

# Water Heroes!

## The Journey of Water



by Catherine Coe



## Foreword by Simon Reeve

Freshwater, found in lakes, rivers and wetlands, is a precious resource that is essential for all our amazing species and the thriving biodiversity that they support. Without it, they and we can't survive. The effects of climate change and growing demand for water present a real challenge. Here in the UK, the Environment Agency predicts we may even run the risk of having water shortages in the next 25 years unless action is taken. If this happened, it could mean huge changes to how we use water at home each day and would negatively affect the ecosystems and wildlife that our freshwater supports.

That's why it is so important for us all to understand where our water comes from, the habitats and wildlife it supports, and how we can help protect our freshwater sources for years to come.

Water Heroes: The Journey of Water, by Catherine Coe, tells the story of three Water Heroes, who, with the help of the Water Wizard, go on an adventure to find out where our freshwater comes from, and how it gets from lakes, reservoirs and rivers, into our homes. Along the journey they also learn some fun facts and water saving tips that we can all use at home. By making these small changes that have a big impact on the amount of water we use, we can all do our bit to help preserve UK freshwater.

The story was developed by Finish and WWF as part of their partnership, which is replenishing 500 million litres of UK freshwater and encouraging everybody in the UK to save more water at home. I hope you enjoy reading the story and that it might inspire you to become a 'water hero' to help protect our water!

# The Journey of Water

“We’re heroes...” rapped Jamie.

“Not zeros,” Alex went on.

Jamie shook their head. “But what’s next?”

“We’d better figure it out if we’re going to win the school talent contest,” Loretta spurted, her mouth full of toothpaste.

They’d stayed up late trying to write their rap during their sleepover at Alex’s. Now it was morning and they still hadn’t got past the first line.

“Loretta!” Jamie yelped, rushing to the tap to turn it off.

“What? I’m just brushing my teeth.”

“You’re wasting all that water!” Jamie said.

Loretta was about to reply when something blue shone out of the tap – like someone was flashing a coloured torch from inside. They stared as the flash of light spun in the air...and landed on the edge of the sink.

“Is that some weird animal?” Alex said, still staring at the round blue shape. Jamie was sure that this creature put its hands on its hips. And then it spoke!



“I’m not an animal,” it huffed. “I’m Water Wizard. And Jamie’s right about saving water. Only a drip would waste a drop!”

Jamie turned to Loretta and smiled smugly.

“Well, I’ll happily never take a shower again,” Loretta laughed. “But what’s the big deal? It rains LOADS in the UK.”

“Yeah, stop picking on my friend, whatever you are,” said Alex. “If you’re even real at all!” He tried to bat him away, but Water Wizard leapt up and landed on the shower curtain, hanging upside-down.

“I can see you’ve got a LOT of things to learn. And not just how to rap!” Water Wizard joked. “Hey!” said Jamie, put out.



“The best way to explain all this is to take you on an adventure to show you how precious water is,” Water Wizard went on. “That’s if you’re brave enough?”

“Of course we are!” Loretta replied quickly.

Alex felt his feet lifting up. The next moment, he and his friends were sucked into the sink’s plughole, like dirt into a Hoover!





Loretta blinked. How were they suddenly standing on top of a mountain in the pouring rain? “See, there’s plenty of water for everyone!” Alex said, shivering. “Can we go somewhere dry? I’m wetter than an octopus’s swimming trunks!”

Water Wizard laughed. “But I love the rain. It’s a big family reunion! Look, there’s my Great Uncle Willy!” He pointed to a tree branch dripping with water. “Hi, Uncle Willy!”

Was Water Wizard going to greet all of the raindrops? Jamie panicked. They’d be there all day! Water Wizard whipped into the air. Suddenly, three umbrellas were flying down towards them from the cloudy sky.

Loretta reached out to catch one, but slipped and fell into the mud. “Argh!” As they caught their umbrella, Jamie couldn’t help but giggle at the mud all over Loretta.

