



Nature for Water

Sustainable Forestry Initiative: Working Forests as Water Infrastructure

SFI – September 18, 2013

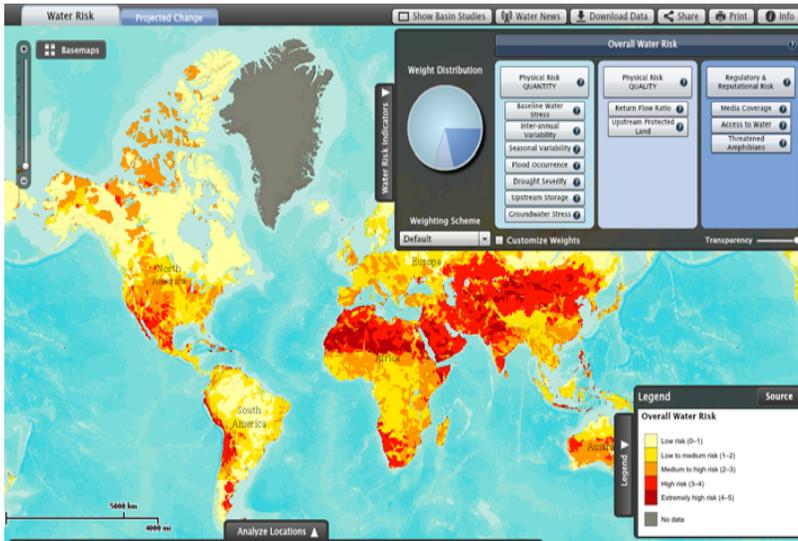
Todd Gartner, M.F.
Senior Associate
Conservation Incentives and Markets
tgartner@wri.org



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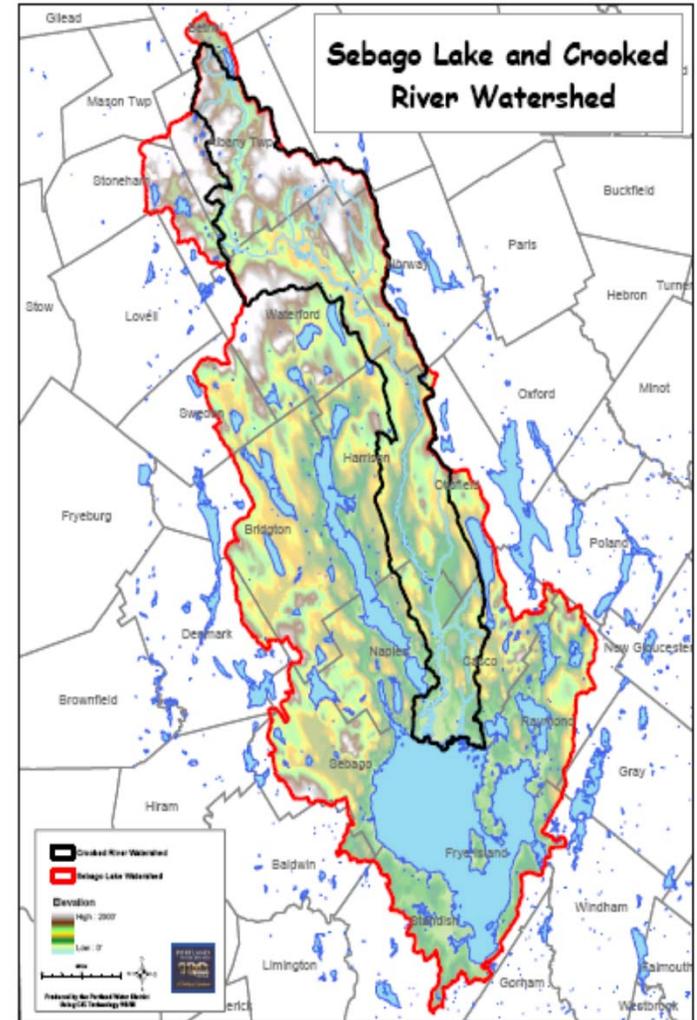
Nature for Water Campaign

Increasing Investment in Natural Infrastructure

- (1) Mobilize and Equip Champions**
- (2) Make the Business Case**
- (3) Advance Needed Policies, Incentives & Design Elements**
- (4) Address Political Inertia**



Forest Investment for Drinking Water Supply Portland, Maine - Sebago Lake Watershed



Beneficiaries: Making the Business Case

Need to know:

- Who uses the water
- How they use it
- How they benefit from “clean” water
- How they fit into a broadly-defined investment framework



