Water Management, Inc. recently donated a 1,000 gallon rainwater harvesting system and small irrigation system at the child development center located at George Mason University in Fairfax. The system is utilizing the existing gutter to harvest the rainwater off of approximately 4,000 square feet of the north facing roof. During rain events the rainwater flows off the roof into the existing gutter system and to a downspout, where the rainwater system begins. The rainwater is funneled through a leaf eater filter which is designed to keep leaves and other large debris away from the rainwater harvesting system. The rainwater then makes its way to the cisterns.

Two 500 gallon cisterns were installed to collect the rainwater. The tanks are a dark color to ensure no allergy growth develops inside the tanks, they are also piped together at the top and bottom to ensure they fill and release at the same level. There is a submersible pump located in one of tanks. The pump is connected to a float extractor, which pulls the water from the tank. When the automatic controller signals the irrigation system to turn on, the pump kicks on. The stored rainwater goes through the float extractor, through a 25 and 5 micron filter and then through ultra violet filter to ensure the water is at its cleanest state. From there the irrigation heads almost magically pop-up with excitement and irrigates the garden.

WMI believes that teaching through example is the best way to impact, especially, our young minds. There are so many benefits to conserving water and sustainable measures such as this one. Not only does capturing the rainwater lessen the demand on the water supply, and allow us an option to use the harvested water to recharge our ground water but it also reduces our storm water run-off, which is a growing problem in our major urban centers.