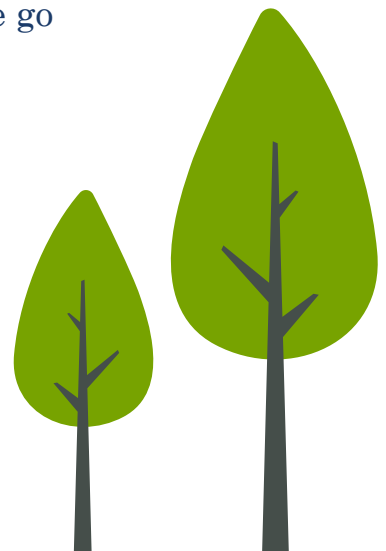
“Maybe you’d like to have that shower now?” Alex laughed.

Loretta scowled. “Here’s a joke to cheer you up,” said Water Wizard. “What goes up when the rain comes down? Loretta shrugged, too grumpy to reply.

Water Wizard grinned. “An umbrella!”

Jamie put out their hand, catching a few raindrops and hoping none were Water Wizard’s cousin or something. “Here, that’s saved some,” they said. “Can we go home now?”

Water Wizard shook his head. “You’ll need something a lot bigger than that. Come on, I’ve got more to show you.”



They arrived at a riverbank, where it was no longer raining. “Did you know the average person uses around 143 litres of water a day?” Water Wizard said.

The friends looked at Water Wizard blankly. “That’s 572 cups of tea!” he explained.

“Whoa, even my grandad can’t drink that many!” Alex laughed.

“And some households can use over 500 litres a day,” Water Wizard continued. “Especially if they waste water in the garden and when washing up the dishes. At this rate, there might not be enough water for everyone in the UK in 25 years. So, you can forget about drinking loads of tea when you’re as old as your grandad!”

Water Wizard pointed at the river. “This should be a watery playground, but it’s turned into a H<sub>2</sub>O-no!”

Loretta looked confused.

“H<sub>2</sub>O is water,” Jamie explained. “It’s made of hydrogen and oxygen, which is where the H and O come from.” They walked closer to the bank edge and gasped. A sad-looking otter was making a screeching sound as it pawed at the water.

“She doesn’t have enough to eat,” Water Wizard said.

“There’s not much of her usual food in the river, like salmon and frogs, because they struggle to survive when the river is low, and when it’s being polluted by humans. Climate change also affects rivers too. Sometimes too much rain causes floods and other times there isn’t enough, meaning rivers and streams can shrink or even dry up. Drought is bad for wildlife that live in a river or depend on it for food.”

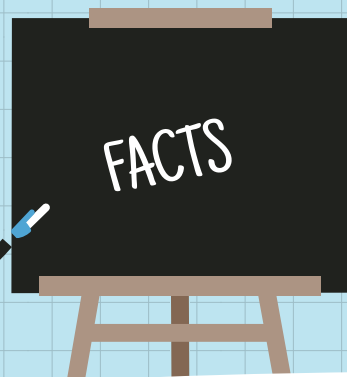
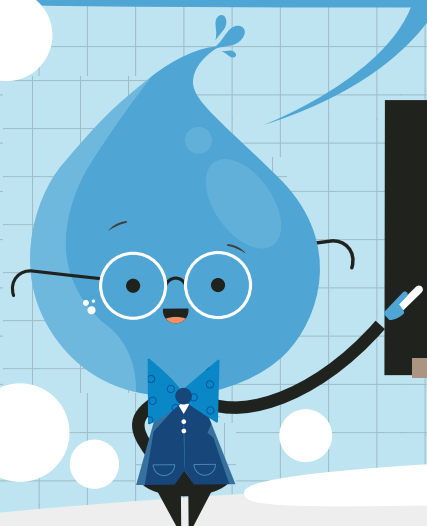
“We have to take the otter home!” cried Loretta.



“That’s otterly ridiculous!” Water Wizard said. “You can’t take her out of her home environment. But I hope you’re starting to get it. Water is precious! In case you’re not, here are some RIVER-ting facts for you to POND-er on. Let’s SEA how many of them you already know...”

“The water you’ve been seeing is the water that ends up in your houses – which is why you have to take much better care of it.”

