



**Sustainable Funding Options
for a Comprehensive
Riparian Restoration Initiative**

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Sustaining Colorado Watersheds
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a non-profit alliance
working to restore riparian lands

Tamarisk Coalition

P.O. Box 1907 · Grand Junction, CO 81502

Outline



Tamarisk Coalition Background
Restoration Challenges/Funding Needs
Sustainable Funding Options

Purpose

Process

Governance Structure Options

Purpose

Process

Key Findings
Next Steps



Tamarisk Coalition



The Tamarisk Coalition's mission is to provide education and technical assistance in the restoration of riparian lands

- Local, state, & regional riparian invasive plant planning efforts; including restoration activities
- Tamarisk and Russian olive research and management symposiums/conferences
- Native plant materials program
- Inventory & mapping
- Tamarisk biological control monitoring
- Restoration funding identification and coordination



The Problem



Restoration need

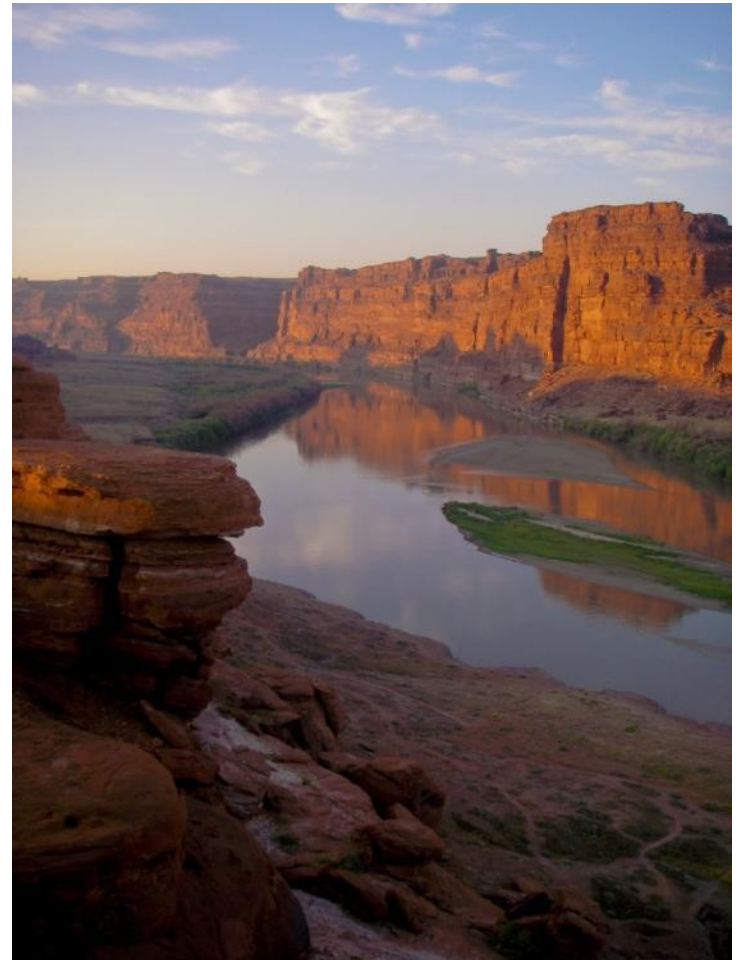
Restoration requires significant investment

Traditional funding resources are not enough

Geographic and Time Scale

Organized strategy does not exist

For large-scale restoration in the Colorado
River Basin



Coordinated Research Approach



SUSTAINABLE FUNDING OPTIONS FOR A
COMPREHENSIVE RIPARIAN RESTORATION
INITIATIVE IN THE COLORADO RIVER BASIN

December 15, 2010

Prepared for the Walton Family Foundation



Colorado River near Moab, Utah

Tamarisk Coalition

Sustainable Funding Options

*Discussion of Potential Governance
Structure Options*

The Nature Conservancy

*A Compendium of Financing Sources
and Tools to Fund Freshwater
Conservation*



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www.tamariskcoalition.org/FundingResources.html

