocean, but lately less and less people have been swimming in my waters. I don't know exactly why, do you have any ideas?