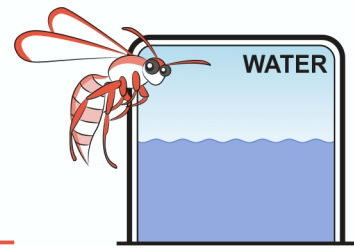


Waste Water – Teacher Notes



Where to locate the toilet?



When setting up camp outdoors – whether you are an army on campaign, nomadic roamers, or modern campers – it is critical to carefully consider where to place your camp facilities in relation to any nearby water sources. Most importantly, you need to make sure that waste from your makeshift toilet doesn't contaminate your drinking water. In World War I, more soldiers were killed from dysentery (a severe case of gastroenteritis caused by bacterial infection) than by enemy action. This was because often men drank water from the bottom of trenches that were next to latrines, and the dirty water caused infections. Water contaminated by human waste still kills many people around the world today. In outback Australia, the rules for locating toilets (and washing facilities) were simple:

'Down hill, down water, and down wind from the water source and camp.'

From your knowledge of the water cycle (and using common sense), explain why each of these three rules were necessary:

Down hill

Water always flows downhill. Even the water table underground slopes gently downhill. If the camp is located downhill from the water source, gravity flow will provide water without pumping. This would also mean that any contaminated water from the toilet could not flow uphill to the water source.

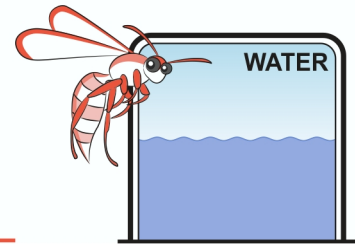
Down water

If any waste water was emptied into flowing water it would have to be entered downstream from the campsite and flow away from it. Aboriginal people never contaminated a water source because water was revered.

Down wind

This location for a toilet meant that any smell of urine and faeces would not be blown towards the camp. In most cases, the evening wind direction was considered the most important.

Waste Water – Teacher Notes



Safety

If we clean water using filter paper, a filter funnel, and a clean container, is the water safe to drink?

Filter paper only removes the larger solid particles. Germs are small enough to pass through it.

If you were desperately short of water, what could you do to the filtered water to make it safe to drink? **Boil the water, cover it and then let it cool.**

Extra for experts

Where would the best location for showering and clothes washing be?

These could be located between the camp and the toilets. This would permit water to flow down to the toilet by gravity and waste water to be used to wash out the toilets and perhaps water the vegetable garden.