First PMBus System Power Management and Protection IC

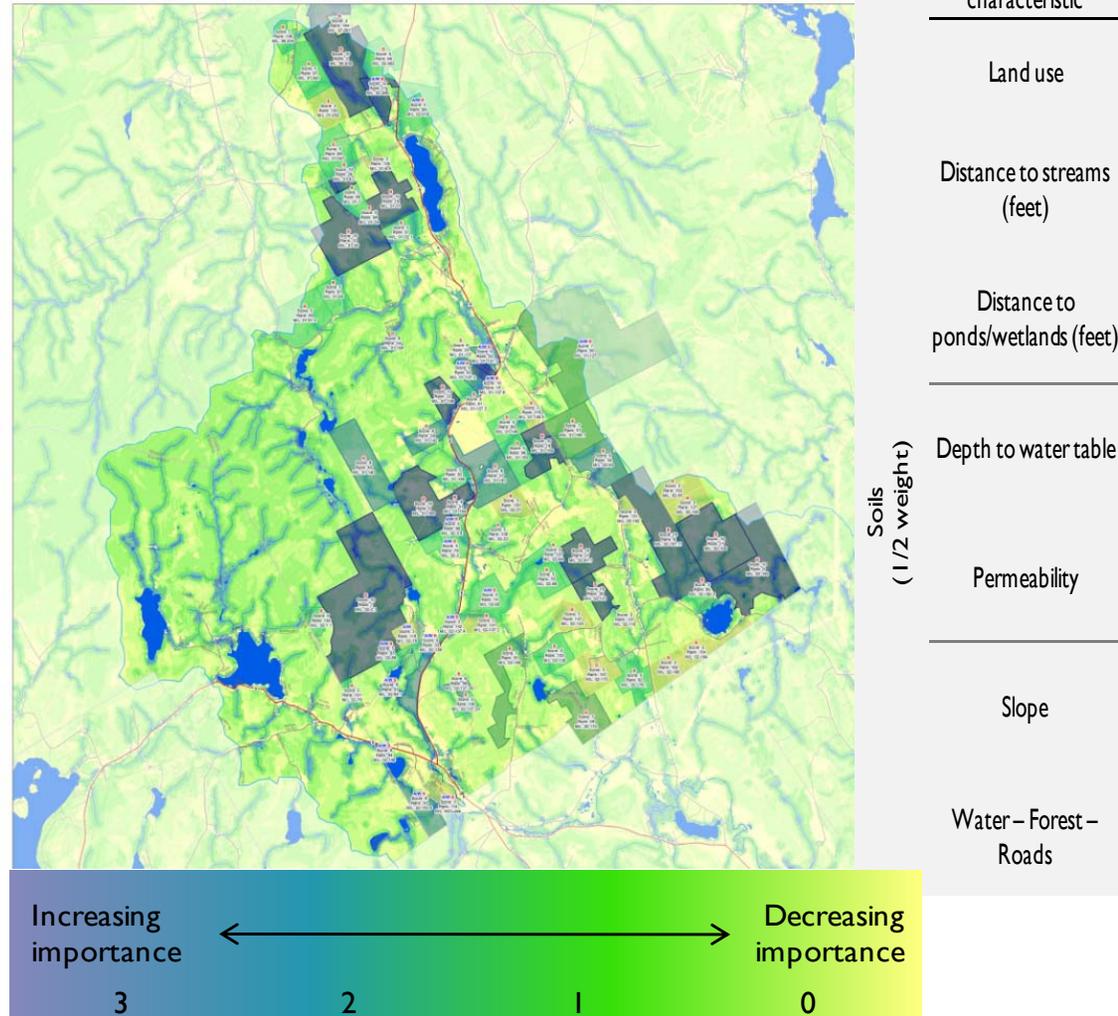


- Improves reliability
- Reduces power consumption



Where should we focus our \$ and effort?

