To recap we learned about the natural water cycle, the urban water cycle, the different types of water pollution, and how water is treated. Now it's time to learn how we can protect and conserve our water!

Remember, **nonpoint source pollution** is the most common form of water pollution that is created by people.

Nonpoint source pollution makes up half of the contamination of our surface water.
How can we prevent water pollution?

One way we can make a difference is by not dumping trash in lakes, rivers, wetlands, and other bodies of surface water.

Another way we can make a difference is by supporting local beach or lake cleanup programs, or even starting your own!
What are more ways we prevent water pollution?

We can also **conserve** our water by reducing our everyday use. This helps keep wastewater treatment plants from spending time treating clean water.

**Do not** dump hazardous materials, like house cleaners, paint, etc. into the ground or in toilets.
How can we conserve water?

• Did you know we use about 150 gallons a day? These are some tips that you can use to help conserve water.

Using the bathroom sink can use up to 2-7 gallons of water a minute. Turning off the sink while brushing your teeth, can help to conserve water.

Taking a bath uses about 70 gallons of water. Whereas, taking a shower use 10-25 gallons of water. Taking a shower from time to time is a good way of conserve water.
What are more ways we conserve water?

The **washing machine** uses **41 gallons** a load. Separating your dirty clothes or reusing clothes are fairly clean like a sweater or jeans, can help save water.

With a parent you check for **leaky pipes** in your toilet. Put 12 drops of red food coloring into the tank. After 15 min, if there us any red dye in the bowl, this means you have a toilet leak! Fixing leaks can save water, and money!
Here’s Another Way We Can Conserve Water

**Rain gardens** are an easy and effective tool that we can use to help reduce stormwater runoff from our homes. Rain gardens can help filter out pollutants in runoff and provide food and shelter for butterflies, birds and other wildlife.

**Rain barrels** capture rain runoff from a building’s roof using the gutter and downspout system. Rain barrels help reduce pollutants and the velocity of water entering local rivers and streams.
Materials we **do not** put down our drains

It is very important to properly dispose of waste once we are finished. Here some materials that we do not put down our drains.

**Wipes** even the “flushable” ones clog pipes, and cause issues at water treatment facilities. They should be thrown in the trash after use.

**Hazardous Materials**, like motor oil, gas should not be flushed down the toilet or in sewer drains. These chemicals can have harmful impacts to aquatic life and our health. Instead, there are programs that accept these materials and disposes of them properly.
Materials we **do not** put down our drains

**Medication** should be properly disposed of either by a take-back program offered at a pharmacy, or in the trash. Flushing medicine down the toilet can also have many harmful impacts on aquatic life, and on our health.

**Fats, Oils, and Greases** should not go down drains. Over time it will get hard and clog pipes. If wastewater can’t move through the pipes it can cause flooding, sewage to backup in your home, and issues at wastewater treatment facilities. To dispose of this material wait until it cools down and throw it away in a nonrecyclable container.
Materials that **do** go down our drains/toilets

- Remember the 3 Ps: Poop, Puke, and Toilet Paper.

- Toilets are **not** trash cans. It is important that they are used correctly because, this can prevent many water quality issues.
Activity Time

• “Water Goes Around and Comes Around” activity.
• In groups of 2-3 you will work together to build a model of a water system and plan ways to conserve water at the community level.

• **What you will need:**
  - Large piece of cardboard
  - Paper towel or bathroom tissue tubes straws
  - Different sizes of pasta (spaghetti, manicotti, etc.)
  - Glue paste or glue sticks
  - Small boxes (matchboxes, small milk cartons)
  - Markers
  - Construction paper

This activity is from the Water Environment Federation Website: https://www.wef.org/resources/for-the-public/k-12-resources/
Thank you, we hope you now know more about protection and water conservation.

Address: 525 Plum St, Syracuse, NY 13204
Phone Number: (315) 422-7811
Website: http://www.nywea.org/SitePages/Front.aspx