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# Greener Challenge

## Day 4: Water

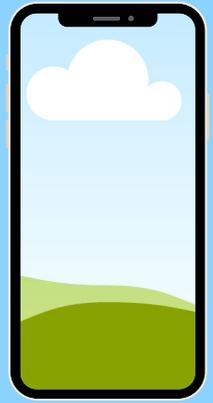




# **Water Consumption of 3 items I use daily**



# 1. Smartphone water consumption



Smartphones use 3,190 gallons to create because they are composed of many pieces in multiple steps, and each step consumes water. Lots of resources and even rare metals go into our phones, so mining for these metals and creating synthetic chemicals add to its high water footprint. The process of mining for these resources uses excessive amounts of water to help reduce hazards. Manufacturing the parts also makes wastewater that gets released into nearby waterways.

## 2. Car water consumption



Producing a car uses about 13,737-21,826 gallons of water to manufacture. Like cellphones, cars are composed of many different pieces, but on a larger scale with more parts. Though metal finishing operations use considerable volumes of water and other water-based products contribute to the high numbers, regularly cleaning the processing equipment takes high amounts of water as well. This cleaning water is disposed of as hazardous waste unless contaminants are able to be removed. Luckily, water use per car has shown a declining trend over the years due to more efficient practices being used to manufacture car parts.

### 3. T-Shirt water consumption



At first glance, one wouldn't think a single cotton t-shirt takes 659 gallons to make. But when we take a closer look at the water footprint of cotton consumption, we can see that with cotton farming being the largest water consumer within the apparel supply chain, products made of cotton consume lots of water behind the scenes. New strategies and technology are being created to help increase water efficiency. For instance, soil sensors are used by farmers to know when it's time to water the soil and building reservoirs to capture rainfall and redistribute the water during the summer are ways people are working to make cotton a more sustainable crop.

# Reflection



I was definitely surprised by the amount of water that's used in the three daily items I selected. I'm sure that if I went through all the items I use every day like my pens, journal, toothbrush, etc., there would be even more water consumption with these products. People don't really think about water consumption on a daily basis, especially virtual water. When one looks at their phone, the words that come to mind are often "expensive" and "electronic." Water seems to have nothing to do with phones, but in reality, the amount of water that goes into their production is massive. This idea applies to so many of the items around us. It's important for us to understand the impact that our shopping habits have on the environment and be conscious of what we bring into our homes so we can reduce our water footprint and move the date.

There currently aren't better alternatives to smartphones and cars other than purchasing them second hand. The best thing we can do as consumers is to use what we already have and buy things we need second hand. Doing so will lower the demand for new products and allow used items to cycle through another person's hands, and possibly more than one. The most sustainable fabrics happen to be organic cotton and linen since they are made from plants, but as mentioned earlier, cotton farming uses lots of water. Since these fabrics are biodegradable and sustainable, I think it's okay to purchase these kinds of clothes even though they use a lot of water as long as we treat them well and buy from companies that make clothing last. It's also important to be mindful of how much we buy and trying to purchase only the things we really need. If everyone stuck to the idea of buying what they need instead of what they want, we would be able to reduce our ecological and water footprint a massive amount. Cutting out these products to save water isn't feasible, but through the acts of thrifting, shopping second hand, and changing our mindset to only buying what we need, these efforts will contribute to a more sustainable and water conscious lifestyle.

# Infographics for Social Media



## Water Footprint



### What is a water footprint?

A measure of the amount of water used to produce all of the goods and services we use throughout our daily lives.

### How is it calculated?



Direct water use: water used directly by the individual

Indirect water use: the water footprints of all the products consumed by the individual

## Water consumption of a smart phone

1 smartphone = 3,190 gallons!



### Why?

Smartphones are composed of many pieces in multiple steps, and each step consumes water. Lots of resources and rare metals go into our phones, which require excessive amounts of water to reduce hazards. Additionally, manufacturing the parts creates wastewater that gets released into nearby waterways.



## Calculate your water footprint at [watercalculator.org](http://watercalculator.org) :)

Your water footprint:

Personal: **1,157** Gallons/Day

Household: **5,787** Gallons/Day

US Average: **1,802** Gallons/Day



## Ways to reduce your water footprint

1. Install water-efficient appliances / faucets
2. Consume less; buy quality over quantity. Think before you buy the latest gadgets.
3. Eat less meat and eat more plants. Raising cattle uses about 10x more water than most fruits and vegetables !



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