



Integrating the Social Sciences into NOAA's Mission

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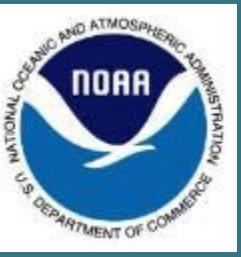
NOAA Science Advisory Board
April 29, 2016



Outline



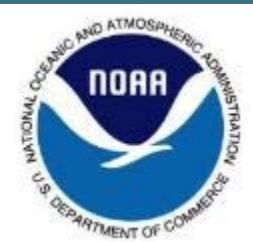
- Purpose
- Recap
- Social Science Vision and Strategy
- In the spotlight
- Looking ahead



Purpose

An informational briefing to:

- Update the SAB on work to implement social science across NOAA
- Discuss next steps



What is Social Science?

*“Social science is the process of describing, explaining and predicting **human behavior** and institutional structures **in interaction with their environments...**”*

NOAA Science Advisory Board.





How can Social Science help NOAA's Mission?



- ✓ Managing, mitigating and communicating risk – ***integrated risk assessment, risk communication and behavior***
- ✓ Valuing NOAA's products and services and valuing what is at risk - ***economic statistics and valuation studies***
- ✓ Enhancing and valuing stewardship (resources, protection) – ***valuing ecosystem services***
- ✓ Linking earth systems to human wellbeing (housing, job security, clean water access) - ***social indicators***
- ✓ Measuring long-term successes and societal impacts - ***performance metrics***



We've Come a Long Way

**2003 NOAA SAB Social
Science Review Panel Report**



**2009 Social Sciences
Working Group Report**



**2013 Social Science
Needs Assessment**

**2014 Social Science Tiger
Team Recommendations**



**2015 Social Science
Vision and Strategy**



VISION

NOAA's mission and priorities more effectively drive positive environmental, societal, and economic change.

STRATEGY

Integrate Social, Behavioral, and Economic science end-to-end in NOAA's mission and priorities.

Make communities more resilient

Evolve the Weather Service

Invest in observational infrastructure

Achieve organizational excellence

GOAL 1

NOAA's impact on society is defined and measured.

Quantify and promote the value and impact of NOAA's products and services in serving communities and meeting its mandates.

Standardize approaches for defining and measuring high profile economic data.

Strengthen the impact of investment by valuing improvements in NOAA products and services.

GOAL 2

NOAA's products and services strengthen societal decision-making.

Incorporate social science research in management decisions to increase community resilience.

Use social science methods to assess and communicate risk while reducing vulnerability to changing environmental conditions.

Consistently collect social science data and information to strengthen the implementation of ecosystem-based management.

GOAL 3

Institutionalize social science to further NOAA's mission.

Integrate social science in program planning and budgeting.

Apply social science methods in internal agency operations and decision-making.

Use only the most high-quality, robust, and innovative social science in NOAA products and services.

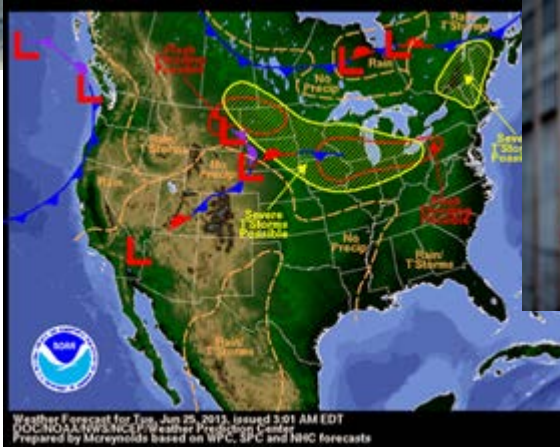
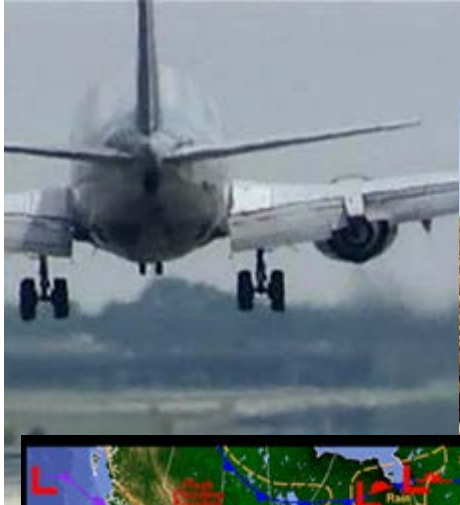
Science, Service, and Stewardship





Measuring and Defining NOAA's Impact on Society

Spotlight: Value of Information Workshop/COP



NEWS - CIO BRIEFING - EMERGING TECH - CLOUD - CYBER

NOAA TRIES 'ODDBALL' APPROACH TO HARNESSING BIG DATA



NOAA Administrator Kathryn Sullivan // Sue Ogrocki/AP File Photo

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Imagine a world where the world's environmental data were as easy to access as sports scores.

