

Office of Water U.S. Environmental Protection Agency

Sustainability: Activities of EPA Water Programs

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Ensuring safe and clean water for all Americans
Healthy Watersheds Sustainable Communities



Principles of Sustainability for Water Resources

- **Reduce:** Reduce land consumption, development footprint, environmental impacts by using land efficiently
- **Reuse:** Rainwater, gray water, wastewater
- **Recycle:** “wastes” turn into usable water, energy, nutrients – sewage treatment plants become “used” water resource recovery centers

Green Infrastructure

An array of technologies, approaches, and practices that protect and use natural systems or systems engineered to mimic natural processes, to manage rain water as a resource, to solve combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs), enhance environmental quality and achieve other economic and community benefits.



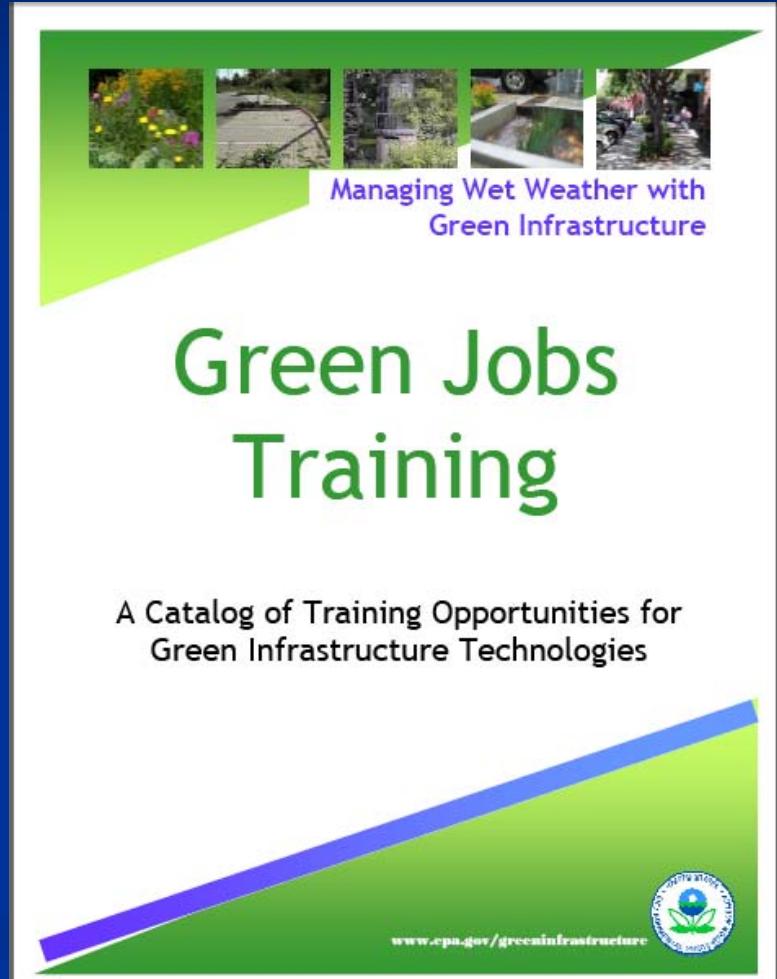
Green Infrastructure Approaches



- Place-based work
- Funding
- Tools
- Regulation
- Federal leadership

Green Infrastructure Tools

- Updated “Green Jobs Catalogue” (Sept. 2010)
- “Integrating Green Infrastructure Concepts Into Permitting, Enforcement and Water Quality Standards Action” under development
- GIS Mapping Tools
- Storm Water Calculators



Green Infrastructure and CSO Reductions: Enforcement Approach

Green/Gray Infrastructure Demonstration Pilot for Combined Sewer Overflow (CSO) Control in Kansas City, MO.

- Focus on urban core neighborhood with CSO system.
- Evaluate water quality/quantity improvement benefits of application of large-scale LID or micro-BMP retrofits in entire subcatchment.
- Expected outcomes: reduced costs, improved aesthetics, assistance to utility managers, eventual applicability to entire city.



Sustainability

Related OW Priorities

Clean Water and Drinking Water Infrastructure Sustainability Policy

- Released in October, policy represents the next step in EPA's efforts to work with stakeholders to move water sector towards greater sustainability.
- Based on principles laid out in the policy, EPA seeks to promote sustainability on three fronts:
 - The sustainability of our water infrastructure,
 - The broader sustainability of water sector systems, and
 - The role that both of these play in fostering the overall sustainability of our communities.

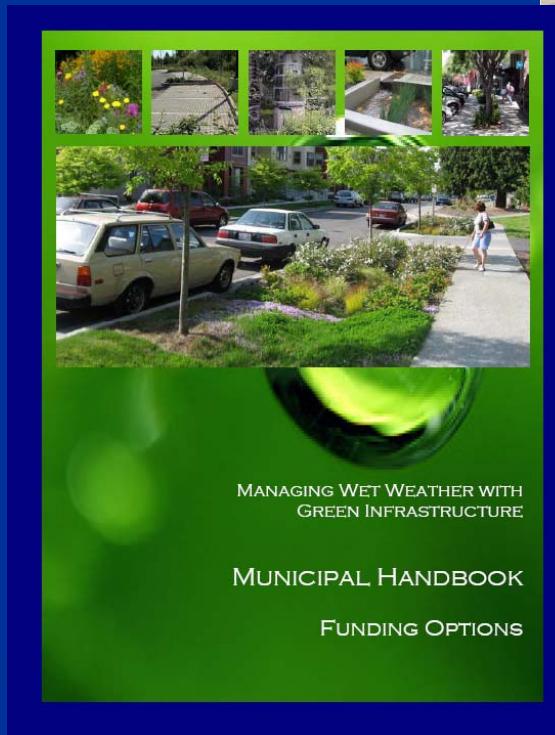


State Revolving Funds

State Revolving Fund

- Required 20% set aside for “green reserve”
- Recipients can include:
 - Communities
 - Utilities
 - Individuals
 - Citizen’s groups
 - Nonprofits
 - Businesses

Municipal Handbook, Funding Options



Healthy Watersheds Initiative

- Goal: Protect high quality waters and prevent future water quality impairments; increase vigilance and protection of healthy watersheds
- Develop a common set of comprehensive metrics to create a national list of healthy watersheds
- Implement State-wide strategic plans for identification and protection of Healthy Watersheds and in partnership with other Federal agencies.
- Use the latest state-of-the-science, peer-reviewed methods to conduct assessments to identify healthy watersheds state-wide
- Develop an MOU with Forest Service, Fish and Wildlife Service, DOT, USGS, COE, and NRCS

Climate Ready Utilities

- Goal: utilities to develop an understanding of the potential impacts of climate change and develop long-term plans that account for these impacts so they can continue to provide safe drinking water and wastewater treatment
- Defining what a “climate ready utility” looks like



Urban Waters Initiative

- "Right now in cities across the nation, urban waters are being threatened like never before. New and different environmental challenges are appearing everywhere from the Anacostia River in Washington, DC to the waterfront in Dubuque, Iowa. The range of challenges we face are going to require both traditional and innovative strategies – and broad partnerships to address the local issues in our communities, and the national issues we all share."
-Lisa P. Jackson, EPA Administrator



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“Meeting the next generation of water challenges requires new kinds of thinking. ... if we’re going to make our water systems work harder in the years ahead, then we have to start working smarter today.”

Administrator Lisa Jackson, Milwaukee,

August 2010

Questions?

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