

NESST- National Ecosystem Services Strategy Team

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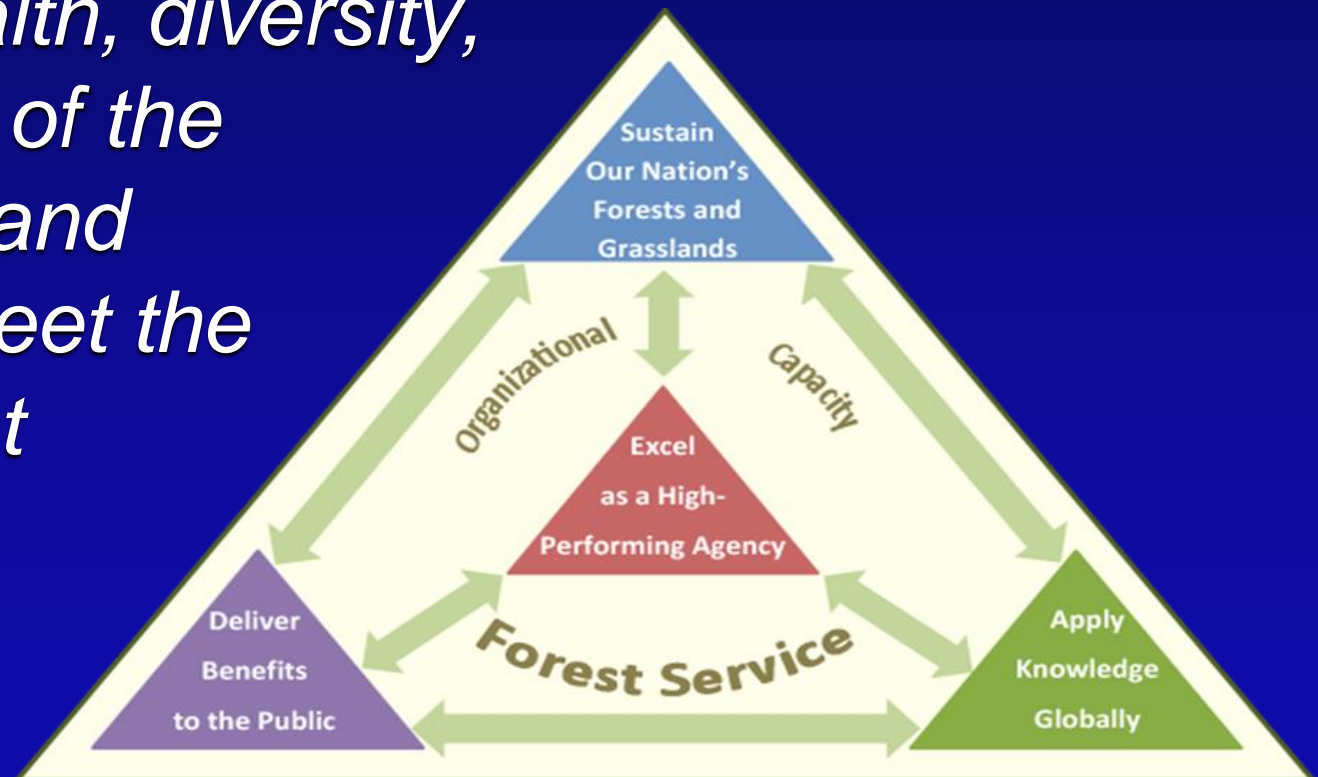


