

# TOWARD NET-ZERO WATER USE

NEWS FROM GRHC'S INTEGRATED WATER MANAGEMENT COMMITTEE

By Jeffrey L. Bruce

**W**ater is energy and water is life. For too long, we have overlooked the connections between water and energy usage in our homes, communities, places of work and power plants. Water resources, when applied to vegetation, particularly in conjunction with buildings, save energy — and by saving energy, they also save the water needed to produce this energy.

In this sense, water is an essential part of cycles of urban and regional sustainability. Recognizing this important aspect of our environment GRHC teamed with the American Society of Irrigation Consultants (ASIC) to develop a seminar series that explores the future opportunities in integrated water management for buildings and sites. This seminar explores new opportunities hidden within our economy, building systems and neighborhood development for managing our water and energy resources more wisely. Although the technology, policies and termi-

nology may be new for many readers, the underlying ideas are very commonsense. The core premise of the seminar is based on the “net-zero water” approach to water management and planning.

The net-zero water concept is the goal that for every building, landscape, community and region, water is used so efficiently that there is a net-zero loss of water and a minimal use of energy to move it and treat it. Because they are so self-sustaining, these environments can endure and thrive over time. Achieving net-zero water utilizes the concept of the using and reusing water multiple times on site or to provide to the greatest degree possible a closed loop of water. There are seven steps associated with this integrated water cycle. While this concept may not be achievable in certain projects, incorporation of its principals can lead to reduction of domestic water and sewer dependency. The circle is a strategic approach to thinking about water and how it integrates into systems.

The seminar was praised by government officials and practitioners at its premier at the GRHC

Regional Conference in Washington D.C. on June 1st, 2010. “Water has always been a limiting resource in achieving true living architecture in the urban context,” noted Lynda Wightman, committee chair “and now we have a powerful tool to influence policymakers as to how to utilize alternative water sources more effectively.” From previous experiences across the planet, it is clear that institutional capacities in governance systems must all be strengthened to adequately address the magnitude of future challenges involving water. A new GRHC course is an important first step in meeting these challenges. The course will be offered as part of the education program in Washington D.C. at the Living Architecture Regional Symposium on April 12, 2011. Plans are underway to develop a second course to build out the seven steps in the integrated water cycle. \*

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