Green Infrastructure Financing

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December 2012

Green Infrastructure Financing

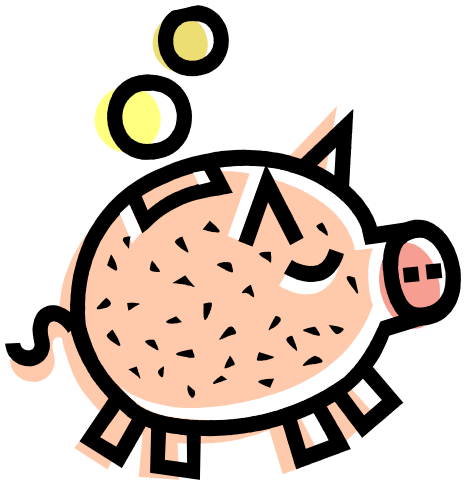
What we will cover:

- **Why financing important**
- **Characteristics of effective financing strategies**
- **Components of effective financing strategies**
- **Examples of effective financing strategies**
- **Resources for getting started**

Green Infrastructure Financing

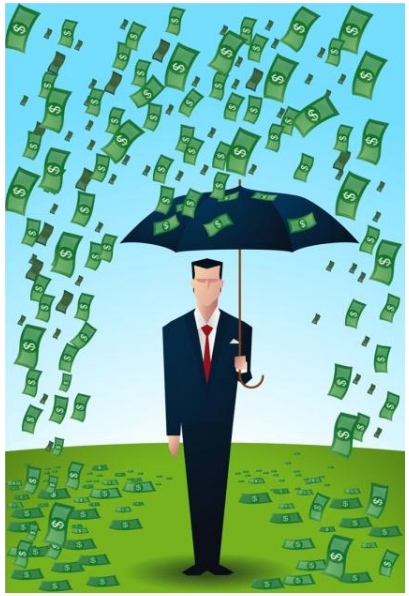
Coming to "terms"

- **Funding:** financial resources
- **Financing:** managing fiscal resources



Goal: increase return on investment

Financing Truth



There is not, has never been, and never will be enough grants - public or private - to fund natural resources protection and restoration, including green infrastructure

Why does financing matter?

- Provides backbone for implementation plan
- Lends credibility with funders
- Resonates with decision-makers
- Your plan cannot become a reality with out it!

Successful Financing Strategies

- Community-based
  - Local drivers and priorities
  - Local champions
- Integrated
  - A mix of financing mechanisms
  - A mix of funding sources
- Mirror the resource
  - Different stakeholders contribute in different ways
  - Mix of approaches based on the landscape

Sustainable Financing Strategies

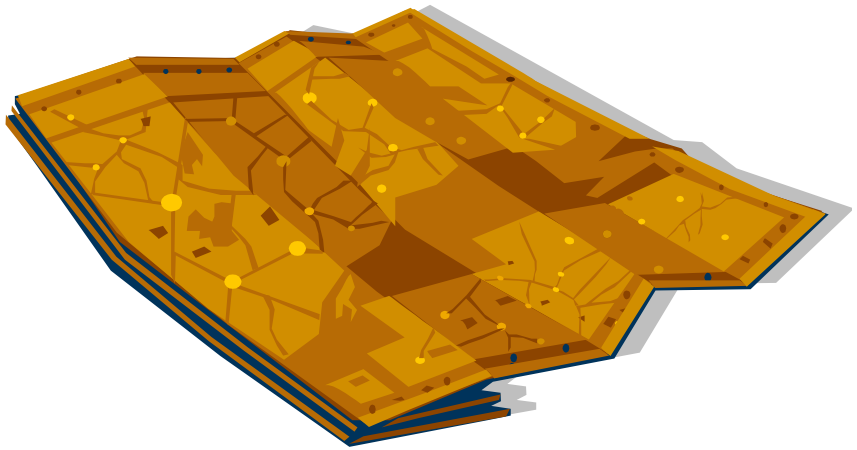
Tend to interweave several elements

- Cost reduction strategies
- Revenue generators
- Market-based programs

Cost Reduction Strategies

Planning

- Strategic planning
- Community visioning
- Comprehensive planning



Cost Reduction Strategies

Effective, enforced rules and regulations:

- Zoning
- Subdivision ordinances
- Forest conservation laws
- Buffer set-back requirements

Cost Reduction Strategies

Coordination with other community priorities and programs

- Reduces costs through efficiencies
- Creates alliances
- Increases political will

Revenue Generators

Grant and loan programs

- Federal
- State
- Foundations

Revenue Generators

Sustainable, dedicated funding

Tax and fee-based sources

- Real Estate and Sales taxes
- Tax Increment Financing
- Impact fees
- Stormwater utilities
- Impervious surface fees

Market-based Programs

Regulatory Markets

- Clean Air Act, Clean Water Act, Endangered Species Act
- Planning and zoning ordinances

Voluntary Markets

- Incentive programs
- Tourism-based programs
- Private sector greening
- Other voluntary programs

Top photo from www.gcbl.org/system/files/rn_grdn3.jpg
Lower hoto by Kevin Robert Perry, from **pruned.blogspot.com/2008/02/hyperlocalizing-h...**

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Sustainable Financing Example: Lenexa, Kansas

- Kansas City Metropolitan Area
- Intense development pressure
- Major concerns with flood mitigation and stormwater management

