Integrating Ecosystem Services into USFS Policy and Operations

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NESST core team, US Forest Service

Overview

- USFS Planning rule, Memorandum and NESST.
- E.S. Champions Forum and NESST.
- New NESST General Technical Report.
- Planning, performance and partnerships.
- Ongoing efforts.

Ecosystem Services on Public Lands

- 2012 Forest Service Planning Rule
- Ecosystem Services into Federal Decision Making (OMB, CEQ Directive)
- NESST- National Ecosystem Services Strategy Team

USFS Planning Rule

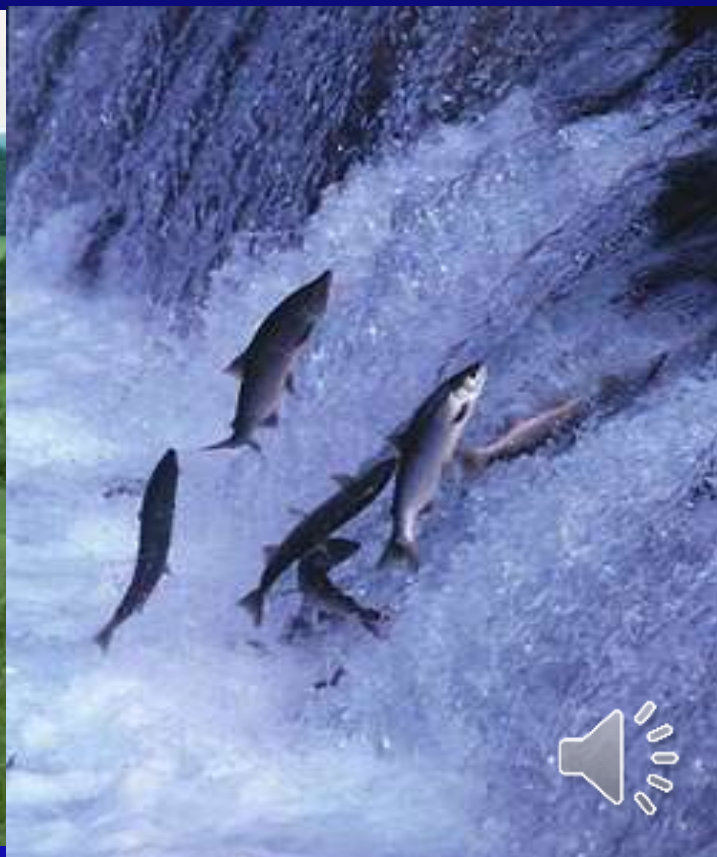
- Ecosystem services and multiple uses "considering a full range of resources, uses and benefits"
- MUSYA- timber, water, recreation, range, wildlife & fish.
- Early adopter forests are using Planning Rule for forest plan revisions and assessments.
- 2015 Directives state the N.F. should include "key ecosystem services" in forest plan revisions.
- E.S. also includes cultural heritage values, other services not included in multiple use.

Incorporating Ecosystem Services into Federal Decision Making

- October, 2015 –CEQ, OMB Directive.
- Directs agencies to develop and institutionalize policies for ecosystem services in planning, investment and regulatory context.
- Each agency developing work plan due March, 2016.
- Implementation guidance, CEQ convening subject matter experts for “community of practice” concept.

NESST- National Ecosystem Services Strategy Team

Robert Deal, Emily Weidner, Mary Snieckus, Tommie Herbert, Jonas Epstein, Krista Gebert, Tania Ellersick, Greg Arthaud, Nikola Smith, many others



Historical Context

- Ecosystem Services Champions Forum
  - Two day grassroots effort in 2012 with NFS, R&D and S&PF
  - Champions Forum led to **four major objectives-framework**
  - Develop common language & understanding of ES
  - Relevance of the ES to agency
  - BMP, tools for planning, mgmt.
  - Better communication about ES across FS Deputy Areas
- Framework for the agency

Historical Context

- Ecosystem Services Framework for Agency
  - Associate Deputy Chiefs directed Champions group on different path
  - Instead of framework, wanted to develop policy for agency for incorporating ecosystem services into FS programs and operations.
  - Led directly to chartering of National Ecosystem Services Strategy Team (NESST)
  - NESST charter in 2013, 2016

NESST Purpose

"The National Ecosystem Services Strategy Team was established to collaboratively develop national strategy and policy around ecosystem services and integrate it into Forest Service programs and operations."

