



# GREEN INFRASTRUCTURE PROGRAM



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Region 6

# What is Green Infrastructure?

- System of natural and engineered components
- Infiltrate, evaporate, transpire, capture, and reuse rainfall
  - Bioretention
  - Permeable/porous pavements
  - Rainwater harvesting
  - Green roofs
  - Trees (expanded tree boxes)
  - Reforestation & restoration



# Green Infrastructure Benefits

- **Water quality/quantity**
  - Pollutant discharges
  - Stream and groundwater impacts
  - Flooding
- **Energy consumption**
- **Air quality**
  - Pollutants
  - Carbon sequestration
  - Urban Heat Island
- **Community**
  - Green space
  - Property values



# How is EPA Promoting Green Infrastructure?



## Green Infrastructure Strategic Agenda 2013

*U.S. Environmental Protection Agency*

Photos courtesy of Abby Hall, EPA

- Engage local communities
- Business as usual across different levels of government
- 5 Focus Areas
  - Federal coordination
  - CWA regulatory support
  - Research & Information Exchange
  - Funding & Financing
  - Partnerships & Capacity Building

# Federal Coordination

- Align federal programs to support and finance green infrastructure
  - Examples: HUD, DOT, NEP, Urban Waters program, Smart Growth program, USFS grants
- Develop information on large-scale green infrastructure programs as a component of resiliency and disaster relief
  - Examples: FEMA, NOAA, USACE, DOD, GI Technical Assistance

# Clean Water Act Regulatory Support

- Incorporate green infrastructure into MS4 permits and water enforcement actions
  - Builds on series of policy memos released in 2007, 2008, and 2011
  - GI provisions incorporated into growing number of state requirements and MS4 permits
  - GI now routinely considered as part of CSO consent decrees



# Research and Information Exchange

- Conduct research on planning and evaluating green infrastructure systems
  - Examples: community-scale studies in CSO communities, site-scale research
- Widely share emerging information on performance, implementation, and maintenance
  - Examples: website, webinars, modeling tools

# Funding and Financing

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- Leverage funds to finance GI projects
  - SRFs, Section 319 NPS, Urban Waters, Brownfields
- Identify opportunities to reduce cost of implementing green infrastructure
  - Examples: Region 3 pilot study on public-private partnership in Prince George's County



# Partnerships & Capacity Building

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- Direct technical assistance to communities
- Peer-to-peer exchanges
  - 2013 National Summit in Syracuse
- Partnerships with external organizations
  - Partnerships with 7 professional orgs, advocacy groups
- Raise awareness among engineering and design professionals

# Questions?

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