NESST- National Ecosystem Services Strategy Team

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Overview

- Ecosystem Services at the Forest Service
- National Strategy Building
  - Champions Forums (2012 & 2014)
  - National Ecosystem Services Strategy Team
- Opportunities for incorporating ES
- Needs for making it happen
“Sustain the health, diversity, and productivity of the nation’s forests and grasslands to meet the needs of present and future generations.”

(from USFS draft Strategic Plan 2015-2020)
Managing for Ecosystem Services at the USFS - 1905

**PROVISIONING**
- Water (quantity)
- Fuelwood
- Energy and Minerals
- Food and Medicines
- Fiber
- Forage
- Timber
- Range
- Fish and Wildlife

**REGULATING**
- Carbon sequestration
- Climate regulation
- Soil stabilization
- Watershed Services (Water Quantity and Flood Control)

**CULTURAL**
- Aesthetic values
- Educational values
- Spiritual values
- Cultural heritage
- Recreation

**SUPPORTING**
- Soil formation
- Seed dispersal
- Pollination
- Nutrient cycling
- Biodiversity
- Ecosystem resilience
Managing for Ecosystem Services at the USFS - 1960- to infinity & beyond....

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Growing Momentum at USFS

- 2008: Farm Bill establishes Office of Environmental Markets
- 2012: Planning Rule newly requires considering ecosystem services
- 2012: 1st Forest Service Champions Forum
- 2013: Forest Service National Ecosystem Services Strategy Team (NESST) officially chartered
- 2014: 2nd Forest Service Champions Forum (3 days ago!)
- 2015: NESST synthesis document
1st USFS Ecosystem Services Champions Forum (2012)

- Cross-Deputy group of practitioners, managers, researchers who were actively engaged with Ecosystem Services in agency.
  - Planners working on early adopter forests- Planning Rule
  - District Rangers, Forest Supervisors, practitioners working to implement projects
  - S&P specialists working with partners- markets
  - Researchers on policy, urban and metrics, valuation

- Key Findings: Numerous activities in S&P, NFS, R&D but not communicating within agency and/or different messages.
1st USFS Ecosystem Services Champions Forum (2012)

- Recommendations for Eco-Serv Framework for agency
  - Develop a common language and understanding of E.S.
  - Develop an ecosystem services framework for agency.
  - Clarify the roles of three Deputy Areas of USFS.
  - Explore the potential of partnerships (e.g. All-Lands).

- Not exactly….
  - Framework evolved into NESST (National Ecosystem Services Strategy Team)
National Ecosystem Services Strategy Team (NESST)

Established “to collaboratively develop national strategy and policy around ecosystem services and integrate the concept into Forest Service programs and operations”
NESST

- NESST core team and broader engagement
- Interim briefing papers
- Workshops and webinars
- Strategies to communicate and integrate ecosystem services across agency
- NESST synthesis paper - GTR
2nd USFS Ecosystem Services Champions Forum (2014)

GOALS

• Present the NESST draft report

• Engage USFS champions to provide feedback to NESST synthesis paper

• Generate specific next steps to address needs to integrate ecosystem services into USFS management

• Build a USFS community of practice on ecosystem services
Integrating Ecosystem Services into National Forest Service Policy and Operations

- Final draft Winter/Spring 2015, publish as GTR
- Paper goals
  - **Opportunities** to integrate ecosystem services in USFS policy and operations
  - **Needs and Next Steps** to address to enable application of ecosystem services
  - Recommendations
NESST: Opportunities for An Ecosystem Services Approach

1. Decision-Making and Priority Setting
   • Consider a Broad Suite of Services

2. Metrics and Reporting
   • Quantify and Communicate in terms of Benefits to People

3. Partnerships and Investments
   • Connect Providers and Beneficiaries of ecosystem services
1 Consider a Broad Suite of Services in Decision-Making and Priority Setting

- Inform decision-makers about landscape values and tradeoffs
- Enhance transparency
- Build trust and credibility
- Highlight environmental justice issues
- Strengthen relationships with diverse groups

Opportunities
- Forest Planning
- Project Level Planning
- Program Prioritization
- State Forest Action Plans
Forest Planning

2012 Planning Rule:

“to maintain and restore NFS land and water ecosystems while providing for ecosystem services and multiple uses”