Overview

- **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**

USFS + Ecosystem Services

“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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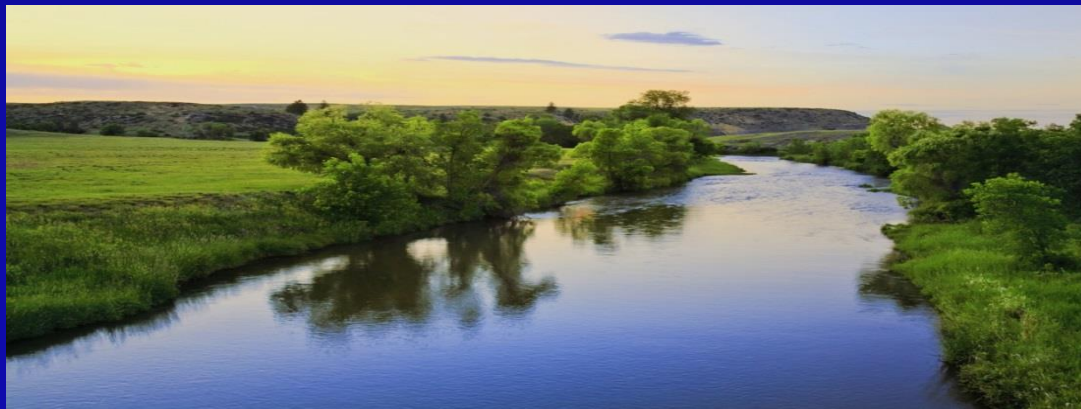
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Growing Momentum at USFS

- 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”



CHARTER

National Ecosystem Services Strategy Team (NESST)

*USDA Forest Service
January 18, 2013*

Justification

The ecosystem services concept has garnered increasing attention in the natural resource management field, and appears in a greater and greater number of USDA and U.S. Forest Service policy documents, most notably the 2012 Planning Rule. USFS employees across deputy areas are applying ecosystem services considerations to forest planning and management, contributing to the development of markets and payment incentives for private forest conservation and restoration, and advancing the field of ecosystem services research. In response to this growing effort, an ecosystem services champions forum of U.S. Forest Service practitioners met in May 2012 to identify needs and opportunities for supporting and further developing a diversified yet integrated ecosystem services program across the agency. Participants provided key findings and recommendations to strengthen communication and application of the ecosystem services concept as outlined in the Planning Rule and coordinate ecosystem service-related efforts across the National Forest System, State and Private Forestry, and Research and Development.

Purpose

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

Objectives

1. Develop a common language and understanding of ecosystem services.
2. Clearly explain the relevance of the ecosystem services concept across the agency.
3. Identify BMPs, available tools and information, and gaps and capacity requirements for integrating ecosystem services approaches into planning, management, and decision-making.
4. Foster better communication and coordination across the Deputy Areas by formalizing information sharing, identifying reporting mechanisms and recognizing areas of mutual interest or potential collaboration within the Agency and USDA.
5. Collaboratively define policy around ecosystem services and institutionalize it through publication in the U.S. Forest Service Manual and/or Handbook.

