

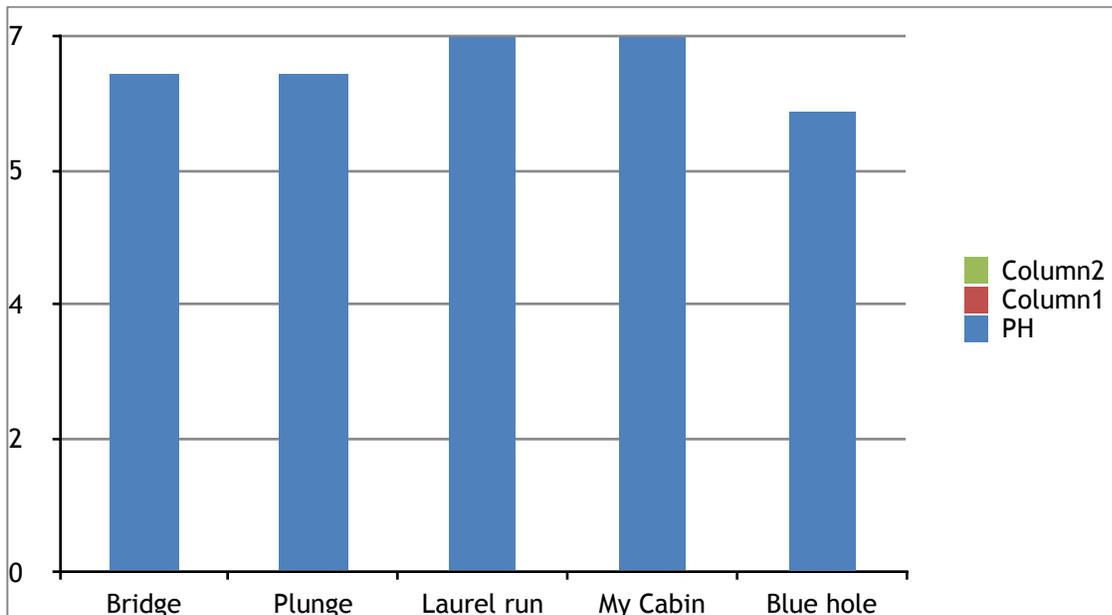
## Run-Off into the Chesapeake Bay

Any precipitation that falls from the sky and lands on the ground travels. It can be absorbed into the soil, evaporate, or it could even runoff. Runoff is rain that takes unwanted materials and carries them into the watershed. These materials consist of litter, chemicals (such as motor oil), pet waste, septic tanks, fertilizers for lawns, and gas contaminants that come from all cars. All of these pollutants pick up and go into the water causing much harm for aquatic life. On the eastern shore, five hundred and sixty eight million chickens were raised last year. Because of all the animal waste, being carried out from the ditches that they were stored in by runoff, bacteria is created in the water, this is the cause of many dead zones in the Chesapeake Bay. Another example, the Chesapeake Bay has 86,000 farms that cover thirty percent of the land of the basin of the Chesapeake Bay watershed. The Chesapeake Bay foundation is working on a variety of ways to fix the excessive amount of runoff from farming, such as switching from chemical fertilizers and cutting the amount of fertilizer that can be used. Another problem for runoff is sediment. Sediment is a type of dirt that runs off into the water making the water cloudy and hard for aquatic life to function and survive. Currently farmers in the Chesapeake Bay watershed have cut the sediment losses from their farms by fifty five percent. Sediment collects in the body of water and settles to the bottom affecting all of the sea creatures.

According to the Chesapeake Bay foundation runoff contributes to sixteen percent of nitrogen pollution, seventeen percent of phosphorus pollution, and twenty five percent of the sediment pollution.

Along with runoff tributaries is also another part of Will and I's project. Tributaries are smaller bodies of water coming off a larger body of water. When runoff enters the tributary it goes into the larger body of water, causing a greater pollution. Will and I conducted an experiment that tested the water in different areas of the Maury River, a tributary of the bay. The chart below shows the PH of different spots on the Maury that varies in types of pollution depending on location and who uses the area. PH measures how acidic or basic the water is.

The PH scale goes from 1 to 14, making 7 perfectly clean water, with acids from 1 to 7 and bases from 7 to 14.



**About the Maury-** Very close to where the river starts, the river changes into a fast moving series of rapids with many natural filter and buffers. This is known as the Goshen Pass.

**The Bridge** – Under the bridge there is a sandy area that is visited often by fishers and other people. There is always trash everywhere. This bridge is above Goshen pass.



**The Plunge** – The plunge, located in the pass, is a natural diving board that is a very popular destination. It gets a lot of use in the summer and is polluted with cans, bottles, and other trash people bring down, often when having lunch there.



**Laurel Run –**

Laurel run, also in the pass, is a park with grills. When we was there, we did not see a trash can. It does, however, have a great buffer zone.



**Tysinger Cabin** – The Tysinger Family cabin does not get a lot of use and is downstream from the pass.

**Blue Hole** – Blue hole is a deep, small pool downstream from the pass. It has about 5 homes bordering it. The section I tested is down the hill from a farm with cattle. When the Cattle get out they come down and stand in the river. The boarder of this pool has hardly any buffer.