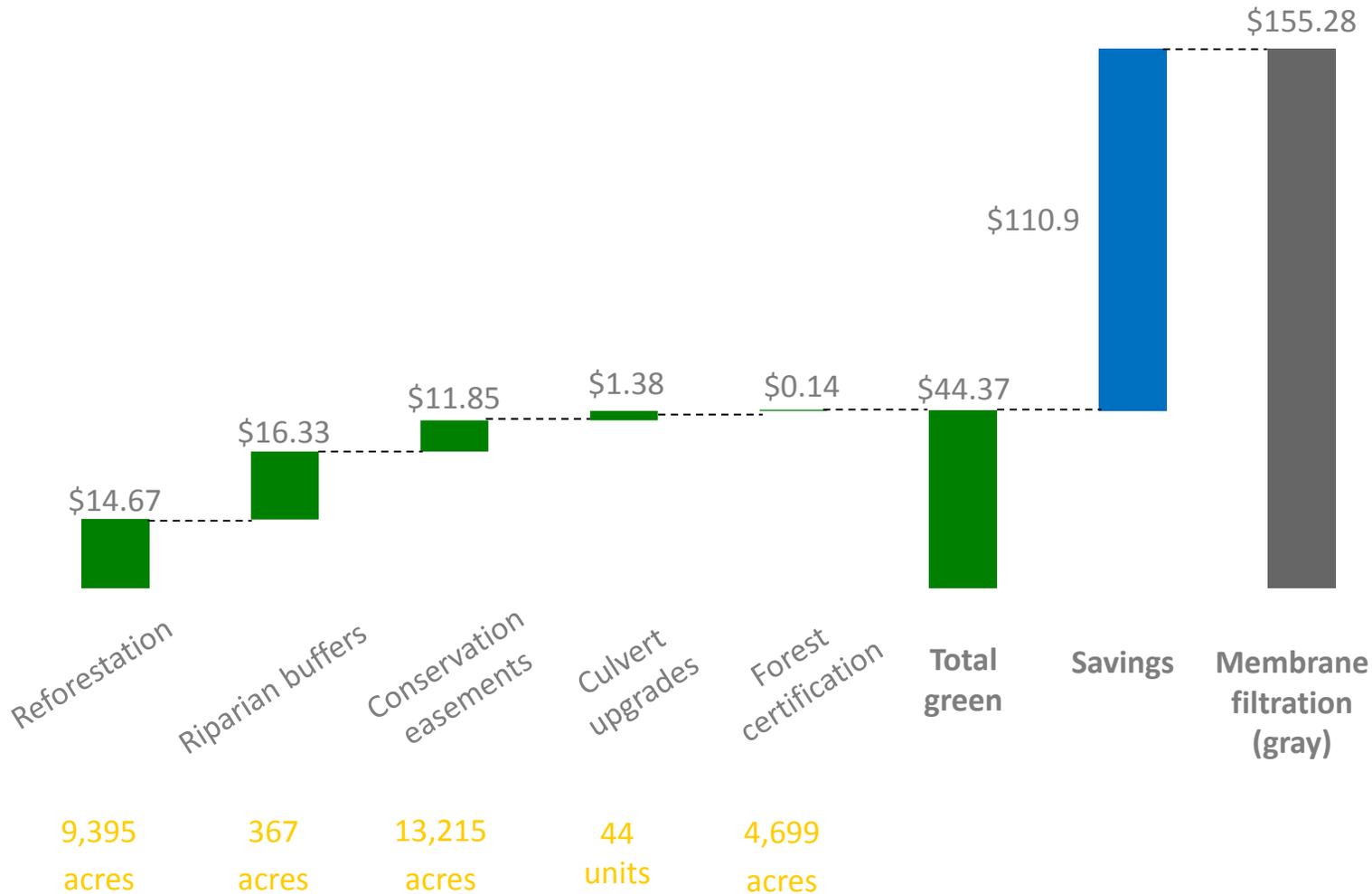
Priority Parcels for Source Water Protection
Part of the
Northern Forest Watershed Project
Albany and parts of Bethel, Mason and Stoneham



Detailed financials of green vs. gray infrastructure approaches for securing clean drinking water (Portland, ME)

