

A vibrant, hand-drawn illustration of a landscape. In the background, there are several mountains with green slopes and white peaks. A bright yellow sun with rays is in the top center of the sky, which is a clear blue. Several birds are flying in the sky. In the foreground, a blue river flows from the right side towards the bottom. To the left of the river, there are large green trees with brown trunks. A white fence with brown posts runs across the middle ground, separating a green field from a yellow field. The title 'The Catastrophe' is written in a large, black, sans-serif font inside a white, cloud-like shape in the upper center of the image.

The Catastrophe

Hunter Local Land Services

Hunter Local Land Services works with land managers and the community to improve primary production within healthy landscapes. We help people make better decisions about the land they manage and assist communities and agricultural industries to be productive and sustainable into the future.

The Hunter Local Land Services region covers an area of approximately 33,000 square kilometres, extending from Mid Coast Council in the north to Lake Macquarie City Council in the south and Upper Hunter Shire Council in the west.

The landscape ranges from estuarine wetlands and mangroves, rainforests and freshwater wetlands to open grasslands, woodlands, eucalypt forests, lakes and foreshores.

The region has good soils, a subtropical climate and abundant rainfall which support a wide range of industries, including farming, forestry, fishing, oyster farming, tourism and nature-based recreation.

www.lls.nsw.gov.au/hunter

Hunter Water

Hunter Water provides drinking water, wastewater, recycled water and some stormwater services to a population of almost 600,000 people in homes and businesses across the Lower Hunter. We work with contractors, stakeholders and the community to build our water resilience capabilities and ensure a sustainable water future for our region. Now, more than ever, we need to Love Water. It's our most valuable resource, and like all the things we love in life, we want to protect and treasure it.

www.hunterwater.com.au

The Catastrophe

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This book has been published as part of the Every Bit Counts Enviro-Stories program and involves schools learning about the importance of sustainably managing our farmland and natural resources and protecting them from biosecurity threats.

The Every Bit Counts Enviro-Stories program forms part of a collaborative project between all four coastal Local Land Services regions, including Hunter, Greater Sydney, South East and North Coast. This project has been assisted by the New South Wales Government through its Environmental Trust.

Hunter Local Land Services has also partnered with Hunter Water Corporation since 2014 to provide education programs which engage school students and teachers in projects to improve water quality and catchment health.

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I ran down the hill to try to get the cows back into their paddock. I had to stop them from getting into the Allyn River.

As I rushed down, I tripped on a rock and fell over. My dog Waffles helped me up, but it was too late. Half of the cows were already in the river walking and slushing around.

I looked down at Waffles and sighed, "Oh no, not again!"

Hi, my name is Lilly! I'm an only child, although I do have my dog Waffles and my parents.

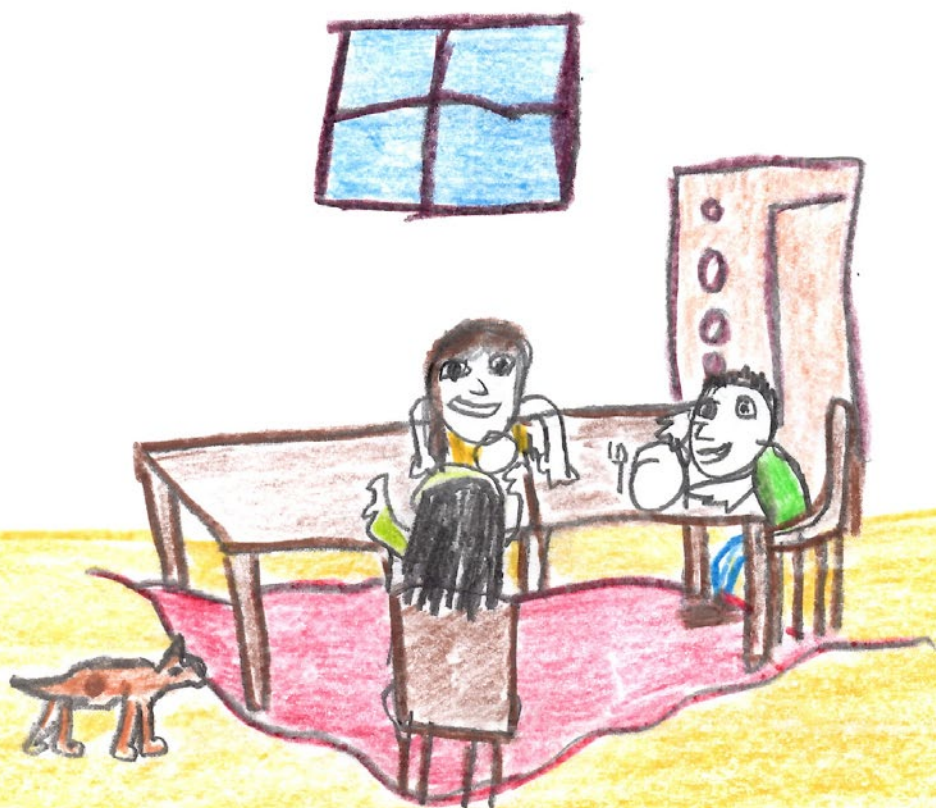
Waffles and I raced back to the house to find Mum and Dad. It was late Friday afternoon in spring, which meant they were probably cooking dinner.

