

## Who polluted the River?

### Materials:

- 1 clear container of water for every 10 - 15 scouts
  - 10 labeled canisters per group (can be baby food jars, film canister, ...)
  - Canister ingredients (all are safe for scouts to handle)
  - Dry Ingredients: Fill canister halfway full with dry ingredients listed above
  - Liquid Ingredients: Fill canister 2/3 full with liquid ingredients listed above
- For multiple uses, use a spoon and reuse the same container.

### CANISTER LABEL / Ingredient

1. Trees / dried leaves or Parsley Flakes
2. Construction Site dirt / cocoa or cinnamon
3. Person Fishing / Fishing line or dental floss
4. Farmers / Baking Soda
5. Family Picnic / Assorted Litter
6. Barnyard / instant coffee
7. Washing the Car / Soapy Water
8. Electricity Plant / Vinegar
9. Commuters / red food coloring in Vegetable Oil
10. Motorboat / Vinegar and Vegetable Oil

### Procedure:

1. Prepare and label the canisters as described above. For each group, fill one clear container with water nearly to the top.
2. Distribute one canister to each student. Instruct them to keep the canister closed and upright. The scouts should also be told not to reveal the identities of their canisters at this point.
3. Explain that you will tell a story about the river (water body) and that each one of them will play a part in the story. When they hear the name of the character listed on their canister in the story, they should open their canister, and empty its contents into the container (representing the water body).
4. Read the story. After the story has been read, use the following questions for a follow up discussion.

### Discussion Questions (Try to keep this brief if part of the Outdoor Ethics Orientation):

1. Describe the river before the story.
2. Who polluted the river? (everyone one played a role)
3. Would you drink this water now?
4. Is it healthy for fish or other wildlife?
5. Could the pollution had been prevented?
6. Can it be fixed?

The idea that we can prevent pollution before it occurs, fix current pollution, and save resources for the future is Sustainability.

For dramatic effect, try to filter the water through a coffee filter, cotton, paper towel, or cheesecloth. Ask the scouts to explain what happened.

## The Story: WHO POLLUTED THE RIVER?

Listen for the name of the character printed on your canister. When you hear your character named, open the canister, and dump its contents into the river.

For many thousands of years, a river has flowed in this area. Occasional storms drenched the area. High winds whipped through the TREES and blew leaves into the water.

Gradually, towns started to grow along the banks of the river. Developers cleared wetlands and forests to build houses and businesses. Rains washed loosened soil from CONSTRUCTION SITES into the river.

At first, towns were small. Upstream, FARMERS planted crops to feed the towns' growing population. Some of those crops grew right up to the river, and fertilizer washed off the land and into the water. Other farmers kept pigs, cows, and other animals in their BARNYARDS. As rainwater drained out of the barnyard, it carried some of the manure into a little creek behind the farm. The creek flows to the river.

As the towns grew, more and more people began to move to the nearby countryside. To meet the electricity needs of the towns; area officials decided that they would need to generate more power. To burn coal and produce power, an ELECTRIC POWER PLANT was built along the river. Gases coming out of the smokestacks combine with moisture in the air to form acids. The pollution falls back to the earth as acid rain or smog.

Traffic congestion can also be a problem for COMMUTERS and truck drivers who drive to and from work. Exhaust fumes, just like power plant emissions, can cause acid rain. If a vehicle is not kept in good repair, it might also leak oil or other fluids, which will wash off the pavement and into the river with the next rain.

Nearby, a boy is WASHING THE CAR. The soapy water rushes down into the driveway into the storm drain; the storm drain empties into the river.

On nice days, many people head down to the river. Some zoom all around in MOTORBOATS and don't notice that a little oil leaks into the water. Lots of families are PICNICING in the parks too. Some of these people have left trash on the shore. With the next storm, that trash will wash into the river. On the shore, a PERSON FISHING snags a hook on a log and breaks off the nylon fishing line.