Can-U-Read

Water as a Resource

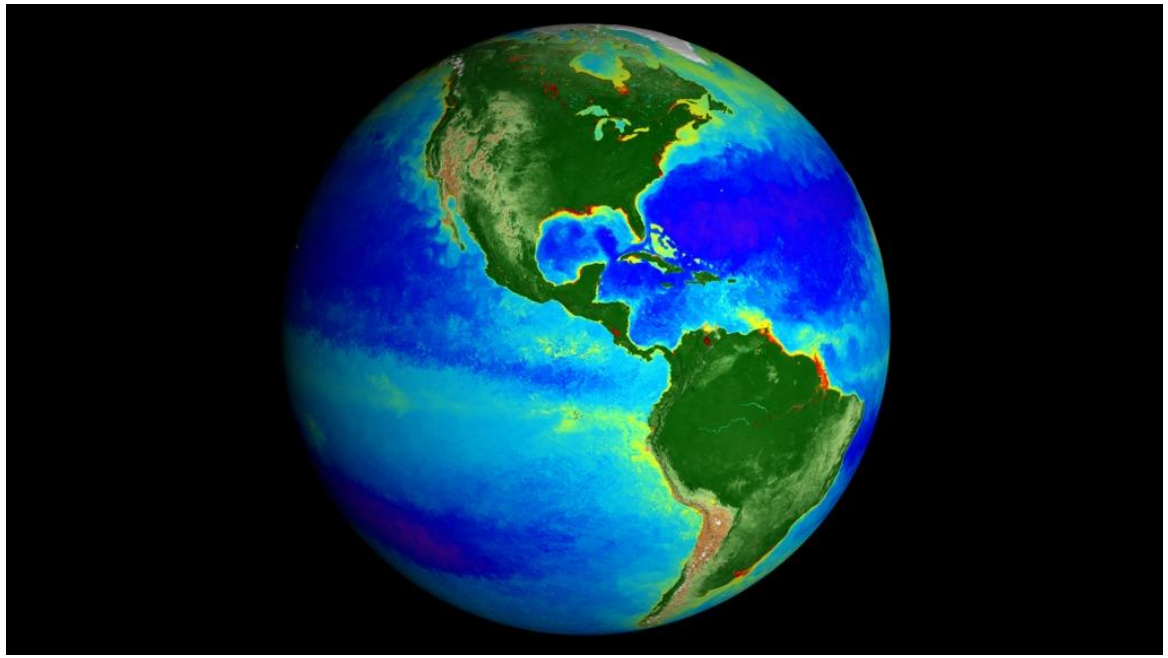
Hi, I’m Moyra and this is our Earth.

It’s a funny name for a planet that is mostly covered in water.

Maybe they should have called it “Ocean”.

So much of the planet is water.

I want to show it to you.

