

Poly's Pollution Problem





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*This book is dedicated to raising awareness
for plastic pollution and supporting water
quality initiatives in East Tennessee.*



Poly's Pollution Problem was written and illustrated by Lisa Cicchetti.
It is one third of a trilogy of children's books about water pollution
created by the following CAC AmeriCorps Members:

Lisa Cicchetti, Knox County Stormwater '18/'19 AmeriCorps Team

Lindsey Rasnake, Knox County Soil Conservation District '18/19 AmeriCorps Member

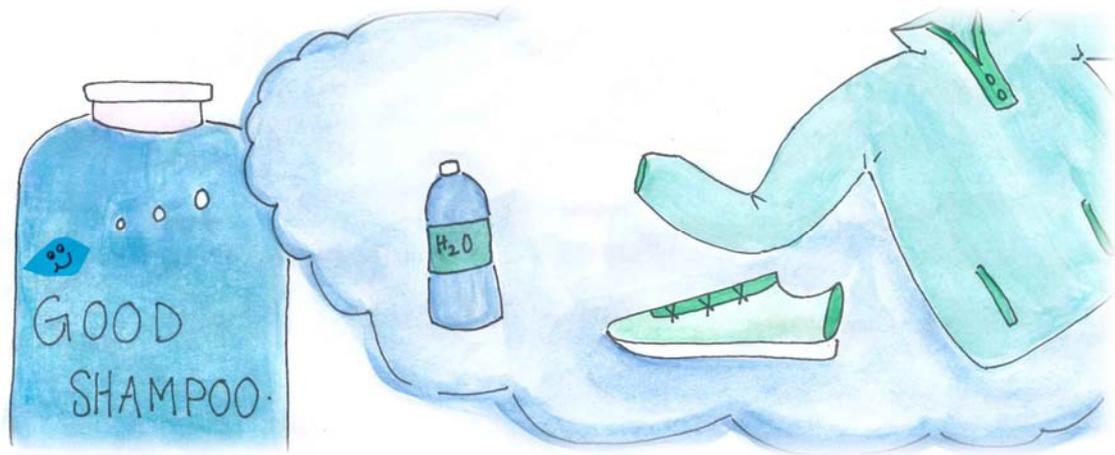
Alexis Jenkin, Knox County Stormwater '18/'19 AmeriCorps Team

Julie Elfin, Water Quality Forum '18/'19 AmeriCorps Member

These books were created to be free teaching materials to make water
quality and environmental education more approachable topics inside
and outside of the classroom.

Poly lives in a house just like yours, but she is much smaller than you. She is a tiny piece of plastic, smaller than the nail on your pinky finger. She is a microplastic. Poly's parents are microplastics too. They are part of a shampoo bottle.





Poly is very excited for her next adventure! Her parents told her that plastic can have many lives. Plastic can be recycled. When plastic is recycled it is transformed into a different plastic thing. Poly looks forward to the day the shampoo bottle is empty so she can be recycled. Then she can start her adventure as a new plastic thing.

But one day a person decides to throw the whole shampoo bottle in the trash. Poly and her family are sad because they were not recycled. They have lost their chance to be transformed.

Poly and her family are in a dark and smelly trash bag for days. Then they are dumped in the woods by the side of the road. Poly and her family wait there for a long time. Other plastic joins them when people litter. People throw their trash like cups, straws, bags and bottles out into nature.



One hot, sunny day, Poly feels a crack. Suddenly she is not connected to her family anymore. Their bonds have been broken by the powerful sunlight. She cannot hold on.

Poly is very scared but her dad says, “I know you are scared but you are also strong. No matter where life takes you I know you will make the best of it.” Then Poly waits for the rain because she knows it will wash her away.





When Poly feels the first drop of rain she takes a deep breath and remembers what her father told her: “You’ll make the best of it.” Then she flows away from everyone she knows.

Poly falls asleep as the sun sets. When she wakes up she is in flowing water and sees land next to her on both sides.

At first Poly thinks she is alone. She feels scared. But when she looks closely she sees lots of other tiny pieces of plastic. They all look different from her.



