



Integrating Ecosystem Services into Federal Resource Management and Planning

National Ecosystem Services Partnership
Federal Resource Management and Ecosystem Services Project



U.S. Army Corps of Engineers

Janet A. Cushing

Supervisory Environmental Planner

How Are Ecosystem Services Currently Incorporated?

- The USACE has historically considered the purpose of water resources planning to promote the quality of life by reflecting society's preferences for the attainment of goods and services.
- Currently do not consider the full array of goods and services
- Some ecosystem restoration planning studies have either implicitly or explicitly considered ecosystem services to describe the benefits of the project.

What Are Next Steps for Incorporating Ecosystem Services?

- Draft framework has been developed that integrates the consideration of ecosystem goods & services (EGS) into the USACE Planning Process
- EGS tools/models catalog developed
- Next steps involve testing the framework on watershed studies and multi-purpose projects
- Exploring the possibility of considering ecosystem services in watershed-informed budgeting

What Are the Challenges to Incorporating Ecosystem Services?

- Institutional challenges
 - Changing institutional culture
 - Building capacity within agencies
 - Support from OMB
- Scientific/technical challenges
 - Better understanding of the ecoservice production functions, including the spatial and temporal variability associated with ecological outputs
 - Reducing uncertainties



U.S. Fish and Wildlife Service

Edward Maillett
Senior Economist

How Are Ecosystem Services Currently Incorporated?

- Public Affairs
 - Refuges use an ecosystem services concept to improve communications with stakeholders affected by management policies and decisions.
- Legal
 - The Contaminants Program has been using an ecosystem services concept to estimate human use damages.

What Are Next Steps for Incorporating Ecosystem Services?

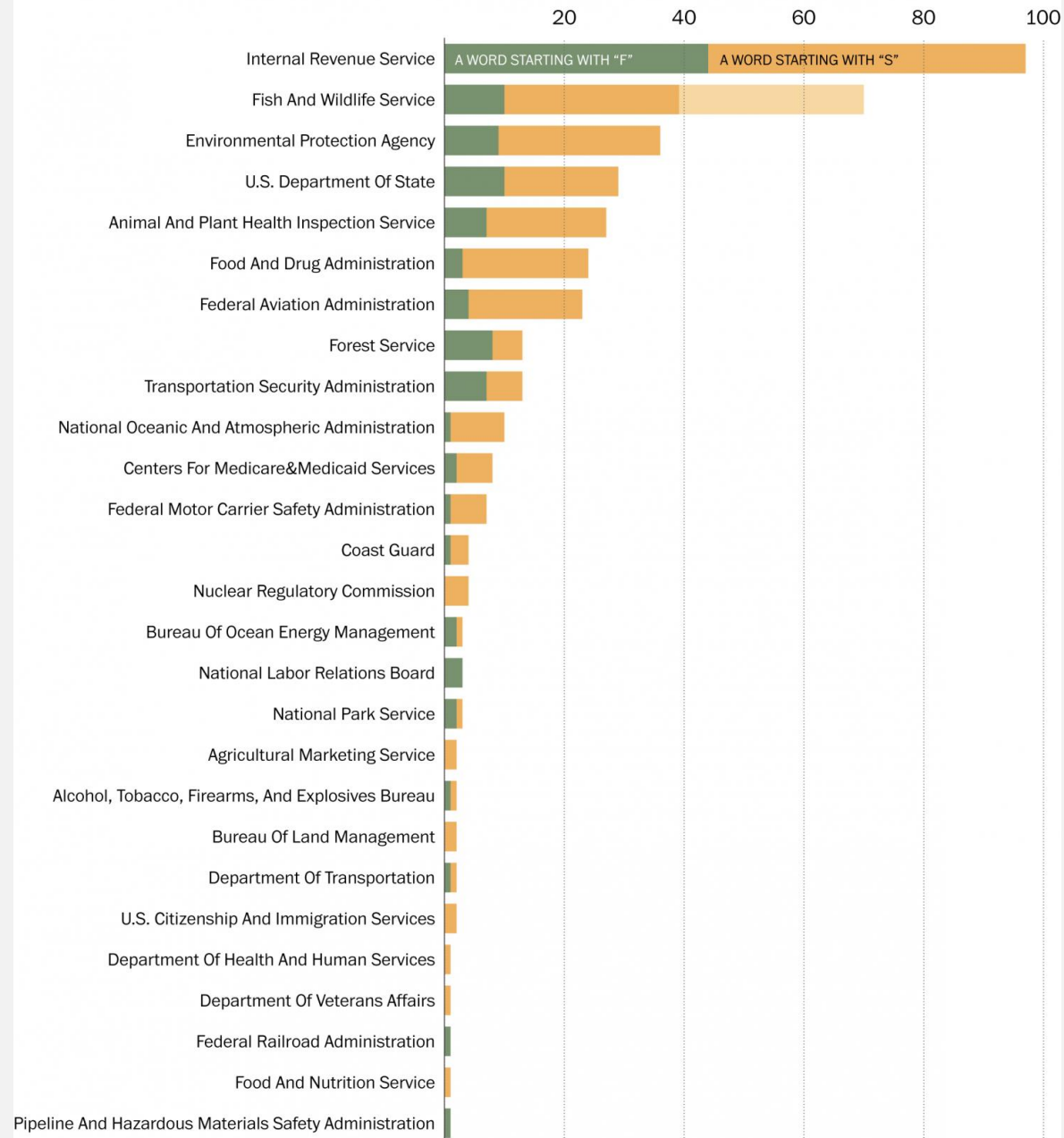
- Developing Service-wide policies to adopt the use of ecosystem services in planning and decision-making.
- Improving the science behind the identification and quantification of physical service flows to beneficiaries.
- Identifying other Service programs that could benefit from an ES framework.
- Identifying and working with partners to make the establishment of an ES framework a reality.
- Considering an ES framework for voluntary markets.