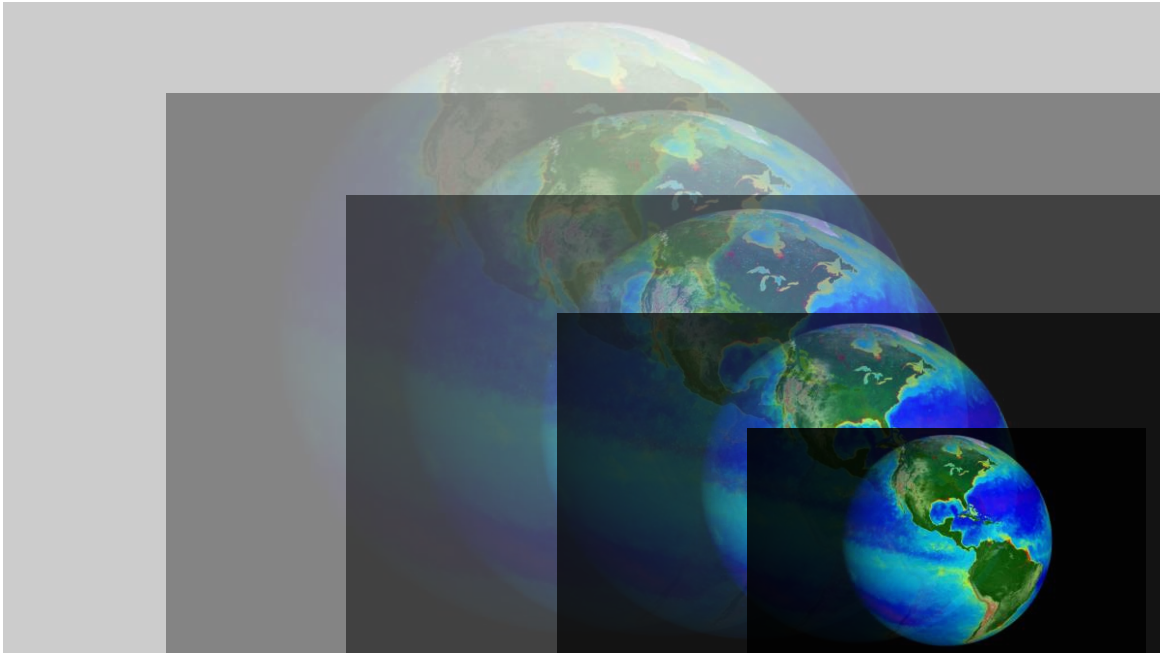


Of course, a planet is too big to work with.

Let’s imagine that the Earth were something much smaller.

I’m going to imagine the Earth is the size of a single swimming pool.

That’s still big, but at least I can think about something that small.



To make it a little easier, let’s say that this pool is divided into 100 parts.

Each part represents just 1% of the water in the world.

How much of this pool is ocean water?

How much is ice?

How much is good for drinking?

What?! Where’s all the water?

It turns out that 97.5% of the pool is ocean water.

That’s almost everything.

How much water do I get to keep for drinking?

Three buckets?

That’s it?

And two of them are ice.

That doesn’t make any sense.

Where is all the ice?

Well, there is ice on some lakes and rivers sometime, but most ice is permanent.

Some ice is in big rivers of snow and ice called glaciers.

Some ice is at the poles and it creates icebergs.

Some ice is under the ground and stays there all year long.

Permafrost only happens in the coldest places.

Glacier

Polar ice

Permafrost

But I still have one bucket of good water.

I can see why we have to take care of our water.

Good, so this is one bucket I can drink.

That’s good news.

What do you mean “not quite”?

That’s my bucket of clean water.

We need to keep that one because we don’t have any more clean water.

What’s wrong with that?

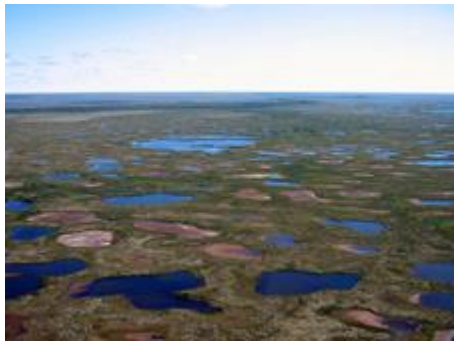
There is a lot of water in lakes and rivers on the land.

That water is mostly good to drink.

Some of it has become polluted.

Most of that bucket is hidden deep under the surface.

We call it ground water.



