

Wild State Australian Curriculum Links Earth and Environmental Science Senior Secondary

The following Australian Curriculum links have been identified for senior secondary school audiences:

Content Description	Wild State Elaboration/s
<p>Science Understanding (Unit 1) Development of the atmosphere and hydrosphere Water's unique properties, including its boiling point, density in solid and liquid phase, surface tension and its ability to act as a solvent, and its abundance at the surface of Earth make it an important component of Earth system processes (for example, precipitation, ice sheet formation, evapotranspiration, solution of salts). (ACSES024)</p>	<p>Discuss how animals have adapted to fluctuations in water availability in the Arid habitat; an extreme lack of water for most of the time, sporadic and sudden flooding and/or isolated pockets of permanent water at other times.</p> <p>Investigate how the availability of water in an Open Forest habitat affects animal survival.</p> <p>Examine sources of water and moisture in the Rainforest environment; how do animals respond to these conditions.</p> <p>Explore how the energy of ocean water shapes the shores and how animals are equipped to survive in these environments.</p> <p>Understand the diverse marine habitat and complex ecosystems of an environment immersed in water.</p>
<p>Science Understanding (Unit 4) The cause and impact of global climate change Climate change affects the biosphere, atmosphere, geosphere and hydrosphere; climate change has been linked to changes in species distribution, crop productivity, sea level, rainfall patterns, surface temperature and extent of ice sheets. (ACSES106)</p>	<p>Describe how slight changes in the environment can affect animals adapted to a delicately balanced Arid habitat.</p> <p>Understand how climate change and extinction are threatening animals living in the Rainforest environment.</p> <p>Examine the fragile conditions of coastal and intertidal environments and the effects on these animals' populations.</p> <p>Explain the effects of climate change on the Great Barrier Reef and the marine and terrestrial animals that depend on it for food and shelter.</p>

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Science as a Human Endeavour (Unit 1)

Science is a global enterprise that relies on clear communication, international conventions, peer review and reproducibility.
(ACSES008)

Examine the role of scientists working within Queensland Museum in discovering new species and understanding the complexity of life to ensure proper economic, ecological, political and social decisions are made about Queensland's unique animals and their habitats.

Understand the importance of scientific names to ensure clear communication is achieved globally.

Science as a Human Endeavour (Unit 1)

Scientific knowledge can enable scientists to offer valid explanations and make reliable predictions.
(ACSES013)

Examine the range of research areas of Queensland Museum that are available related to both individual species and the whole ecosystem. Understand the role of scientific papers to validate their findings.

Recognize how Queensland Museum's collections can communicate science information and document Queensland's unique flora, fauna and landscape.

Suggest various technologies used by Queensland Museum's scientists to investigate a range of scientific questions. These investigations may impact on other areas of society and involve ethical considerations.

Consider how science & technologies has contributed to finding solutions to conservation issues and natural resource management.

Science as a Human Endeavour (Unit 4)

International collaboration is often required when investing in large scale science projects or addressing issues for the Asia-Pacific region.
(ACSES096)

Consider how nations and worldwide organisations work together to achieve global outcomes and targets, including a reduction in greenhouse gas emissions to significantly reduce long-term global warming.

Wild State **General Capabilities and Cross-Curriculum Priorities** Links Earth and Environmental Science Senior Secondary

General Capabilities and Cross Curriculum Priorities

General Capabilities



Critical and creative thinking

- Inquiring – Identifying, exploring and organising information and ideas
- Generating ideas, possibilities and actions
- Reflecting on thinking and processes, analysing, synthesising and evaluation, reasoning and procedures



Personal and social capability

- Self-awareness
- Self-management
- Social awareness
- Social management



Ethical behaviour

- Understanding ethical concepts and issues
- Reasoning in decision making and actions
- Adopting values, rights and responsibilities



Intercultural understanding

- Recognising culture and developing respect for diversity
- Interacting and empathising with others
- Reflecting on intercultural experiences and taking responsibility



Literacy

- Comprehending texts through listening, reading and viewing
- Text knowledge
- Grammar knowledge
- Word knowledge
- Visual knowledge

Cross-Curriculum Priorities



Sustainability

- Consider the strong links between environment and survival of living things
- Human actions can play a vital part of meeting the needs of living things in man-made environments
- Suggest actions that can be taken to improve sustainable practices and support the provision of the basic needs of living things