

WORKSHOP ON INNOVATIVE TECHNOLOGIES AND SOLUTIONS FOR NON-POTABLE REUSE OF URBAN RAIN WATER AND STORMWATER

Background

The Clean Water Act requires that EPA regulate certain water quality standards and parameters in navigable waterways. As regional and/or national variability in rainfall event frequencies and volumes continue to change, due in part to increasing fresh water scarcity and changing climatic patterns, there is a need to sustainably manage national water resources. One proposed solution to mitigating stormwater and rainwater runoff to the sewer systems is the use of green infrastructure or rain water and stormwater catchment devices designed for water diversion and reuse. However, there has yet to be a comprehensive approach that targets current rainwater and stormwater collection needs and practices, nor have the current and existing technology barriers and solutions been identified.



A Rainwater Catchment Device (Rain Barrel)

EPA Cincinnati Water Technology Cluster Team

On January 18, 2011, EPA Administrator Lisa P. Jackson announced the commitment of \$5 million over the next three to five years to support the research, development, and deployment (RD&D) of cost-effective, innovative water technologies that demonstrate tenets of sustainability, timeliness, innovation, and responsiveness.

The EPA Cincinnati water technology cluster team was created to oversee and promote this RD&D effort. The cluster team holds the following goals and objectives as it strives to help solve water challenges:

- To promote innovation in the water technology sector in the Cincinnati, Dayton, northern Kentucky, and southeast Indiana region by communicating water challenges, Agency priorities, and technology needs.
- To foster and generate water technology RD&D collaborations among internal and external partners within the region by facilitating access to EPA research facilities and equipment.
- To help identify, protect, and transfer EPA intellectual property to the marketplace.

These objectives allow the cluster team to promote regional water technology RD&D while maintaining EPA's overall mission of protecting human health and the environment.

For more information, please visit www.epa.gov/nrmrl/watercluster.

Research Plan & Objectives

To plan a solution strategy for optimizing water resources, EPA is partnering *Confluence*, Duke Energy, U.S. Green Building Council, EPA Region 6, and the Green Umbrella Regional Sustainability Alliance to organize a workshop to evaluate current methods of rainwater and/or stormwater collection and reuse. The workshop will provide an information exchange on water quality characteristics relevant to protecting public health and ecosystems, treatment technologies, performance standards, and approaches to management and regulation. Rainwater and stormwater reuse within water-scarce regions and for CSO management will also be discussed, along with recent research advances, case studies, and technology challenges. The two day workshop is planned for April, 2013. It is expected that federal, local and state government, non-profit groups, and private industry will attend.



A Stormwater Collection Drain

Products & Outcomes

The workshop will consist of four sessions:

- Overview of stormwater and rain water reuse, market analyses, and water quality guidelines
- Review of current best practices and examples in the form of case studies
- Outline of current technology gaps and needs
- Discussion of how to address those gaps and needs with a focus on collaborating on water reuse projects

After the workshop's conclusion, a document summarizing its results will also identify existing barriers and make recommendations for potential management strategies.

Status

Project Tasks/Milestones	Project Timeline						
	July-Aug. 2012	Sept.-Oct. 2012	Nov.-Dec. 2012	Jan.-Feb. 2013	March-April 2013	May-June 2013	July-Aug. 2013
Topic Discussion & Development							
Work Group Assembly							
Agenda Development							
Invitations Round One							
Speaker Solicitation							
Invitations Round Two							
Workshop							
Final Document							

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