OPPORTUNITIES

- Consider a broad suite of ecosystem services in decision-making and priority setting
- Quantify and communicate in terms of benefits to people through measurement and reporting
- Connect providers and beneficiaries of ecosystem services through partnerships and investments

Key Contributors

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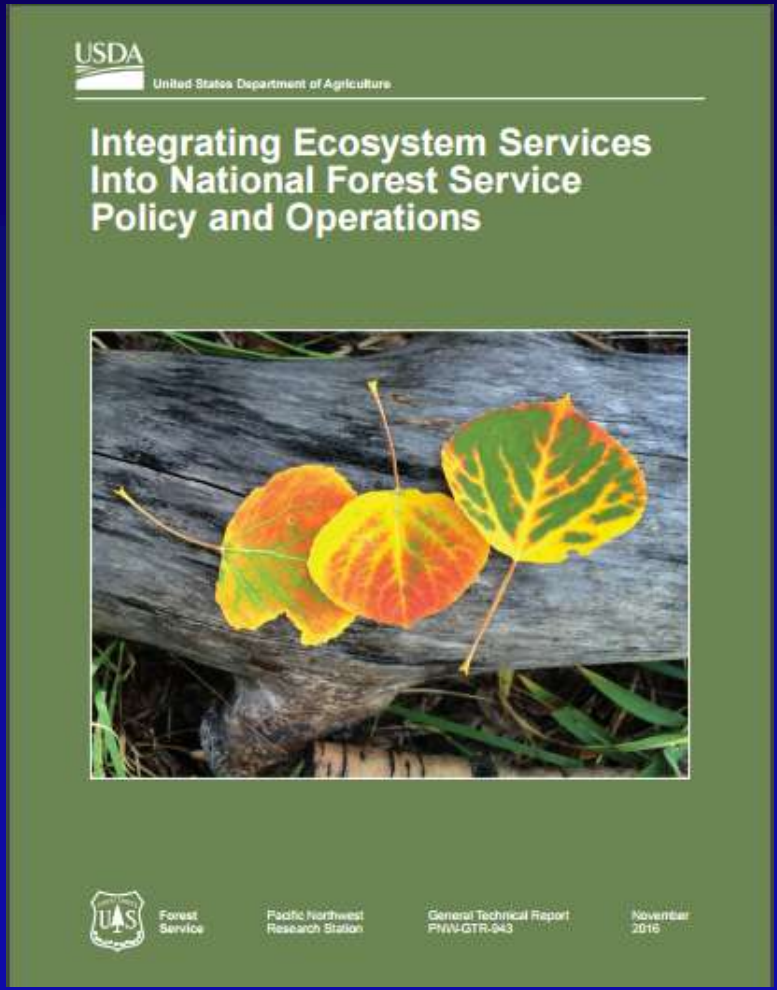
- Introduction
- Ecosystem Services and USFS
- Elements of an Ecosystem Services Approach
  - Decision-Making and Analysis
  - Measuring, Reporting, Communicating
  - Partnerships and shared investments in ES
- Synthesis
  - Common Needs
- Next Steps



http://www.fs.fed.us/pnw/publications/gtrs.shtml

The Opportunities

- **Planning:** Consider a broad suite of ecosystem services in decision-making and priority-setting
- **Performance:** Quantify and communicate in terms of benefits to people through measurement and reporting
- **Partnerships:** Connect providers and beneficiaries of ecosystem services through partnerships and investments

Planning

Considering the full suite of objectives in analysis, decision-making and priority-setting

- Forest Planning
- Project Level Planning
- Prioritizing Restoration Activitie
- State Forest Action Plans

Example:
Cool Soda All-Lands Restoration Proposal
Willamette, Sweet Home Ranger District

Project-Level Planning

Community Discussions	• Understanding of ES • Proposed projects
Mapping/ Analysis	• Ecological drivers • Assess trade-offs
Rank Priorities	• Impacts on ecosystem services benefits • Employment
Select Actions	• District Ranger to identify and implement management action

