

It's never funny to block a dunny.

Did you know wet wipes are wreaking havoc on Canberra's pipes? We're lifting the lid on this serious issue through our "Free the Poo" video game. A fun way to introduce a topic often dismissed or overlooked. The presence of wet wipes in our sewer, along with other unflushables, is one of Canberra's rising sustainability issues. It might seem out of sight out of mind, but there is no such thing as simply 'flushing it away.'

Our game is available for free on iOS, Android and PC. Let's draw attention to a serious sustainability issue plaguing our sewers!



# How to play our game



The game is available on <u>Android</u>, <u>Apple</u> and <u>Desktop</u> devices.

Year level suitability – Grades 3 to 12 Game play – approx. 10 minutes for new players

#### What is the game about?

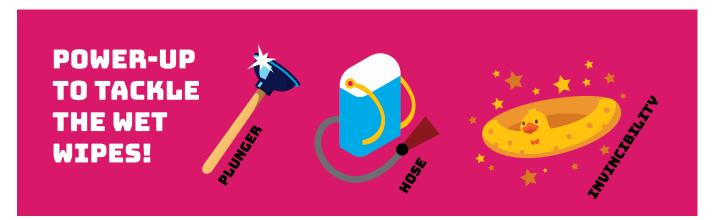
Our game takes you on journey through Canberra's sewerage network to help 'Free the Poo'. The objective is to make your way to the wastewater treatment facility but look out! Wet wipes will try to stop you at every turn.

#### How to play

You'll encounter a hoard of wet wipes as you progress towards the wastewater treatment plant (Lower Molonglo Water Quality Control Centre). There are two ways you can deal with these obstacles: dodge them or squash them. You can choose to avoid wet wipes entirely and instead focus on completing the game quickly. Once you've reached the treatment plant your completion time will be ranked against other players to give you a final score. **But be aware:** any wet wipes you hit, but don't destroy, will follow you through the game. This can make the boss (fatberg) fight more difficult.



If you'd rather try your hand at plumbing, you can aim to destroy as many wet wipes as possible. There are toilet rolls scattered throughout the game that cycle through power ups. Each time you collect a roll you progress to the next item. These items are an excellent way to clear out wet wipes, or even give you a speed boost!



Once you reach the treatment plant the game will tally how many wet wipes you've destroyed, compare that count to other players and give you a final score.

Regardless of how you choose to play you will need to complete two major tasks: clearing the wet well and defeating the fatberg.

#### The Wet Well

In this section you need to unclog the wet well before water reaches the top. If the wet well fills with water, it's game over.

The game will send out a blue pulse to tell you one of two things:

1. If the pulse is coming from above you, it means you have to turn on the pump.

You can turn on the pump by swimming up until you see a big floating object. This is the float switch. Bumping this switch activates the pump.

2. If the pulse is coming from below you, it means you have to clear the pump.

Wet wipes entering the well will try and clog the pump. They'll do this by swimming underneath the pump and lodging inside the blades. To clear them out you need to swim to the bottom and destroy any wipes you find. The hose is an excellent item for clearing this level quickly.



#### The Fatberg

This is the final section of our game and leads directly to the treatment plant. The fatberg has an insatiable appetite for wet wipes and grows with every one it consumes. You need to defeat this monstrosity before it grows large enough to block the pipe. If the pipe becomes clogged, you lose the game.

Wet wipes will continuously stream towards the fatberg's mouth. Each time it eats a wipe it grows slightly larger. Stopping the wet wipes before they reach the fatberg is a good strategy, but that's not how you'll defeat it.

To stop the fatberg, you need to destroy all the wipes orbiting inside its stomach. As you destroy these wet wipes the fatberg will shrink. When the last wipe is removed from its stomach the fatberg will collapse, opening the path to our treatment plant



#### Game over

If you don't clear the pipes in time you'll see the consequences of a major blockage. This isn't simply a game over, but a very real situation!

Blockages can cause the sewage to back flow. Sometimes blowbacks are the result. Yuck!





# **Teacher notes**

# Why it is important to care for your sewage drains?

There are drains inside your house, and school, that suck away water after it has been used by taps, sinks, baths and toilets. These drains join the vast network (3,328 km) of sewerage pipes that run beneath Canberra. Together, they guide sewage to the treatment plant (Lower Molonglo Water Quality Control Centre). Water leaving this plant is so thoroughly treated that it can return to the natural water cycle, free of pollution, where it is reused by other towns further downstream. It then flows into the Molonglo River, Murrumbidgee River and then into the Murray-Darling Basin river system. Eventually it spills into the ocean south of Adelaide. What we put down our drains, both at home and at school, matters.