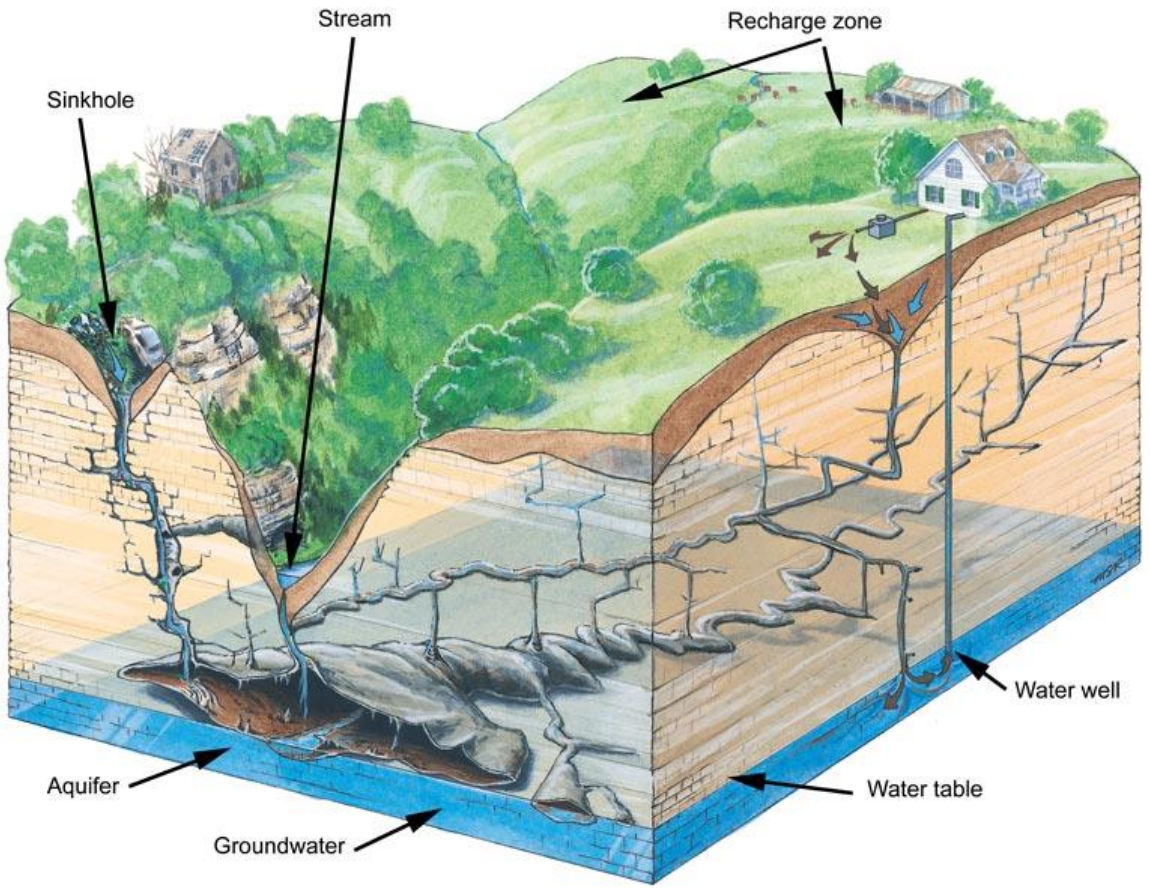
All over the surface water seeps down through the soil to the rock layer.

Those rocks have cracks and water drips down further.

Eventually the water leaks into a big space that holds the water.

These aquifers fill up over many years.

People can dig a well down into the water under the rocks.

