Innovative Financing for Watershed Conservation
working collaboratively across sectors and landscapes

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A Community on Ecosystem Services ~ Washington, DC ~ December 5, 2018
Why Partner?

The Forest Service Mission...

*to sustain the health, diversity, and productivity of the nation’s forests and grasslands to meet the needs of present and future generations*

...requires a collaborative approach

The Challenges are Complex...

*climate change, population growth, shrinking habitats, increasing demand for access and development pressure*

...we must work together to address them
“An all-lands approach requires valuing the social outcomes needed for shared stewardship across landscapes.”

Toward Shared Stewardship Across Landscapes: An Outcomes-Based Investment Strategy
USDA Forest Service, August 2018
“A sustainable forest land base requires relief from development pressures, an intact industry infrastructure, and conservation incentives and markets that value working forests’ ecosystem services.”

~ Washington State Forest Action Plan
Forests are Critical to Communities, Governments and the Private Sector

Socially
Ecologically
Economically

We all have a stake in forest stewardship
Making the Economic Case for Restoration

*broadening the tent*

U.S. requires $1 trillion in investments for water infrastructure over the next 25 years

~ American Water Works Association
Making the Economic Case for Restoration  
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At the core of conservation finance is the underlying belief that it is possible to align environmental, social and economic returns: the so-called triple bottom line.
From 2004 to 2015, the private sector channeled $8.2 billion into investments seeking measurable environmental benefits in addition to financial return.
Aligning Finance with Forest Service Goals

- Priorities and risk assessments
- Coordination with states
- High value resources and assets
- Engaged leadership
- Committed partners
- Measurable results

PNW Quantitative Wildfire Risk Assessment, Stratton et al. 2018
<table>
<thead>
<tr>
<th>Driver</th>
<th>Example</th>
<th>Potential Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission or Outcome</td>
<td>Desired ecological, social or economic result (e.g. habitat restoration)</td>
<td>Public Philanthropic NGO</td>
</tr>
<tr>
<td>Corporate Social Responsibility</td>
<td>Business approach that delivers social and environmental benefits</td>
<td>Private</td>
</tr>
<tr>
<td>Avoided Cost</td>
<td>Mitigate expected future expenditure (e.g. infrastructure loss due to wildfire)</td>
<td>Municipality Utility Private Sector</td>
</tr>
<tr>
<td>Resource Reliance</td>
<td>Sustain a critical input (e.g. water for a beverage company or a recreation opportunity)</td>
<td>Private</td>
</tr>
<tr>
<td>Environmental Markets</td>
<td>Meet regulatory requirements (e.g. mitigation of wetland or habitat impacts)</td>
<td>Public Private</td>
</tr>
</tbody>
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Forest Contributions to Water Supplies

building metrics / assessing outcomes

Use geospatial tools to quantify benefits delivered to the public

Characterize threats to justify and target restoration actions

Forests to Faucets Project
Assessing Drinking Water Importance and Threats
“Eighty percent of all flowering plants depend upon pollination for reproductive success. This ecosystem service is critical to our national security and food security.”

Chief Tom Tidwell
National Pollinator Week Proclamation
June 12, 2017
Recreation as an Economic Driver

National Forest visitors in the Pacific Northwest spend approximately $738 million annually in nearby communities.

This supports approximately 6,000 year-long jobs and contributes $210 million in labor income for local businesses and employees.
Economic Benefits of Recreation

Recreation produces more jobs and contributes more to GDP than anything else the National Forest System does.

One dollar invested in Forest Service recreation programs becomes a $33 contribution to GDP.

USFS Sustainable Recreation Strategy
Nature and Public Health

- Reduces stress and anxiety
- Increases attention capacity and creativity
- Enhances ability to connect with others
Watershed-Based Collaboration
Eugene Water and Electric Board
Partnership with the Willamette National Forest

payments to private landowners to maintain high quality riparian areas

partnerships with NGOs to fund restoration of degraded areas

collaboration with the Willamette National Forest to manage headwaters through stewardship contracting
On average, each acre of healthy riparian forest protected through the program results in an **$438** economic benefit per year, with a **260% return on investment** over 20 years.
 Mt. Baker-Snoqualmie National Forest: An economic powerhouse

One of the country’s most visited forests provides sustainable economic activity and natural benefits we tend to take for granted.

- 2 million+ visitors each year
- $80 million spent annually in nearby communities by visitors
- $1 trillion in products, jobs and services predicted over the next 100 years
- $30 billion in clean water, improved air quality and other natural benefits

Source: "Gem of the Emerald Corridor: Nature’s Value in the Mt. Baker Snoqualmie National Forest"
Federal Cost Share: Urban Waters Federal Partnership

The Green/Duwamish River Watershed

Puget Sound

Seattle

Puget Sound Nearshore Sub-watershed

Duwamish Estuary Subwatershed

Middle Green River Subwatershed

Upper Green River Subwatershed

Mount Baker Snoqualmie National Forest

Tacoma Water Supply
Stewardship and Community Cohesion

Duwamish Valley Youth Corps

Building knowledge and personal connections with the land

photos courtesy of Tracy Stanton
Innovative Partnerships
Across the Urban to Rural Gradient

Green Infrastructure for Stormwater Management
FROM WASTE TO WEALTH

Wood is salvaged from building deconstruction and urban tree care operations, and taken out of the city’s waste stream.

1. Collected wood is diverted from space-limited landfills and other waste facilities.

2. A local facility is dedicated to sorting and processing salvaged wood for its best use.

The wood is repurposed and resold locally, creating a closed loop system. Reclaimed and upcycled wood products are available for sustainable building, furniture, energy, and other uses.
Transformational Change Through Urban Wood Economies

- Lives & livelihoods
- Jobs, businesses, markets
- Environmental outcomes
- Social cohesion & wellbeing
Support for Innovative Forest Products and Restoration Economies
Combining Fish Conservation with Economic Development

- 95% of habitat accessible for 6 fish species
- 400 local jobs created
- $53 million contributed to the local economy in direct and indirect benefits
- $34 million direct investment in Tillamook County’s river and road infrastructure over 10 years
Applying Ecosystem Services to Watershed Investments

measure  partner  implement
Thank You!

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