What Are the Challenges to Incorporating Ecosystem Services?

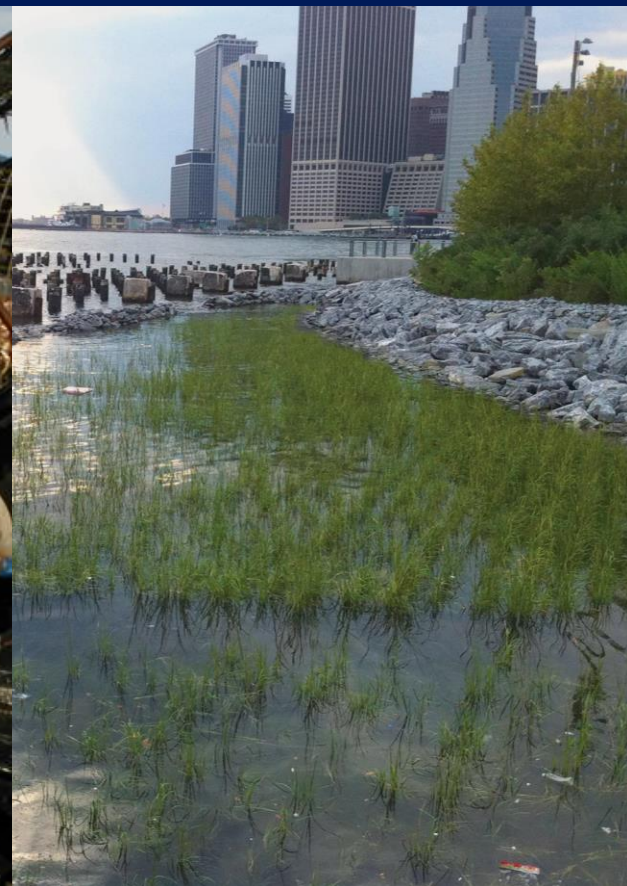
- Lack of formal Agency policy to incorporate ecosystem service concepts into planning and decision-making.
- Lack of specific methodologies to understand and measure physical service flows to beneficiaries.
- Identifying appropriate studies to conduct benefit-transfers to estimate marginal values on different populations in different periods.

The government agencies that are sworn at the most

Appearances of two common swear words in comments submitted on proposed regulations.



SOURCE: REGULATIONS.GOV



National Oceanic and Atmospheric Administration

Tracy Rouleau

Deputy Chief Economist

How Are Ecosystem Services Currently Incorporated?

