

# NOAA, Society, and the Economy:

An Assessment of NOAA'S  
Social Science Capability and Needs

NOAA Science Advisory Board

Presented by  
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# Introduction



- Responding to request for Social Science Needs Assessment
- Social Science and NOAA's Vision
- Role of social science in NOAA
- Status of social science at NOAA - capacity, needs and gaps
- Filling the gaps

*“The capacity of NOAA to meet its mandates and mission is diminished by the under-representation and under utilization of social science.”*

~NOAA Science Advisory Board, 2003, 2009.

**Recommendation 4.2** NOAA should conduct a formal needs assessment to determine its needs for social science staff and research by program, and determine the appropriate mix of internal and external staffing to meet these needs. NOAA SAB, 2009

# NOAA Vision: NOAA Serves Society

*“Healthy ecosystems, communities,  
and economies that are resilient in the  
face of change.”*





# Social Science and NOAA's Mission

*“...necessary to  
sustain economic  
growth”*

*“...health of  
human society...”*

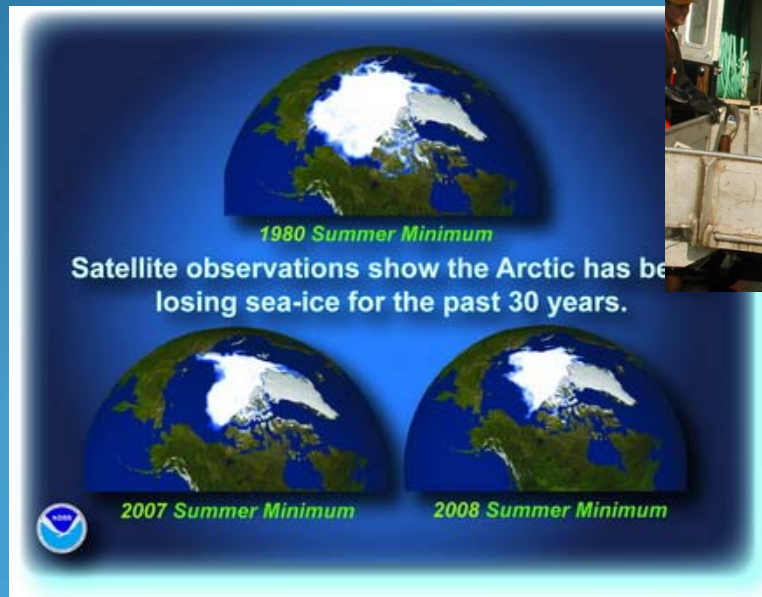
*“... communities are  
environmentally and  
economically  
sustainable”*

*“An informed  
society...”*

*“Society is  
prepared for and  
responds to ...”*

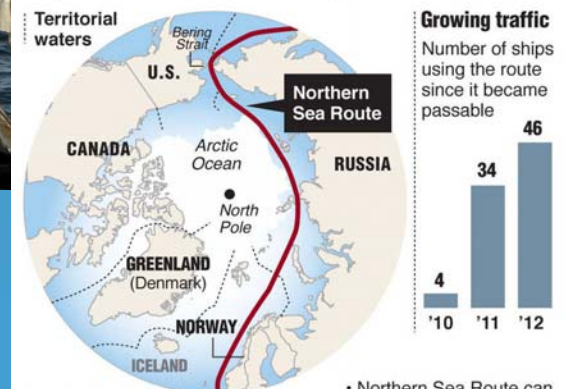
*“...understanding  
of the interaction  
between human  
activities and the  
Earth system...”*

*“...understanding of the interaction between human activities and the Earth system...”*



## Melting ice opens Arctic route

The Northern Sea Route is now navigable so ships can move cargo between Europe and Asia through this Arctic shortcut.



NOTE: U.S., Canada, Russia, Greenland (Denmark) and Norway have Arctic Ocean coastlines and have exclusive economic zones of 230 mi. (370 km), measured from the end of continental shelf