Present value of investments over 20 years, USD millions

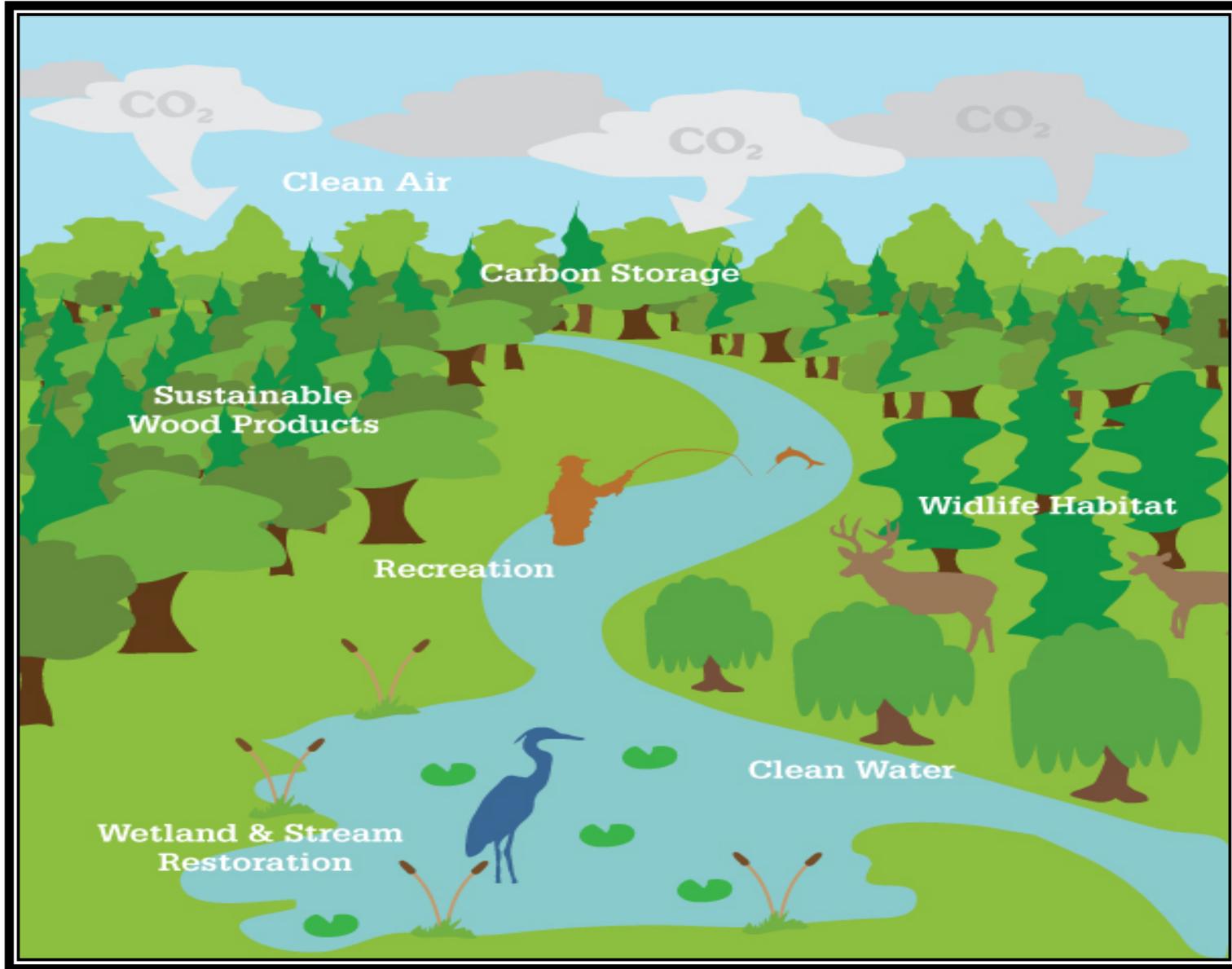
Most Optimistic Scenario



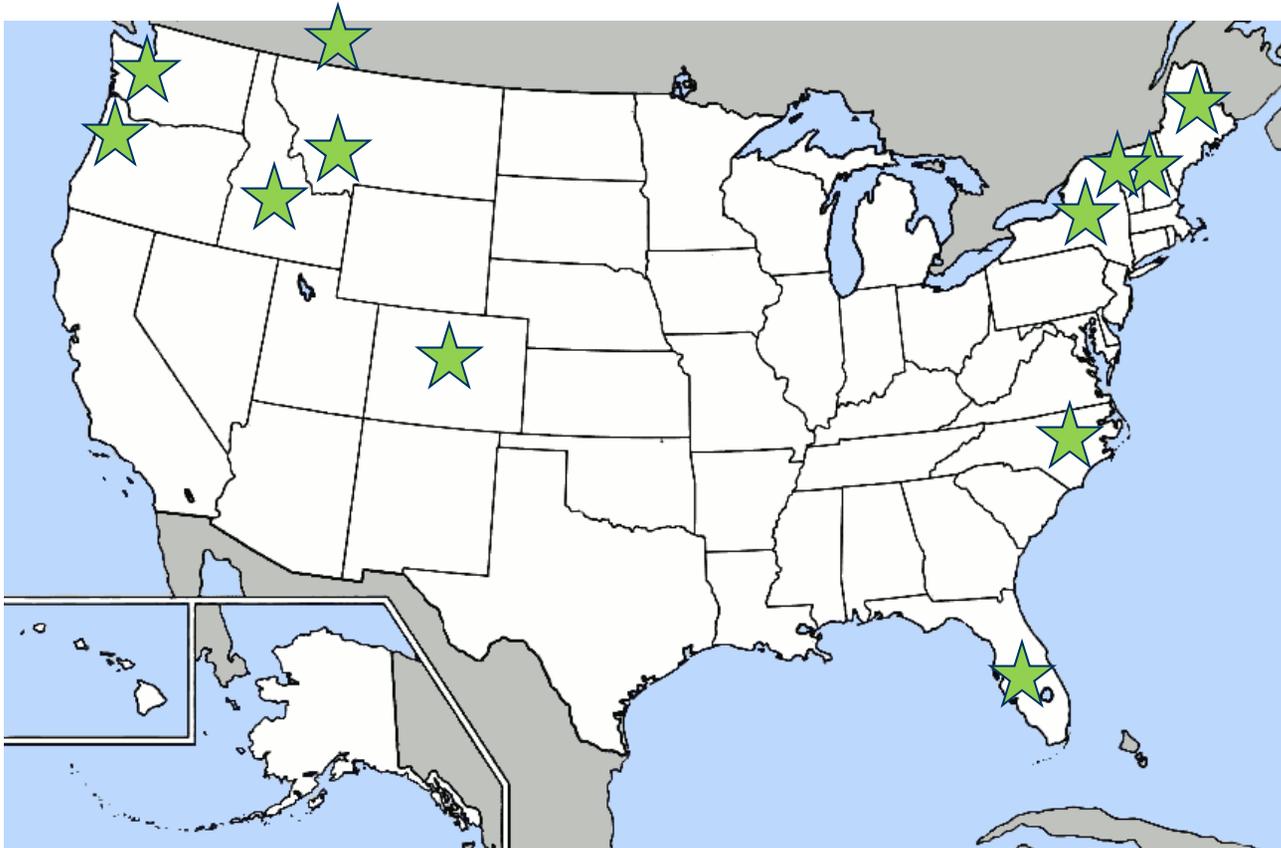
Source: Talberth, J. et al. 2012. *Insights from the Field: Forests for Water*. Washington, DC: World Resources Institute



Ancillary/Co-Benefits



Scaling and Replication



Working Forests as Water Infrastructure

And the role of SFI



Purpose:

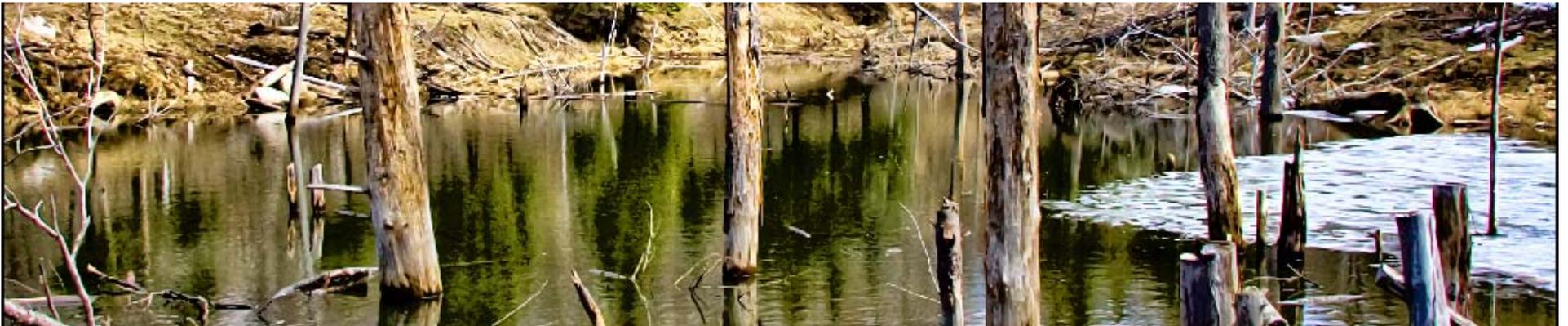
To determine the role that SFI certification can play in emerging compensation programs for watershed services.



Working Forests as Water Infrastructure

Project Scope:

- Focus on SFI land management requirements;
- Evaluate SFI performance through lenses of legal compliance, BMP implementation, and additional practices for water quality protection;
- Evaluate SFI performance against likely eligibility & performance requirements of compensation programs.



Working Forests as Water Infrastructure

Objective 3. *Protection and Maintenance of Water Resources.*

To protect water quality in rivers, streams, lakes, and other water bodies.

Performance Measure 3.1. *Program Participants* shall meet or exceed all applicable federal, provincial, state and local water quality laws, and meet or exceed *best management practices* developed under Canadian or U.S. Environmental Protection Agency–approved water quality *programs*.

Indicators:

1. *Program* to implement state or provincial *best management practices* during all phases of management activities.
2. Contract provisions that specify conformance to *best management practices*.
3. Plans that address wet-weather events (e.g. *forest inventory* systems, wet-weather tracts, definitions of acceptable operating conditions).
4. Monitoring of overall *best management practices* implementation.



Working Forests as Water Infrastructure

Methods:

- Review of mechanisms in SFI Standard, literature on BMP effectiveness, SFI Audit Summary Reports
- Interviews with SFI auditors, state officials, conservation experts
- Review of emerging practice in compensation programs for water & carbon



Working Forests as Water Infrastructure

Findings:

- Strong legal compliance and BMP implementation in SFI-certified parcels



Working Forests as Water Infrastructure

Findings:

- BMPs effective relative to historic practices.
- BMPs do not necessarily eliminate risk
- Additional or more stringent practices may be desired

