

DREDGING IN HAMPTON ROADS HARBOR

Student Directions

This experiment demonstrates how a dredge works (on a very small scale).

Step 1: Fill the bottle 1/3 full of water (the first flat line on the bottle).

Step 2: Fill the bottle to about the top of the label with sand. Make sure to put the sand in the funnel slowly, so that it does not clump.

Step 3: Attach the cap and fill the water using the spigot until the water spills out of the cap a little bit.

Step 4: Insert straw (which represents the Dredge vessel) through the lid and push it down about 2 inches into the soil, so there is about 4 inches (use the ruler) of straw above the bottle. Once you insert the straw, you will see a water level inside the straw. Mark it with a pen.

Step 5: Squeeze the bottle using 2 fingers around the “rib” of the bottle, about at the bottom of where the straw is. Measure the water level with the ruler again and mark it with a pen.

What happens to the water level when you squeeze the bottle?

Why do you think this happens?