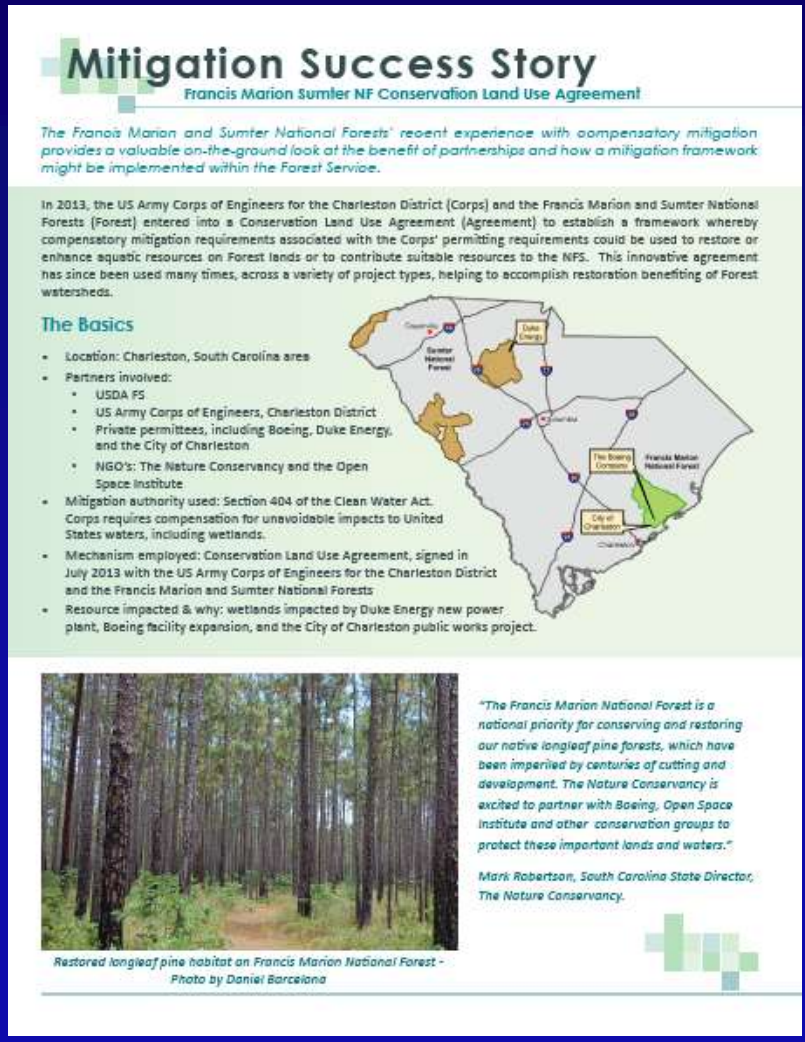
Assess project-level impacts using a collaborative approach

Solicit values and priorities from local communities

Highlight potential outcomes of actions

Ongoing Development

Landscape-level planning and ecosystem services benefits analysis is an important component to following the mitigation hierarchy and developing compensatory mitigation partnerships.



Mitigation Success Story

Francis Marion Sumter NF Conservation Land Use Agreement

The Francis Marion and Sumter National Forests' recent experience with compensatory mitigation provides a valuable on-the-ground look at the benefit of partnerships and how a mitigation framework might be implemented within the Forest Service.

In 2013, the US Army Corps of Engineers for the Charleston District (Corps) and the Francis Marion and Sumter National Forests (Forest) entered into a Conservation Land Use Agreement (Agreement) to establish a framework whereby compensatory mitigation requirements associated with the Corps' permitting requirements could be used to restore or enhance aquatic resources on Forest lands or to contribute suitable resources to the NFS. This innovative agreement has since been used many times, across a variety of project types, helping to accomplish restoration benefiting of Forest watersheds.

The Basics

- Location: Charleston, South Carolina area
- Partners involved:
  - USDA FS
  - US Army Corps of Engineers, Charleston District
  - Private permittees, including Boeing, Duke Energy, and the City of Charleston
  - NGO's: The Nature Conservancy and the Open Space Institute
- Mitigation authority used: Section 404 of the Clean Water Act. Corps requires compensation for unavoidable impacts to United States waters, including wetlands.
- Mechanism employed: Conservation Land Use Agreement, signed in July 2013 with the US Army Corps of Engineers for the Charleston District and the Francis Marion and Sumter National Forests
- Resource impacted & why: wetlands impacted by Duke Energy new power plant, Boeing facility expansion, and the City of Charleston public works project.