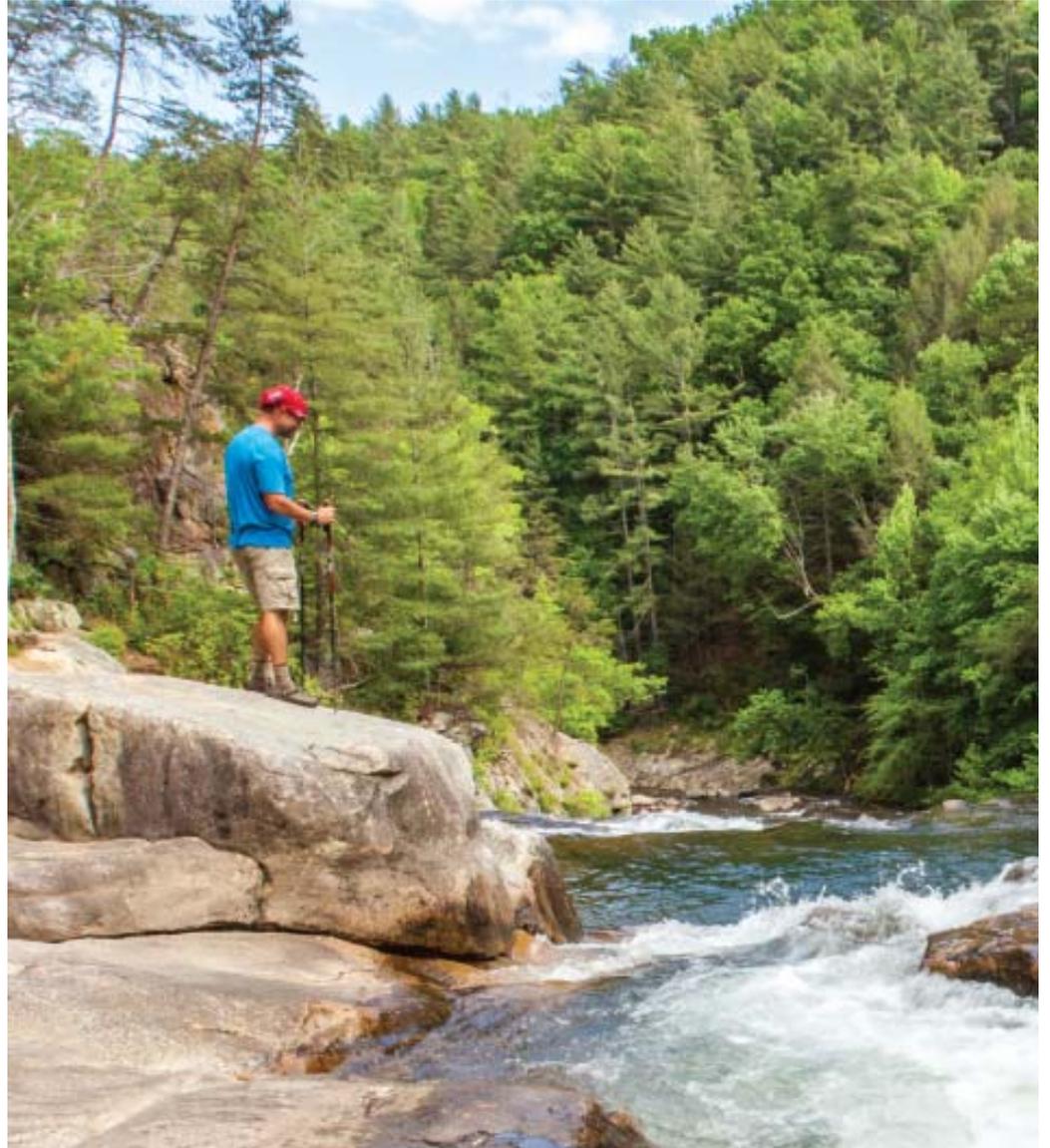


	Washington	Oregon	Maine	Georgia
Culvert Design	100yr flood event and associated debris	50yr peak flows	25yr flood event	Permanent culverts designed for 25yr, 24hr storm flows; temporary culverts designed for 2yr, 24hr storm flows

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Findings:

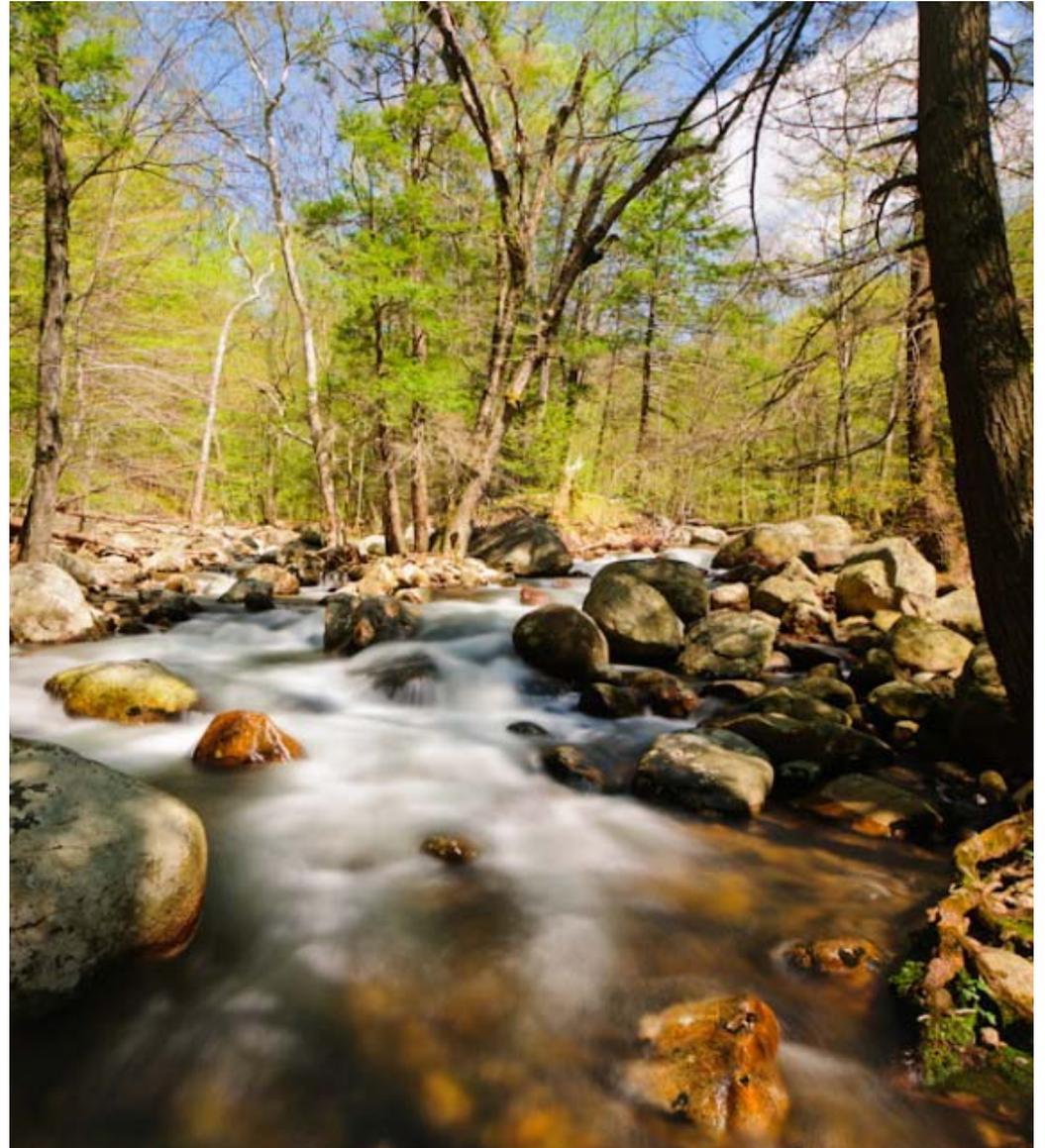
- “Additionality” occurring in SFI-certified forest parcels
- Little evidence of consistent additionality or documentation.



