

## Educational Activity

Contact Seneca SWCD Education Specialist  
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regarding activities or presentations to  
community groups

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### Clean the Water

Water in lakes, rivers and swamps often contains impurities that make it look and smell bad. The water also may contain bacteria and other organisms that can cause disease. Sometimes the water looks clean but is it? How can we get this water clean enough to drink?

Water treatment plants clean water using some or all of the following processes:

1. Aeration
2. Chlorination
3. Ozonation
4. Filtration
5. Disinfection with ultra violet light

Visit NACD website for words and definitions to  
print off and use with this activity.  
<http://www.nacdnet.org/stewardship&education/>

If you have your own well and septic system you depend on the natural resources around you to clean your water to reuse again.

It's your turn to clean dirty water. Follow the experiment below.

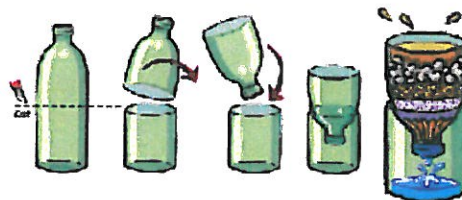
#### Items needed:

- A homemade filter (sock, cotton, paper towels, coffee filter, sponge, sand)
- 2 empty plastic bottles - (1-liter soda bottles are okay but one bottle should be clear)
- Cooking oil
- Dirt & grass
- Clean water
- Dish soap

#### Procedure:

1. Fill one of your bottles half-way with water from the faucet.
2. Put cooking oil, dish soap and some dirt and grass into the bottle of water.
3. Shake the bottle to mix the dirt around.
4. Take the unused bottle and cut it in half. Rest the top half in the bottom half (see diagram below).
5. Grab your filter and stuff it in the "neck" of the bottle you just cut.
6. Pour the dirty water from the first bottle through the filter on the second bottle.

Does the water poured through the filter look cleaner? **It's not clean enough to drink, so don't try it!**



#### Questions and Discussion

1. Compare the water you filtered to the dirty water. How are they different?
2. Can you get dirty water cleaner? How?
3. How hard is it to clean dirty water?
4. Share what you learned with your community friends and family.