



Webcast sponsored by EPA's Watershed Academy

Watershed Financing - Moving Beyond Grants

October 17, 2007 Webcast

Tim Jones, USEPA
Dan Nees, World Resources Institute

*In collaboration with the
Environmental Finance Center
University of Maryland*

Welcome!

- ✿ This Webcast features watershed finance approaches – sources, instruments, and institutions -- that can help you and your partners build sustainable watershed organizations and implement watershed plans



Why are we interested in watershed financing?

- ✦ In 2000, water quality inventories show that approximately 40% of streams, 45% of lakes, and 50% of estuaries assessed in the United States remain too polluted for fishing, swimming, and other uses
- ✦ There are not enough grants to fully fund watershed protection and restoration



3

Today's Webcast

- ✦ Introduction to Watershed Finance
 - ✦ Sources, instruments, and institutions
- ✦ Watershed Financing Process
 - ✦ Assess sources and institutional capacity; implement strategies
- ✦ Effective Watershed Financing Strategies
 - ✦ Key elements
- ✦ Watershed Finance Case Studies
 - ✦ Cacapon and Lost River Land Trust, WV
 - ✦ Montgomery County, MD



Charge to group

- ✱ Think creatively about finance mechanisms and approaches you may not have previously considered
- ✱ Use these ideas to develop innovative funding strategies



Introduction to Finance

What is financing?



- * Financing is an allocation process comprised of acquiring, investing, and managing fiscal resources
- * Ultimate goal of financing is to maximize return on investment
- * Financing helps us determine how we should go about accomplishing a goal. It is the how and the when, not the why

Why finance?



- * *Finance provides long-term solutions:*
 - There are not, have never been, and never will be enough grants – public or private – to fully fund watershed protection and restoration
 - Moves us from funding to investing

- * *Effective financing results in efficiency:*
 - Maximize return on the community's investment

Why finance? (cont.)



- * *Finance is a community process:*
 - Multiple stakeholders, institutions, organizations, citizens
 - Requires the community to prioritize

- * *Watershed financing mirrors the resource:*
 - Local problems resulting in local solutions

Why financing?



**Financing is how
things get done!**

Core financing components



* Revenue *sources*



* Financing *instruments*



* Financing *institutions*

Financing components: revenue sources

Financing is about MONEY!

* Revenue source: payers of costs

* Ultimately, we are sources:

* Taxpayers, ratepayers,
consumers, businesses,
investors



Financing components: revenue sources (cont.)

Revenue sources are diverse

- * Appropriate revenue sources are determined by many factors: efficiency, sufficiency, equity, market behavior, community and political will
- * Types of sources: taxes, fees, tolls, governments, foundations, organizations, marketplace, private **equity** (ownership) and wealth

Financing components: Instruments

*The tools and programs necessary for
allocating fiscal resources*

- * Financing instruments connect sources to costs
- * Effective financing instruments reduce costs, thereby maximizing return on investment

Financing components: Instruments (cont.)

*Choice of instrument is
determined by many factors*

- * Efficiency
- * Effectiveness
- * Organizational structure
- * Scale
- * Community capacity and priorities



Financing components: Instruments (cont.)

Debt

- * An obligation to pay or do something:
loans, bonds
- * Allows leveraging – annual or consistent
revenue results in lump sum
- * Why debt? Taking action today is
cheaper than taking action tomorrow



Financing components: Instruments (cont.)

Grants

- * Have served as the foundation for watershed restoration projects
- * Excellent way to seed programs and projects
- * Types: government (subsidies), private (foundations, corporations, individuals)
- * Usually not a long-term solution



Financing components: Instruments (cont.)

Market-based programs

- * Trading and offset programs
- * Fiscal incentives (tax credits)
- * Purchasing and transferring development rights
- * Voluntary programs