“Hello, my name is Lenny. Are you new here?” says a kind voice. Poly turns around and sees a thin, red piece of plastic.

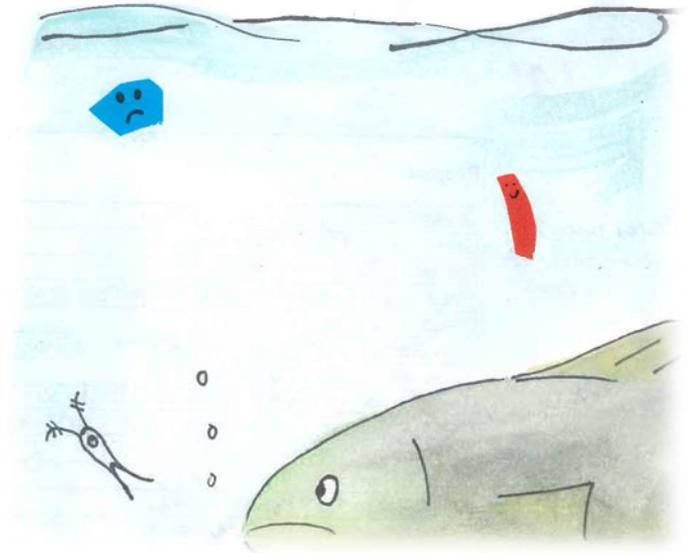
“Oh, hi!” Poly says nervously to Lenny, “Yes I’m new here. Where are we?”

“We are in a creek” Lenny explains. “You were probably left outside when you were littered, right? And now you’ve lost your family.”

“Yes, that is exactly what happened.” says Poly. “So where did you come from?”

“I am a microplastic just like you. I used to be a bristle on a toothbrush. Then I was littered out here like everyone else.

Now we pollute this creek. Just like the sediment and dangerous pathogens. But people don’t care that we are polluting their water because they cannot see us.”

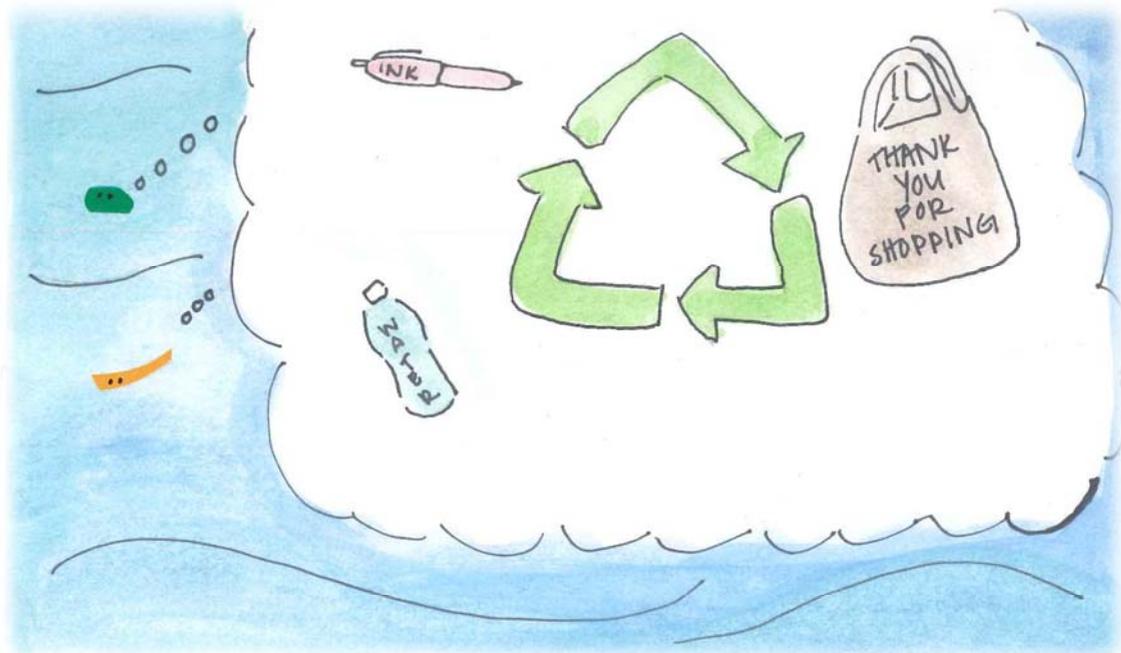


After Lenny says this, Poly looks around again. There are a lot of faces looking at her.