Restored longleaf pine habitat on Francis Marion National Forest - Photo by Daniel Barcelona

"The Francis Marion National Forest is a national priority for conserving and restoring our native longleaf pine forests, which have been imperiled by centuries of cutting and development. The Nature Conservancy is excited to partner with Boeing, Open Space Institute and other conservation groups to protect these important lands and waters."

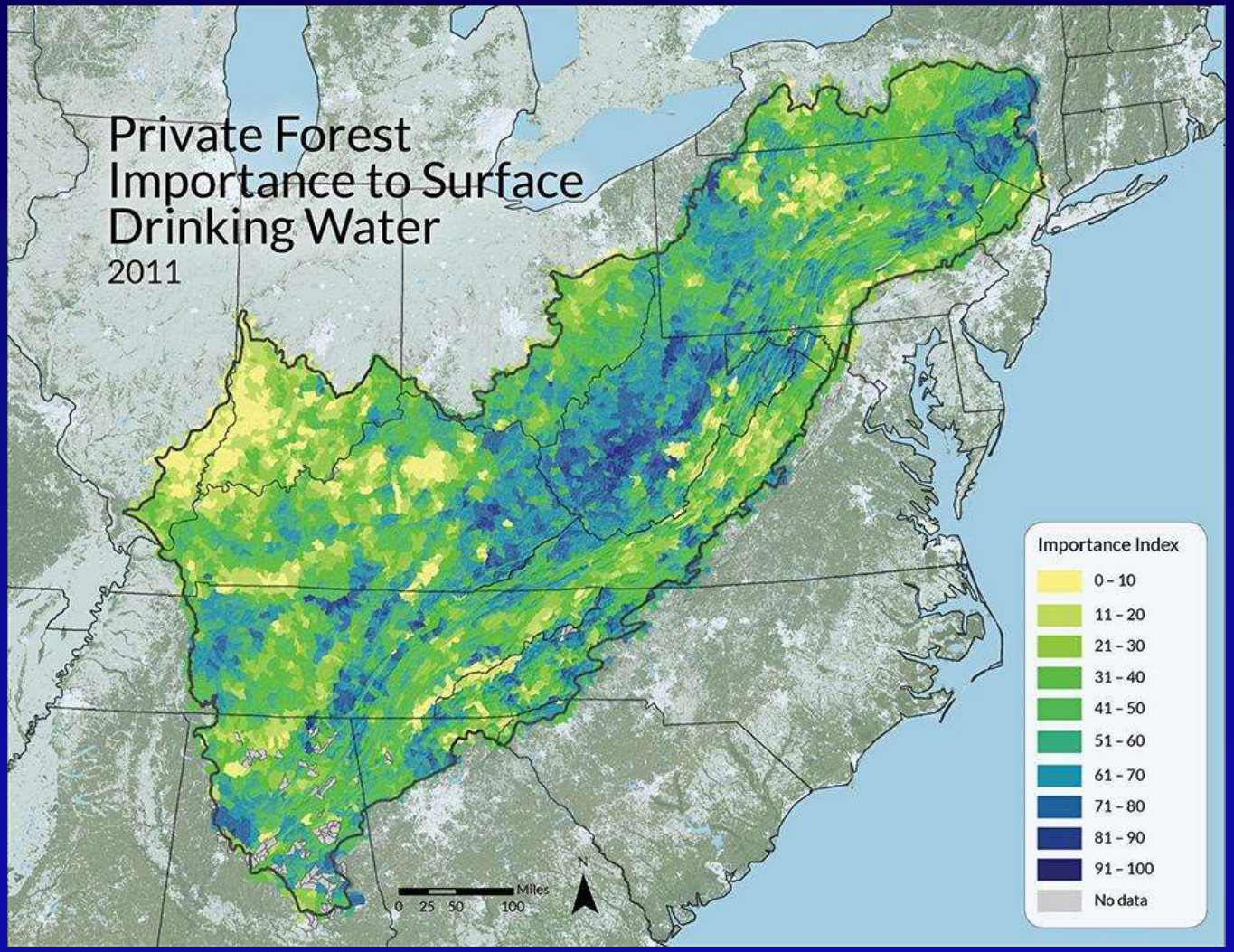
Mark Robertson, South Carolina State Director, The Nature Conservancy.