Financing components: Institutions

- *The organizations needed to implement the financing process



- *Critical component of community financing capacity

NGOs



Financing components: Institutions

* Local, state and federal governments



* Utilities and authorities



* Non-profits and NGOs



NGOs

* For-profit corporations and businesses



* Private citizens

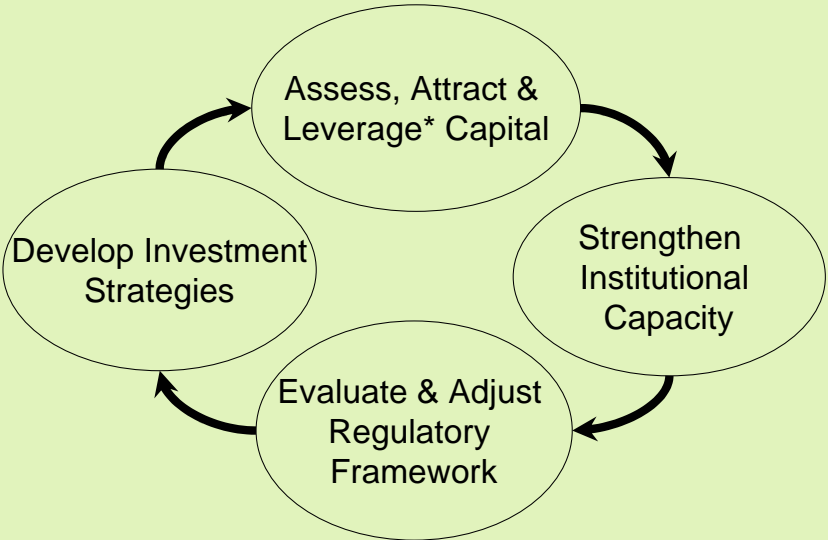
Questions?



Dan Nees, World Resources Institute

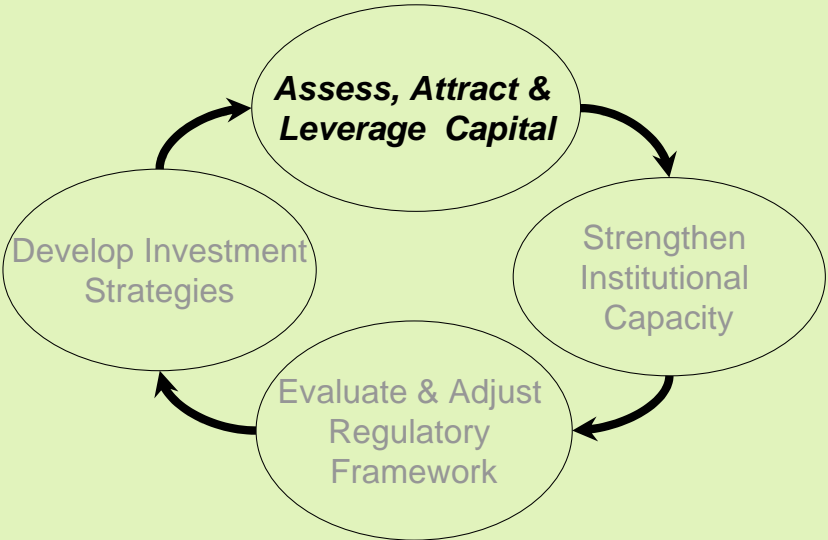
Process of Financing Watershed Protection

Watershed Financing Process



***Leverage** = The degree to which an investor, business, or institution is utilizing borrowed money.

Watershed Financing Process



Assess, attract & leverage capital

Key points on the process:

- ✦ Analyze capacity to attract capital, which includes assessing existing revenue streams and sources
- ✦ Evaluate and recommend new revenue sources and capital approaches
- ✦ Consider and involve key players (city, county, state, etc.) in the financing process

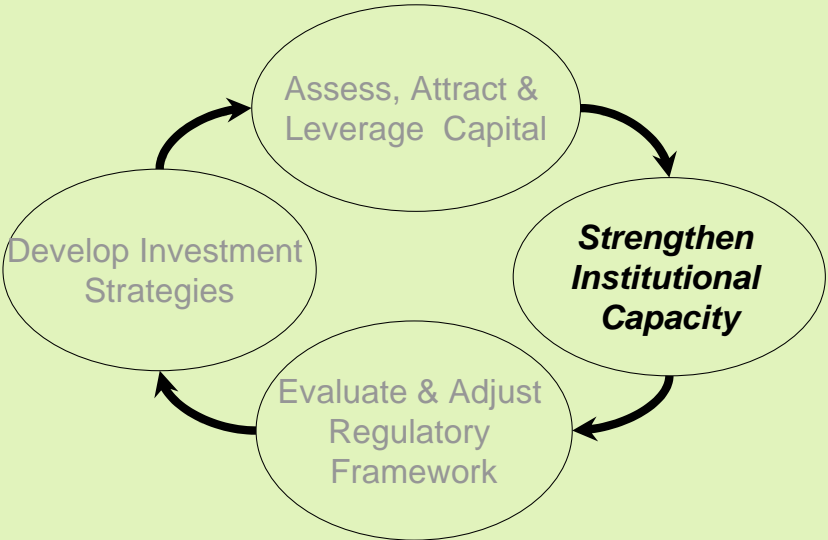
Assess, attract & leverage capital (cont.)