Poly meets Ethyl, Carrie, and Hydie who are also microplastics. Poly begins to feel more comfortable.

Poly makes friends over the next few weeks as they flow from their small creek into a larger river. She hears their stories and they are all sad.





“I was a water bottle and everyone told me I would be recycled into a plastic bag. Now I am just drifting in the river. I’d give anything to be recycled!”

“I was a pen! It was so fun. I got to see so many places. Now all I see is this dirty water.”

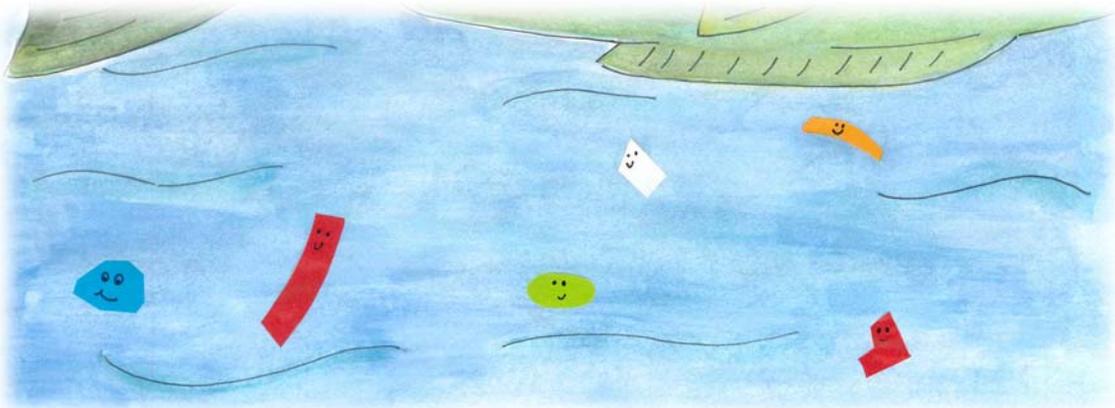
Poly becomes frustrated. Poly thinks it is not fair that they are stuck in the river forever. These microplastics deserve to be recycled so they can be transformed and have a new life.



Poly wonders “Why don’t people keep their water clean? They use it every day! If only there was a way to make them see what they are littering.”