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Findings:

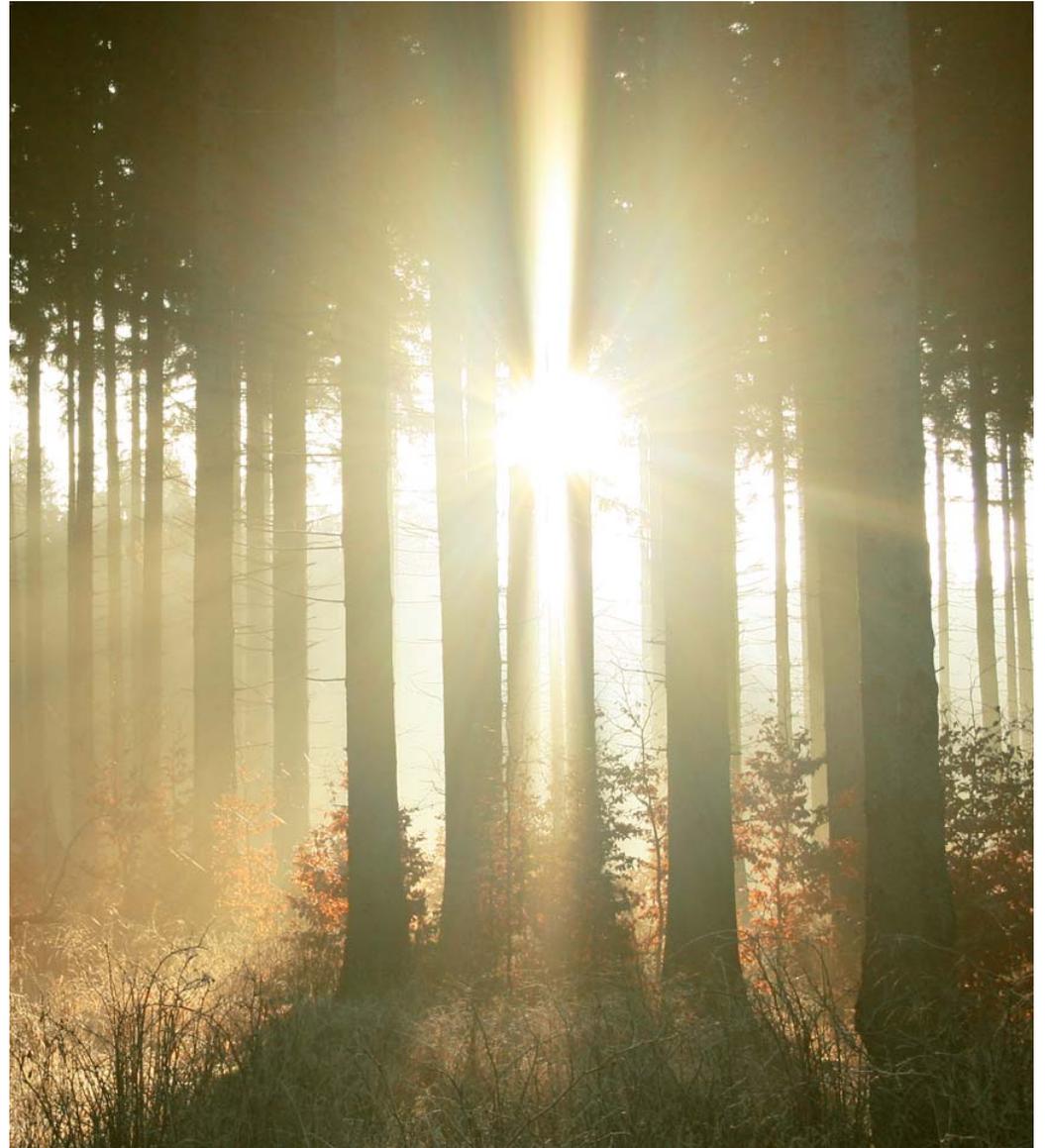
- “Buyers” unlikely to compensate landowners for legal compliance, voluntary BMPs, or what is already being consistently implemented