That's the future envisioned by leaders at the National Oceanic and Atmospheric Administration, the world's leading producer of what they termed "environmental intelligence."

NOAA collects terabytes of weather data per day and publicly shares a good chunk of it – more than



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Strengthen Societal Decision Making

Spotlight: Ecosystem Services



- OMB memo “Incorporating Ecosystem Services into Federal decision making”
- OSTP Report “Research Needs for Coastal Green Infrastructure”





NOAA's Goals for ES

- Integrate ecosystem services approaches into relevant NOAA priorities
- Strengthen connections between NOAA's ecosystem research and ecosystem services information needs
- Integrate needed support for ecosystem services approaches into existing policies
- Support the development and appropriate use of existing methods and tools
- Effectively communicate, within NOAA and externally, ecosystem services concepts and project outcomes to promote collaboration and deliver management outcomes





Immediate Actions (Pre-Guidance)

Continue to integrate ES into NOAA's stewardship priorities and policies that support implementation of statutes

- Magnuson-Stevens Fishery Conservation and Management Act
- Coastal Zone Management Act
- Endangered Species Act
- Marine Mammal Protection Act
- National Environmental Policy Act





Immediate Actions (Pre-Guidance)



Target grant programs initially

- Regional Coastal Resilience Grant Program
- Coastal Ecosystem Resiliency Grant Program
- Sea Grant National Strategic Investment Grants





Post-Guidance Actions

- Undertake a comprehensive review of policies and programs
- Provide senior-level direction to integrate an ES approach, where appropriate





Principles



1. Tie ecosystem services work to decision making
2. Measure changes in ecosystem services and value them
3. Communicate results and clarify management impacts of ecosystem services information
4. Leverage ongoing new action
5. Support existing priorities







Strengthen Societal Decision Making

Spotlight: Risk Communication and Behavior



Turn Around Don't Drown

Hurricane Floyd 10 Year Anniversary
More than half of the 56 deaths from hurricane Floyd in 1999 occurred when vehicles were either driven into high water or swept away by rapidly rising water