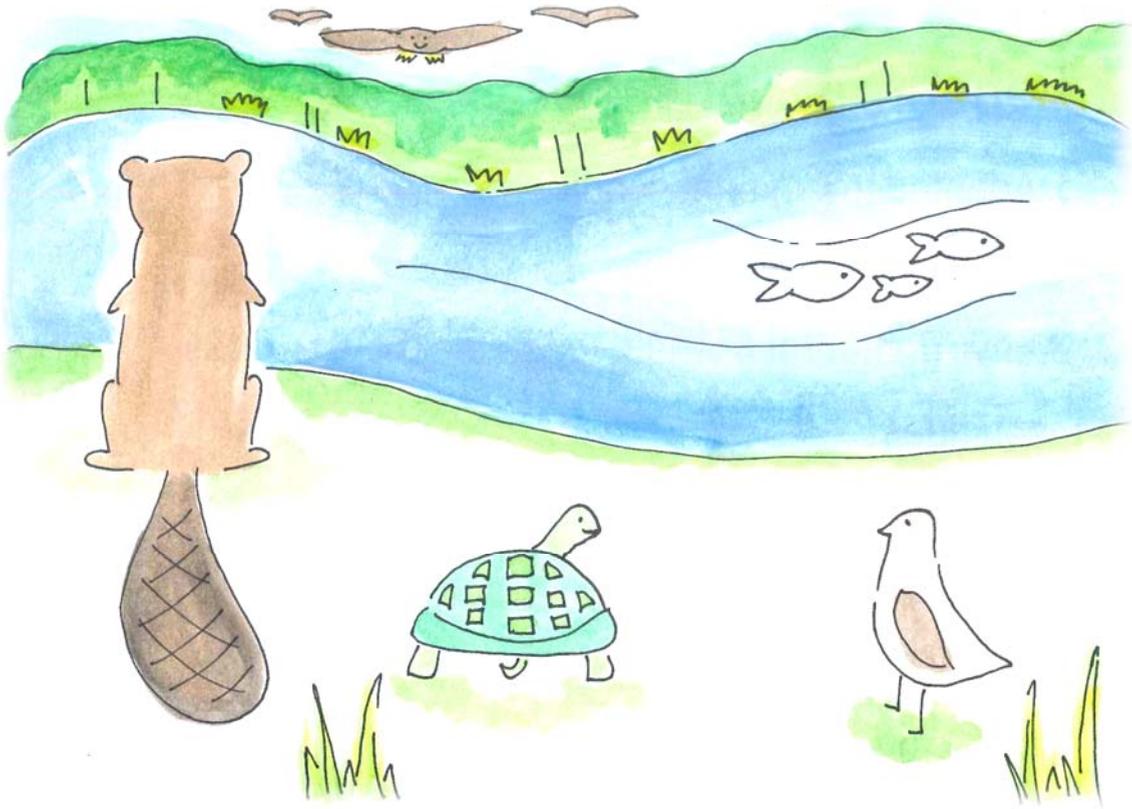


“That’s it!” Poly cries out. “I have an idea. I can get us all out of here. Come listen!” Many of the other microplastics listen to Poly.