I found Mum and Dad just in time and told them what had happened.



"Hey Dad! The cows got out again, you need to fix the fence!"

Dad said that he would have to fix the fence tomorrow because those cows would cause too much trouble at the river. But I knew he was lying because of the look on his face. I knew our fences were in such bad condition that Dad had almost given up on them.



After brushing my teeth, I said 'goodnight' to my parents and stomped up the stairs to my bed.

I tossed and turned in my bed. I tried so hard to get myself to sleep, but nothing was working. I tried singing to myself, drinking milk, counting sheep and anything else I could think of.

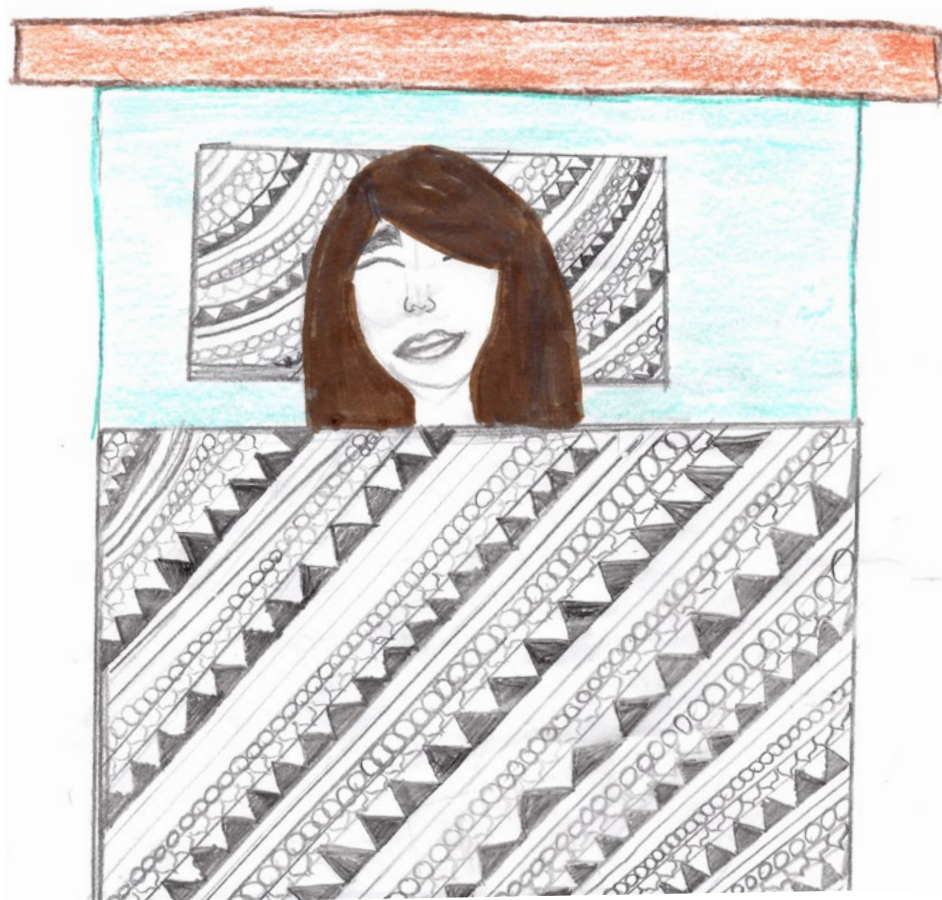


But all I could think about was the escaped cows.

