



Stream Scene

Years 7-9 Science

Department of Education

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Our vision is for a community that cares for self, others and the environment to achieve enough for all forever.

The Big Idea: Water quality is fundamental to a healthy environment

Students' Blanket Role: Ecologists-in-training

Program Snapshot

Students investigate biotic and abiotic indicators of the health of local waterways and consider the importance of water quality to our environment and society. The program implements elements of the Australian Curriculum for Science as well as Cross Curriculum Priority: *Sustainability*.

Curriculum – Year 7 Science

Achievement Standard (extract)	Students analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems. They predict the effect of human and environmental changes on interactions between organisms and classify and organise diverse organisms based on observable differences.
Content Description	ACSSU116 - Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable ACSSU111 - Classification helps organise the diverse group of organisms
Elaborations	<ul style="list-style-type: none">investigating factors that influence the water cycle in natureexploring how human management of water impacts on the water cycleusing provided keys to identify organisms surveyed in a local habitat



Cross Curriculum Priorities

Sustainability– addresses the ongoing capacity of Earth to maintain life. Students develop the knowledge, skills, values and world views necessary to contribute to more sustainable patterns of living, which means meeting the needs of the present without compromising the ability of future generations to meet their needs.

Main sections covered: **Systems O1.2**- All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival. **Futures O1.7**- Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.

Visit Day – Program

Using scientific equipment and an identification key on iPads, students look for biotic and abiotic indicators of the health of local waterways. The significance of water quality for the Murray-Darling catchment and factors affecting water quality are discussed. Activities also include examination of terrestrial invertebrate sampling techniques and the use of binoculars and bird identification app to identify local bird species.

Amaroo EEC pedagogy

Amaroo is guided by the Place-Responsive Pedagogy, in particular; Learning Beyond the Classroom.

This particular program uses the strategies of **Learning By Doing**, and **Being in the Natural Environment**.

Additionally at the fore-front of our pedagogy is connectedness, real-world context, authentic cultural experiences, sense of place, and recognition of difference, which can lead to other powerful, long-term, lifestyle outcomes, often not assessable in traditional curriculums.

For more information please refer to Amaroo's [Pedagogical Framework](http://amarooeec.eq.edu.au/supportandresources/formsanddocuments/documents/pedagogical-framework.pdf) (amarooeec.eq.edu.au/supportandresources/formsanddocuments/documents/pedagogical-framework.pdf)