TSUNAMI HAZARD ZONE



IN CASE OF EARTHQUAKE, GO TO HIGH GROUND OR INLAND

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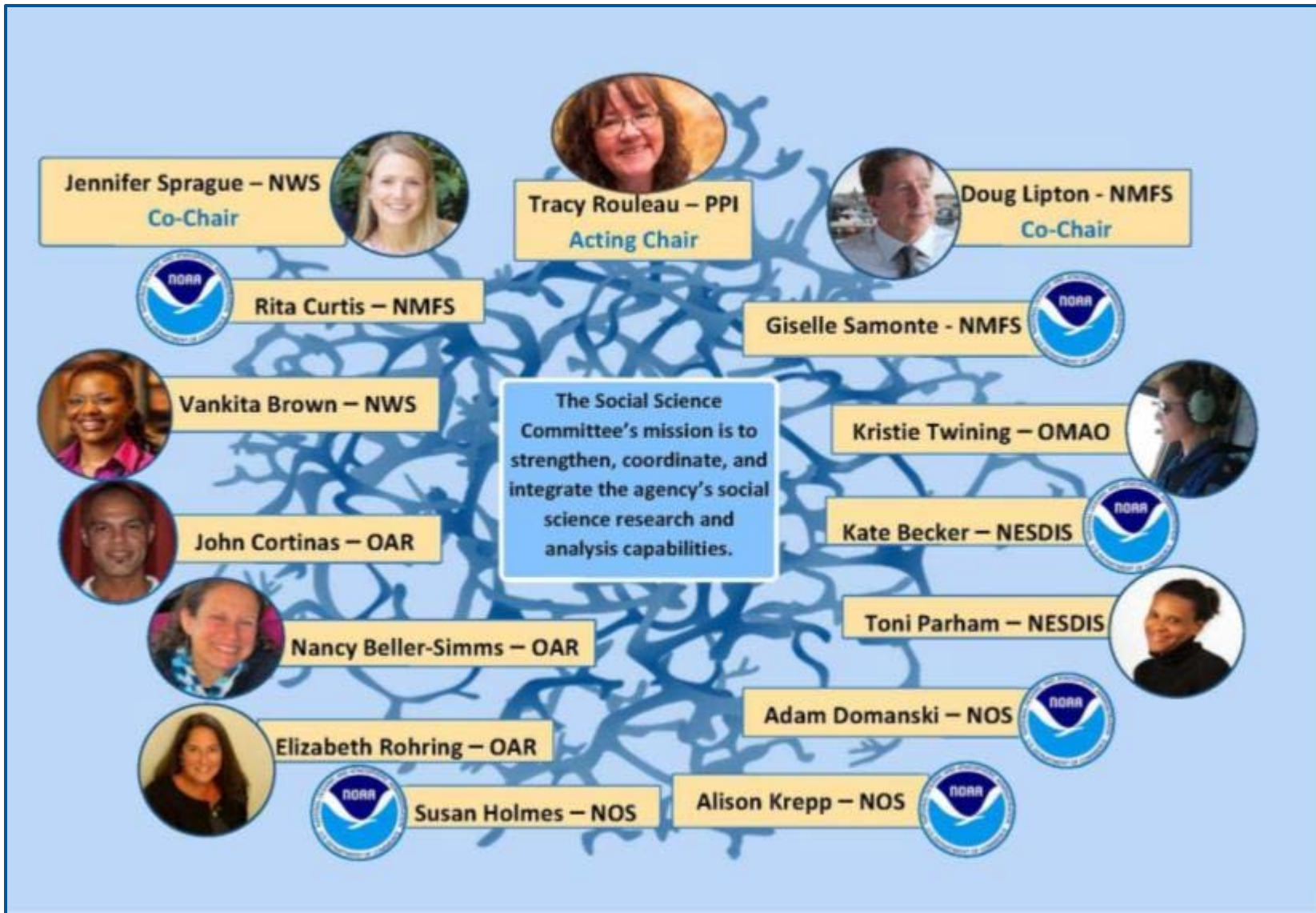
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Science, Service, and Stewardship





Institutionalize Social Science to Further NOAA's Mission Spotlight: Social Science Committee





Institutionalize Social Science to Further NOAA's Mission Spotlight: Performance Metrics



GET THE INFORMATION
YOU NEED...24 HOURS A
DAY... GET A **NOAA
WEATHER RADIO!**



Mark Trail Image courtesy of North America Syndicate, Inc., World Rights Reserved

- Purpose: Pilot societal outcome indicators to track NWS progress
- 4 metrics
 - Become better informed
 - Get prepared
 - Take action
 - Avoid injuries
- Draft report to be released soon



NOAA and NSF MOA

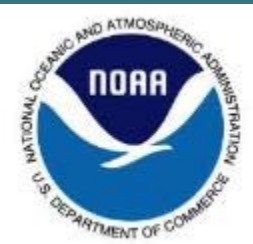


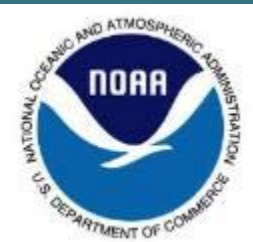
- Purpose: Share information about projects and areas of mutual interest
- Current/potential cooperation areas:
 - National Water Center
 - Activities and research at NSF and/or NOAA observatories, centers, and networks
 - Nexus of Food, Energy, and Water Systems solicitations





Looking Ahead





Thank you!



