**Why are rivers so important?**

Rivers, lakes, swamps are important freshwater resources for humans and other animals. 97,5% of the earth’s surface is water, and only 2,5% of it is freshwater. To acknowledge the importance of rivers and streams, we need to understand how they are structured and how they function. They embody our natural heritage and will play a vital role in the future health and prosperity of every one of us.

Let’s take a look at the reason why we need to preserve the rivers.

**Healthy rivers are vital resources to freshwater**

If all the world’s water were to fit in a gallon jug, only a tablespoon of it would be the equivalent of the freshwater available to us to drink.

Healthy river ecosystem directly impacts the freshwater we consume. Vegetation or the forest around the river acts as a filter, constantly purifying the water so it requires less chemical treatment and expensive filtration to be clean enough to drink.

**Riverbank can provide flood protection**

Water streams in the big city and in the mountains might be very different. Ideally, a river with good capacity and a healthy ecosystem won’t flood the neighborhood. On the contrary, a healthy river ecosystem provides habitat for fish and other animals, making them flourish and thrive.

**Rivers as home to urban biodiversity**

According to the research done by Endah Sulistyawati and Dasapta Irawan from Bandung Institute of Technology, there are around 335 species of plants and animals found around the riverbanks of Cikapundung River, Bandung. As written in The Conversation, diversity index and biodiversity abundance are high in the upstream, and low in the downstream. This shows that riverbanks are the perfect place for many organisms to grow and thrive..

**River hygiene are affecting the groundwater**

Through a different research, Irawan stated that a handful of Cihampelas citizens are closing their own family wells. Compared to the 80s, 50 families had their own well and didn’t depend on the Local Government-Owned Water Utility (*Perusahaan Daerah Air Minum* – PDAM) in Bandung. They felt that it’s unsafe to consume, even for external use like bathing or laundry.

This is caused by the polluted water of Cikapundung River, which comes from different sources: from industrial waste, to domestic and municipal waste. This has been the time-bomb consequences from the exploitative human actions. The decrease in water quality also directly impacts the degradation quality of groundwater. At present time, we probably only encounter a highly-functioning river as a healthy ecosystem and habitat for every species in the mountains. As the stream got closer to the human village and downstream, the water became more and more contaminated. Municipal waste and other hazardous materials need to be averted from entering the ocean.

The Generation Foundation is supporting the prevention of marine debris coming from waterways through the program[**Citarum Repair**](https://greeneration.org/en/program/citarum-repair/), by solving the garbage problem in Citarum River and helping educate residents around Citarum regarding plastic, river waste and marine debris.

We have to support the availability and the health of groundwater and the rivers. If you live in the city, you could also save fresh water through small steps such as turning off the tap and collecting rainwater for washing your vehicles or watering your plants. If you use an AC (air conditioner), you could also collect the water excretion to mop the floor. Congratulations, you have practiced the sustainable consumption and production pattern!