TC Research: Sustainable Funding Options



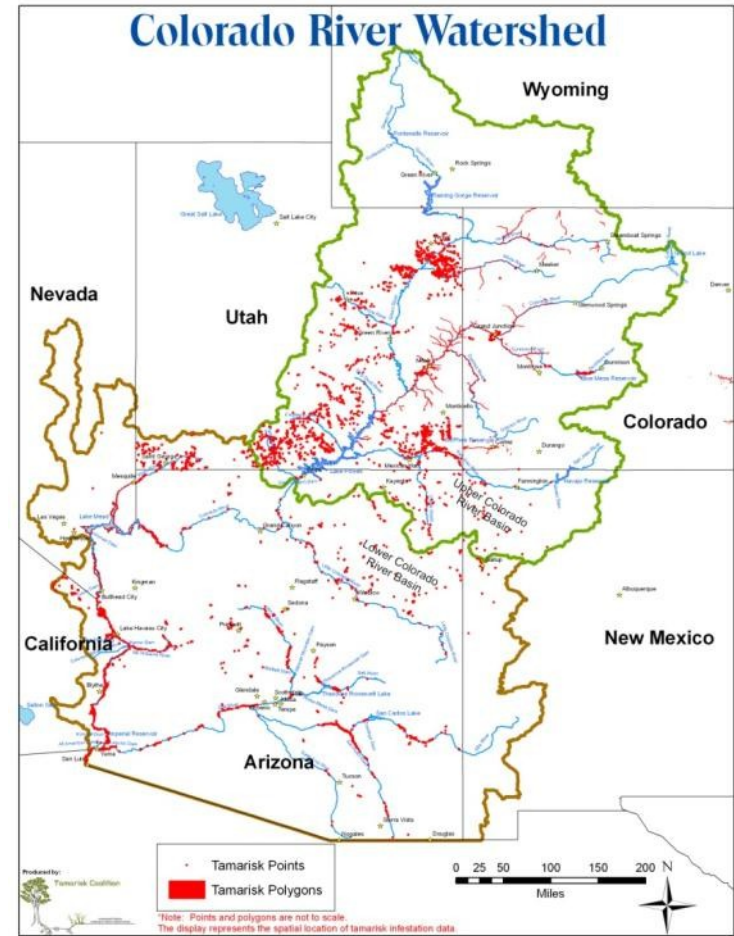
Purpose

Explore potential **long-term** and **sustainable funding options** that will be necessary a basin-wide riparian restoration initiative

Application

Report focus is on Colorado River Basin

Applies to other western rivers



TC Research: Sustainable Funding Options



Definition

“...sustainable funding is defined as a **perpetual revenue stream** that is **sufficient in magnitude** to accomplish a program’s goals and reliable enough to confidently develop **long-term maintenance and monitoring** programs.”

Process

Initial planning and literature review

Defining the mechanisms

Case study analysis

White paper – mechanism viability

Recommendations



Initial Planning and Literature Review



Federal conservation fund

Capitalized by a single or a few distinct tax mechanisms (e.g. Duck Stamp).

Appropriation funded

[and] government managed, both federal and state (not sustainable).

Government-supported market creation

(e.g. Cap and Trade, Payment for Ecosystem Services).

Self-organized private market funding

(e.g. user fees, certification mechanisms, and private contracts).

Voluntary, private, non-market funding

(e.g. donations and lotteries).

Hybrid approach

Involving two or more of the above funding mechanism categories.

Sustainable Funding Mechanisms: Appendix A



Categories

Tax and fee based revenue mechanisms

Regulatory based revenue mechanisms

Lending based revenue mechanisms

Market based revenue mechanisms

Volunteer or philanthropic based revenue mechanisms

Glossary and Examples

Defined specific revenue generating mechanisms

Evaluated the mechanisms uses within various case study examples

Related the mechanism to use in the Colorado River Basin

Funding Mechanisms Glossary: Example



Water Fee (a.k.a. water tax, or water supply tax)

Excise tax paid by water users and assessed by the supplier based on quantity of water consumed or allocated; fee based on tiered or sliding type scale to provide for basic needs, discourage wasteful use, etc.

Examples

City of Portland, OR; City of Fort Collins, CO; New York City, NY

Applicability

...tax structure of utility provider could be structured to include a small fee or surcharge that goes directly into a local or state designated restoration fund; assessed fee should be proportionate to the quantity of use and could be applied to residential, commercial, industrial and agricultural users within the affected watershed, but also to trans-basin diversion users...

Funding Mechanisms Glossary: Example



Washington State's Puget Sound Partnership (PSP) – Funding Sources

- Private Contributions
- Certification Programs
- Compensatory Mitigation
- Public Benefit Rating System (PBRs)
- Seattle Environmental Program General Funds
- County Environmental Programs
- PSP In-Lieu Fee Program
- Multiple Community Based Non-Profit Organizations
- Multiple Private Foundations
- Water Quality Compliance Spending
- Sewer, Water & Storm water Fees
- Corporate Environmental Performance Initiatives
- Mitigation Banks
- State General Funds (DOE, DFW)
- State Appropriations (Salmon Recovery Grants, etc.)
- State General Obligation Bonds
- Federal Formula Grants
- Direct Congressional Appropriation
- Federal Lands Management Activities (NPS, USFS, Military Bases)
- FHA mitigation projects
- USACE /EPA Regulation and Enforcement Spending