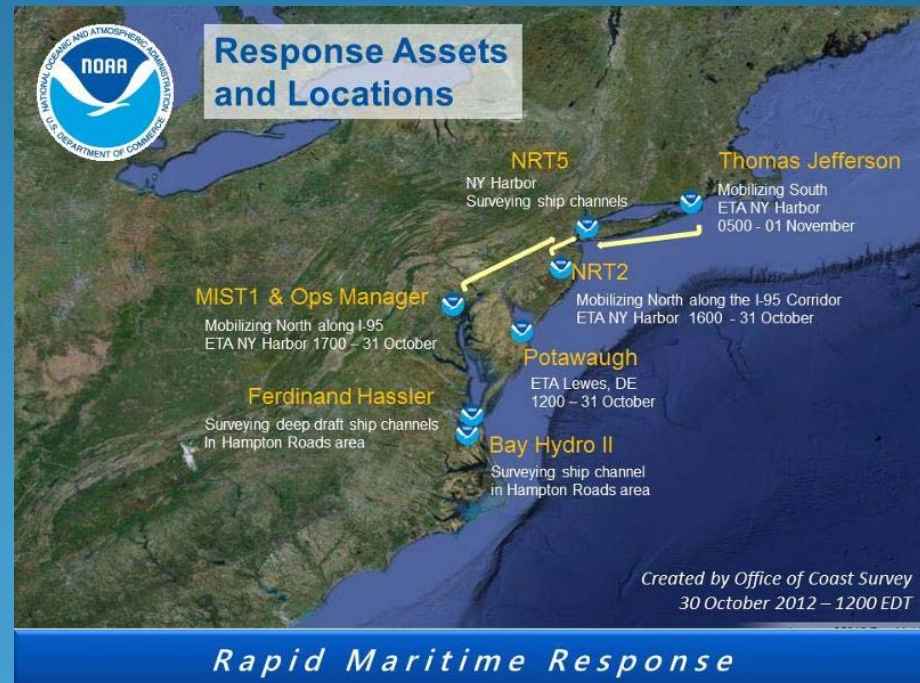
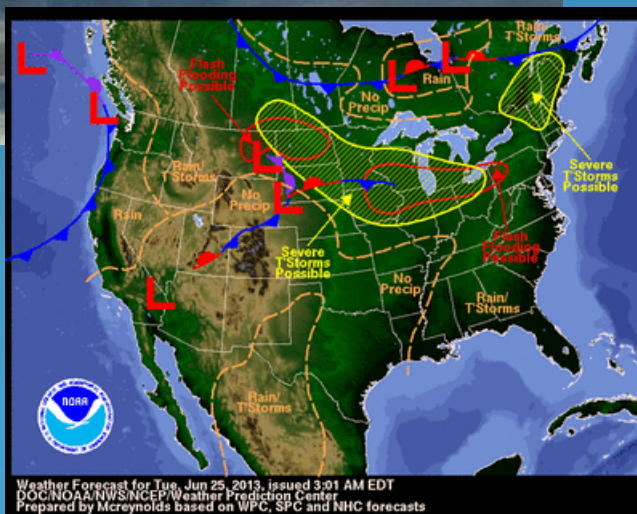
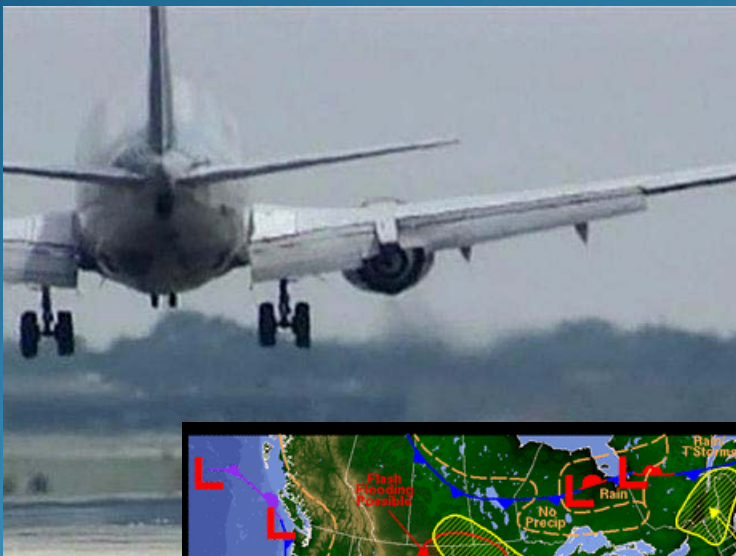
• Northern Sea Route can be 40 percent faster than using the southern route through the Suez Canal

Source: Barents Observer, ESRI, National Institute for Defense Studies (Japan), McClatchy Washington Bureau