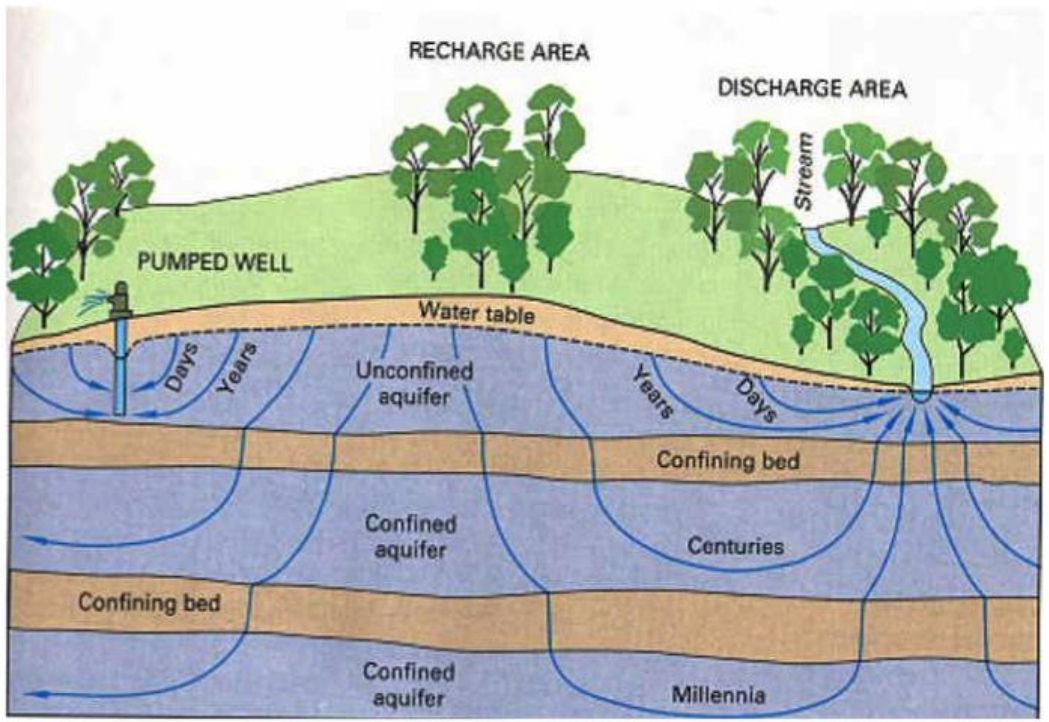


Groundwater is found under layers of soil and rock.

Water just under the soil gets in after only a few days from rain, rivers, and lakes.

Getting through a layer of rock takes longer, so those aquifers might take many years to fill.

Deep, deep water can be many thousands of years old.