Case Study Analysis: Appendix B



Large Federal Programs

Single Revenue Source

Pittman-Robertson Act/1937

Dingell-Johnson Sport Fish Act/1950

Migratory Bird Conservation Act/1929

Migratory Bird Hunting Stamp Act/1934

North American Wetlands Conservation Act /1989

Conservation and Reinvestment Act (CARA)

Harbor Maintenance Trust Fund

US Commission on Ocean Policy

Domenici-Landrieu Gulf of Mexico Energy Security Act/2006

Highway Trust Fund

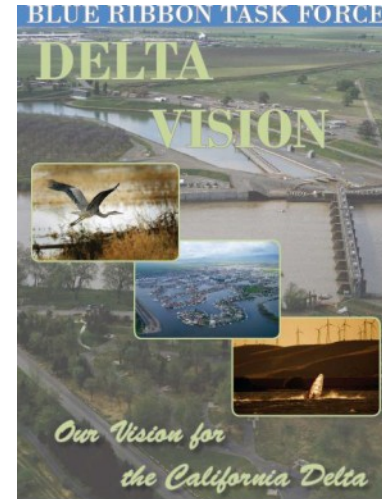


Case Study Analysis: Appendix C



Large-Scale Watershed Restoration Programs Multiple Revenue Sources

- Platte River Restoration Program
- Columbia River Basin
- California Bay-Delta
- Everglades Restoration Program
- Great Lakes Restoration Program
- Puget Sound Partnership
- Chesapeake Bay Restoration Program
- National Estuary Program
- Murray-Darling Watershed Restoration (Australia)
- Working for Water Programme (South Africa)
- European Union's Water Framework Directive



Funding Mechanism Viability Rating



Represents the Tamarisk Coalition's opinion:

- ... of whether or not the mechanism should be given further consideration
- ...at various initiative levels (local, state, federal).

The rating is based on the following qualifiers:

1. Potential Significance
2. Reliability
3. Constraints of the Colorado River Basin
4. Political Acceptability

Viability Rating – Potential Significance



“...the magnitude of revenue that each source could potentially bring to a restoration initiative.”



High

Major source of funding, possibly a stand-alone source.



Moderate

A less influential funding source that would likely need to be paired with other sources to create substantive funding.



Low

A relatively insignificant quantity of funding, must be paired with other sources.

Viability Rating - Reliability



“...the perpetual nature of a revenue source.”



High

A source that is minimally affected by shifting political leadership or economic recession.



Moderate

A source somewhat affected by shifting political and economic interests but will persist over time.



Low

A source highly susceptible to political and economic shifts.

Viability Rating – Constraints of the Basin



“...catch-all qualifier subjectively examines the funding mechanisms’ physical, social, and economic constraints as they relate to the CRB...”

“...in certain cases a mechanism has already been employed for other purposes which would exclude the mechanism from further consideration in the CRB.”



Viability Rating – Political Acceptability



“Relating to social and economic realities, this qualifier builds upon the Colorado River Basin constraint qualifier by specifically considering the political climate of the CRB.”



High

A mechanism that has low political risk.



Moderate

A mechanism that could be passed if considerable political considerations were adequately addressed.



Low

A mechanism that would be nearly impossible to implement.

Viability Rating: Example

TABLE 1: Tax and Fee Based Sustainable Revenue Generating and Supporting Mechanisms for Ecological Restoration in the Colorado River Basin (alphabetically listed)

REVENUE MECHANISM	Potential Significance	Reliability	CRB Constraints and Opportunities	Political/Social Acceptability	OVERALL VIABILITY
Instream Flow Tax Credits	LOW to MODERATE, depending on the terms of the tax credit, replaces need for funds, but not likely to be a significant source.	LOW to MODERATE, many variables including incentives and market conditions will affect its use. Already shown to work in Colorado	Colorado already has ISF tax credit; same program could be explored in other CRB states. Increasing values of water will place pressures on irrigation users to sell or donate water rights; this would provide another option for farmers and ranchers.	HIGH, as a voluntary program, there would be little political opposition, increase public awareness and provide options to rural land stewards.	MODERATE for a localized initiative.
					HIGH for a state initiative.
					LOW for a federal initiative.
Recreational Equipment Sales Tax – Federal and/or State	LOW to HIGH, depending on tax rate and need to split funding among multiple programs.	HIGH, tax associated with growing economic sector.	River and reservoir recreation including aesthetic quality is important economic industry in CRB. The hunting and Fishing industry is closely tied to riparian community health. Several recreational equipment taxes already exist in the CRB states.	LOW to MODERATE, for hunting and fishing supplies as these are already taxed. LOW to MODERATE, for other recreational items such as camping gear, campers, OHVs, boats, boat motors, rafting gear, GPS units, mountain bikes, etc. This would be a new tax and would require support beyond the conservation community. Would require industry support.	N/A for a localized initiative.
					MODERATE to HIGH for a state initiative.
					LOW to HIGH for a federal initiative.
Resort Tax/Ecotourism Payments	LOW to HIGH, depending on tax rate and need to split funding among multiple programs.	MODERATE to HIGH, tax associated with growing economic sector.	Most tourism oriented locations have already taken advantage of this concept to fund other programs. Some communities may determine that maintaining river is critical to maintaining tourism, so there may be localized potential.	LOW to MODERATE, a new tax, it would likely meet resistance during a time of already slow tourism industry.	MODERATE for a localized initiative.
					LOW for a state initiative.
					LOW for a federal initiative.