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

NESST Synthesis Paper

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

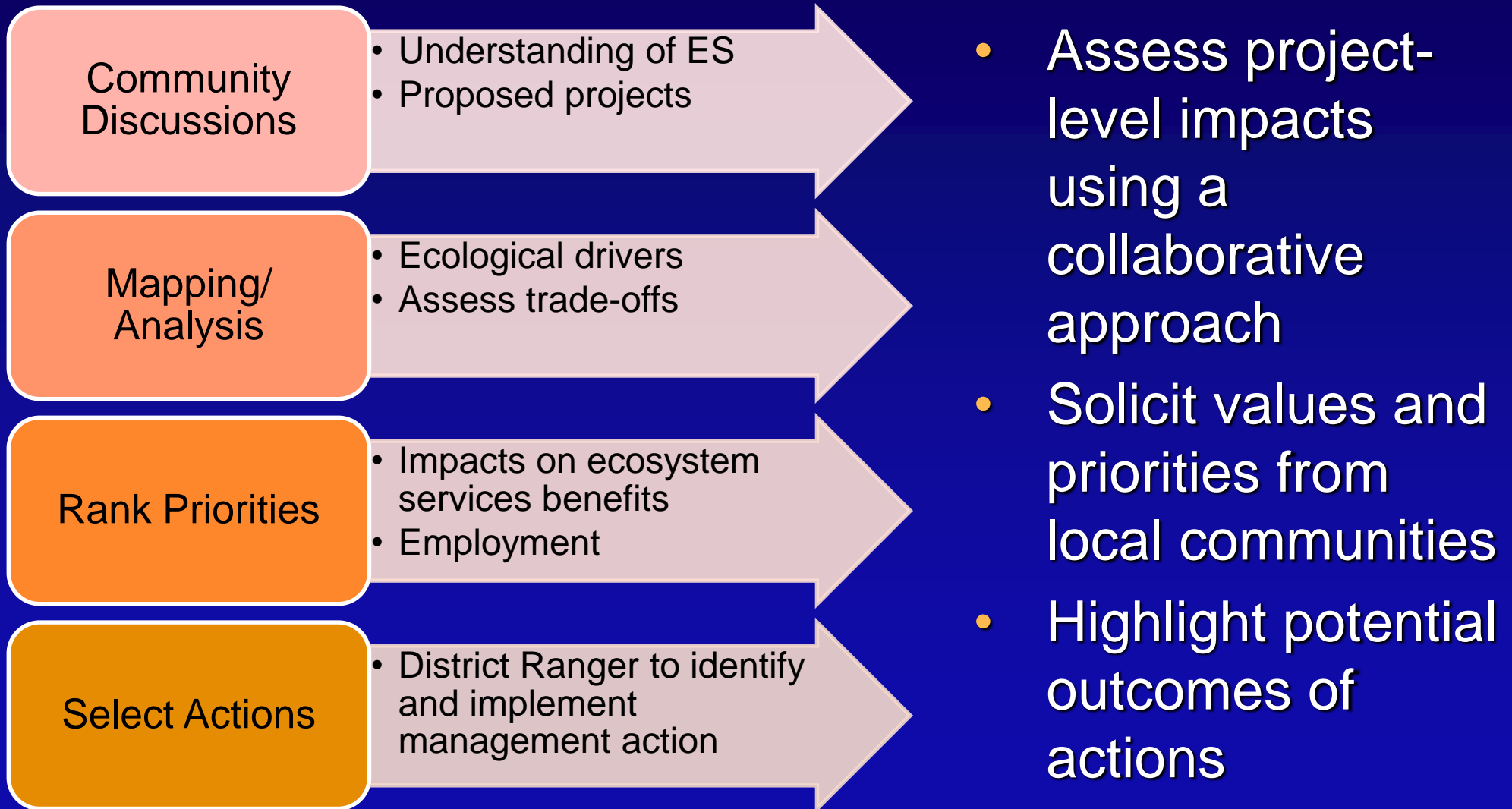
2012 Planning Rule:

“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

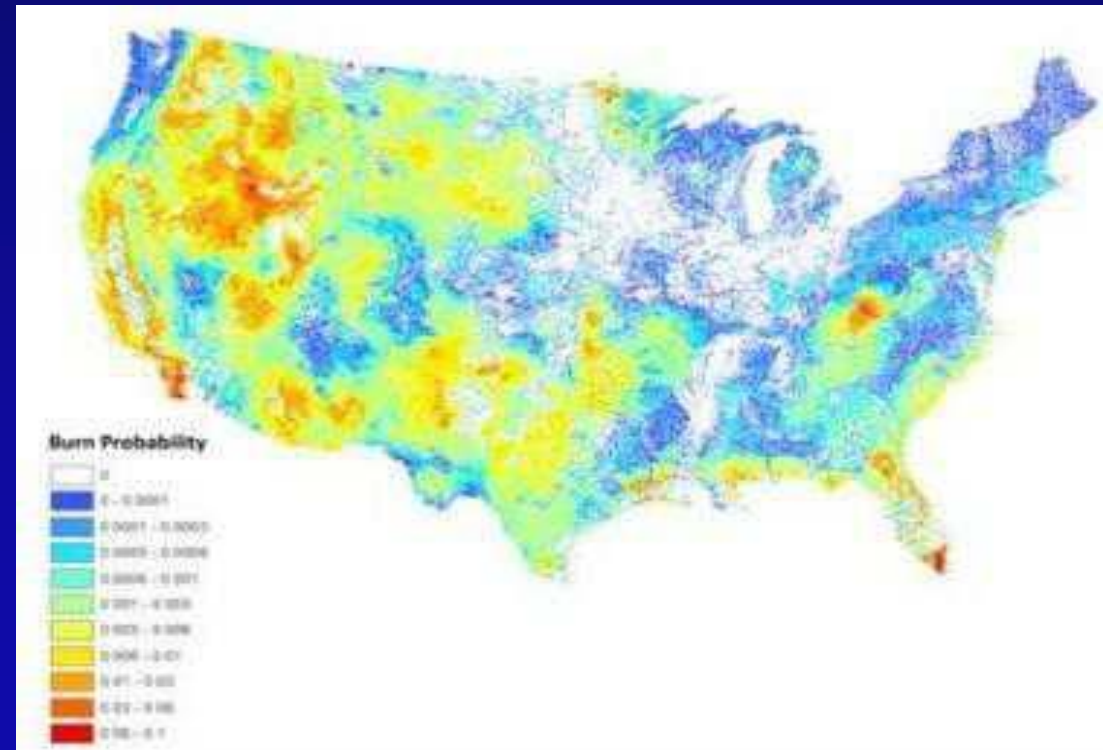


Program Prioritization

The Hazardous Fuels Prioritization System

Using ecosystem services to inform:

- National Program Direction
- Priorities
- Funding



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

2 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

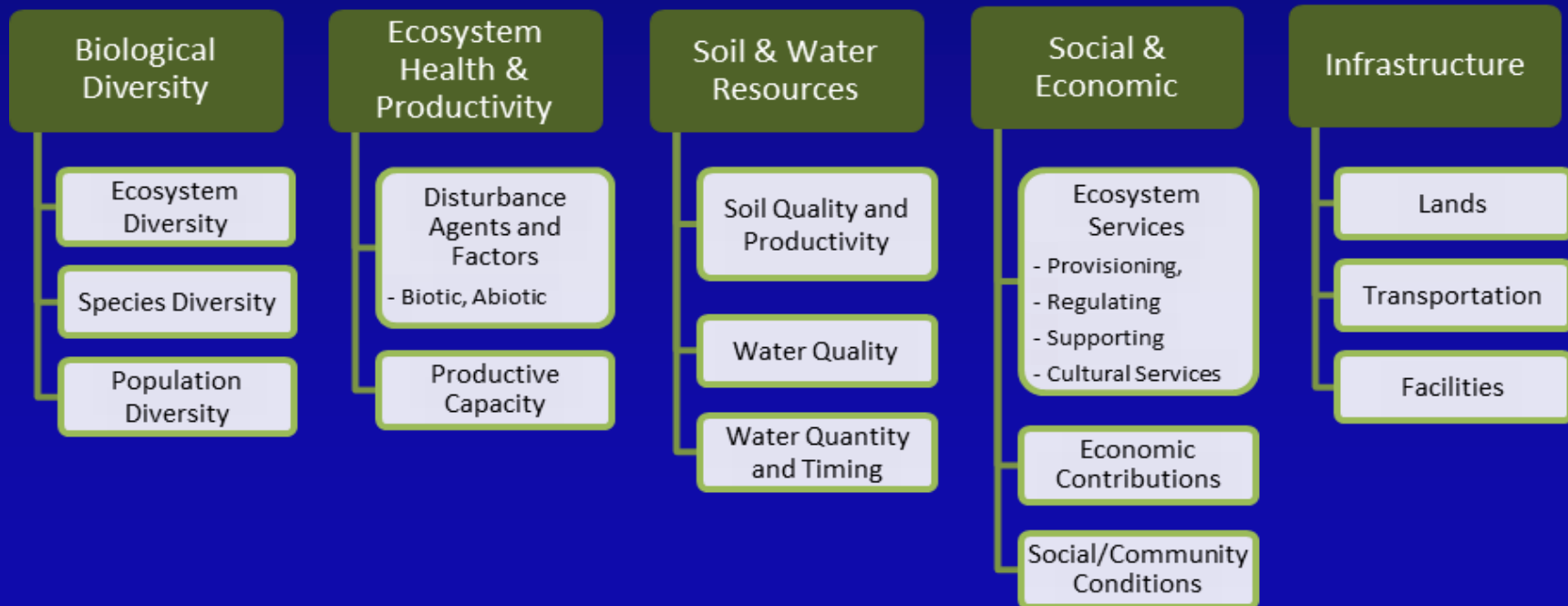
Opportunities

- National Assessments
- Performance Monitoring
- Inventory Monitoring and Assessment