“Parts of the UK such as London are drier than Mumbai, India, and Nairobi, Kenya, yet most people here don’t think we have a water problem.”



“Using more water at home means taking it away from freshwater lakes and streams where wildlife such as otters live.”

“People today use a lot more water than they did in the 1960s – back then the average person used 60 litres fewer a day than people do now. That’s the equivalent 240 fewer cups of tea a day than we use now!”

“I LOVE tea, but I don’t think I can drink that much!”



“British households use more water than most other European countries. We need to do better!”

“We should save water when cleaning ourselves by showering instead of taking baths. But I wouldn’t recommend going as far as Queen Elizabeth I, who only bathed once a month. Or even King James I, who never bathed in his life!”

“He must have stunk!” Jamie said, screwing up their face.

Water Wizard leapt up and whipped around mid-air, spinning their umbrellas upside down. “Now it’s stopped raining, you can jump on!” he cried. “We’re travelling to our next destination in the most so-FISH-ticated and e-FISH-ent manner. Hold on tight to your Brolly Trolleys!”

The friends grabbed their umbrella handles for dear life as they rose up and zoomed away.

“Duck!” called Water Wizard, and the three friends ducked their heads. “No, there’s a duck on the water reservoir ahead.” He burst out laughing. “You lot are quackers!”

“This is aqua-mazing!” giggled Jamie as they shot towards the reservoir.

“No it isn’t!” yelled Loretta as her umbrella caught on a tree branch and tipped her into yet more mud.

The others stopped by Loretta at the edge of the reservoir.

“Reservoirs are made by humans, but they collect water from natural sources such as rivers,” Water Wizard explained. “Water is taken from them for you to use in your homes, as well as in factories and farming. But people use so much of it that sometimes reservoirs struggle to keep full. Unfortunately, the dams used to hold back the water in

reservoirs stop fish from moving up and down the river. In some places they need fish ladders to help them get past the dams.”

Loretta pulled a face. “We drink water that comes from reservoirs that are filled with fish?”

“Aha, that’s the next part. Even water needs a bath to get clean – so it’s professionally cleaned before it enters our homes!” Water Wizard waved his arms and the friends found themselves together inside a bubble that was rising up. Suddenly it plunged down into the reservoir...





“Did you know, toilets use a lot of water every time you flush? But you can use a water hippo to help! It’s a small container you put in the cistern that reduces the amount of water used to flush.”

“Someone should tell my mum – she spends half her life in the toilet!”

“Choose a short shower over a bath and you’ll save up to 20 litres every time!”

