

Year 11 Unit Outline For Unit 2

Managing Catchments (Focus on Flooding)

School Name:	Unit title: Up a Dry Gully	Learning Area(s): Geography Science History Technology	Year level(s): 10	Duration of unit: Approx 13 Lessons supplied by SEQ Water
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RATIONALE

The “Up a Dry Gully’ Schools program is to create and implement an education program that can be adopted by schools and integrated with the curriculum to promote the water story, from catch, collect, store and treat in SEQ.

It is important to implement this program to ensure that the community of SEQ has a great awareness, acceptance and understanding of water in our region. This project is very topical given the developments in the water system in SEQ and the drought challenge we have been facing more recently. The knowledge, skills, perspectives and values this education resource offers will enhance the development of the children and their relationship with Assets of SEQ water.

This unit is designed to engage all learners in a variety of research and hands on activities related to water conservation and sourcing in the SEQ region. Each learning experience is inclusive of all types of learners. Teachers are encouraged to mould the activities to best suit the students needs.

The ‘Up a Dry Gully’ Schools program is designed to run each year. It is a school-based competition that encourages continued interest in SEQ water, its assets and its role within the community.

IDENTIFY CURRICULUM - GEOGRAPHY

Ways of Working	Knowledge & Understanding
<p>Students are able to:</p> <ul style="list-style-type: none"> • Understand geographical facts, concepts and procedures. • Understand how systems influence the changes in places and the distribution and movement of people, resources and information. • Interpret a variety of maps, images (aerial, oblique, ground photographs, satellite images), tables, graphs and diagrams. • Identify and explain patterns, trends and relationships in geographical data and information. • Collect, select and organise primary data from field settings. • Respond to geographical investigations across a range of scales. • Use appropriate geographical and language conventions and terminology when manipulating data and creating maps and plans. 	<p>Place – Places have absolute and relative locations (site and situation). Complex human and physical factors cause variations in their features and uses over time that contribute to a place being what it is.</p> <ul style="list-style-type: none"> • Places are dynamic and the global patten of settlements has changed significantly as the rate of urbanisation has raised issues of sustainability. • Public and Private places can be managed in creative and innovative ways according to the principles of stewardship and sustainability. • Aboriginal and Torres Straight Islander peoples’ economic, social and spiritual life defines significant places and connections to country. • The Australian environment has impacted on the way people interact with place and space and this can be seen in the different relationships with the land. <p>Systems – Systems underpin the relationships, the connections, the human interactions and movement between places and within spaces.</p> <ul style="list-style-type: none"> • The development of resources is essential to our social and economic well being, but this needs to be balanced against harmful impacts on the natural environment and the potential impact on the quality of life of some peoples. • A complexity of factors in physical, social, economic, cultural and political systems and decision making affect levels of access to resources and influence the movement of people, resources and information. • Natural phenomena across a range of scales have an impact on geographical patterns features and human activity.



IDENTIFY CURRICULUM - HISTORY

Ways of Working	Knowledge & Understanding
<p>Students are able to:</p> <ul style="list-style-type: none"> • Identify issues or problems for investigations and design research questions. • Locate and use evidence from primary and secondary sources and maintain a record of research. • Draw conclusions and make decisions supported by interpretations of evidence. • Reflect on the nature of historical sources, recognising inherent values and beliefs, and the tentative and interpretive qualities. • Reflect on the research process and findings to revise and adapt the inquiry. 	<p>Time, Continuity and Change – Changes and continuity are connected to particular events, people and movements, understood through key historical ideas, definitions and concepts, and interpreted from different standpoints.</p> <ul style="list-style-type: none"> • Past events reveal values, beliefs and assumptions that have changed and continue to impact on present-day Australian public policy and community views. • Changes and continuities in Australia and international settings reflect the dominant ideas and beliefs of particular historical eras. <p>Culture and Identity – Cultures and identities are shaped by events, people and movements and their development reflects how the past can promote division, cohesion and diversity.</p> <ul style="list-style-type: none"> • Cultural research involves following protocols and acting sensitively.

IDENTIFY CURRICULUM - TECHNOLOGY

Ways of Working	Knowledge & Understanding
<p>Students are able to:</p> <ul style="list-style-type: none"> • Investigate and analyse products, processes or services in response to design challenges or problems. • Use safe and ethical practices relevant to specific contexts. • Communicate design solutions in response to challenges or problems using suitable modes and genres for presenting technical ideas and design concepts for a given audience and purpose. • Use evaluation throughout the design and production process to validate and refine the effectiveness of solutions to challenges or problems. • Analyse and evaluate the ethics and impacts of products, processes and services on local and global communities and environments. 	<p>Products, Processes and Services – Individual characteristics of different technological resources (information, materials or systems) will decide how they are applied in products or services that have been designed to meet a challenge.</p> <ul style="list-style-type: none"> • Information takes different forms that can be collected, analysed and organised. • Systems incorporate multiple processes that work together to meet challenges and can be managed with tools. <p>Techniques and Tools – Techniques and tools are selected to manipulate resources to meet detailed specifications and predetermined standards and their characteristics inform the selection for specific tasks.</p> <ul style="list-style-type: none"> • Practical experiences with techniques and tools provide opportunities to develop skills. • Safe practices are part of the control and management of processes. • Design ideas are represented by specialist forms of technical communication. <p>Impacts & Consequences – Decisions made about the design, development and use of technology are based on that technology's probable impact on people, their communities and environments at local and global levels.</p> <ul style="list-style-type: none"> • New products and technologies are designed and developed to meet changing needs. • Impacts and consequences of products, processes and services include aesthetic, cultural, economic, environmental, ethical, functional and social factors.



Develop Assessment			Make Judgements	
Type of Assessment	Type of Assessment	When it will be assessed	Purpose of Assessment	Assessable Elements



Up a dry gully