Sustainable Financing Example: Lenexa, Kansas

Sustainable Financing Strategy

- Planning and regulation
- Existing public programs
- Sales tax
- Stormwater utility
- Clean Water State Revolving Fund
- New development charge

Sustainable Financing Example: Lenexa, Kansas

Planning and Regulation

- Land protection policies in 20 year comprehensive plan
- Green infrastructure approach to capital and redevelopment projects
- Stream set-back ordinance

Sustainable Financing Example: Lenexa, Kansas

Existing Public Programs

- Federal and state grants including USEPA nonpoint source funding
- Surface Transportation Project funding provided capital for demonstration projects which tied transportation to parks.
- The Johnson County Stormwater Management Advisory Council 1/10th cent sales tax and proceeds from basic permitting fees charged to developers

Sustainable Financing Example: Lenexa, Kansas

Sales Tax

- 2000 Voter-approved 1/8th cent sales tax
- Supported upgrades and repairs to existing infrastructure problems – capital costs
- Generated $7.2 million between 2000-2005
- Voters approved extension through 2010 projected to raise an additional $8.1 million

Sustainable Financing Example: Lenexa, Kansas

New Development Charge

- Systems Development Charge in 2004
- Developers pay a one-time fee when applying for a permit as a means of recovering the costs of capital improvements
- Growth pays for growth

Sustainable Financing Example: Lenexa, Kansas

Stormwater Utility

- A monthly $5.50 fee approximately $66 annually for residential properties
- Commercial and non-residential properties is based on the amount of stormwater runoff generated by the parcel.
- Collected by the County via annual property tax
- Covers long-term system upkeep

Sustainable Financing Example: Lenexa, Kansas

Clean Water State Revolving Fund

- Green project reserve funds
- $1 million low-interest loan
- Invested in "Central Green Streamway"
- Drains 65 acres of new mixed-use development through seven step pools
- Wetlands and trails connect to existing networks and enhance recreational activities

Sustainable Financing Example: Lenexa, Kansas

Current Status

- Sales tax has sunset
- Utility and new development charges provide sufficient income for operations and maintenance
- Focus shifts to outreach and education to engage private property

Sustainable Financing Example: Lancaster, Pennsylvania

Location:

- Lancaster County
- South Central Pennsylvania
- 7 square miles

Demographics:

- Population: 60,000
- Most of the population lives in area of 4 square miles

the city of Lancaster
a city authentic

EFC

Sustainable Financing Example: Lancaster

Sustainable Financing Strategy

- Planning and regulation
- Existing public programs
- State revolving fund loan
- Stormwater authority (pending)

Sustainable Financing Example: Lancaster

Stormwater Management

- Old system combined rainwater and sewer water
- Heavy storms volumes would overtax the treatment facility
- Raw sewage dumps to the Conestoga River

Photo courtesy of US EPA

Sustainable Financing Example: Lancaster

Stormwater Management

- A gray infrastructure solution would cost about $300 million in capital costs
- Would also cost $1 per 1000 gallons for treatment of delayed flow– a total of close to $750,000 annually
- Use green infrastructure to divert 750 million gallons of rainwater from the system annually

SAVE IT!
YOUR WATER.
YOUR MONEY.
YOUR CITY.
saveitlancaster.org

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Sustainable Financing Example: Lancaster

Green Roofs

- 77,000 square feet of vegetation
- Capture and retain 50-70%
- Slow 90% of rainfall

Photo from Bay Journal

Park Improvements

- Basketball court replacement project
- Tweaked plans to reroute runoff
- Gravel bed under court, porous court surface
- Addresses run off for $0.16 per gallon, gray alternative would have cost $0.30 per gallon

Sustainable Financing Example: Lancaster

Rain Barrels

- Available to property owners at subsidized rates
- City partnering with LIVE Green
- Ones installed at City collect enough to water entire city garden

Tree Canopy

- Currently 25%, Goal: 40%
- Planting 6000 trees every 3 years
- Tree sale program – private property owners select from 20 different native species at wholesale price
- Benefits include increase in property value, rental rates, retail sales

Sustainable Financing Example: Lancaster

Sustainable Financing Strategy

- Green infrastructure approach would initially cost about $140 million
- Use existing city improvement projects as opportunities to incorporate green infrastructure
- Stormwater ordinance requires no net increase in runoff – looking to require 20% increase in on-site treatment
- Grant programs where appropriate/available
- $7 million from the Pennsylvania Infrastructure Investment Authority (PENNVEST)
- Working to put utility in place – proposed $10 quarterly

Green Infrastructure Resources

Information and tools

EFCs and Partners

- Green Infrastructure Resource Directory efc.umd.edu/greeninfrastructure.html
- Roadmap to Green Infrastructure in the Federal Agencies narc.org/issueareas/environment/areas-of-interest/green-infrastructure-and-landcare/roadmap/

Green Infrastructure Resources

Information and tools

EPA

- Green Infrastructure
  www.epa.gov/greeninfrastructure
- Healthy Watersheds
  www.epa.gov/healthywatersheds
- Water Quality Scorecard
  www.epa.gov/smartgrowth/water_score_card.htm

Green Infrastructure Resources

Information and tools

- CNT's Green Toolbox
greenvalues.cnt.org/
- American Rivers
www.americanrivers.org
- NRDC
www.nrdc.org and www.switchboard.nrdc.org
- The Conservation Fund
www.greeninfrastructure.net
- Trust for Public Land
www.tpl.org also www.landvote.org

For Further Information

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