

# Model Watershed Demo

**Introduction:** We are going to use basic household and craft materials in order to build a model watershed. We will watch how water moves through the watershed. Remember, watersheds are important to environment because they help absorb and collect water.

## Watershed Materials:

### Current:

Aluminum tray  
Foil  
Construction paper  
Scissors  
Tape  
Straws

### Newly Added:

**Food Coloring:** Something that can be placed in the model watershed to illustrate contamination. Could even embed a bottle cap into the foil or tape and fill it with the staining material to allow water to make its way over it. (probably only work for older kids).

**Rocks:** To better illustrate filtration and change in direction of surface water based on solid structures. (Showing how development has an impact on surface water flows).

Rocks could also be regarded as “houses” and the staining liquid could be placed next to the rock “houses” to show how development affects quality and flow of surface water. Ultimately explaining how it is important to protect watershed areas (especially NYC) from development.

A “**filtration plant**” put toward the bottom of the hill that could be as simple as some paper towels laying rolled up as a barrier to the water. Just so the idea of the contamination being trapped by the paper towels is shown.

## Directions:

1. Obtain aluminum tray, foil, construction paper, scissors, etc...
2. You could make two tall mountains on the outer edges of the tray. You could then have a river run between the mountains down to a lake. You could also make a shallow depression for the lake to hold water. If you would like to construct your watershed differently – be creative!
3. Start constructing structures like buildings, rivers, mountains, and trees to put in your watersheds
4. Include rocks to change the direction of water; include food coloring in a creative way to show the dangers of pollution.
5. Don't forget to create a filtration plant out of the papers towels to show what type of pollution has collected at the bottom of the hill!
6. Use the spray bottle to spray water over the watershed – *rain*. Watch what happens to the water. Where does it go? Does it move? Does it stand still? Is it absorbed? Does it form puddles?

**Record Your Observations Below:**

**Answer the following questions below**

1. Imagine that it is raining outside right now. Where do the raindrops go after they hit the building? Where do they go from there? Where do they end up?
2. What can people do to protect watersheds and streams, rivers, creeks, ponds, and lakes in the watersheds?
3. How would you educate people about protecting their watersheds?