Green Infrastructure and the Economic Benefits of Parks

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TPL’s Conservation Finance Program

1. “Think tank” on financing conservation
   Leading source of research, education and policy information

2. Field services
   #1 provider of technical assistance to state and local governments
   $34B created, 450+ ballot measures, 84% success rate
Conservation Finance Ballot Measures 1998-2010
Mass. Community Preservation Act

155 Cities & Towns Adopted
$1 billion raised
Why Do Voters Choose to Raise Their Taxes to Support Land Conservation and Parks?
Voter Support for Investments in Land Conservation

### 2011 Poll Purpose Summary

- **Linking Water (8):** 50% 87%
- **Water Quality (11):** 41% 83%
- **Ranchlands (6):** 32% 72%
- **Wildlife Habitat (9):** 27% 66%
- **Lands/Areas (9):** 22% 64%
- **Open Space (6):** 25% 64%
- **Open Space Parks (7):** 11% 60%
Economic Benefits of Parks and Open Space in Massachusetts

Every $1 invested by Massachusetts in parks and open space returns $4 in natural goods and services

- Water quality protection
- Air pollution removal
- Flood control
The state’s $35.9 million investment in gateway city park improvements will generate 492 jobs. $26.5 million in labor income. Every $1 million invested creates 13.7 jobs.
Green Infrastructure is not a panacea, but be can be cost effective strategy alongside Grey Infrastructure

It must be Green WITH Grey

Green Infrastructure can provide amenities
NYC playgrounds; Houston Bayous

Parks can be adapted to serve as GI
Harvard Colloquia
EPA requirement: reduce the 750 million gallons of CSO runoff flowing into Chesapeake Bay annually.

Gray Alternative: $300m capital cost to expand WWTP and build CSO tanks plus $750k operating costs.

Green Alternative: $140m capital cost.

Proposed Stormwater Fee: $31/1000 sf impervious cover = $4.8m annually.
How Green Infrastructure is Financed

- Legal Enforcement Actions
- Payment for Watershed Services
- Clean Water State Revolving Fund (CWSRF)
- State Legislation/Ballot Measures
- Local Ballot Measures
- Private support (foundations/landowners/donors)
Northeast OH Regional Sewer District – Enforcement Order

$3b Consent Decree with EPA

--$42m required for GI

Cleveland Foundation -- $400k grant to ID green opportunities

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http://blog.cleveland.com/architecture/2012/06/cleveland_foundation_awards_40.html
DEC and DEP Announce Groundbreaking Agreement To Reduce Combined Sewer Overflows Using Green Infrastructure in New York City

$2.4 Billion in Green Infrastructure and $1.4 Billion in Gray Infrastructure to Target the City’s Most Impaired Waterbodies:

http://blog.cleveland.com/architecture/2012/06/cleveland_foundation_awards_40.html
New York City Playgrounds – Enforcement Order

http://blog.cleveland.com/architecture/2012/06/cleveland_foundation_awards_40.html
Raleigh, North Carolina – Payment for Watershed Services

TPL hired to develop Upper Neuse Clean Water Initiative Plan

Multiple organizations implement conservation strategy

Local Government $ is Key

Wake County: 3 Bonds total $91 million; Local match program

Raleigh Watershed Protection Fee

1 cent per 100 gallons = $1.8m/year

Results: 53 mi. stream buffers protected; 5,262 acres of land
Bayou Greenways Initiative – 4,000 acre goal; 300 miles of trails, $480m
Step 1: Bayou Greenways 2020 -- $215m Effort
  – Public Funding: $100m; Private Funding $115m
November 2012: $166m Parks Bond Measure -- $100m for Bayou Greenways (68% Support (highest in city's history)}
Atlanta – Local Taxation

- Historic Fourth Ward Park -- 5-acre park designed to deal with CSO problems
- 2 acre engineered pond vs. storage tunnel saved city $15 million
MA Water Infrastructure Legislation – Proposed Incentives for Green with Grey under WPAT

- Increase WPAT points for Green Infrastructure Water Projects
- Bonus points for joint Green-Grey applications
- Green projects must help with Clean Water Act compliance, part of stormwater mgt. plan
- Green projects: riparian corridor restoration, swales, rain gardens, green roofs change from asphalt to porous surfaces
  Could be linked to accompanying amenities such as parks, playgrounds and trails funded by other sources like CPA
- Stormwater utilities may be key to financing WPAT loan repayment