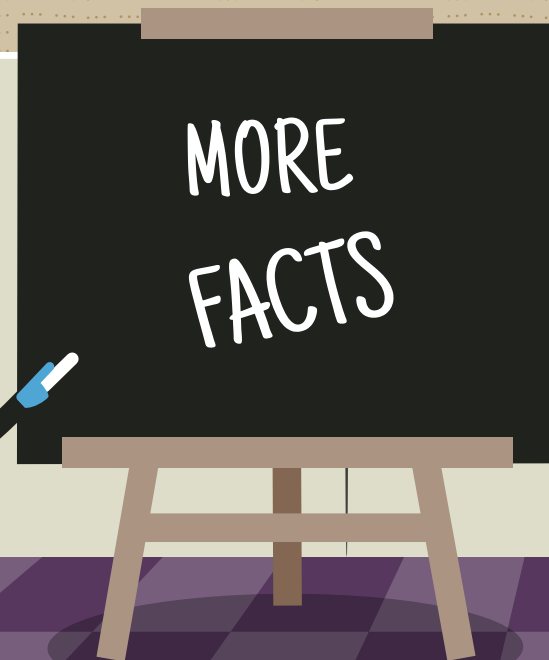
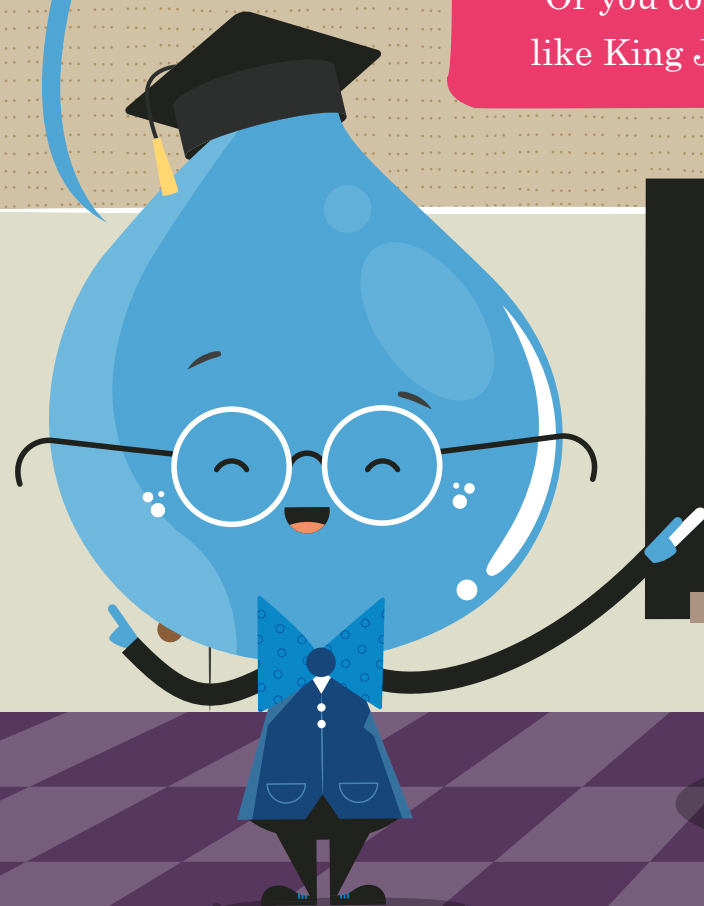
“Or you could not shower at all, like King James I!”

“Use a dishwasher if you have one instead of handwashing and you’ll save up 6800 litres of water a year – that’s the equivalent of 85 baths! If you have good dishwasher tablets there’s no need to pre-rinse before you put the dishes in, and you’d save another 1000 litres a year, or 12 and a half baths.”

“I never pre-rinse – I just lick the plate clean!”

“Ask your family to wash their car with a bucket not a hose. And if you have a garden, use a watering can, not a sprinkler. Install a big water butt to collect rainwater and you’ll save even more!”

“Whose butt are you calling big?!”





“This is water’s version of a theme park!” announced Water Wizard. “Look at all the fun it’s having as it travels through the pipes from the lakes and reservoirs. It’s a lot more exciting than going by bus!”

“How does it go so fast?” Loretta asked.

Water Wizard grinned. “It’s just like me – totally pumped!” he said, laughing at his own joke. “After coming to the water filtration plant, it’s **PUMPED** again into storage tanks, which are connected to a complex network of pipes that take water to homes.”

“What’s happening?” Alex asked, pointing at the dial on the storage tank. The water was sinking lower.

“Lots of people must be wasting water today,” Water Wizard points out. “Doing things like using garden sprinklers and pre-rinsing dishes quickly adds up!”

“So now you’ve seen that a tiny drop of water has come a long way for you to be able to use it,” Water Wizard said.

“But what EXACTLY happens here?” Loretta asked. “Apart from all the pumping! What about all the fish and dirt and stuff?”

“That’s the cleverest part!” Water Wizard grinned. “Are you ready?”

The water is filtered to take out big things like leaves and insects. This is done by spraying the water onto a filter bed made of layers of gravel and sand, which large bits and pieces can’t get through.

A chemical called aluminium sulphate is added to the water – this pulls together all the tiny bits of dirt in the water to make those easier to remove.

The water is pumped – oh yes, again! – through another filter that takes away any tiny bits of dirt that still remain.

Another chemical called chlorine is added to the water – this makes sure the water contains no nasty microbes including deadly diseases. You don’t want to skip this part!

“Not forgetting that the water is tested at every single stage of the process,” said Water Wizard.

“Whoa. That’s more than we get tested in maths class!” Alex gulped.

“Can we go home now?” Loretta asked. “We really need to tell our families about all this.”