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Findings:

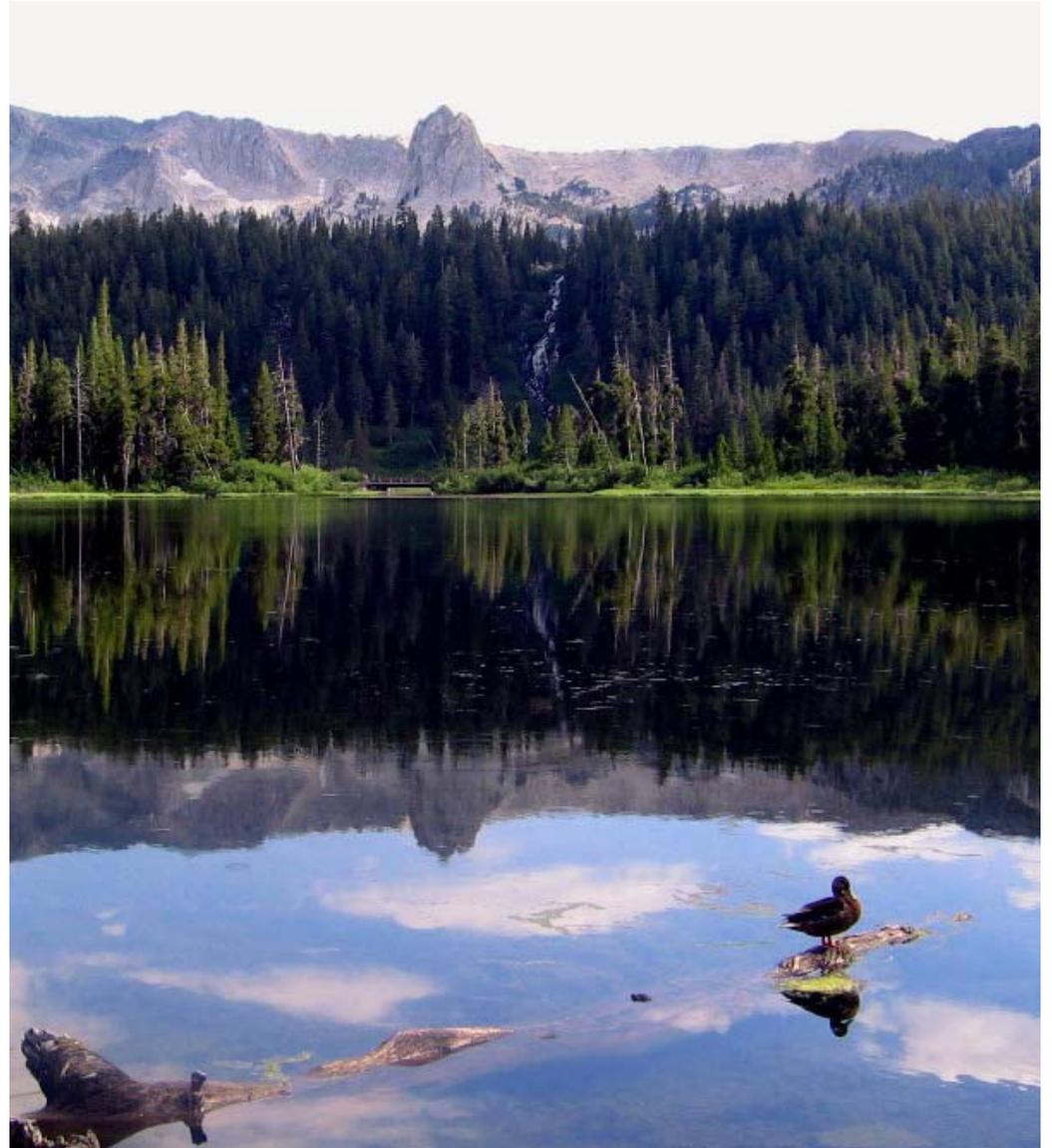
- Time matters
- Documentation matters



Working Forests as Water Infrastructure

Findings:

- SFI certification alone unlikely to be basis for payment
- Could have a place as an eligibility requirement
- A number of other opportunities for synergies exist



Working Forests as Water Infrastructure

Recommendations:

SFI can...

- As part of **Standard revision process**, *champion compensation programs* by strengthening prescriptions & documentation...or by developing a *secondary protocol* within Standard—a “product you can sell” to downstream beneficiaries.
- Encourage participation by SFI Implementation Committees in watershed program development efforts.



Working Forests as Water Infrastructure

Recommendations:

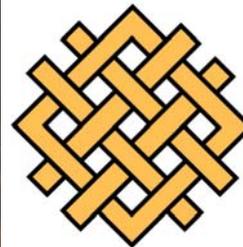


Landowners can...

- Reach out to downstream utilities and other beneficiaries to discuss concerns & opportunities. Talk annually. It's 2013...do *you* know where your downstream public resources are?
- Share results of your own water quality research to speed program development & provide greater confidence to “buyers.”



Todd Gartner
Senior Associate, WRI
410-790-4070
tgartner@wri.org



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