Top 5 Programmatic Lessons-Learned



No single funding source will be sufficient

The problem must be defined and supported by solid scientific and economic justifications

Bipartisan political support is essential; requires political will

Must be supported by diverse partners; those who would be paying must be advocates

Clear connection needs to be made between how revenue is generated and how it is to be used

Key Findings



Long-term sustainable funding has not been achieved
Large-scale restoration progress in projects surveyed has been slow and difficult to monitor

- Grassroots or sub-watershed level efforts
 - Critical for garnering public support for a larger initiative
 - Provide education
 - Build awareness
 - Demonstrate successful projects



Governance Structure Options



Definition

Formal/informal rules, social norms, and structures that combine to formulate and advance joint objectives

Creating direction, control, and coordination

Enabling new statues, resources, structures, rules and routines when necessary

Process

Literature review

Re-review of case studies in Sustainable Funding Options

Projected viability of options in Colorado River Basin

Conclusions and next steps

Literature Review



Categories of governance structure

Inter-organizational network or “network”

Collaborative organization form or “second-order organization”

Both involve collaborative frameworks but differ in extent of formalized structure

Market structures

Structured interaction between organized economic agents

Increased capacity in existing organizations or agencies



Watershed Case Studies Lessons Learned



Re-examines programmatic lessons learned

Successful governance structure components:

- Trust, Funding, and Time
- Adequate Power to Drive Action
- A Recognized Problem (a crisis helps)
- Appropriate Scope
- Effective Leadership
- Appropriate Participation/Membership
- Properly Aligned Environmental, Economic & Social Values
- Clear and Specific Goals
- Effective Implementation
- Adequate Regulation
- Adequate Authority
- Adequate Technical Resources
- Adequate Monitoring

Governance Structure Viability

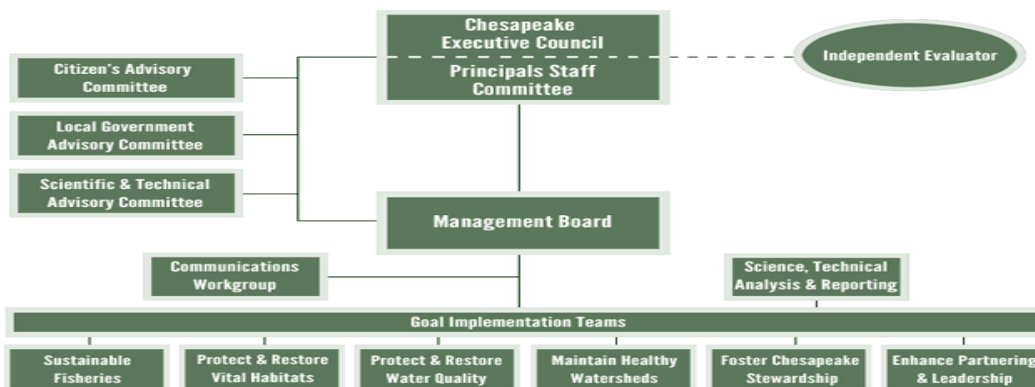
Components of the Viability Description

Various structures employed in each case study examined

Type of funding mechanisms employed to support each structure or implementation of its directives

Pros and cons of structures' performance, with relation to funding where applicable

Potential application of the structure type to Colorado River



Next Steps



Education

Share research and lessons learned

Continue to identify resources and potential application

2012 Tamarisk Symposium, Feb . 15-17, Grand Junction, CO

Coordination

Coordinate with other governance structure research

Carpe Diem West

University of Colorado's Western Water Policy Program

Continue to work with TNC and others to explore options and strategies for implementation



Next Steps



Provide assistance to collaborative partnerships
Focused on restoration in the context of invasive species management

Involvement in funding subcommittees and financial strategies

Dolores River Restoration Partnership

Northwest Colorado Watershed Partnership

Escalante River Watershed Partnership

Southeastern Utah Tamarisk Partnership

Arkansas River Watershed Partners

Verde River Watershed Partners

Others...

We're Hiring!

Funding Specialist – Application deadline 10/14



Questions?



www.tamariskcoalition.org/FundingResources.html

Disks available by request