Alex nodded to agree. “We have to make sure everyone starts saving water!”

Water Wizard beamed. “You really have been listening! Come on then.” He guided them back into the bubble. They were flung into the water again, through another long set of pipes.

They suddenly rushed out in a blast of water – out of the hosepipe at Jamie’s house! Jamie shrieked to see their mum washing the car with the hose. “Mum, what are you doing?”

She jumped and turned around, spraying water everywhere. “Oh Jamie, I didn’t realise you were home.”

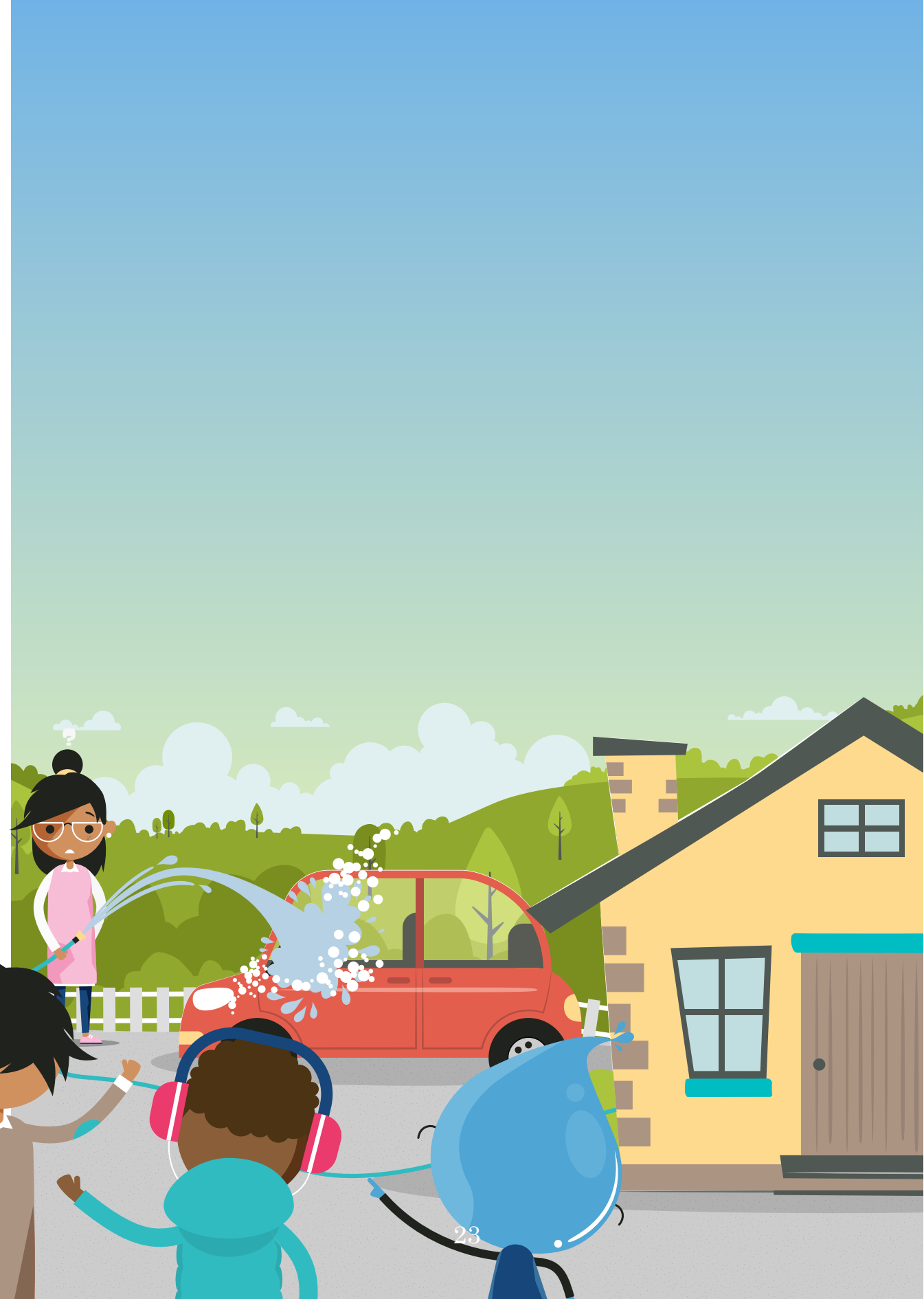
“You shouldn’t use a hose to wash the car,” Jamie went on. “It wastes loads of water and if we’re not careful we won’t have enough soon! Please use a bucket and sponge instead, Mum.”

