


Flushed!		
Learning Objectives		Time: 1 Hour
Students will...	<ul style="list-style-type: none"><li>✓ know what sewage (wastewater) is and how it is treated before returning to the environment.</li><li>✓ understand that sewage (wastewater) treatment is an essential service that we all need.</li><li>✓ consider how we are all responsible for what goes ‘down the drain’</li></ul>	Key Vocabulary and Terms
		<ul style="list-style-type: none"><li>• Sewage</li><li>• Wastewater</li><li>• Treatment</li><li>• Water Reclamation Plant</li><li>• Water cycle</li><li>• Environment</li></ul>
Inquiry Questions		
<ul style="list-style-type: none"><li>– What happens to the water we have used?</li><li>– What is wastewater?</li><li>– Why do we need to ‘clean’ the water that we use?</li><li>– Is managing our wastewater essential?</li><li>– What responsibility do we have for what goes down the drain?</li></ul>		
Teaching and Learning		Resources
<p><b>Orientation:</b></p> <p><b>Activity: How do you use water? (5-10 mins)</b> <i>Purpose: challenge students to think of all the ways they ‘use’ water in order to make wastewater relevant to them.</i></p> <p>Build a mind map of all the ways that students use water in their life. It could be drinking it, laundry, washing a car etc.</p> <p>Record these answers where they will be visible for the rest of the lesson and can be referred back to.</p>		<p>Use provided slides to support all activities.</p> <p>Record answers on whiteboard.</p>
<p><b>Body:</b></p> <p><b>Activity: Story of a Sewage Pipe (10-15mins)</b> <i>Purpose: build on the mind map activity by reinforcing how:</i></p> <ul style="list-style-type: none"><li>• we all create wastewater;</li><li>• we should take care with what we send down the drain.</li></ul> <p><i>Note: There is a bit of prep involved with activity, but it is a fantastic way to demonstrate how we all create wastewater. Please dispose of your ‘wastewater’ thoughtfully once complete.</i></p> <p>Starting with a jug/container of clean water, nominated students are given a character from the story (<b>Resource A</b>). As the teacher narrates the story, each character/student will come forward and add their ‘pollutant’ to the water. At the end of the story we have a pretty foul mixture, demonstrating concretely what wastewater is made up of: an aggregate of all our activity and usage.</p> <p>Take time to reflect on and emphasise these conclusions:</p> <ul style="list-style-type: none"><li>• We <u>use and pollute</u> water in many ways – resulting in the need to clean it.</li><li>• In modern towns and cities, <u>we create a lot of wastewater.</u></li><li>• We need to clean this water for the benefit both <u>our health and the environment.</u></li></ul> <p>This is also a relevant time to highlight a Local Traditional Owner perspective on water.</p>		<p><b>Resource A:</b> Story of a Sewage Pipe and Character Cards</p> <p>Prepared small containers of:</p> <ul style="list-style-type: none"><li>A. Milk</li><li>B. Wet wipe and ear buds</li><li>C. Coffee mixed with water</li><li>D. Soapy water</li><li>E. A bit of colourful paint mixed with water</li><li>F. ‘Spew’ – a mix of milk and cornflakes will do.</li><li>G. A small amount of cooking oil</li><li>H. ‘Wee’ – water with yellow food colouring</li></ul>

<p><b>Activity: So, what do we do with it? How a Water Reclamation Plant works. (5-10 mins)</b></p> <p><i>Purpose: Using Epsom Water Reclamation Plant as an example, students build an understanding of how their wastewater is treated by exploring a map of the Plant (<b>Resource B</b>) and watching a short video (<b>Resource C</b>).</i></p> <p><i>Given this is aimed at level 3 and 4 of the curriculum, a broad view of the process is enough here.</i></p> <p><b>Activity: Was it always this way? (10-15mins)</b></p> <p><i>Purpose: Using stimulus material to help reflect on the history of sewerage treatment and how important it is to our modern society.</i></p> <p>Split class into four groups. Give each group one of the Stimulus Images below from <b>Resource D</b>.</p> <ol style="list-style-type: none"> <li>1. Typhoid Nightman illustration</li> <li>2. Cesspan advert</li> <li>3. Back yard outhouses</li> <li>4. Bendigo night soil truck.</li> </ol> <p>Give each group 5 mins to do the following:</p> <ul style="list-style-type: none"> <li>- Describe what they think the image is of.</li> <li>- Think about how it might relate to the history of wastewater treatment in Australia.</li> <li>- Be prepared to report back to the class.</li> </ul> <p>Bring class together and discuss each image in order. Students will hopefully reflect on how we can be grateful that we no longer manage our waste in such a way!</p>	<p><b>Resource B:</b> Map of Epsom Water Reclamation Plant (WRP)</p> <p><b>Resource C:</b> Video of Divers at Epsom WRP</p> <p><b>Resource D:</b> Stimulus Images</p>
<p style="text-align: center;"><b>Plenary:</b></p> <p><b>Activity: True or False (5 mins)</b></p> <p><i>Note: You may like to do this activity as a 'heads and tails' game.</i></p> <p><i>Purpose: reflect on the objectives of the lesson, and consider how we are all responsible for what goes 'down the drain'</i></p> <p><b>Activity: Revisit Learning Objectives (5 mins)</b></p> <p>Revisit learning objectives reworded as statements – gauge student understanding.</p> <p>Finally, revisit the Traditional Owner's perspective, which neatly summarises how we should be thinking about how we should respect water.</p>	
<p style="text-align: center;"><b>Curriculum Links</b></p>	
<p><b>Geography Levels 3 and 4:</b></p> <ul style="list-style-type: none"> <li>- <i>Types of natural vegetation and the significance of vegetation to the environment, the importance of environments to animals and people, and different views on how they can be protected; <b>the use and management of natural resources and waste, and different views on how to do this sustainably (VCGGK082)</b></i></li> </ul>	