



Green Lingo: Greywater

Greywater, (also spelled Gray Water), is wastewater generated from domestic activities such as laundry, dishwashing, and bathing, which can be recycled on-site for re-use. Greywater differs from water from the toilets which is designated sewage or blackwater to indicate it contains human waste.

Most greywater is easier to treat and recycle than blackwater, because of lower levels of contaminants.

If collected using a separate plumbing system from blackwater, domestic greywater can be recycled with treatment to provide water for flushing toilets, irrigation and other uses depending upon individual state regulations.

Green Product of the Month: Flotender Greywater Recycling System

Water conservation is among the most practical way of going green – even in water rich areas like the Northeast. One such way is by recycling greywater, which comprises up to 80% of the wastewater generated by a typical home.

Greywater reuse has been used successfully to conserve water in many large-scale commercial and industrial applications, but can be used for small residential applications too. A common use of greywater around the home is for landscape irrigation. One product, the Flotender Grey Water System, collects grey water from the home's plumbing and filters it so that it can be safely used to water plants. The machine then pressurizes drip irrigation lines. The company claims that the average household can reduce water usage by over 30% by recycling greywater with their products.

Flotender Grey Water Machine www.flotender.com

Green Current Events: "Illinois Traffic Roundabout Collects Storm Water for Use in Fountain" – Information taken from "Civil Engineering – October 2010"

In order to revitalize the business district and solve some traffic concerns in Normal, Illinois, the Town hired consultants to design a roundabout with a Town green in the center. Five streets converging into one intersection was the main reason for this solution, however, the designers took the concept one step further to make this a 'green' roundabout. The designers incorporated permeable pavers and collect the stormwater generated for use in a fountain in the center of the roundabout.

"In plan, the circle comprises five features surrounding a 56 ft diameter sloped lawn. Ringed by a reinforced turf apron, the roundabout includes a main entry plaza and three small entry plazas. Of the roundabout's two water features, the outermost comprises a series of four interconnected 'filtration bogs' that convey water in a clockwise direction. Separating the filtration bogs from the roundabout's other water feature, a circular fountain, is an area covered with permeable pavers that includes several precast-concrete benches and a dozen London Plane trees. Like the filtration bogs, the circular fountain conveys water in a counterclockwise fashion, depositing flows in a pool from which the water is returned to an underground cistern." (Civil Engineering)

It was possible that three of the five streets could collect stormwater to be used in the fountains and irrigation. The system works using a 76,000-gallon cistern, water quality filters, and filtration bogs. Before the water is pumped to the fountain it also passes through a filter with ultraviolet disinfection so no chemicals are used to treat the water.

Green at PARE: PARE to Host Gray Water Reuse and Rainwater Harvesting Webinar

In keeping with the Sustainable Design Committee's theme of water reuse for this issue, PARE is sponsoring a 'Gray Water Reuse and Rainwater Harvesting' webinar on November 4, 2010, open to PARE employees, with invitations extended to PARE's municipal clients. The program, sponsored by the American Public Works Association (APWA) includes the following program description:

Precious water resources are becoming scarcer and many municipalities face long-term water shortages. Learn how you can realize both water conservation and potential energy savings by reducing the amount of water and wastewater that requires treatment. Hear about how gray water from sinks, showers, washing machines, and more can be used for purposes like toilet flushing and landscape irrigation at both residential and public facilities - all with minimal treatment. Discover how rainwater harvesting is being utilized to manage stormwater runoff and reduce treated water usage in two municipalities.

Featured speakers include:
Dr. Sybil Sharvelle Assistant Professor
Colorado State University

Fernando B. Molina Public Information Officer
Tucson Water Tucson, Arizona

Wing K. Tam, P.E. Assistant Division Manager
Watershed Protection Division
Bureau of Sanitation City of Los Angeles, California



November 4, 2010
**Gray Water Reuse and
Rainwater Harvesting**