California’s Inyo, Sequoia, and Sierra National Forests are conducting their forest plan revisions within the context of an “all-lands” approach.
Project-Level Planning with NEPA

- Assess project-level impacts using a collaborative approach
- Solicit values and priorities from local communities
- Highlight potential outcomes of actions

**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
Program Prioritization

Using ecosystem services to inform:

- National Program Direction
- Priorities
- Funding

The Hazardous Fuels Prioritization System

http://www.fs.fed.us/research/highlights/highlights_display.php?in_high_id=396
State Forest Action Plans

Working with states to highlight and conserve public benefits provided by state and privately-owned forests

*Tennessee urban FIA project estimated value of urban forests for removing atmospheric pollutants at over $203 million annually*
Quantify and Communicate in Terms of Benefits to People

- Understand impacts of actions to community resilience
- Measure and monitor changes in conditions
- Illuminate public benefits from USFS management
- Communicate agency relevance
- Utilize modeling and mapping tools
- Promote information exchange

Opportunities
- National Assessments
- Performance Monitoring
- Inventory Monitoring and Assessment
Creating standardized ecosystem services metrics, integrative valuation models and decision support tools to illustrate and enhance USFS benefits to people.
National Assessments

Report on national trends in forest and grassland conditions in terms of benefits to people to inform decision-makers.

- Assess resources and changing conditions
- Connect management impacts to people
- Track USFS progress
- Promote partnerships and collaboration
Performance Measures

Help discern how agency activities deliver benefits to people and improvements to land conditions.

Monitor progress toward the mission using clearly defined success indicators.

Tongass NF Alaska salmon and trout fisheries accounted for $986 million in regional revenue, as well as 10% of regional jobs.
Connect Providers and Beneficiaries through Partnerships and Investments

- Increase public and private financial investments
- “All lands” approach
- Promote proactive approaches and thinking on longer timeframes
- Catalyze innovative solutions

Opportunities
- Incentives
- Partnerships
- Damage Assessments
- Environmental Markets and Investments
Incentives

USFS provides incentives for ecosystem service delivery from private landowners through grants, contracts and financial assistance.

- Cooperative Forestry Assistance Act programs
- Stewardship Contracts
Partnerships

Shared work agreements deliver shared ecosystem services values

USFS and Western Utilities Group (WUG) manage vegetation adjacent to transmission lines.


To Protect Tap Water, Cities Sharing Costs of Slowing Wildfires
By PHIL TAYLOR of Greenwire
Published: August 18, 2011
Damage Assessments

Quantify and value damages to ecosystem services on USFS land and property.

Gain a more accurate and complete idea of natural resource impacts from planned or implemented management activities.

Storrie Fire 2000 Union Pacific Railroad. 22,000 acres NFS land,$22 million in to Plumas NF. Assessment included restoration, suppression, timber, public scenery, recreation, habitat, and unique forest values.
Facilitate environmental markets by:
• creating enabling infrastructure,
• generating credits from NFS land, and
• reducing market barriers for private landowners
NESST: Needs
Resource Cooperation & Infrastructure

BUILD staff capacity regarding the concept and application of ecosystem services

CREATE AND PUBLISH USFS resources and reference materials in a centrally available location

ALIGN agency staffing, funding and program structures with ecosystem service priorities
Data, Tools and Methodologies

**ESTABLISH** national coordination around data systems and create data standards and consistent metrics

**IDENTIFY** inventory metrics, define outcome-based performance indicators, organize and link data

**COLLECT** qualitative and quantitative data on social values

**VALUE AND MAP** ecosystem services utilizing current tools and methodologies
Communication & Collaboration

**EXPAND** collaborative outreach and partnerships

**COMMUNICATE** both internally and broadly to decision-makers and citizens
AGREEMENT FROM LEADERSHIP on a national strategy for ES

CLARIFY and STRENGTHEN existing policy

DEVELOP guidance for ES implementation which supports a common USFS language

ADDRESS absence of policy
Take-Aways

• Common needs highlight the imperative for collaboration and sharing resources to avoid re-inventing the wheel
• If we focus on 4 key needs we can make significant progress toward all opportunities
• In every deputy area have initiatives, pilot projects, and success from which to build
THANK YOU!

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