“In that case, do you kids fancy doing it for some pocket money?”

“Definitely!” said Loretta.

“While you’re doing that, I’ll have a nice cup of tea...” Jamie’s mum said.

“As long as you don’t have 572!” Jamie replied.





Water Wizard had been hiding behind Alex, but jumped out once Jamie's mum had gone indoors.

"Can we go to mine next?" Loretta said. "Dad always has a bath on Saturday morning. I need to ask him to have a shower instead!"

"Water we waiting for?" Water Wizard grinned. He did a backflip and the umbrellas magically appeared again.

They whizzed along on them to Loretta's flat, landing on the balcony. Loretta rushed in and sure enough, her dad was about to turn off the bath tap. "Dad, please have a shower next time. A bath wastes 20 litres of water compared to a quick shower. That's ten big bottles of juice!" she worked out.

Her dad looked a bit confused, but nodded. "Um, okay," he said.

"We need to save every drop of water. For the otters!"

"And they have to be short showers – no singing for ages and ages!" Loretta went on.

"Not even Raindrops Keep Fallin' on My Head?" her dad joked.



Loretta groaned. “Talking of showers,” she said, looking down at the crusty mud on her legs, “I’m going to have one quickly!”

The others waited downstairs until Loretta was done, then all jumped back on their umbrellas and zoomed towards Alex’s house.

They walked in the back door, straight into the kitchen. His mum was at the sink, pulling on her rubber gloves.

“Mum, what are you doing?” said Alex. “Washing up in the sink wastes water! Dishwashers use way less, so as we’ve got one, we should use it.” He ran over and started putting the plates beside the sink in the dishwasher.

His mum smiled. “It’s great to see you being so helpful!” she said. “But wait, you need to rinse them first.”

“Oh no, you don’t,” said Loretta quickly. “Pre-rinsing wastes water too, and there’s no need if you use good dishwasher tablets.”

They finished loading the dishwasher and shut the door, remembering to press the button for the eco programme. The friends turned to Water Wizard, hoping he’d be impressed. But he was nowhere to be seen.

“Where’s Water Wizard?” Jamie asked, and had a sudden worrying thought. “Has he dried up?”

“I know he was annoying, but I kind of liked him too!” Loretta admitted.



“You know what though?” Alex said.  
“I think I’ve got our rap for the school  
contest! But can we perform it to our  
parents?”

They’re the ones that need to hear it the most.”  
They were all soon in Alex’s garden, and began  
performing to their families:

Are you a water waster  
Or a water hero?  
You gotta dial that tap  
Right down to zero.  
Skip those baths,  
Jump in the shower.  
You don’t need a sprinkler  
Soaking your flowers.  
Choose a bucket not a hose  
To wash your car.  
Don’t pre-rinse your dishes  
To make the water go far.  
Making sure we look after  
Every single drop.  
Cos we don’t want our precious water  
Coming to a stop.

As they finished and their parents clapped, the friends couldn’t help  
but giggle. Behind their audience, Water Wizard had appeared.

Alex nudged Loretta and Jamie.  
“He’s tap dancing!” laughed Alex.

Water Wizard waved at them, turned into an actual wave and  
disappeared up the tap.

“That’s a pour joke,” said Jamie and they all laughed harder.

But despite their smiles, they knew that saving water was serious,  
and they’d never waste a drop again!

# Helping to protect UK freshwater sources

To help protect UK freshwater sources, Finish has partnered with WWF to replenish 500 million litres of freshwater in the UK. During the 3-year partnership Finish will fund crucial WWF water replenishment projects in the East Anglia region of the UK.