Performance

Quantifying and communicating the value of resources and impacts of management actions in terms of benefits to people

- National Assessments
- Performance Management
- Inventory Monitoring & Assessment

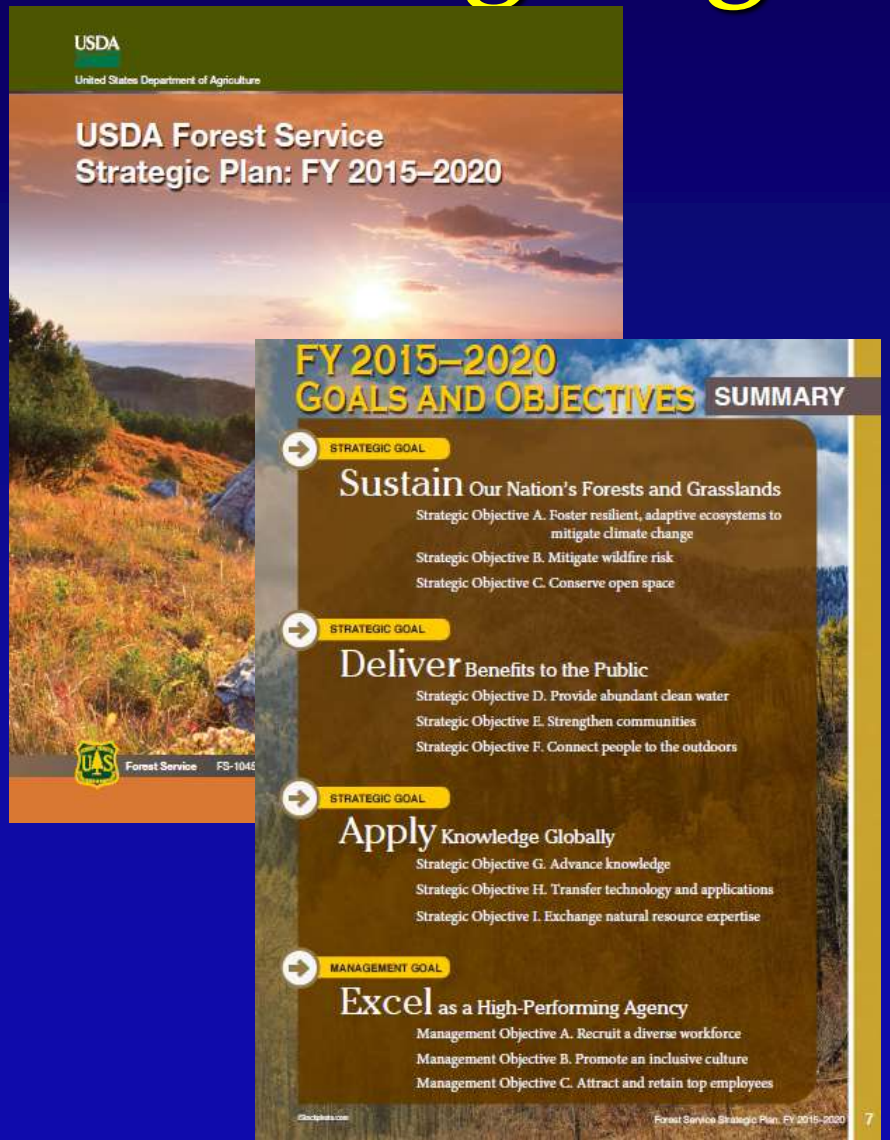
Example: National Assessments

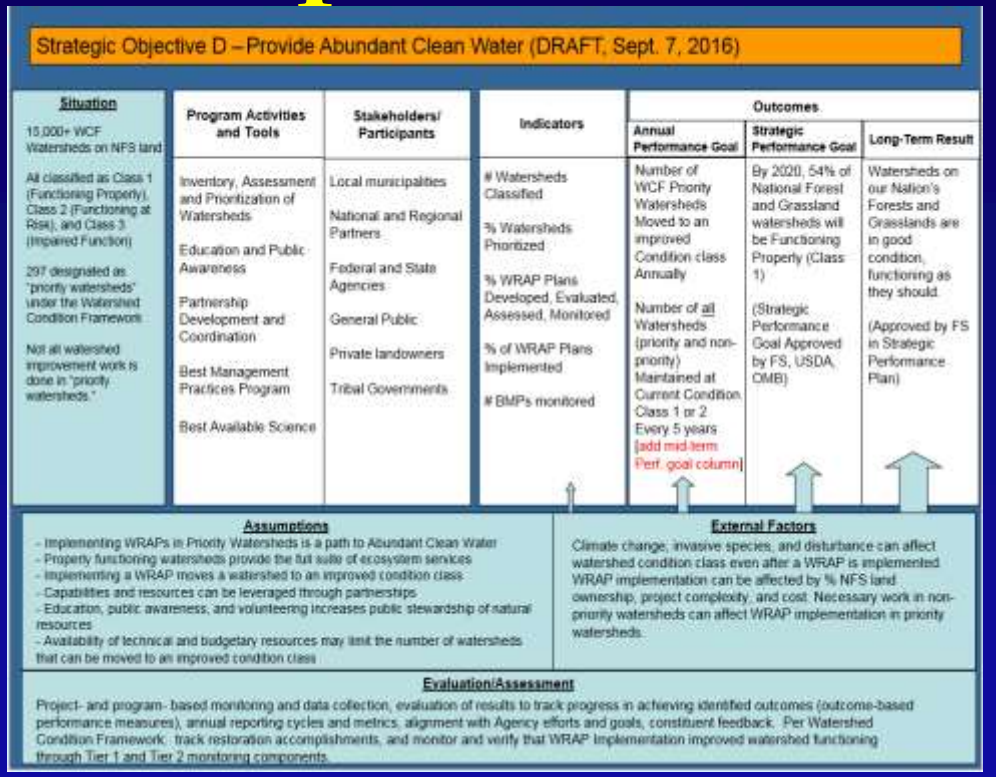


Increasing focus on geospatial tools to quantify benefits delivered to the public

Characterization of threat and justification for targeted restoration

Ongoing Development





Partnerships

Connecting providers and beneficiaries of ecosystem services through partnerships and shared investments.

- Incentives for Private Landowners
- Partnerships for Shared Investments
- Damage Assessments
- Environmental Markets

Example: Watershed Investment Partnerships

- Utilities
- Municipalities
- Multi-Sector/ Water Funds
- Federal Agencies
- Corporations
- Consumers/ Communities