Inventory Monitoring & 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

RPA

- Inventory, measurement of renewable resources

PCAST/BEST

- Climate change impacts on ES
- Federal capacity to sustain ES

PAS/GPAS

- Ntl performance accountability report monitors accomplishments

Forest Health, Wildfire Risk, Ecological Stressor Reports

- Identify and prioritize areas for habitat, fire prevention, and associated activities

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

3 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

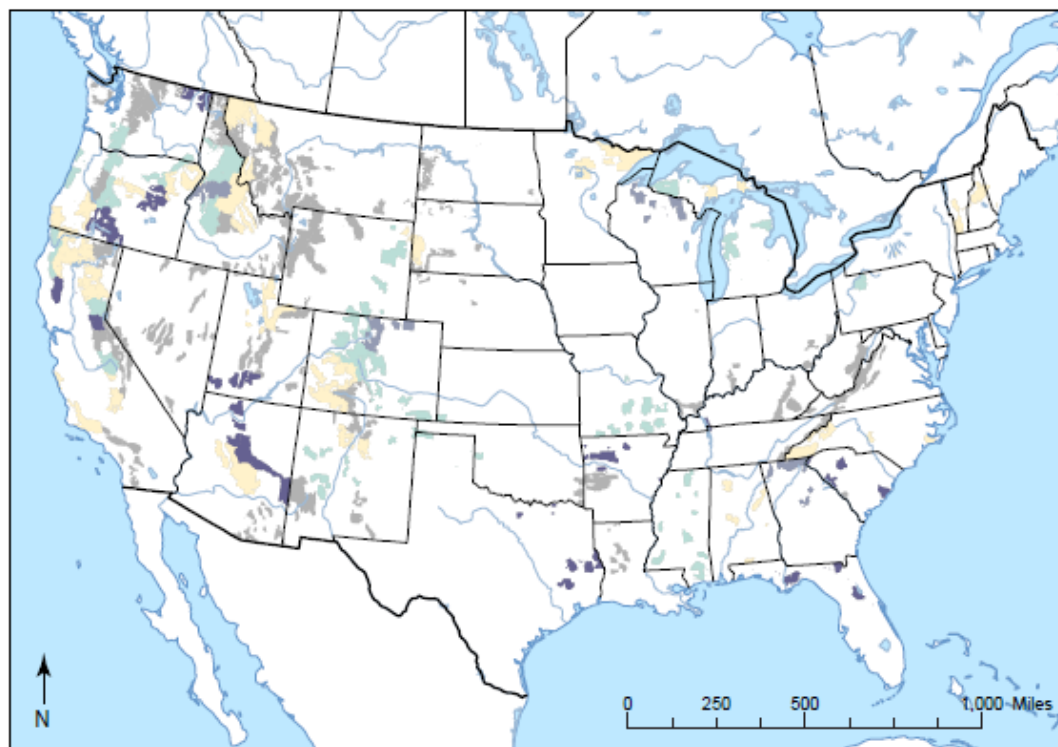


Incentives

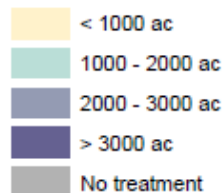
USFS provides incentives for ecosystem service delivery from private landowners through grants, contracts and financial assistance.

- Cooperative Forestry Assistance Act programs
- Stewardship Contracts

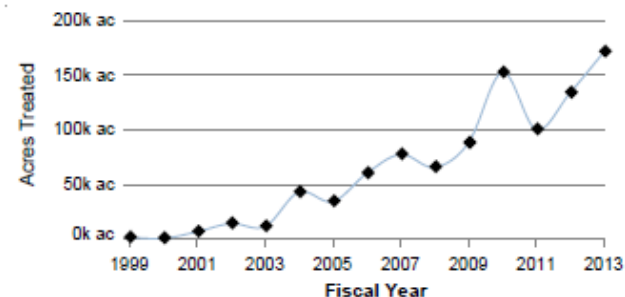
Acres Treated in 2013 through USFS Stewardship Contracts



Acres treated in fiscal year 2013



Acres treated nationwide through stewardship contracts and agreements, fiscal years 1999 to 2013



Partnerships

Shared work
agreements deliver
shared ecosystem
services values



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



Businesses fund The
National Water
Replenishment and
Enhancement Initiative
to restore National
Forests for watershed
health.