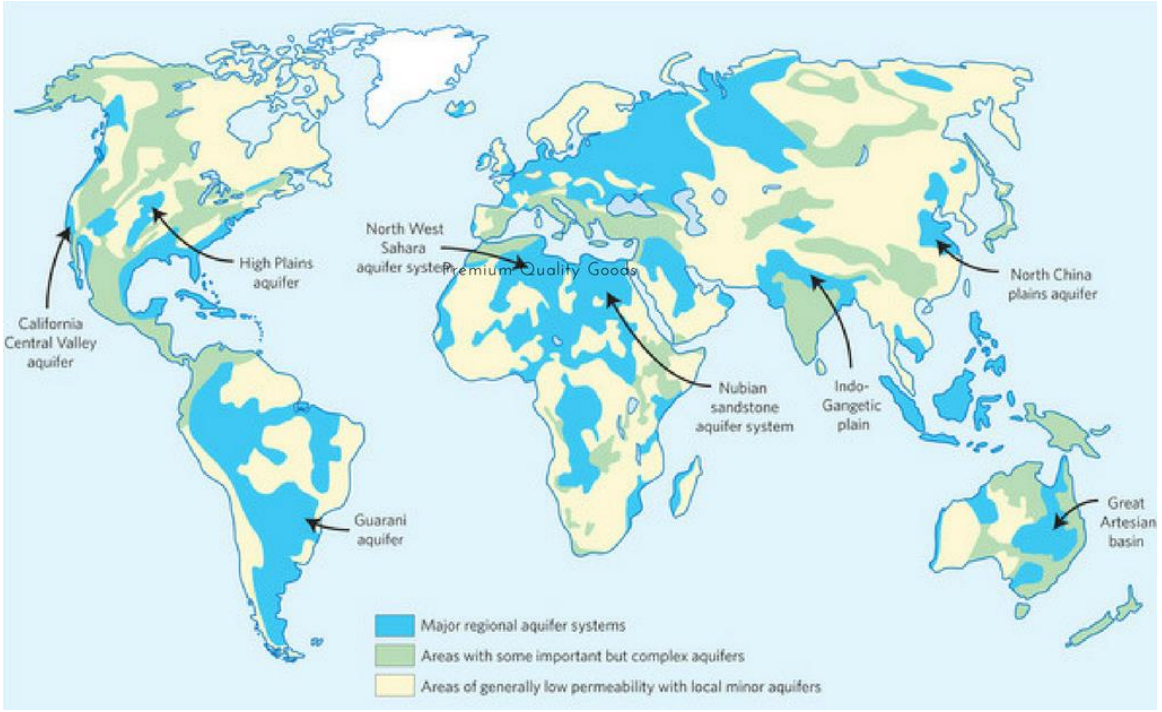


Aquifers are all over the world.

Some aquifers are very big, spanning continents.

Other aquifers are connected to rivers and caves.

Most of the solid rock has no aquifer so the people living there have to depend on rivers…or no water at all.

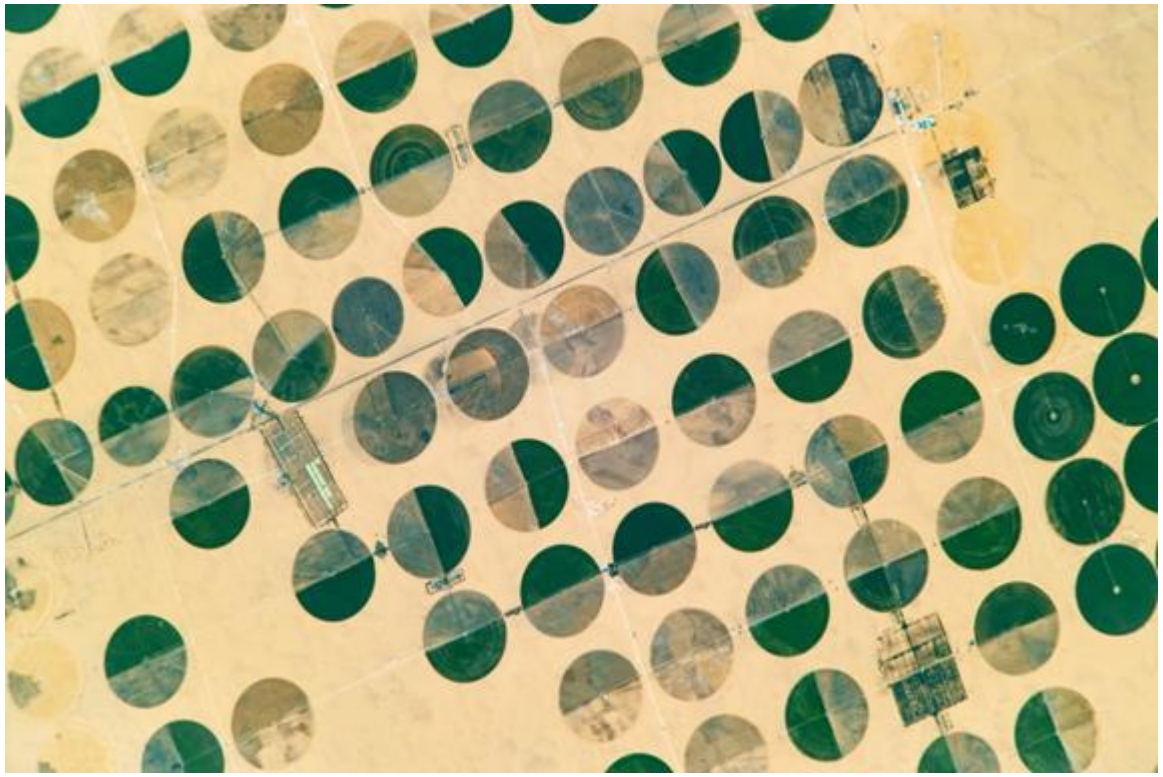


Where an aquifer is found people can dig wells and pull the valuable water up.

