



Following Next Generation Science Standards, our lessons and activities are tailored towards the needs of your group. BWD education staff can bring the following lessons to you, free of charge. If there is a specific lesson not listed here that you want to see, contact us!

1. Drinking Water Treatment
 - 45-60 minutes
 - How does Beaver Water District (BWD) clean water from Beaver Lake to make it safe for drinking and usable? This is one of many questions answered during the lesson. Students will learn about the Northwest Arkansas (NWA) water supply, the four customer cities of BWD (and surrounding communities) and gain an understanding of the process for providing clean, safe drinking water to the public, businesses, and industries right here in NWA.
2. Water Fun Facts Scavenger Hunt
 - 45-60 minutes
 - Participants join Randy the frog and Castor the beaver in a fun and educational scavenger hunt for water facts! Exploring in an indoor or outdoor setting, students search for signs featuring Randy and/or Castor with interesting water facts and fill in the blanks on their scavenger hunt sheets. Educators then facilitate discussions on the importance of water conservation as they go through students' answers as a group. This lesson allows students to stretch their legs and leaves them thinking about how water usage impacts all of us.
3. A Water Droplet's Journey Through the Urban Water Cycle
 - 45-60 minutes
 - Based off Project WET's Incredible Journey, students act as a water droplet traveling through infrastructure during human use. In this simulation, participants are sent from the source water (Beaver Lake) to visit each part of the urban water cycle thereafter. Students learn how water gets to the faucets and where it goes once down the drain. The discussion involves key terms such as watershed, stormwater, and inter-basin transfer.
4. A Water Droplet's Journey
 - 45-60 Minutes
 - Based off Project WET's curriculum, this lesson describes the movement of water within nature's water cycle and identifies key vocabulary terms related to water. The hands-on activity allows students to imagine themselves as a water droplet traveling through the water cycle. They create a bracelet/key chain with different colored beads representing the places of the journey. After the activity, students discuss what conditions and processes were necessary for water to move to each place.

5. History of BWD and Beaver Dam

- 45 minutes
- Many of us today take water for granted, but the leaders who formed Beaver Dam Association and Beaver Water District understood that clean drinking water is precious and ensures the continued health and economic growth of a region. Let us tell the local history of how these leaders pulled together to make safe, economical drinking water for all a reality in NWA, and how we continue to plan for the growth of NWA.

6. Water Quality Testing

- 60 minutes
- Testing source water and recording data on parameters such as turbidity, temperature, alkalinity, pH, nitrate, phosphate, and dissolved oxygen is the first step of the drinking water treatment process. In this lesson, students get to test sample water, collect data, and communicate their findings to the class.

7. Watershed Demonstration

- 45-60 minutes
- Students will gain knowledge and enhance their skills in identifying urban and agricultural point and non-point source pollution using a watershed model. Students take turns demonstrating how pollution can occur throughout the watershed. This lesson answers questions such as: Where does pollution come from? How does pollution get into waterways? What are best management practices to lessen the burden of point and nonpoint source pollutants? Why is source water protection important? Human influence on the health of waterways is emphasized here.