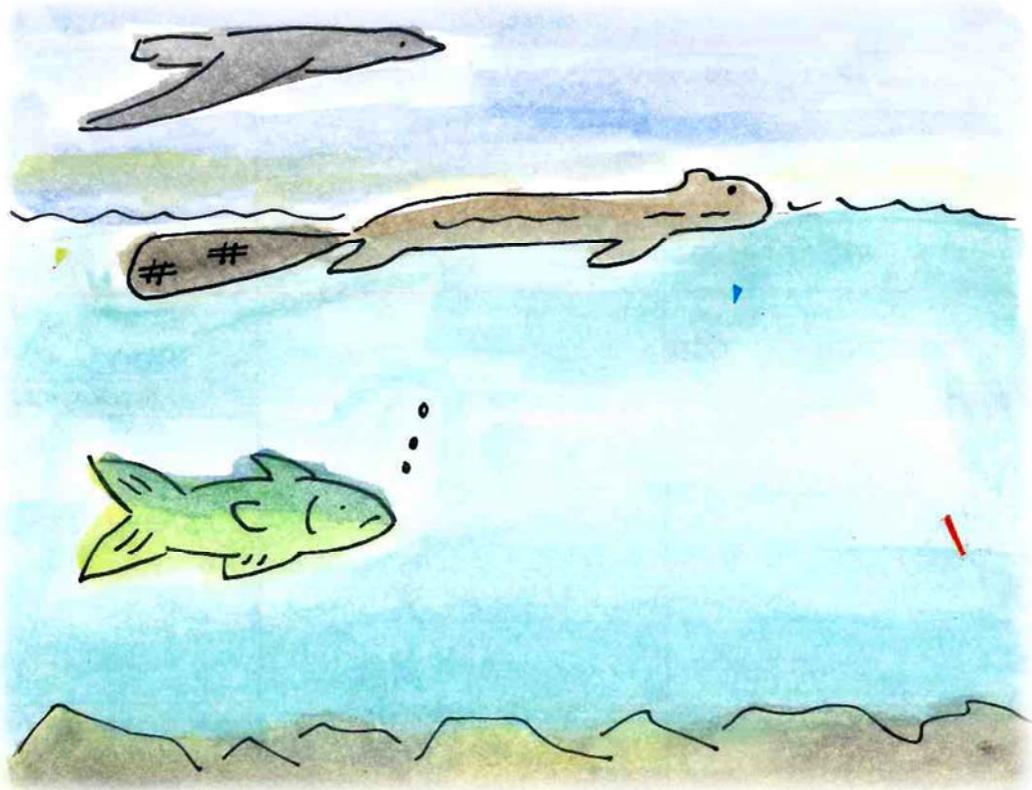


“I think if people could actually see us in their water, they might want to remove us. They want clean water but they do not see how dirty it is. That is because we are small and hard to see. We can work together to create a dam: a barrier that stops the flow of water. If we create a dam and stop the river from flowing, people will finally see us. Then they will take us out of the river! Maybe some of the animals in here can help us. They don’t want us in here anyway.”

The other microplastics are so excited. They agree to try Poly's idea right away. The animals in the river keep getting sick from accidentally eating and drinking the microplastics. So they help Poly, too. Over the next few days Poly talks to beavers, turtles, fish and birds. They come up with the perfect plan.



The animals move down the river towards the city. Then they pile up microplastics to stop the flow of water. The animals place the tiny pieces of plastic in the dam, just like if they were building a wall with bricks. By the time Poly gets there, the dam only needs a few more microplastics. Soon they are all tucked into the dam and the water stops flowing.



They have created a dam made of tiny pieces of plastic. The water cannot flow downstream. The water rises and floods the land next to the river. The people nearby notice the river flooding. Finally they see all the microplastics they have littered!



Everyone comes to see the plastic dam. People start to realize that they created this problem by littering. They work together to solve the problem.

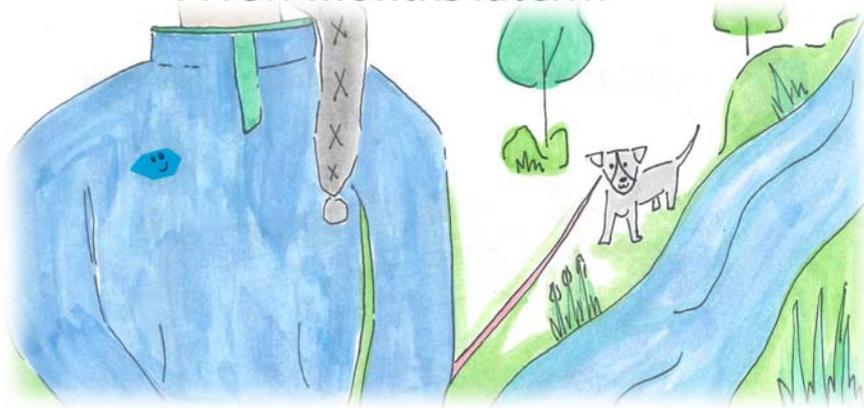


They make a special filter to remove all the plastic from the river. They also teach everyone to never litter and to always recycle plastic.

Finally, all the microplastics from the river are given a second chance. They are recycled!