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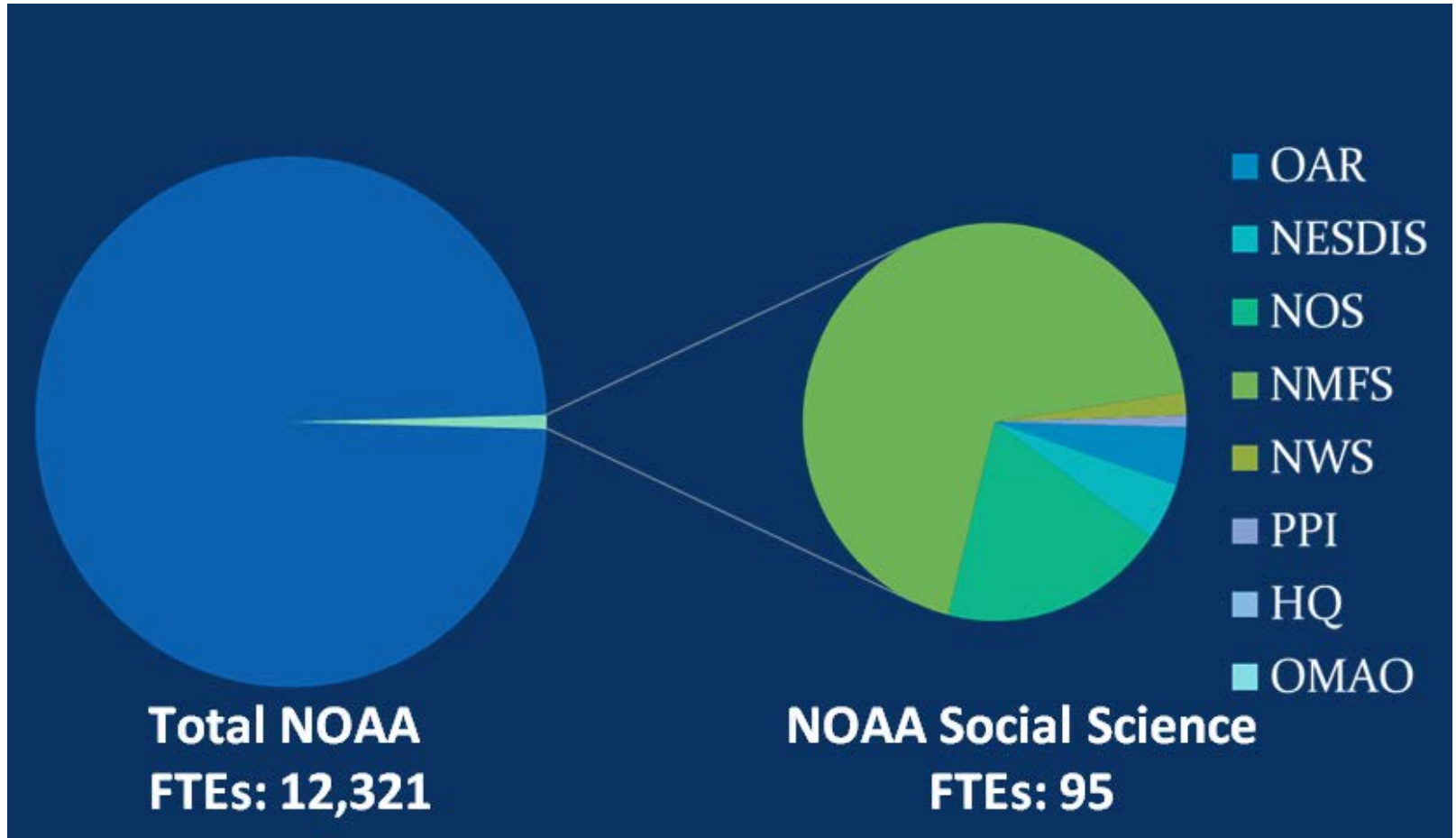


