## **Appendix: Water topics in Australian Curriculum: Science Foundation to Year 10**<sup>1</sup>

TOPICS YEAR LEVELS

	F	1	2	3	4	
Natural and human water cycle systems	Daily and seasonal changes in our environment, including the weather, affect everyday life (ACSSU004)	Observable changes occur in the sky and landscape (ACSSU019)			Earth's surface changes over time as a result of natural processes and human activity (ACSSU075)	
Chemistry of water	Objects are made of materials that have observable properties (ACSSU003)	Everyday materials can be physically changed in a variety of ways (ACSSU018)	Different materials can be combined for a particular purpose (ACSSU031)	A change of state between solid and liquid can be caused by adding or removing heat (ACSSU046)	Natural and processed materials have a range of physical properties that can influence their use (ACSSU074)	
Catchments and waterway health	Living things have basic needs, including food and water (ACSSU002)	Living things live in different places where their needs are met (ACSSU211)		Living things can be grouped on the basis of observable features and can be distinguished from non-living things (ACSSU044)	Living things depend on each other and the environment to survive (ACSSU073)	
Uses of water			Earth's resources are used in a variety of ways (ACSSU032)			
Water treatment						
Water and health	Living things have basic needs, including food and water (ACSSU002)	Living things live in different places where their needs are met (ACSSU211)				
Water conservation		People use science in their daily lives, including when caring for their environment and living things (ACSHE022/ACSHE035)		Science knowledge helps people to understand the effect of their actions (ACSHE051/ACSHE062)		
Water careers						
Sustainability						
Aboriginal and Torres Strait Islander Histories and Cultures						

	5	6	7	8	9	10
Natural and human water cycle systems		Sudden geological changes or extreme weather conditions can affect Earth's surface (ACSSU096)	Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable (ACSSU116)			Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere (ACSSU189)
Chemistry of water	Solids, liquids and gases have different observable properties and behave in different ways (ACSSU077)	Changes to materials can be reversible or irreversible (ACSSU095)	Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques (ACSSU113)	The properties of the different states of matter can be explained in terms of the motion and arrangement of particles (ACSSU151)		
Catchments and waterway health	Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)	The growth and survival of living things are affected by the physical conditions of their environment (ACSSU094)	Classification helps organise the diverse group of organisms (ACSSUIII) Interactions between organisms, including the effects of human activities can be represented by food chains and food webs (ACSSUII2)		Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems (ACSSU176)	
Uses of water						
Water treatment			Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques (ACSSU113)			
Water and health					Multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment (ACSSU175)	
Water conservation	Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083/ACSHE100)		Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120/ACSHE135)		Values and needs of contemporary society can influence the focus of scientific research (ACSHE228/ACSHE230)	
Water careers	Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083/ACSHE100)		People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE121/ACSHE136) Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures (ACSHE223/ACSHE226)		People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities (ACSHE160/ACSHE194) and (ACSHE161/ACSHE195)	
Sustainability						
Aboriginal and Torres Strait Islander Histories and Cultures						

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