

## Topic: Environmental issues

Links with K-10 content: Landscapes and Landforms; Place and Liveability; Water in the World; Sustainable Biomes; Environmental Change and Management

### Learning continuum

### Syllabus Outcomes

#### Early Stage 1 Outcomes (2015)

**GEE-1:** identifies places and develops an understanding of the importance of places to people

**GEE-2:** communicates geographical information and uses geographical tools

#### Geography Life Skills 7-10 Outcomes (2015)

**GELS-1:** recognises features and characteristics of places and environments

**GELS-3:** explores interactions and connections between people, places and environments

**GELS-4:** recognises perspectives of people and organisations on a range of geographical issues

**GELS-7:** collects and uses geographical information for inquiry

#### HSC HSIE (Geography) Life Skills 11-12 Outcomes (2012)

**GLS3:** explores the relationships between geographical processes and physical environments

**GLS4:** explores the interrelationships between peoples activities and physical environments

**GLS9:** researches an ecosystem at risk

**GLS10:** explores key geographical issues and challenges facing Australia and the world

Pre-Intentional	Intentional	Concrete Symbolic	Abstract and Verbal Symbolic	Syllabus Content
<p>Students will:</p> <ul style="list-style-type: none"> <li>react negatively to moving over worn surfaces or bumpy ground</li> <li>react to changes of temperature eg being moved into the warm after being cool outside</li> <li>turn away or vocalise at the smell of bush fires or car exhaust</li> <li>turn toward pleasing environmental smells and sounds eg flowers, birds calling</li> <li>react positively or negatively to different environments and events eg crying in a noisy room, calming in a quiet room.</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>express positive or negative feelings when given items from nature (flowers, leaves) and items of garbage (screwed up paper, empty bottle)</li> <li>vocalise or use a specific gesture to request a change of venue if uncomfortable eg too hot or too cold</li> <li>show interest in the resources shown during and an excursion or incursion by an environmental centre such as the Field of Mars</li> <li>express positive or negative feelings to smell, sounds and sights at a resource recovery centre such as Kimbriki.</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>differentiate between litter and natural objects when participating in a clean-up event</li> <li>show awareness of differences between specific physical/natural and human/made features of places eg "Cars here," on a noisy street, "Cars gone," in the park</li> <li>match key words to visual representations eg clean to a picture of a tidy street, dirty to a picture of a graffitied, rubbish strewn street</li> <li>use visuals to illustrate a local environmental issue, garbage in the playground or cracked and flaking paint on a wall.</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>explore environmental issues through models eg using sand and water in a tray to demonstrate erosion</li> <li>create a PowerPoint to show an environmental issue, such as the bleaching of the Barrier Reef</li> <li>plan and carry out a project on an ecosystem at risk eg planting native trees to encourage wildlife back to local bushland</li> <li>participate in a count of feral species in the local area eg rabbits</li> <li>survey a local area photographing damage by introduced species</li> <li>develop and ask questions of a visiting speaker from WIRES or other native animal care group.</li> </ul>	<p><b>Early Stage 1:</b></p> <ul style="list-style-type: none"> <li>investigate the importance of places they live in and belong to eg identification of places they live in and belong to, discussion of why places are special and how people care for them, explanation of why people need to take care of places</li> </ul> <p><b>Life Skills 7-10:</b></p> <ul style="list-style-type: none"> <li>identify the impact of human actions on one landscape</li> <li>investigate strategies to manage water in familiar environments</li> </ul> <p><b>HSC Life Skills:</b></p> <ul style="list-style-type: none"> <li>investigate the impact of introduced species of flora (eg blackberry, lantana) and fauna (eg cane toads, rabbits) on native species</li> <li>recognise some of the human and physical processes that form and transform the earth, such as: human (land clearing, pollution); physical (erosion, drought, fire, floods)</li> <li>identify ecosystems at a local scale that are at risk and require specific care, conservation and protection such as: local creek, beach, wetland</li> <li>investigate opportunities for the care, management and preservation of local ecosystems by: individuals (eg using resources carefully, disposing of rubbish and waste appropriately/recycling, composting); groups (eg cleaning up local areas, tree planting, community action and programs)</li> <li>undertake an audit to identify ways to reduce energy consumption at home and/or at school</li> <li>explore the role of organisations concerned with the care of Australian flora and/or fauna such as Landcare, WIRES, National Parks and Wildlife Services</li> </ul>