Finish's purpose is to save water and improve water quality, and WWF's is to protect and restore nature. The partnership will raise awareness of the importance of the UK's freshwater habitats and encourage people to take action in their daily lives to reduce their water use, leaving more in the environment to support wildlife and help to ensure that water supplies are secure for future generations.

Finish and WWF's water replenishment projects focus on nature-based solutions across East Anglia, home to some of the UK's most precious waterways. As part of the work, WWF will create and restore new ponds, rewet reedbeds, restore bogs and mires, reinstate modified rivers and use constructed wetlands to improve freshwater habitats and enhance the UK's water supply.



# Using water at home

There are lots of things we do daily that can impact how much water we use in the home, from brushing our teeth to showering, lots of our everyday habits use water. Below are some key tips of how to look out for things we do that waste water, and some small changes we can make to save water.

## Ways water can be wasted

- A running tap uses more than 9 litres of water a minute
- A bath uses around 80 litres of water
- An old-fashioned toilet uses up to 13 litres and a leaking toilet can waste even more! Up to 400 litres a day
- Hoses and sprinklers can use 1,000 litres an hour

## Ways water can be saved

- Having a shower instead of a bath can save 20 litres
- Cutting your shower time by just 1 minute saves around 8 litres of water – the shorter the shower, the more water saved
- Turning off the tap when brushing teeth saves 6 litres per minute
- If you have a dishwasher, it can save 6,800 litres per year vs handwashing
- Not pre-rinsing dishes before loading a dishwasher can save 1,000 litres of water a year
- Use eco-setting on washing machines and dishwashers saves up to 4 litres per wash
- Fix leaky loos and dripping taps can save up to 400 litres per day per household
- Washing cars with a bucket instead a hose can save up to 220 litres per car

## References

### Foreword

Here in the UK, the Environment Agency predicts we could run the risk of having water shortages in the next 25 years if no action is taken

- Escaping the jaws of death: ensuring enough water in 2050. Available at: <https://www.gov.uk/government/speeches/escaping-the-jaws-of-death-ensuring-enough-water-in-2050> [Accessed May 2022].

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Did you know the average person uses around 143 litres of water a day

- Discoverwater.co.uk. The amount we use. Available at: <https://discoverwater.co.uk/amount-we-use> [Accessed May 2022].
- The Great British Rain Paradox Report. A report by Finish, supported by Love Water. Published 2020. Available at: <https://www.savewatercleanclever.co.uk>. [Accessed May 2022].

And some households can use over 500 litres a day

- Water.org.uk. Vast majority of Brits have no idea how much water they use each day. Available at: <https://www.water.org.uk/news-item/vast-majority-of-brits-have-no-idea-how-much-water-they-use-each-day/#:~:text=The%20call%20comes%20as%20new,than%20500%20litres%20each%20day>. [Accessed May 2022].

At this rate, there won't be enough water for everyone in the UK in 25 years

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Parts of the UK such as London are drier than Mumbai, India and Nairobi, Kenya

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People today use a lot more water than they did in the 1960s – back then the average person used 60 litres fewer a day than people do now

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British households use more water than most European countries

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Chose a short shower over a bath and you'll save 20 litres every time

- The Great British Rain Paradox Report. A report by Finish, supported by Love Water. Published 2020. Available at: <https://www.savewatercleanclever.co.uk>. [Accessed May 2022].

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### Page 17

Use a dishwasher if you have one instead of handwashing and you'll save up to 6800 litres of water a year

- Reckitt data on file. IPSOS MORI data.

No need to pre-rinse before you put your dishes in, and you'd save another 1000 litres a year

- Reckitt data on file. IPSOS MORI data.

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### Page 25

A bath wastes 20 litres of water compared to a quick shower

- The Great British Rain Paradox Report. A report by Finish, supported by Love Water. Published 2020. Available at: <https://www.savewatercleanclever.co.uk>. [Accessed May 2022].

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Ways water can be saved and ways water can be wasted

- The Great British Rain Paradox Report. A report by Finish, supported by Love Water. Published 2020. Available at: <https://www.savewatercleanclever.co.uk> [Accessed 20 May 2022].