VAIL RESORTS
EXPERIENCE OF A LIFETIME™

DENVER WATER

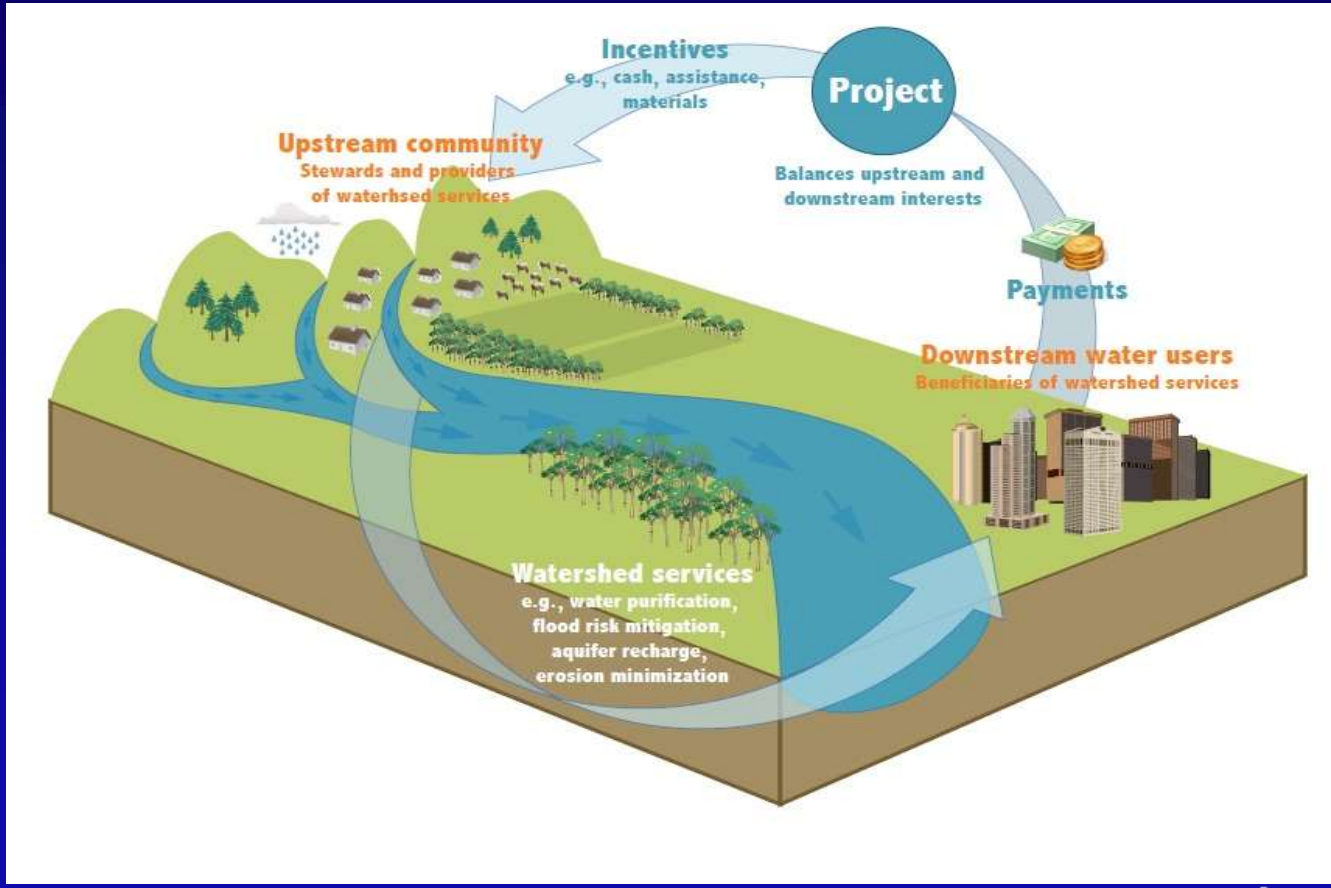
The Nature Conservancy

Coca-Cola

Environmental Markets & Investments

Facilitate environmental markets by:

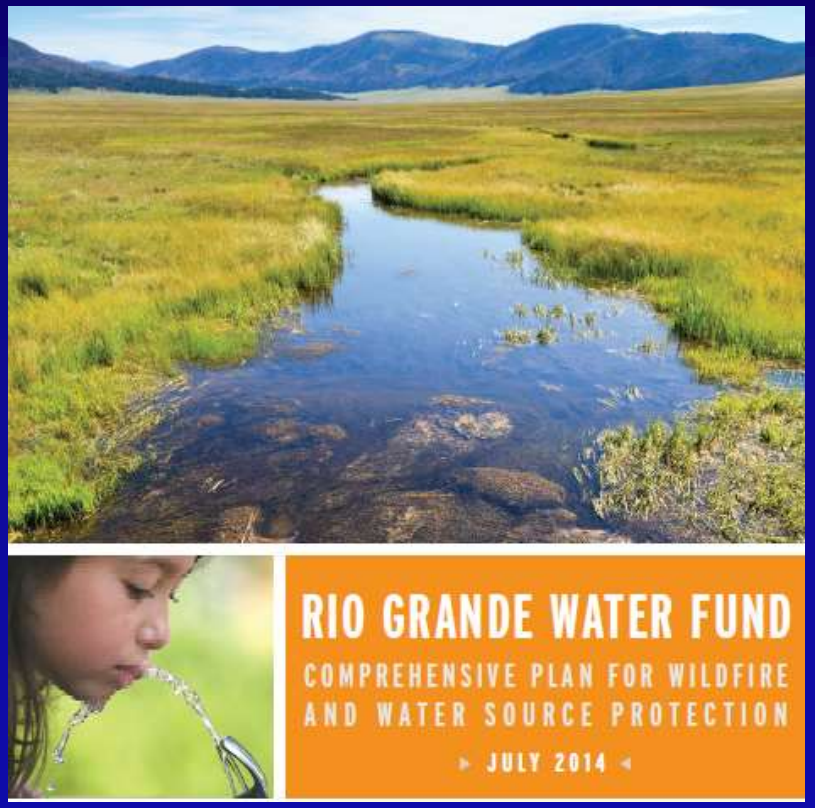
- creating enabling infrastructure,
- generating credits from NFS land, and
- reducing market barriers for private landowners