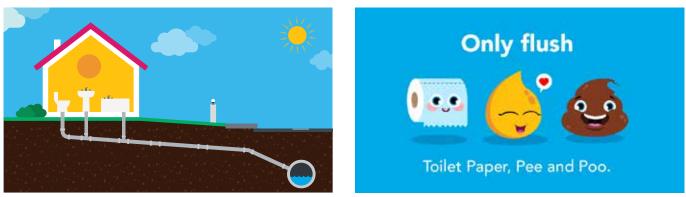
Everything you put down the drain, sink or toilet, goes through the sewerage system. Flushable items that can go into the sewer network are easy to remember, along with soapy waste water it's the 3P's – pee, poo and (toilet) paper.

#### Why are wet wipes such a problem

Wet wipes include baby wipes, toilet wipes, body wipes, personal hygiene wipes and cleaning wipes. They may be labelled as "flushable" or "biodegradable", but these don't disintegrate like toilet paper. Synthetic wet wipes do not break down, contributing to major blockages in our sewerage network.

The pipes that run from your home to the main sewer network are only a few inches wide. They can become blocked easily which could cause sewage to quickly back up into your street, garden or home. This causes a dirty and costly mess – which is completely avoidable.

Instead of disintegrating after flushing – like toilet paper does—synthetic wipes do not break down. On average, wet wipes contribute to one pump blockage every three days. This poses a significant cost to the Canberra community that it is totally preventable. We all have a part to play.



Warning! gross content ahead...



## What are fatbergs

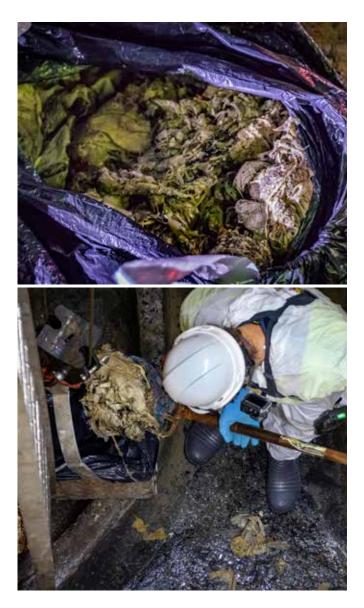
When the wrong stuff is put down a toilet it can have gross consequences.

Fatbergs form when fats and oils, that are wrongly tipped down kitchen sinks and household drains, bind with wet wipes, rags and other non-flushable items. These form solid blockages in the sewer network with often gross and unhygienic consequences.

The sewer network is designed to transport the city's wastewater from bathrooms, laundries, kitchens and toilets to the treatment plant where it is cleaned and returned to the Murrumbidgee River system.

Blockages stop poo flowing freely by causing sewage back ups. This can lead to overflows inside people's homes and damage to the environment. A serious risk for the health and wellbeing of our city.

The collective non-flushables lead to completely avoidable blockages across our network. You never want your poo to flow back to you. Our message to the community is pretty simple – only human waste and toilet paper should be flushed. If you use wet wipes, just bin them.



## **Blockage busters**

Blockage busters are called in night and day to fix these avoidable issues. We have a fabulous crew who attend the water sewage network at all hours, regardless of weather, to make sure Canberra's sewage flows. Think next time you flush, maybe it's worth helping these blockage busters out? Have a look at some of the disgusting things they need to deal with in our Gallery of Gross or see them in action by watching our blockage buster series.

Know where it goes – Bin that wet wipe and all other unflushables

So next time you are sitting on your 'loo' you now know what to do..., Bin that wet wipe. Toilets aren't the place for sanitary products, nappies, cloths, plastics, fats, oils, gloves and masks. We really shouldn't have to ask!

To find alternative disposal options for wastes that can't go down the drain, check out the ACT Government's <u>A-Z</u>. <u>Recyclopedia</u>.

Visit <u>Free the Poo</u> to find out more.



# Classroom activity

Take up the challenge with your students, help us destroy the wet wipes plaguing Canberra's sewerage system! You can free the poo so it's able to journey safely to the sewage treatment plant.

Play 'Free the Poo The Game' to introduce the topic of wet wipes, unflushables and the issues they cause in Canberra's sewage network. Help take action for your next best flush.

#### Tuning in ...

#### Ask your students:

- "What items can be flushed along with wastewater?"
- "Do you know where it goes when you flush the loo? "

Discuss with your class why it is important to know what can and cannot be flushed down our toilets.

## Explore

Ask your students to think about what they flush and how they can help free the poo in their everyday lives.

Find out why wet wipes, and other unflushables, are such an issue in Canberra's sewerage network.

Conduct the '<u>To flush or not to flush</u>' experiment to find out, and test, the properties of materials such as wet wipes, paper towelling, tissues and toilet paper. Your goal is to determine what can, and can't, be flushed.

#### **Action stations**

Now the lid's off. How can you help spread the message at your school and home?

Help your family know what can, and can't, be flushed.

Create an action plan to support promotion of this important sustainability issue. Remember only the 3P's!

## Find out more

Find out what happens to your wastewater after you flush.

Learn about the process of separations that returns treated effluent downstream to the Murrumbidgee River.

Check out <u>a day in the life of poo</u>, our new comic strip!