Key issues to consider:



- * Is current revenue capacity sufficient?
- * What types of revenue sources are most appropriate? Public or private?
- * What are the associated legal barriers?

Watershed Financing Process



Strengthen Institutional Capacity

Key points in the process:

- * Who has the financing obligation?
 - Public? (federal, state, local government)
 - Private? (businesses, citizens, consumers)

- * Is the capacity in place to leverage and allocate fiscal resources?

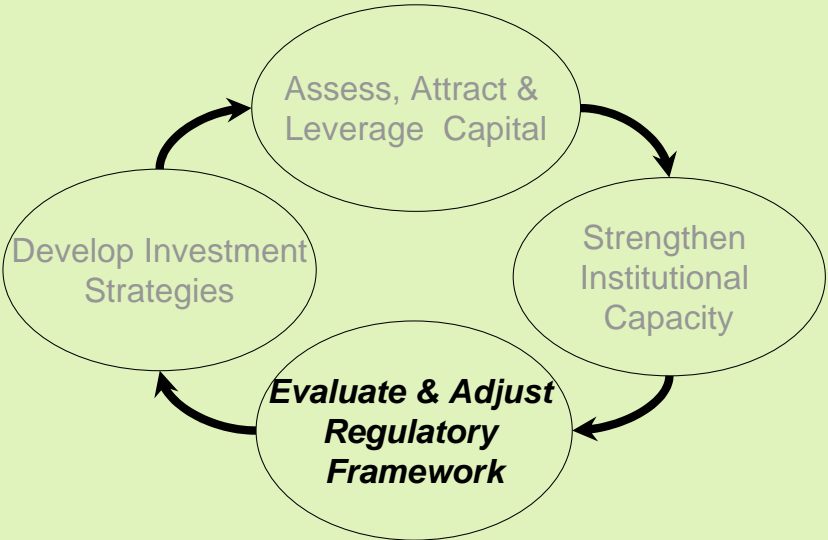
Strengthen Institutional Capacity (cont.)

Key points in the process:

- ✳ If institutional capacity is lacking, where do breakdowns occur?

- ✳ How can capacity be strengthened?
 - ✳ Are new institutions required?

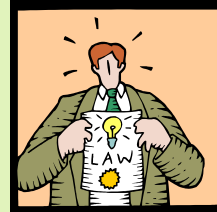
Watershed Financing Process



Evaluate & adjust regulatory framework

Why law and regulation?

- * They correct failures in the marketplace
- * Reduce costs to the community by fostering innovation and compliance

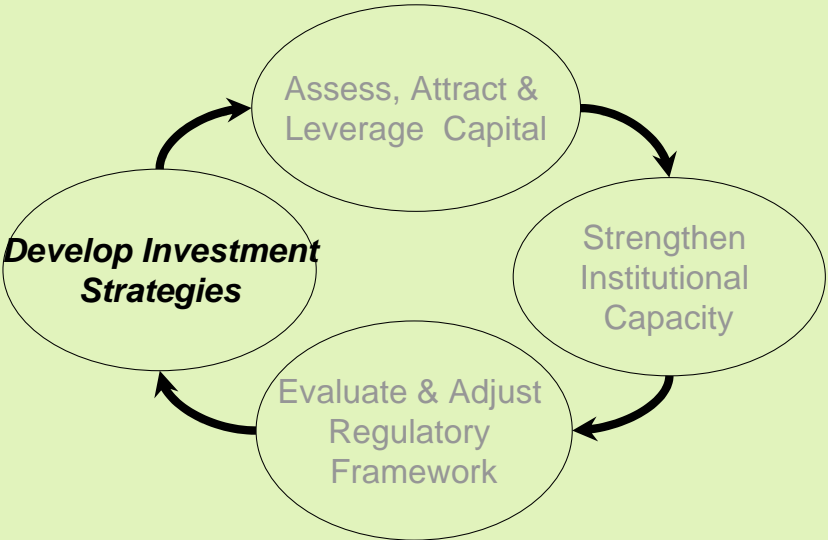


Evaluate & adjust regulatory framework (cont.)

Key issues/questions to consider:

- * Are regulations even necessary?
- * Who has regulatory responsibility?
- * Will regulations improve efficiency?
- * Will regulations shift costs, and if so, to whom?

