

# Stormwater Management and Green Infrastructure

# **CNT Green Infrastructure Initiatives**

Our goal is to make Green Infrastructure the preferred stormwater management option for municipalities, developers, communities, and individuals.

## Turning Ideas Into Action

#### Research and Demonstration Projects

CNT has a series of demonstration Green Infrastructure features underway in a variety of urban and suburban settings. These research projects, in partnership with the U.S. and Illinois EPAs, will scientifically monitor the rainwater capture impacts of Green Infrastructure, while recording the cost of construction and maintenance. These projects will produce data that policy makers need to permit these features and allow for widescale implementation.

## Policy Projects

We are working in collaboration with the Metropolitan Water Reclamation District to integrate Green Infrastructure approaches into the new Stormwater Ordinance, ensuring that the country's largest water resource management agency takes advantage of



these money-saving approaches as it assumes responsibility for the region's stormwater management. The results of a recent analysis of the state-of-the-art in Green Infrastructure technologies, state and national regulatory and funding frameworks for stormwater management, and national and international centers of innovation are now available to decision-makers.

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Stormwater management choices affect all communities

#### DID YOU KNOW ...

- ...over the last two decades, a significant flood event has occurred somewhere in Illinois each year? Flash flooding can occur in urban areas where impervious surfaces, gutters and storm sewers increase rain and snowmelt runoff to the receiving stream.
- ...non-point source pollution (NPS), which includes urban stormwater runoff, is responsible for over 50% of the water quality problems in the U.S.?
- ...over \$70 billion in stormwater management investment will be required from municipalities in order to meet water quality and flood protection regulations and successfully control urban stormwater runoff?



...Green Infrastructure supports healthier communities, delivering clean water and air, and helps to prevent sewagerelated closures of beaches, rivers, and lakes? It also saves money and energy compared to conventional stormwater practices.

### Stormwater Management, Green Infrastructure, and the Center for Neighborhood Technology

The Green Values Toolbox: What Can CNT Offer You? CNT has developed several tools to assist property owners and decision-makers to capture the value of Green Infrastructure.

- The Green Values Calculator (greenvalues.cnt.org) allows developers, regulators or property owners to assess the economic and hydrological impact of green versus conventional stormwater management.
- Our Natural Connections geographic information system (greenmapping.org), developed in partnership with the Openlands Project, maps the interconnected network of Green Infrastructure resources stretching from Wisconsin to Indiana.
- Our book "Water: From Trouble to Treasure" gives easy-to-apply tips on incorporating low cost Green Infrastructure features in private or public landscapes.
- A catalogue of fact sheets on the technologies, regulatory framework, and funding mechanisms that can help promote, or create obstacles to, regional implementation of Green Infrastructure.



#### http://greenvalues.cnt.org/ http://www.greenmapping.org/



# What is Green Infrastructure?

Green Infrastructure is a stormwater management approach that saves money, supports sustainability, and more efficiently uses limited financial and natural resources. By capturing raindrops where they fall, Green Infrastructure utilizes the absorbing and filtering abilities of plants, trees and soil to protect water quality, reduce runoff volumes, and recharge groundwater supplies.

On the regional scale, Green Infrastructure means the interconnected network of open spaces and natural areas, such as greenways, wetlands, parks, and forest preserves, that naturally recharge aquifers, improve water quality and provide recreational opportunities and wildlife habitat.

On the municipal or neighborhood scale, Green Infrastructure refers to best management practices (BMPs) for stormwater, such as rain gardens, vegetated swales, permeable pavements, rain barrels, and gree roofs that mimic the natural capacity of the landscape to absorb precipitation where it falls.