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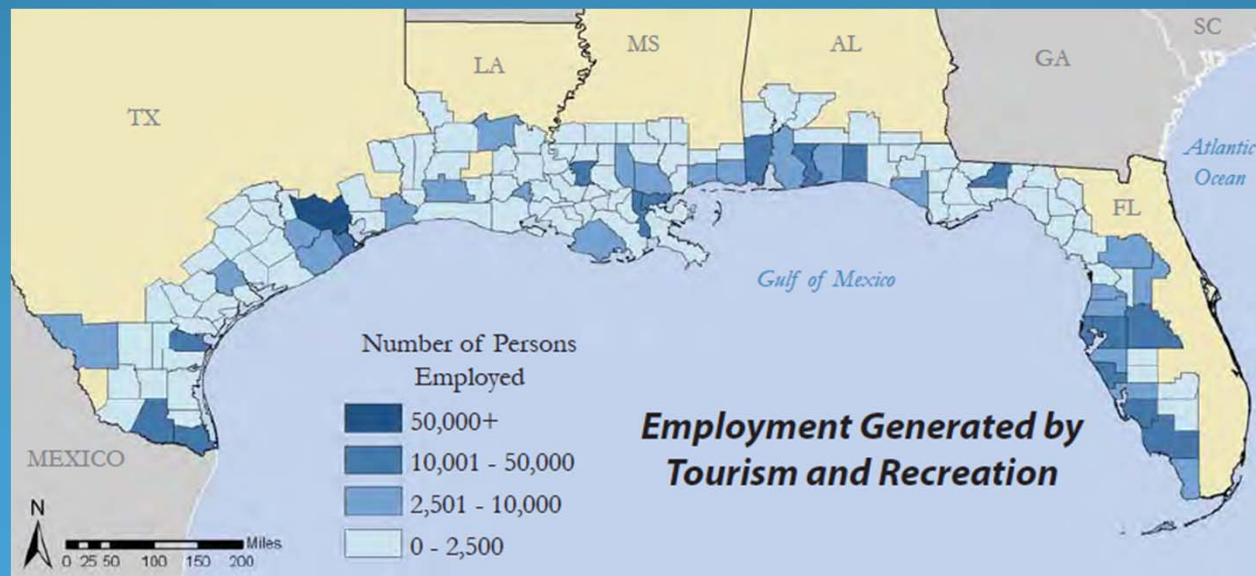


*“supports private enterprise with the information necessary to sustain economic growth”*





*“... communities are environmentally and economically sustainable”*

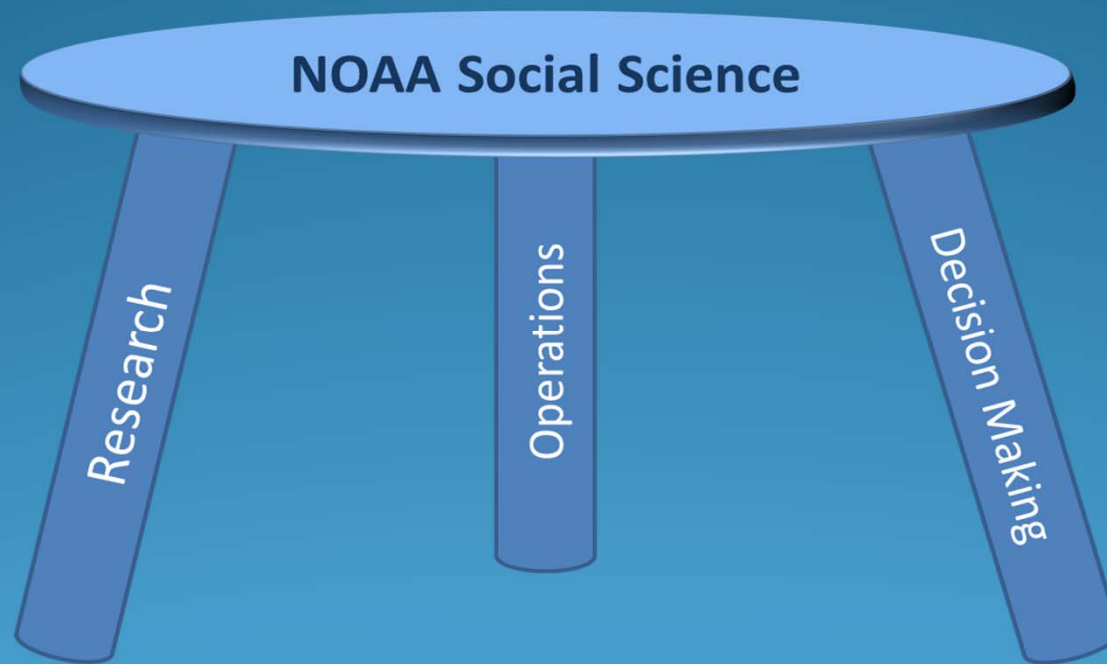




*“...social sciences continue to be underrepresented in NOAA’s research, operations, and decision making.”*

~NOAA Science Advisory Board, 2003, 2009.