Watershed Financing Process

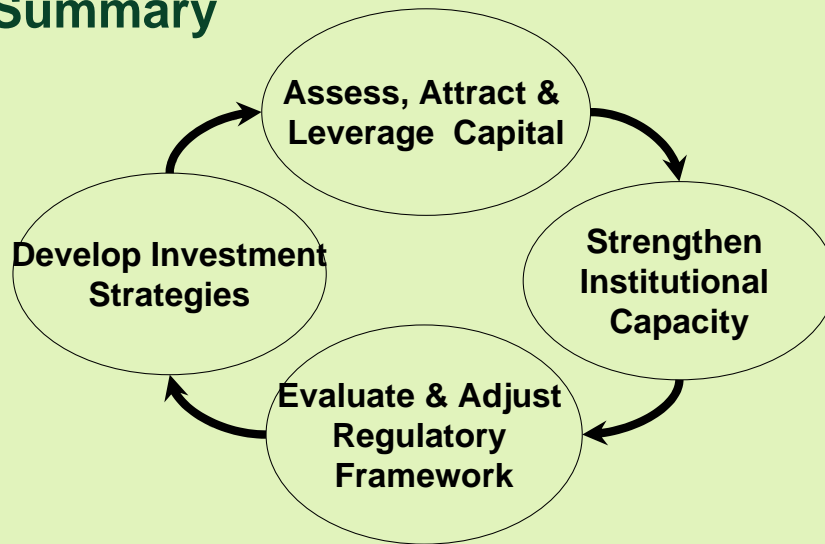


Develop investment strategies

Key issues to consider:

- * Focus on performance, not programs
- * Invest in future success: information, research, monitoring
- * Invest in incentives
- * Coordinate with other community programs and priorities

Watershed Financing Process: Summary



35

Questions?



Dan Nees, World Resources Institute

Join us for our 28th Watershed Academy Webcast,
November 28th, on...



Smart Growth

Visit: epa.gov/watershedwebcasts for more information

37

Case Study Examples

Characteristics of effective financing strategies

- * Community-based, incorporating multiple stakeholder groups
- * Integrated, combining a variety of sources, instruments, and institutions
- * Mirror the watershed, incorporating multiple landowners (public and private), land uses and landscapes



Two case studies

- ✱ Cacapon and Lost Rivers Land Trust, West Virginia: land protection strategy
- ✱ Montgomery County, Maryland: stormwater management

Two case studies (cont.)

Analysis criteria:

- ✳ Developing revenue sources
- ✳ Establishing institutional capacity
- ✳ The role of regulations
- ✳ Key investment strategies

Cacapon and Lost Rivers Watershed, WV

- ✿ The Cacapon and Lost Rivers are actually one river



- ✿ 625 sq mile watershed

- ✿ Located in Hampshire, Hardy and Morgan counties in West Virginia

Cacapon and Lost Rivers Watershed (cont.)

- * Cacapon River suffers from fecal coliform contamination



- * Development pressures from Washington, DC metropolitan area
- * New highway, Corridor H, bisects the watershed

Cacapon and Lost Rivers Land Trust: A strategic approach

- * Established in 1995 to protect the watershed and the area's rural heritage
- * 2002: Healing Waters event prioritized lands for protection
- * 2005: Financing Charrette identified a financing strategy for land protection
- * 2007: Strategic Planning Retreat laid out plan to improve organizational capacity, ensure sustainability, and implement Healing Waters conservation plan – **this costs \$\$\$**



Cacapon and Lost Rivers Land Trust: A strategic approach (cont.)

- ✦ The Trust has set a goal of raising \$200,000 annually by 2010

- ✦ The associated financing strategy includes plans to:
 - ✦ Diversify funding sources
 - ✦ Consider cost-reducing measures
 - ✦ Identify sustainable revenue stream
 - ✦ Examine market-based opportunities
 - ✦ Effectively develop institutional relationships



Cacapon and Lost Rivers Land Trust: financing strategy (cont.)

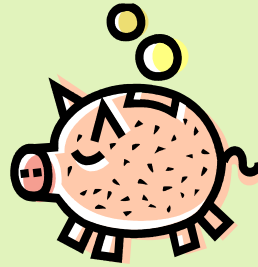
* Diversifying funding sources

- Avoids quick gains and quick declines
- Organizational stability
- Sustainable income despite changes in government budgets, funders' priorities, or market conditions



Cacapon and Lost Rivers Land Trust: financing strategy (cont.)

- * Consider cost-reducing measures
 - Collaboration
 - Regulation
 - Leveraging community priorities



47

Cacapon and Lost Rivers Land Trust: Financing Strategy (cont.)

- * Identify sustainable revenue streams
 - Camp tuition surcharges
 - Management and monitoring fees
 - Mitigation monies
 - Major donor campaign
 - State and federal funds



Cacapon and Lost Rivers Land Trust: financing strategy (cont.)

