# Rainwater harvesting and infiltration

Finally, finally, finally. It is raining and raining hard. People are checking their Instagram, Facebook, Twitter and Pintrest accounts. They are even reading blogs, as the increased number of hits on this blog indicates. So gotta get writing. I am sitting at my desk in my office watching and listening to the rain:

As you can see the rain is sheeting off of our roof. We still have no gutters, a condition that started when we had the house painted about ten years ago. Well it needs to be painted again and I am hopeful that we will follow up with gutters that direct water to downspouts that lead to the permeable gardens around the house. In the mean time, I bought the book, The Water-Wise Home by Laura Allen. Love this book! I am learning about all of the bigger things I can do to keep precious water from flowing out of my yard and into the storm drain system.

But I have made one small change already. I dug out – actually I hired some young men with much stronger backs than I have – the small raised vegetable garden in the back yard and converted it to a tiny rain garden (detention basin). As you can learn from this link, a detention basin holds water temporarily during rain events allowing more of it to infiltrate. A retention basin holds water throughout the year but fluctuates with rainfall to also increase infiltration. Mine is definitely a detention basin, or dry pond. Since we have no gutters I am using the aesthetically-pleasing and highly practical hardscape element called sandbags. The sandbags are placed on the path to direct the water that is streaming off the house into the basin, rather than allowing it to flow out to the sidewalk and street where it would join the rest of the urban runoff in a mad dash to our flood control channels and finally out to the ocean.

I placed garbage cans (ie. rain barrels) in the spots that the water flows off the roof in a concentrated stream. These filled up within minutes of the start of the heavy rainfall, indicating how much water I could have saved with the proper rainwater harvesting system. My goal in the future is not to harvest (save) the water, but rather to direct it into the yard so more of it infiltrates.

It hurts me to see so much clean rainwater flow out to the streets and storm drains but I remind myself that even these small improvements I have made save some water. Also the fact that my yard has very little area of impermeable surfaces and is mostly covered with vegetation (trees) and organic mulch means that the soil does act like a sponge, absorbing and conserving water. Furthermore, greenhouse gas emissions are reduced since leaves and other green matter are not carted away to the landfill. I guess the message is that if all of us do some of the little and easy things, we can make a big difference.

Enjoy the rain!