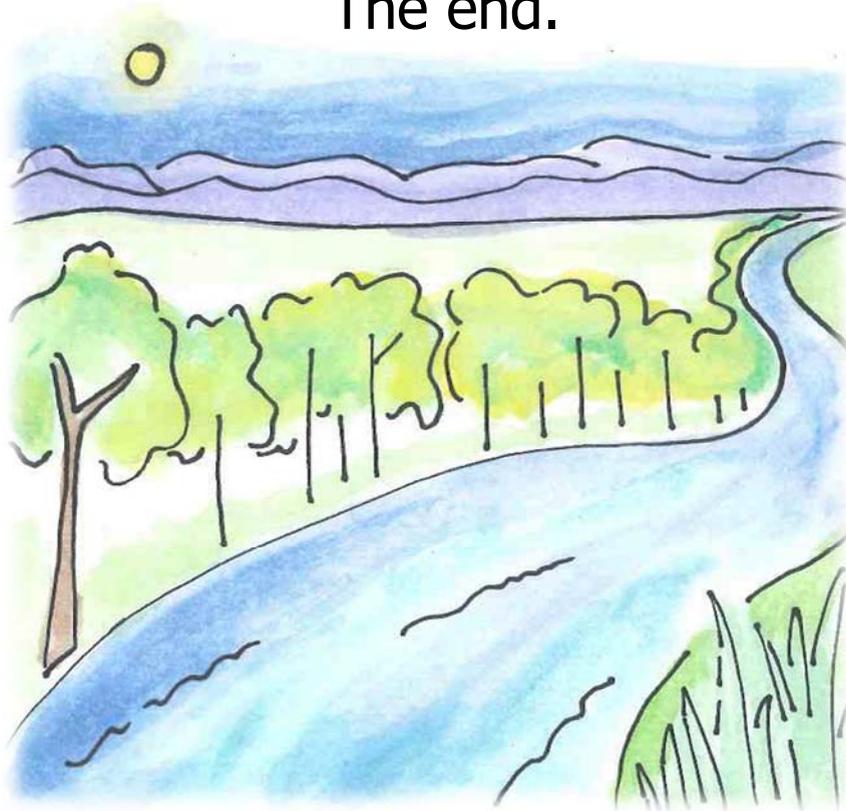
A few months later...



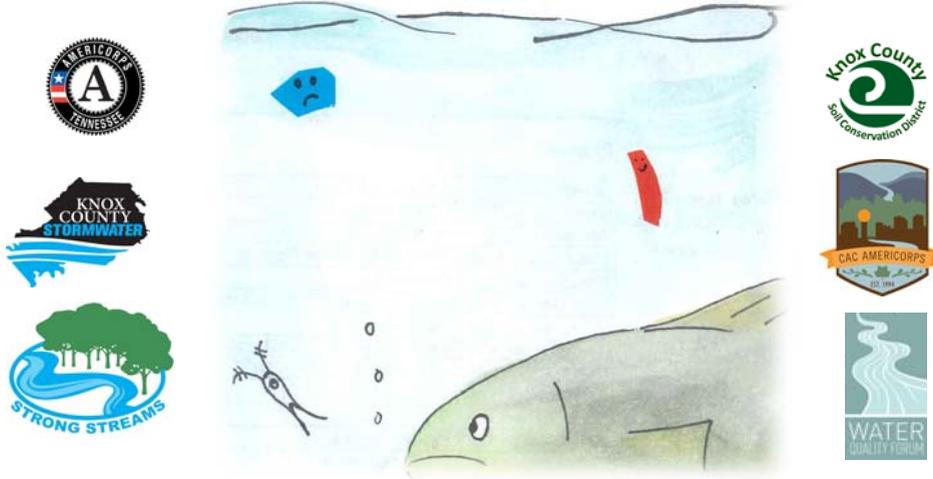
Poly is happy to have a new life. She feels proud that her dad had been right: she made the best of a bad situation. Poly created positive change by working with her new friends! Now, she is part of a soft fleece that someone wears outside on chilly days. She gets to see the river from a different perspective. Poly loves to see how clean the river is now that the plastics have been taken out.

But every time she is washed in the laundry machine, she wonders “What if I fall off this fleece... will I wind up back in the river again?” Poly imagines a special filter that could keep her, and other tiny pieces of plastic, out of the streams. She wonders if anyone has invented it yet...

The end.



Poly's Pollution Problem is a story about Poly, a tiny, microscopic piece of plastic. She travels from the comfort of a bath tub all the way to the river, where she finds out that she has turned into pollution. Pollution happens when people put unnatural things into nature. She realizes that people have been accidentally polluting the streams and rivers when they throw trash outside and on the ground. These actions can hurt both animals AND people. Poly wants to make a change, so she works with other pieces of plastic, and the critters who live in the stream, to try to show people how dirty their water is!



This book was written to be read aloud to 3rd and 4th graders. It is one third of a trilogy aimed at making water quality and environmental science more approachable topics inside and outside of the classroom.