- ✦ Examine market-based programs
 - ✦ Development rights program
 - ✦ Trade land programs
 - ✦ Tourism



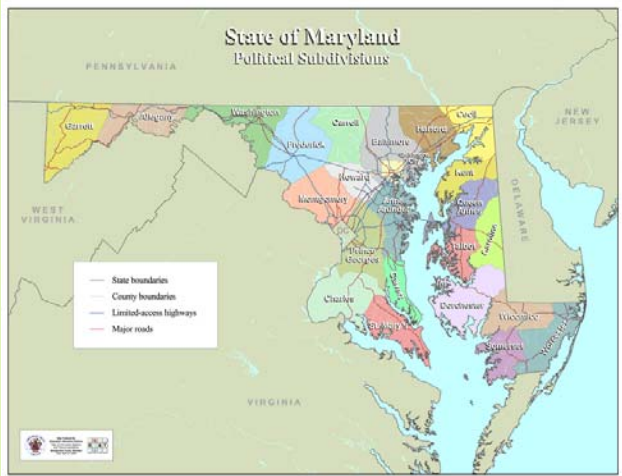
Cacapon and Lost Rivers Land Trust: financing strategy (cont.)

- * **Revenue:** diversifying to minimize changes in any one source of funds
- * **Institutional capacity:** looking to improve internal capacity and develop mutually beneficial partnerships that fill institutional gaps
- * **Regulatory framework:** working with regulatory agencies to coordinate agendas and establish Trust as go-to for mitigation and enforcement \$\$
- * **Investment:** parcel-based land preservation that has been strategically prioritized

50

Montgomery County, MD Stormwater Utility

Montgomery County, MD



Montgomery County, MD

- ✱ Just north of Washington, DC
- ✱ Total population: almost 1 million (growing)
- ✱ Very affluent, very urban
- ✱ Lots of urban stormwater runoff

Stormwater utilities

- ✦ Public enterprises developed to support urban stormwater programs
- ✦ Resulted from increased laws and restrictions: amendments to the Clean Water Act
- ✦ More than 500 stormwater utilities exist across the United States

Montgomery County, MD

Multiple program goals

- * Support required permit obligations
- * Create efficiencies/reduce redundancies
- * Establish and maintain fiscal capacity

Montgomery County, MD (cont.)

Revenue source

- * All county citizens and businesses (tax-exempt institutions are NOT exempt from fee)
- * Revenue is collected as part of property tax bills

Montgomery County, MD (cont.)

Revenue source

- * Rate is based on equivalent dwelling unit (EDU)
- * EDU: one average single family unit
- * EDU in Montgomery County: 2,400 ft²
- * Rate is established annually
- * Current rate: \$25 per EDU

Montgomery County, MD (cont.)

Institutional structure

- * County established new institution to manage stormwater programs
- * Created efficiency: reduced redundant County programs
- * Program focuses on operations and maintenance of the system

Montgomery County, MD (cont.)

Regulatory framework

- * Stormwater is now regulated: NPDES permitting program
- * Montgomery County is permitted under the Municipally Separate Storm Sewer System (MS4) program
- * Phase 1 community (big)
- * Enforced by the state

Montgomery County, MD (cont.)

Investment strategy

- * Program pays for maintenance of stormwater facilities:
 - Inspection
 - Construction/reconstruction
 - Modifications

- * Financing tools: program does NOT support debt financing (pay as you go)

Montgomery County, MD (cont.)

* **Revenue:** sustainable, dedicated

* **Institutional capacity:** improved and expanded

* **Regulatory framework:** foundation of the entire process

* **Investment:** focus on maintenance

61

Conclusions

- ✳ Finance is the process for success
- ✳ Watershed financing requires the entire community to participate
- ✳ Finance is how things ultimately get done

For more information:

Dan Nees
People and Ecosystems Program
World Resources Institute
10 G Street, NE
Washington, DC 20002
(202) 729-7786
dnees@wri.org
<http://www.wri.org>

University of Maryland
Environmental Finance Center
1104 Preinkert Field House
College Park, MD 20742
(301) 405-5036
efc@umd.edu
<http://www.efc.umd.edu>

Questions?

Tim Jones, USEPA



Dan Nees, World Resources Institute

Interested in finding out more information on financing? Check out our additional resources...

<http://www.clu-in.org/conf/tio/owwtrfin/resource.cfm>

Did you enjoy this Webcast? Tell us your thoughts and ideas! Fill out our evaluation form...

<http://www.clu-in.org/conf/tio/owwtrfin/feedback.cfm>