- Resource-based application
 - Fisheries EBM and Integrated Ecosystem Assessments (IEAs)
- Place-based application
 - Regional and local places
- Responding to mandates

What Are Next Steps for Incorporating Ecosystem Services?

- Connect ES Valuation to ES Research
- Improve integration of ESV into policy and regulatory tools
- Advance ecological and economic tools and needed data
- Integrate ESV into appropriate NOAA priorities
- Communicate appropriate messages with diverse stakeholders

What Are the Challenges to Incorporating Ecosystem Services?

- Overlapping ocean and coastal jurisdictions and regulations
- Connecting bio-physical and socio-economic approaches
- Scaling, transfer, and coordination of ESV studies
- Ensuring projects address management needs and policy questions



U.S. Forest Service

Nikola Smith

Ecologist and Ecosystem Services Specialist
USFS Pacific Northwest Region

How Are Ecosystem Services Currently Incorporated?

- Core part of the Forest Service maxim: “caring for the land and serving people”
- Project and forest-level planning
 - Greater emphasis on collaborative engagement
 - Characterization of management rationale and impacts/effects
 - Contributions to social and economic sustainability
- Support for the development of ecosystem services markets and payment programs
- Watershed investment partnerships
 - Connecting providers and beneficiaries / avoided costs
- Research and development – building capacity to measure and assess ecosystem services in diverse contexts

How Are Ecosystem Services Currently Incorporated?

- National Ecosystem Services Strategy Team
 1. Considering a broad suite of services in decision-making and priority setting
 2. Quantifying and communicating in terms of benefits to people
 3. Connecting providers and beneficiaries through partnerships and investments

What Are Next Steps for Incorporating Ecosystem Services?

- National Ecosystem Services Strategy Team
 - Identifying opportunities and needs → implementing recommendations
- Addressing ecosystem services throughout the forest plan process (from assessments to alternatives)
- Increase on-the-ground projects
- Measurement and reporting mechanisms to assess management needs and communicate outcomes
 - Re-thinking national Inventory, Monitory and Assessment
- Clarifying policy
 - Participation of Cooperative Forestry Assistance Act lands in ecosystem services markets

What Are Next Steps for Incorporating Ecosystem Services?

- Communication
 - What this means and why it matters
 - Integration across deputy areas, program areas and scales
- Inter-agency coordination / learning from each other

What Are the Challenges to Incorporating Ecosystem Services?

- Communication
- Risk aversion / resistance to change
- Budgets and administrative structures
- Performance measures
- Inefficient NEPA processes
- Resource and time constraints
- Data, tools and methodologies

Realizing the Potential of Ecosystem Services in the USFS

Today! 1:30 – 3:15 pm Grand Ballroom Salon B

US Forest Service: Integrating Ecosystem Services into Operations & Management

- Ecosystem services and the USFS Planning Rule
- Experience of Early Adopters
- Project-Level Applications
- National Ecosystem Services Strategy Team



USDI Bureau of Land Management

Rob Winthrop

Senior Social Scientist, Socioeconomics Program

How Are Ecosystem Services Currently Incorporated?

At multiple levels, including –

- **Land use plans** – Western Oregon RMP will provide a common qualitative framework for weighing market and nonmarket goods and services.
- **Program guidance** – Recreation planning involves identifying and achieving specific recreational experiences and *benefits*.
- **Project assessments** –
 - Moab oil and gas leasing plan EIS used ARIES to quantify potential disturbance to scenic viewsheds.
 - An Idaho grazing permit EIS included a qualitative description of ES linked to healthy rangelands.

What Are Next Steps for Incorporating Ecosystem Services?

- Prepare a roadmap for ES rollout
- Develop a lessons learned checklist for field office planners, based on the results of pilot projects
- Develop webinars and other training, drawing on the NESP guidebook and BLM examples

What Are the Challenges to Incorporating Ecosystem Services?

- Integrating ecosystem services valuation (quantified or monetized) into BLM socioeconomic policy and guidance
- Developing consensus regarding how and when an ES framework is useful and feasible
- Building internal familiarity and capacity to support ES analyses



More information on how federal agencies are exploring or
applying ecosystem services can be found at
nespguidebook.com