

Don't Just Throw It Down the Drain

Stormwater as a Resource

It is better for civilization to be going down the drain than to be coming up it.

– Henry Allen

While this quote may not be referring to stormwater specifically, it summarizes America's philosophy toward stormwater in general: If we don't put stormwater down the drain, it will just cause problems. And largely, that's how we treat stormwater today; a large volume of freshwater is captured on roofs, roads and other impervious surfaces and funneled off somewhere else. Unfortunately, this philosophy has a flaw in that the quick removal of stormwater often causes the problems we are trying to avoid. Stormwater accumulates pollution, dragging it into local streams and rivers; it exacerbates or causes flooding downstream; and, even worse, it can cause flooding at wastewater plants, leading to the dumping of sewage into our rivers. We are treating freshwater like a waste product and in the process creating other problems for ourselves. Civilization may not be coming up the drain, but our stormwater problems certainly are.

Presented with this dilemma, it's obvious that we need to start treating stormwater as a resource. This entails a radical change in thinking; keeping stormwater where it falls and utilizing it, rather than sending it down the drain. This idea is steadily becoming more popular around the country. Techniques that apply this philosophy include green roofs, rain cisterns, rain gardens and rain barrels, to name just a few.

These methods draw on basic concepts but use technology and innovation to make them cost effective, easy to use and able to reduce flooding and pollution problems. Green roofs can significantly reduce stormwater flows from a building and have the additional benefit of adding

insulation and green space. They can be built in a variety of ways, but the most popular method is a simple ultra light-weight grid system that can be installed on existing buildings. Rain cisterns and accompanying technology have gotten to the point where they can provide all the water needs of a household, even during droughts! Rain gardens and other specially designed landscaping techniques utilize stormwater to grow decorative plants and allow excess stormwater to slowly filter into the soil to become groundwater. Some designers have become so creative with these ideas, that they are incorporating stormwater into fountains, artificial streams, statues and other building artwork displays.

In today's world of diminishing resources, we should be looking for sustainable ways to use natural systems. By capturing rainfall for drinking water, landscaping, artwork and other uses, we not only keep water from going down the drain, we keep the problems from coming back up it.

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FOR MORE INFORMATION

The online **Rainwater Harvesting Guide** is a list of articles, review information, products and services related to rainwater harvesting and sustainability. www.rain-barrel.net/category/rainwater-harvesting

GreenRoofs.com is an internet news media organization that seeks to inform, promote and inspire the earth friendly technology of organic greenroof architecture through the interchange of ideas, projects and news.

Urban Design Tools, a site developed through a Cooperative Assistance Agreement under US EPA Office of Water 104b(3) Program, provides watershed managers with a new set of tools and techniques that can be used to meet regulatory and receiving water protection program goals for urban retrofits, re-development projects and new development sites. www.lid-stormwater.net