http://www.forest-trends.org/embargoed/water_2012/sample_watershed_large.jpg

Ongoing Development

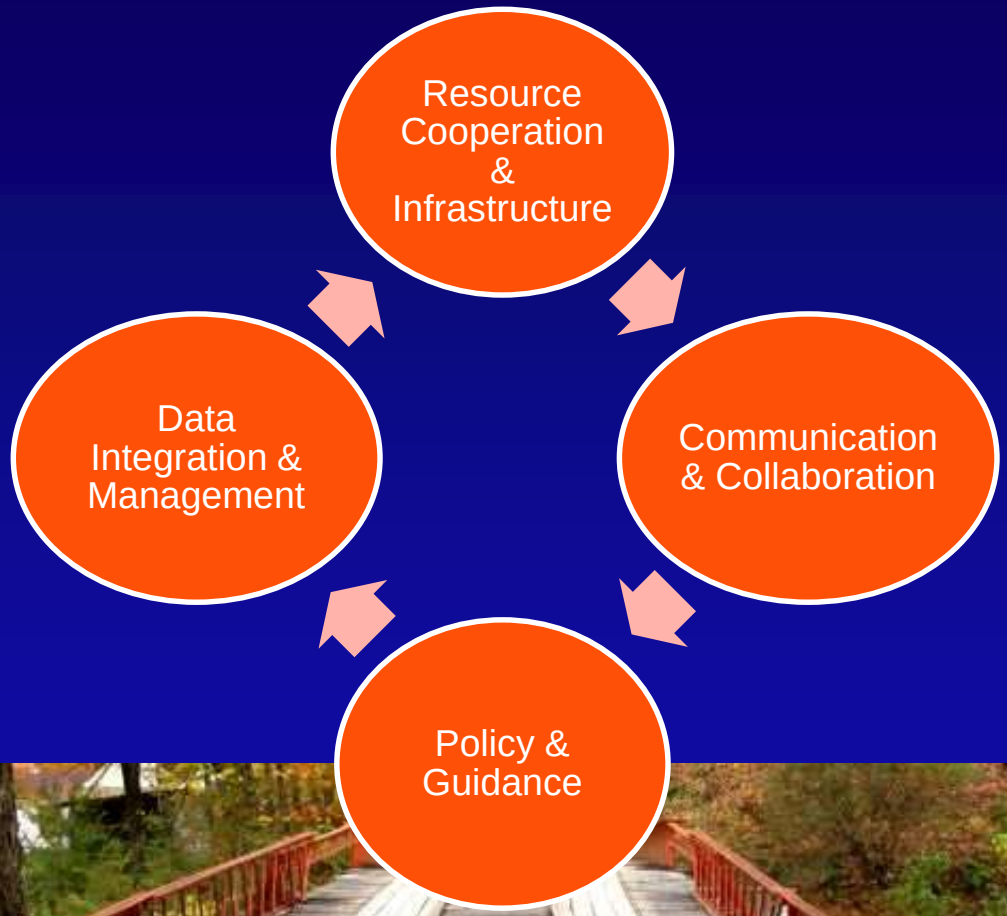
- Bonding mechanisms for accelerated restoration
- Models for cross-boundary compensatory mitigation banking
- Carbon project development on lands with FS landowner assistance funding
- Bringing water funds to scale



Summary of Opportunities

- Ecosystem services **science** can help us analyze trade offs between management decisions and plan for continued public benefits at the landscape scale
- Ecosystem services **tools and methodologies** can help us quantify and communicate the impacts of Forest Service management
- Ecosystem services **concepts** can help us to build partnerships that connect providers and beneficiaries and invite diverse stakeholders to share in our agency's mission

Common Needs



Next Steps

Resources & Infrastructure	Data Management	Communication	Policy & Guidance
• New Sharepoint site to help practitioners across the agency connect, share, learn	• New ES tools portal on USDA website – to be released in January	• Continue monthly webinars • New Champions monthly forum for peer-to-peer sharing	• Addressing authority for new financial mechanisms • Technical guidance for quantification

General Technical Report → National Ecosystem Services Action Plan (17-18)


QUESTIONS?