What damage could they do to the river?

Have any of the cows been hurt?

Eventually I was so tired that I drifted off to sleep.





A few weeks later, on a particularly hot summer weekend, Waffles and I headed down to play at the river.

"I wish we had someone else to play with," I said to Waffles. "Then it would be even more fun at the river."

We ran to the river ready to have the time of our lives. We jumped in and started splashing around when suddenly Waffles started whining and sprinted out of the water.



My skin started to feel like it was burning so I followed Waffles' lead and scrambled out on to the bank.

We both ran as we struggled back up to the house screaming. I rushed inside to tell Mum what had happened. My mother is a water scientist and she thought that she knew what the problem was.

It turns out that because the cows were in the river, they had contaminated the water, and combined with the hot weather an algal bloom had occurred. This algae had drastically changed the pH level, increasing it to a point that it irritated Waffles and my skin.

The following day Waffles and I felt weird. Our skin was still burning and itchy, which was really painful.

Mum said that we would have to rest for a few days for it to clear up. She also told us that we were not to go in the river again.



A few days later Waffles and I felt much better. It was another sunny day, so I went for a ride on our motorbike. Waffles was running beside me, watching my every move.

After lunch I decided to head down to the river to see if it looked any better.

It looked ten times worse than before. More blue-green algae had formed and the river was filled with dead fish floating silently on the water's surface.





Waffles and I were disgusted at what we saw. At that moment I realised that pollution is a really big problem for waterways.

"Yuck! People in Gresford have to have to drink this!" I yelled in horror. We ran to tell Mum and Dad.



As I was running along the bank, I suddenly slipped and fell into the horrifying river. Waffles jumped back and tried to help but he was no use.

I was quickly pulled into the Allyn River. Being in the river full of dead fish and not being able to touch the bottom was scarier and harder than I would have thought.

Waffles disappeared off up the hill to get help. This was the longest two minutes of my life as I was finding it impossible to stay on top of the water with a bunch of dead fish.

I could faintly hear my mum and dad's voices, with Waffles barking in the background.

Just as I thought I was slowly dying, I felt someone grab me and pick me up. I started to open my eyes to see my dad holding me and carrying me home.

Later on, we had a family discussion about the state of the Allyn River. We decided that we would do whatever it takes to make our river healthy again.

That night we did some research on how to stop the pH of river water from getting too high, or too low.





We learned a lot about ways to prevent algal blooms, how to manage pH and other things we could do to keep our river healthy. Some of the things we found out were:

- Don't let your cows in or near the river because they can stir up the water, damage vegetation on the banks, and increase nitrogen and bacteria in the waterway leading to algae outbreaks and changes in pH.
- Prevent fertiliser from being washed into the river as it can also increase nitrogen levels.
- Don't let detergents from washing cars, yards, machinery, or clothes flow into the river, and use environmentally friendly biodegradable detergents whenever possible.
- Fence off any waterways and their banks to protect them from damage.
- Plant local native plants to revegetate the banks of the waterway.



Well, it is one year later and I am really proud to tell you that our Allyn River is really clean and fantastic to swim and play in again.

We fixed the fence so the cows can't get down to the river anymore, scooped up all the algae and dead fish, planted native plants along the banks and only use environmentally friendly, biodegradable fertilisers and detergents.



I can sleep well at night now knowing that my family and I are happy with the improvements on our farm. We do what we can to make sure the river stays healthy as we understand that water is one of the most important natural resources we have.

We also work with our community to encourage everyone to do the same.

Enviro-Stories

Enviro-Stories is a literacy education program that inspires learning about natural resource and catchment management issues. Developed by PeeKdesigns, this program provides students with an opportunity to publish their own stories that have been written for other kids to support learning about their local area.

www.envirostories.com.au

ENVIRO stories



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Gresford Public School, Year 6 2020