# Social Science – More Than Research



# NOAA Mandates for Social Science

Magnuson Stevens Act

Regulatory Flexibility Act

Endangered Species Act

National Environmental Policy Act

Coastal Zone Management Act

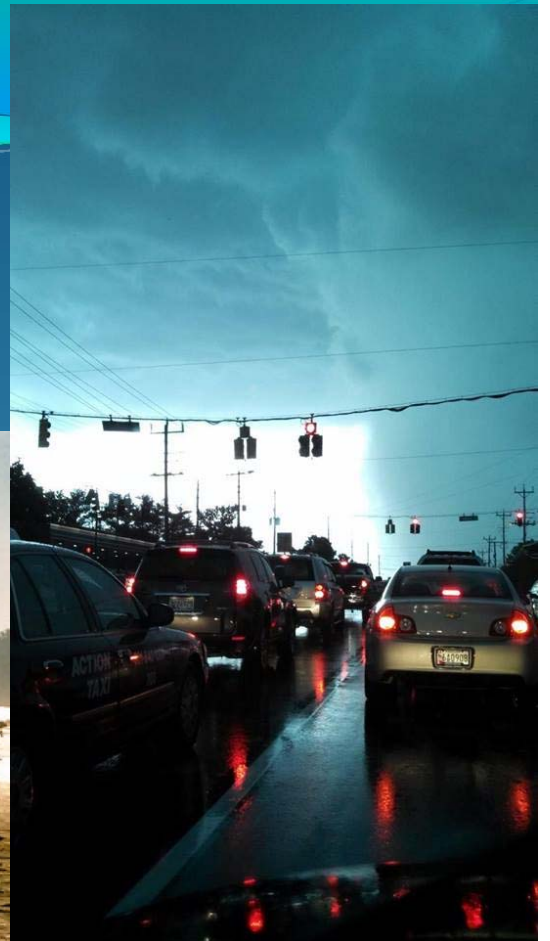
National Marine Sanctuaries Act

Comprehensive Environmental Response,  
Compensation, and Liability Act

Oil Pollution Act



# Social Science Needs and Capacity



# Demand for Social Science at NOAA

- ❖ OMB Passback/PCAST
- ❖ Billion-dollar weather and climate disasters
- ❖ Strategic investments, value of NOAA
- ❖ Response to legal mandates

*The CPA identifies “Investments in social science data, research, and analysis” as a Mission-Critical gap*

# Critical Needs

- Managing ecosystem services
- Weather Ready Nation
- Interdisciplinary expertise for Climate Prediction and adaptation
- Fishery management





# Critical Needs

1. Fisheries socioeconomic data collection
2. Understanding and communicating the value of NOAA's products and services
3. Interdisciplinary decision support work for Climate Program Office and National Climate Assessment
4. Risk behavior information
5. Risk communication expertise
6. Non-market value information on resiliency and hazards
7. Economic information for resource damage assessments
8. Valuing ecosystem services

## Summary of Social Science Capacity and Gaps - Staff\*

	Gaps**		
	FY 11 Capacity	Immediate Risks	Fully Operational
OAR	8	2	21
NOS	29	14	42
NMFS	96	10	56
NWS	3	1	30
NESDIS	6	5	20
PPI	3	1	5
NOAA HQ	1	3	2
OMAO	-	-	-
<b>Total</b>	<b>145</b>	<b>36</b>	<b>176</b>

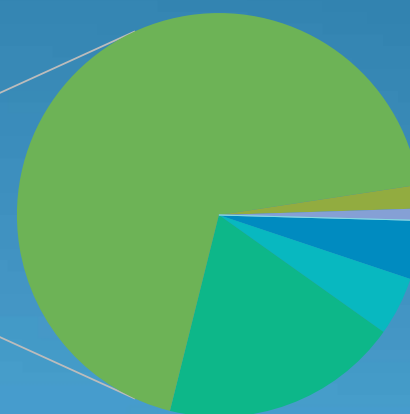
\* These include both Federal and contract staff

\*\*These represent additional staff needed

# Relative Capacity



Total NOAA  
FTEs: 12,321



NOAA Social Science  
FTEs: 95

- OAR
- NESDIS
- NOS
- NMFS
- NWS
- PPI
- HQ
- OMAO



# Recommendations

- One-NOAA Social Science Committee
- Fill the gaps – Tiger Team
- Periodic Needs Assessments



# Moving Forward

Tiger Team

- ✓ Recommendations for filling critical gaps
- ✓ Reports to Deputy Undersecretary for Operations
- ✓ Due August 2013



# Thank You

## Questions ?

