Nature/STEM Activity: Watersheds

Easy Creek is a small stream that runs through Camp Crowell. Did you know that the water in Easy Creek ends up in the same place as water from parts of New York, Pennsylvania, West Virginia, and Delaware? These areas are all part of the Chesapeake Bay Watershed. Easy Creek drains into Difficult Run (located just off the Camp Crowell property), which drains into the Potomac River, which ends up at the Chesapeake Bay. **Create your own watershed.**

- Supply List
  - You will need a large waterproof tarp or shower curtain(s) (clear ones allow you to see underneath), a watering can filled with water, an outdoor area big enough to spread out the tarp, and people/things (could be two volunteers or at least five different items of varying sizes) to put under the tarp. Challenge Mode also requires sand or soil.
- Background Information
  - The U.S. Geological Survey (USGS) defines a watershed as "an area of land that drains all the streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel."
  - For example, the Chesapeake Bay Watershed is the area of land where all streams and rainfall drain into the Chesapeake Bay.

The Chesapeake Bay Watershed

- Making Your Topography
  - Pick at least two volunteers or collect at least five items of varying sizes. The volunteers/ items are going to be the topography (hills, mountains, valleys) of your watershed.
  - Unfold and spread out your tarp. Have your topography volunteers climb under the tarp and sit or lie down in a comfortable position or place your items underneath the tarp. Volunteers or items should be completely covered by the tarp, but make sure the volunteers can still breathe under the tarp.
- Creating Your Watershed
  - Take the watering can and make it "rain" all over your topography. Depending on where you pour the water, where does it go? Count all of the watersheds for each topography.
  - You can repeat this activity as many different times as you like, changing the position, adding, or removing volunteers/items under the tarp to create new watersheds.
- **Challenge Mode:** Sprinkle soil or sand overtop your topography before pouring water on it and discuss what happens to the soil/sand and what it could mean for real-life watersheds.
- Discussion Questions
  - Why might it be important to know what body of water a stream flows into?
  - If all the water in a watershed drains to the same place, what do you think this means for pollution that gets into a watershed?