

Hello! These modules are provided by the Regional Water Quality Control Plant (RWQCP). The RWQCP protects our local creeks and the San Francisco Bay by making sure that dirty water from bathrooms, sinks, and business is cleaned before it empties into the Bay.

Water

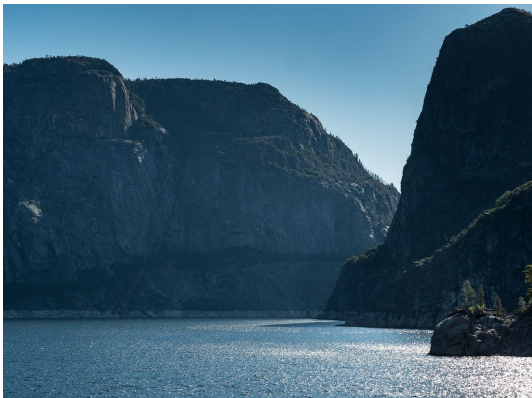
Everybody needs water and everyone uses it. Take a moment to think about all the different ways you use water over the course of a single day.

Water is an incredibly valuable resource, and having clean drinking water is essential to human life. Humans can only survive three days without it!

Try to think about all the water found on the Earth. If you imagine the globe, you might already know that the majority of water can be found in the oceans. One problem with that (for humans, anyway), is all that water is *salty*. We humans don't have much use for salty water. It's great for all the whales and fishes, but isn't so great for us to drink. Oceans actually account for **97%** of all the water found on Earth.

Now, what about the other 3%? The other 3% is fresh water, but only 1% is available from places like rivers, lakes, and springs. The remaining 2% is locked away in icy glaciers and underground.

So **1%** of all the water found on Earth is the kind that comes from rivers and lakes and into our faucets, fills our bath tubs, and washes our clothes. Our water in the Bay Area comes all the way from Hetch Hetchy (shown below), which is a reservoir in the Sierra Nevada Mountains near Yosemite National Park. The water we drink and use at home travels through 160 miles of underground pipes to get to us. Water is a very valuable resource and we need to make sure we take care of it!



Water is All Around Us

Water is never created or destroyed, but it cycles through the environment. Let's think about how water moves around our landscape:

The Water Cycle

Evaporation - The sun heats up water and sends it rising into the sky.

Condensation - All those water droplets in the sky get together and form clouds.

Precipitation - Those clouds get so full of water droplets that they start to fall back down to earth as rain, snow, or even hail.



Where does the water go?

Have you ever wondered where water goes after we've seen it, either as rain or as water that runs through our houses?

It turns out that rain water and water in our homes follow two very different pathways, with two very different outcomes...

Sewage system

All the water that we use within our homes ends up entering the sanitary sewer system and traveling to the Regional Water Quality Control Plant. There, the water gets treated to be safe before it's returned to the bay. The treatment plant removes all the human waste, food waste, toilet paper, soap, and other things that might harm the bay and its wildlife.

Can you imagine what the bay would be like if we didn't have a treatment plant?

Storm Drain System

The water that falls outside our homes takes a different pathway. Take a look at the image on the right. Where do you notice water from the street flowing?



That's right! All the water that falls onto our driveways, streets, and parking lots flows into the storm drains we see around. Have you ever noticed what the curb above those drains usually says in our neighborhoods?



In our region, all runoff water gets directed to our nearest streams and creeks, which all flow directly into San Francisco Bay. There is no treatment process to clean this water before it goes into the bay. Lots of creatures and plants call the San Francisco Bay home, so it's really important that we are careful about what ends up going down our storm drains.

What's an example of something that could accidentally end up going down the drain?