## Topic: Environmental Issues

### LEARNING EXPERIENCES AND OPPORTUNITIES

Suggested Teaching and Learning experiences	K-10 Geography Tools	Assessment strategies	
<p><b>Art activities</b></p> <p><b>Community access:</b> visits to areas of scientific nature such as wetlands and national parks</p> <p><b>Gardening:</b> signs of plant damage from rabbits</p> <p><b>In-school community involvement:</b> Clean-up Australia Day, Tree Planting Day</p> <p><b>Outdoor play:</b> observing cracked ground when no rain or grounded flooded after rain event</p> <p><b>Sensory play:</b> use sand water to demonstrate erosion</p> <p><b>Shared reading:</b> stories and recounts of environmental issues eg Enviro story “The Farmer Changes his Ways”</p> <p><b>Sport:</b> the condition of the sports ground due to rain or drought</p>	<p><b>Maps:</b> 2D, textured and 3D representations of an area</p> <p><b>Fieldwork:</b> observing and recording change</p> <p><b>Graphs and statistics:</b> data tables, column graphs, pictograms</p> <p><b>Spatial technologies:</b> satellite images, Google Earth</p> <p><b>Visual representations:</b> photos, video, aerial photos, artworks</p>	<p><b>Pre-Intentional and Intentional</b></p> <ul style="list-style-type: none"> <li>• anecdotal records: observation of engagement in the teaching and learning activity</li> <li>• observation of a physical response, of performance in practical activities and work</li> <li>• data sheets</li> <li>• photographs</li> <li>• written responses such as diary entries, portfolio</li> <li>• tasks analysis</li> <li>• video/audio recordings</li> </ul>	<p><b>Concrete/Symbolic</b></p> <ul style="list-style-type: none"> <li>• anecdotal records</li> <li>• data sheets</li> <li>• observation of participation including group activities</li> <li>• photographs</li> <li>• portfolios: photos, artworks with teacher annotations</li> <li>• strategic questioning to determine individual level of understanding</li> <li>• teacher/student discussions or conferences</li> <li>• tasks analysis</li> <li>• video/audio recordings</li> </ul>

### Key vocabulary

Syllabus language	Additional terms		
place space environment change interconnected scale – large/small, local/national/international built/natural outdoors / indoors map fieldwork	hill town lake ocean building house map town / city / suburb rural/ countryside/bush country or place	agriculture alpine, aquatic, deserts climate crops, farming, grasslands production, sustainability, vegetation construction housing, multiculturalism, population rural urban	change graffiti litter national park name of school/road/suburb shopping centre playground swimming pool garden

## Resources

**Geography Curriculum advice** <http://www.hsiensw.com/geography-k-10.html>

**Jeannie Baker books:** many of Jeannie Baker's books deal with environmental issues. Most have minimal text or are text free.

Suggested book list: *Story of Rosy Dock; Where the Forest Meets the Sea; Belonging* <http://www.jeanniebaker.com/>

**Dust Echoes** is a series of twelve animated dreamtime stories from Central Arnhem Land, telling stories of love, loyalty, duty to country and aboriginal custom and law. <http://www.abc.net.au/dustechoes/default.htm>



**Enviro Stories:** story books written by children on the environment, sustainability and other aspects of land management.

<http://library.envirostories.com.au/>



**Kimbriki Environmental Enterprises:** Resource and recycling centre <http://www.ecohouseandgarden.com.au/content/school-visits>

**Field of Mars Environmental Education centre:** Incursions, excursions and resources <http://fieldofmarseec.nsw.edu.au/>

**Geospace – My place:** pictures of managed and constructed landscapes [http://www.geospace.edu.au/verve/resources/2.1.4.2\\_1\\_my\\_place\\_photos.pdf](http://www.geospace.edu.au/verve/resources/2.1.4.2_1_my_place_photos.pdf)

**Geospace – Making models:** suggestions for modelling of environments [http://www.geospace.edu.au/verve/resources/2.1.3.2\\_1\\_place\\_like\\_mine\\_images.pdf](http://www.geospace.edu.au/verve/resources/2.1.3.2_1_place_like_mine_images.pdf)