They can turn dry ground into farmland.

The water trapped under the rocks heals the land.

Water makes things live: people, plants, and animals.



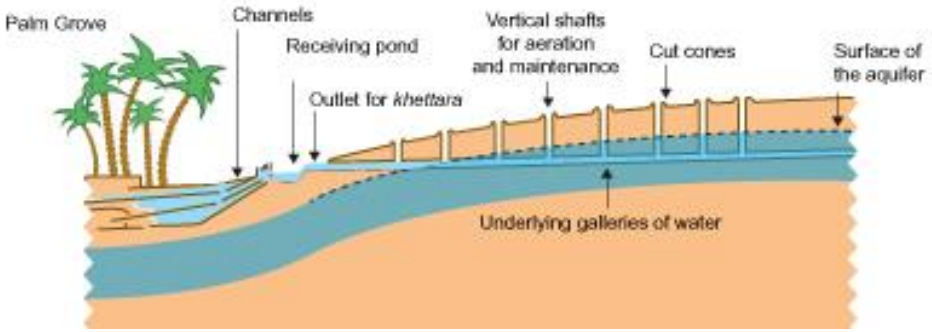
Of course, that water under the rocks took years to get there.

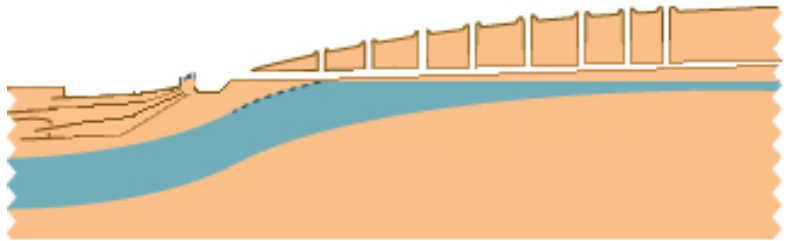
In the past, people have lived of stored water in the middle of the desert.

The Garamantes lived in Africa and built big cities using the water deep under the rocks.

When the water ran out, the people couldn’t live there anymore.

There are abandoned desert cities all over the world.





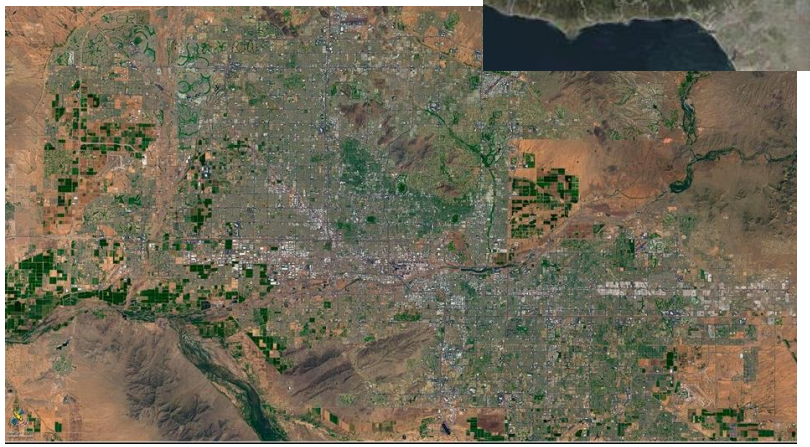
We have cities like that today.

These cities are all in the middle of a dessert.

They all depend on aquifers or rivers that feed into them.

Sooner or later they will run out of water.

What will happen to the people who live there?



But I don’t live in a desert?

No, not everyone does.

Some places are rich in water.

You still have to clean your water and use it carefully.

Everyone has to keep good water habits.

So, I guess we have to keep as much water as we can.

Yes, there are things you can do.

