



Imagine a Day without Water Activity Plan

Background

What is WSSC?

Established in 1918, the Washington Suburban Sanitary Commission (WSSC) is currently among the largest water and wastewater utilities in the nation, with a network of nearly 5,600 miles of fresh water pipeline and more than 5,500 miles of sewer pipeline. This is almost equal to the distance between Washington D.C. and Melbourne, Australia. More than 1,500 employees help WSSC fulfill its mission of providing safe and reliable water and wastewater services to the community.

Our service area spans nearly 1,000 square miles in Prince George's and Montgomery counties, and we serve 1.8 million residents through approximately 460,000 customer accounts. Drinking water is produced by pumping water from the Patuxent and Potomac rivers where it is treated at a water filtration plant before being sent through a network of storage tanks and pipes to our customers. After customers use water and flush it down the drain, the water travels through a separate set of pipes that send wastewater to one of our six water resource recovery facilities. At the plant the waste is removed from the water and the water is returned to the rivers. WSSC's drinking water has always met or exceeded federal standards, and our wastewater treatment plants return water to the river that is cleaner than the water that is pumped out.

Learn more about our work by visiting www.wsscwater.com/education-and-recreation.html

What is "Imagine a Day without Water?"

The water and wastewater distribution system is hidden underground and is larger and, generally, older than the roads and bridges we use to move around our communities. Even though water is a vital resource for all living things, the work needed to provide water and wastewater services to communities 24 hours a day, seven days a week, 365 days a year is something most people take for granted.

Without our water distribution and wastewater collection systems you would not be able to give your dog a bowl of water, brush your teeth, flush the toilet, wash your hands or water your garden. Schools, hospitals, factories, power plants, carwashes and aquariums would have to close.

And while water falls from the sky and flows through our rivers, it is far from free. Processing it, treating it, bringing it to and from your house, re-treating it and then returning it to rivers all costs money. By asking citizens and elected officials to imagine a day without the vital services provided by water and wastewater agencies, we're hoping to raise awareness of the true cost of water infrastructure in our community. <http://imagineadaywithoutwater.org/>

Learning Outcomes

By participating in this activity students will be able to:

- Examine their water use at school and design a visual representation of their water use.
- Recognize that there is an agency responsible for providing water and wastewater services to their community.

Procedure

1. At the start of the school day ask students to list how they use water during the school day. Create a class list on the board.
Examples of water use may include- going to the bathroom, washing hands, getting a drink from the water fountain, watering classroom plants or animals, etc.
2. Instruct the class that for the rest of the day they will be tracking how many times someone in the class uses water. Tracking can be done in a number of ways:
 - Students can create an individual tally sheet at their desk.
 - Create a large tally on the board and ask students to place marks when they use water.
 - Use water drops (attached) and have students place drops in “water use” bins.
3. At the end of the day count how many times each member of your class used water for each type of water use. Then, as a class, decide how you’d like to create a visual representation of the class’s water use for the day.
4. Share a photo of your class’s water use with us by tagging @WSSCWaterNews on Twitter or @WSSCWater on Facebook or email them to communityoutreach@wsscwater.com. Use #ValueWater #WSSC #water when posting your class’s picture.

Wrap Up

Ask students the following questions-

- How would your school day be affected if we did not have access to water at school?
- How would you and your community be affected if there were not sewer pipes to take the wastewater away from the school?

Extensions

- Have students use a water use calculator to determine how many gallons of water they used during the day.
 - <https://www.swfwmd.state.fl.us/conservation/thepowerof10/> or <http://water.usgs.gov/edu/activity-percapita.html>
 - If you’d like to have students do the math on their own you can use the chart here: <https://www.wsscwater.com/customer-service/rates/water-usage.html>
- At home, have students list all the ways their family uses water in a 24-hour period and then create a tally sheet to chart their family’s water use and calculate the approximate amount of water used per household. Have students share their calculated amount of water use and then as a class compare household water use and discuss what factors determine the different ways families use water. For example, size of family, type of house, sprinkler systems, pool, etc.
- Help students understand how their school or homes are charged for water by showing them how to read a water meter and determine the rates used to calculate a bill.
 - Meter reading activity: <http://www.wef.org/PublicInformation/page.aspx?id=143>
 - Calculate a water bill: Use WSSC’s rate structure to determine how much it costs to supply water services for your class for one month. <https://www.wsscwater.com/rates>
- Encourage students to share their water use story on their favorite social media sites to highlight how they use water throughout the day. Be sure to use the following #IUseWater4 #ValueWater on posts, tweets and pictures.

Video Resources

- WSSC’s water main replacement video gives an overview of the work students may see in the community as we work to replace water mains. <https://www.youtube.com/watch?v=yuUwM3prdEs>
- Older students may enjoy this video highlighting the chemistry behind providing water and wastewater services to a community. <https://www.youtube.com/watch?v=CTB7iiYVYq8&sns=em>