BACKUP SLIDES





NOAA's Social Science Workforce





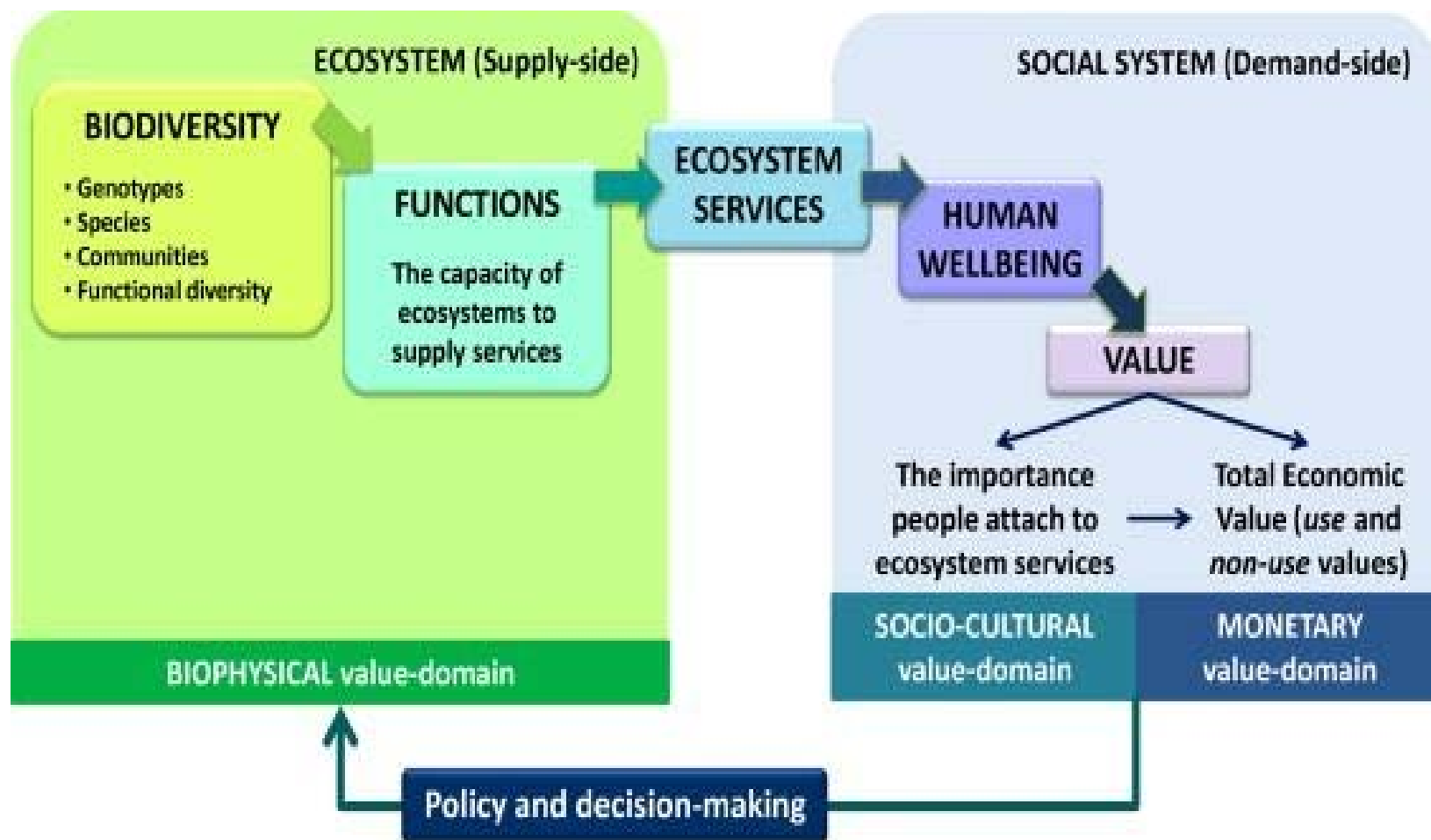
Ecosystem Services Team Members



- NOAA Chief Economist (*Vacant*)
 - Tracy Rouleau (PRSS)
 - Valerie Were (PRSS)
 - Suzanne Bricker (NOS)
 - Marie Bundy (NOS)
 - Peter Edwards (NOS)
 - Ariana Sutton Grier (NOS)
 - Jason Murray (NOS)
 - Peter Wiley (NOS)
 - Doug Lipton (NMFS)
 - Rita Curtis (NMFS/OST)
 - Giselle Samonte (NMFS/OHC)
 - Laura Henson (USEC/IA)
 - Chris Hayes (OAR)
 - LaToya Myles (OAR)
 - Elizabeth Rohring (OAR)
 - Daniel Pollak (General Counsel)
- Other Participants:
- Jordan Creed (PPI/NEPA Liaison)
 - Rachel Krasna (PPI/NEPA Liaison)



What are Ecosystem Services?





Other Social Science Priorities



Catalyze:

- Value of Information
- Nat Cap Business Roundtables
- New Blue Economy
- Ocean Satellite Account

Empower:

- Risk Communication and Behavior
- Social Science newsletter
- Implement/Annual Report on SSV&S

Coordinate:

- Ecosystem Services work across agency
- Interagency SBE Committees
- Social Science Committee
- Billion Dollar Weather and Climate Disasters
- NASA ROSES proposal on Socio-economic Benefits of Satellite Observations