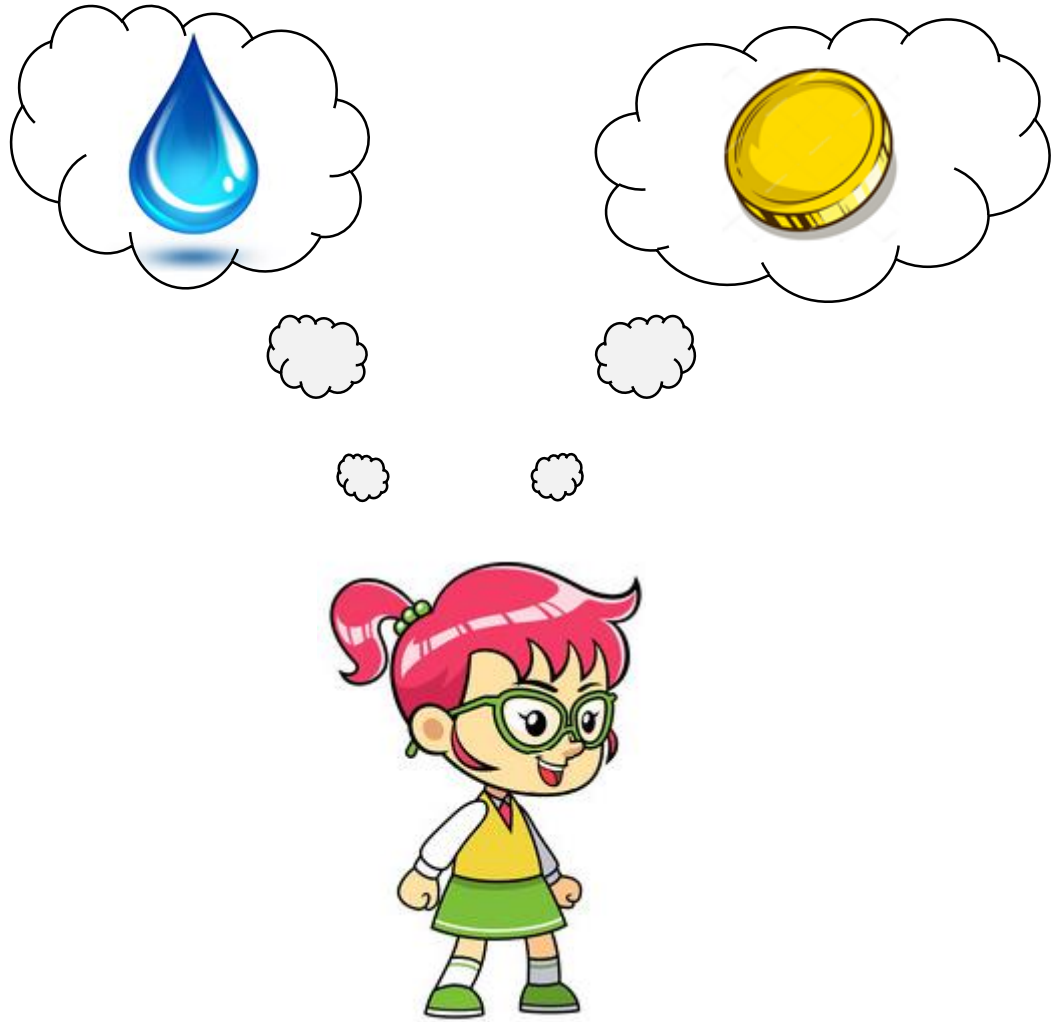
- Take short showers.
- Use all your dish water.
- Fix leaky sinks right away.
- Fill only half the bath.
- Don’t run the water while you brush your teeth.
- Flush every other trip or when you poop.

So I have to treat water like something valuable.

When I run the water down the drain it is like wasting gold coins.

Each little drop is important.

I can be responsible with water and so can you!



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