

CATCHMENT TO COAST AUDITS

INTRODUCTION

An audit is a technique that through unbiased exploration helps establish the baseline levels of a particular facet of an organisation (your school in this case). Once baseline has been ascertained, you can move to improve wherever you fall short.

To perform an environmental audit, one is required to **investigate, measure, analyse** and **evaluate** our environment, in an unbiased way using a resource or activity.

Sustainable Schools' audits employ the **Active Learning Framework** – learners investigate information about environmental issues, explore these through direct interactions in the environment and are then able to act based on their findings. Learners become active participants in positive environmental change.

All our activities follow the four steps of the Active Learning Framework:

1. **Tuning in** (collect & analyse data – access information)
2. **Finding out** (investigate, experiment, and explore – document evidence)
3. **Act** (plan projects that focus on environmental improvement)
4. **Communicate/Report** (discuss, reflect and share)

CATCHMENT TO COAST

Why is catchment management so important?

Humans are entirely reliant on water trapped and stored in catchments. A healthy catchment can function correctly to collect, filter and clean water. It also should have sufficient area for the ground to absorb water to be used by plants as well as topping up ground water sources.

Catchments are complex, what happens in one part of a catchment can have a big effect in another, this makes it difficult to quantify. Humans have been making lots of changes to our catchments. We have cleared land, built roads, cities, and farms. We have removed vegetation and water from our river systems. We have pumped loads of pollutants and rubbish back into the water bodies as well as introduced invasive weeds into the catchments and water bodies. As a result, our catchment health has declined. For example, if sewage or pollutants enters the catchment at some point it will affect the health of that river from that point onwards.

Catchments in cities can be especially damaged; fertilisers, litter, pollution from industries, storm water runoff (filled with toxins) are just a few of the negative things that we are pouring into our rivers.

One of the biggest issues is people are taking too much water from the catchment system.

These issues make managing the health of catchments difficult because the whole catchment must be managed as a single unit.

Catchments supply us with the water we need, but are we helping catchments stay healthy?

How do schools affect catchment health?

The objectives of the catchment to coast audits include the following:

- To introduce the concept of catchments to learners.
- To introduce learners to the importance, structure and functioning of catchments.
- To understand schools can impact catchment health.

- To facilitate discussion around the importance of sustainable management of catchments.
- To strategize methods to improve efforts to contribute to catchment health within the school community.

Basic guidelines

1. **Understand** – ascertain the learners understanding of introduced concepts.
2. **Introduce** – establish the basic concepts of catchments.
3. **Discuss** – establish methodology to be used.
4. **Act** – undertake catchment to coast audit.
5. **Reflect** – discuss results.
6. **Communicate/Report** – learners should be able to communicate method, results, and conclusion.

Grade 1-3

Catch that Catchment	
Prior knowledge:	None
Equipment needed:	Worksheets, coloured pencils/crayons, water
Duration:	45 minutes to 1 hours
Extra notes:	A part of this lesson will need to be outside because learners are using water.

Grade 4 & 5

<i>Cool Catchments</i>	
Prior knowledge:	None
Equipment needed:	Worksheets, paper, coloured pencils/crayons, plastic containers, a small bowl, different types of soil, wood chips, leaves, rocks, water, and blocks of varying sizes
Duration:	1 – 1.5 hours
Extra notes:	Outside lesson so weather dependant

Grade 6 & 7

<i>Got to Catch them All</i>	
Prior knowledge:	Scientific method
Equipment needed:	Worksheets, paper, pens, coloured pencils, plastic containers, a small bowl, different types of soil, wood chips, leaves, rocks, water, and blocks of varying sizes
Duration:	1 – 1.5 hours
Extra notes:	Outside lesson so weather dependant

Grade 8 - 11

<i>Captivating Catchments</i>	
Prior knowledge:	Scientific method
Equipment needed:	Worksheets, paper, pens, coloured pencils, aerial map, plastic containers, a small bowl, different types of soil, wood chips, leaves, rocks, water, oil, bits of rubbish, food colouring, and blocks of varying sizes
Duration:	1 – 1.5 hours
Extra notes:	Outside lesson so weather dependant