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.

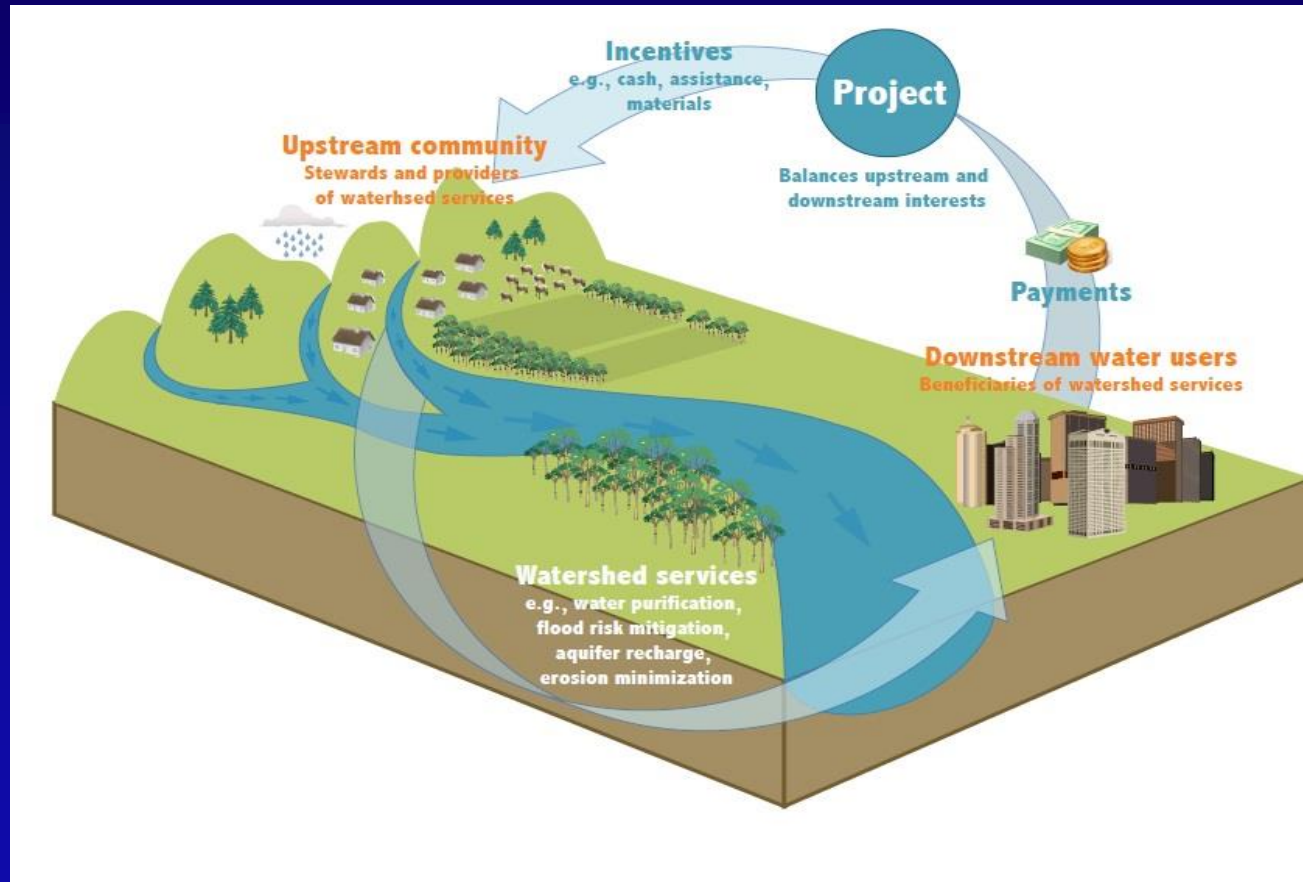


Storrie Fire 2000 Union Pacific Railroad. 22,000 acres NFS land, \$22 million in to Plumas NF. Assessment included restoration, suppression, timber, public scenery, recreation, habitat, and unique forest values.

Environmental Markets & Investments

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

Policy & Guidance

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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