NOAA Observing Systems: Current Status and Way Forward

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October 29, 2015

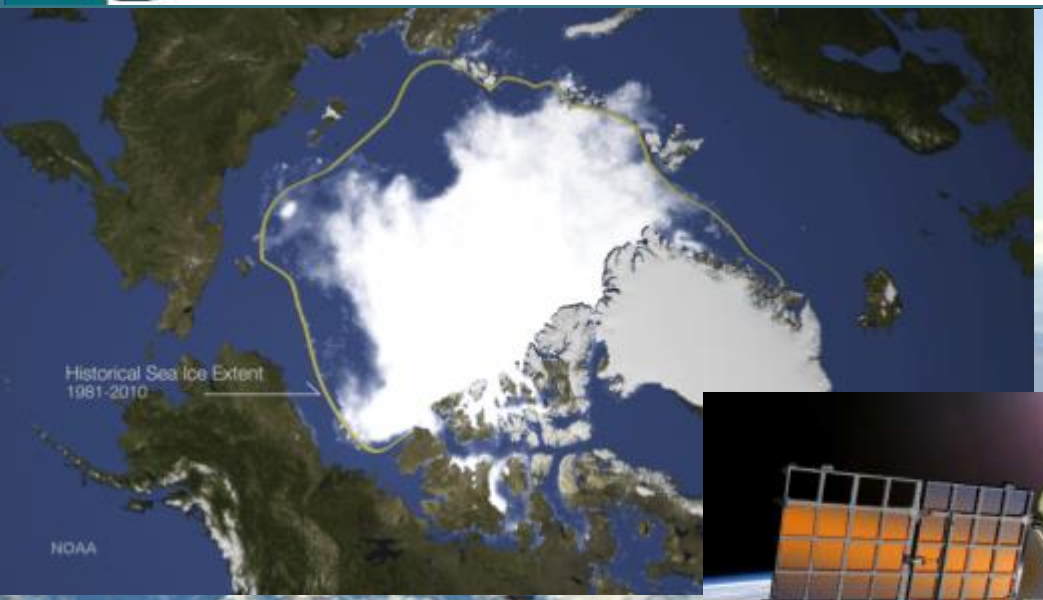
Agenda

- Purpose
- Strategic Drivers
- Administrator's Vision
- NOAA's Observing System Portfolio Management Capability
- Intrinsic Value of Observations
- Where We Stand Today
- Next Steps
- Conclusion

Purpose

Provide an overview of current NOAA Observing System Architecture and plans to develop an observing enterprise that is flexible, responsive to evolving technologies and economically sustainable in response to an ever-growing demand for environmental information.

Strategic Drivers



Administrator's Vision

"NOAA provides the environmental intelligence that helps citizens, businesses, and governments make smart choices."

"NOAA's environmental observations are the backbone of our global earth observing system and provide the information needed to provide a holistic picture of our planet from the depths of the oceans to the surface of the sun."

Strategic Priorities

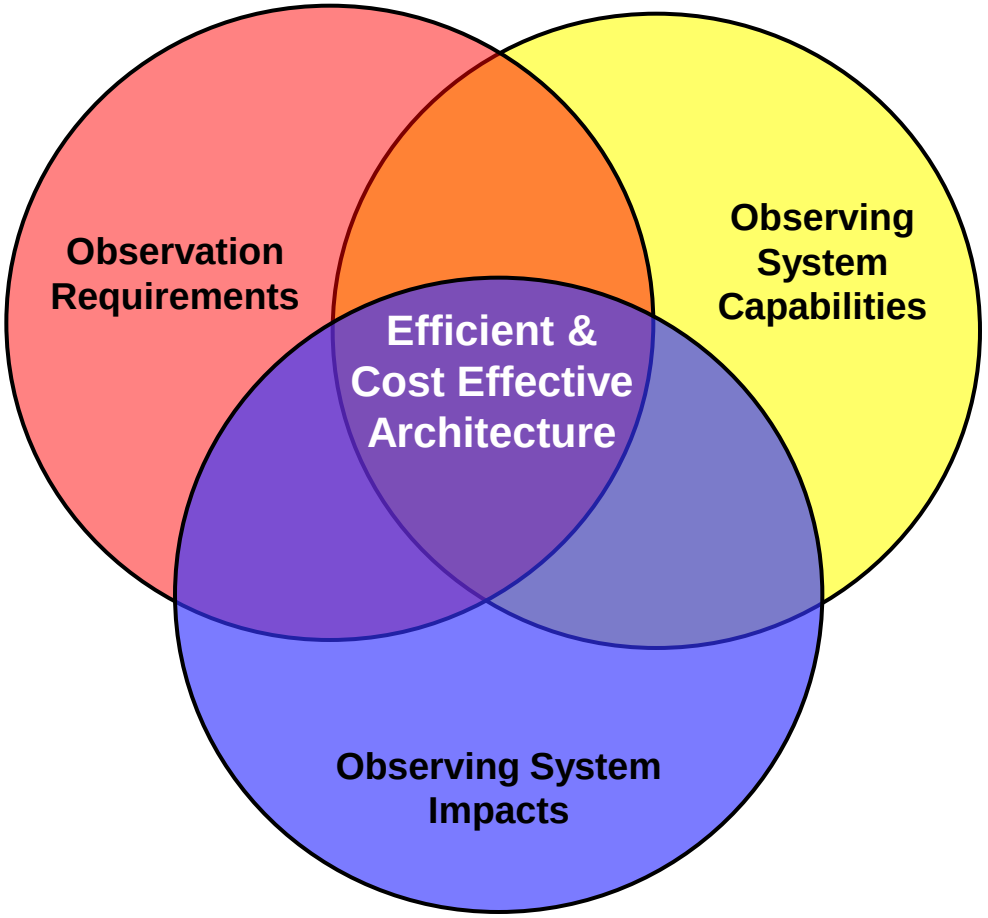
NOAA's Top 4 Priorities

1. Provide Information & Services to Make Communities More Resilient
2. Evolve the National Weather Service
3. **Invest in Observational Infrastructure**
4. Achieve Organizational Excellence

NOAA's Observing System

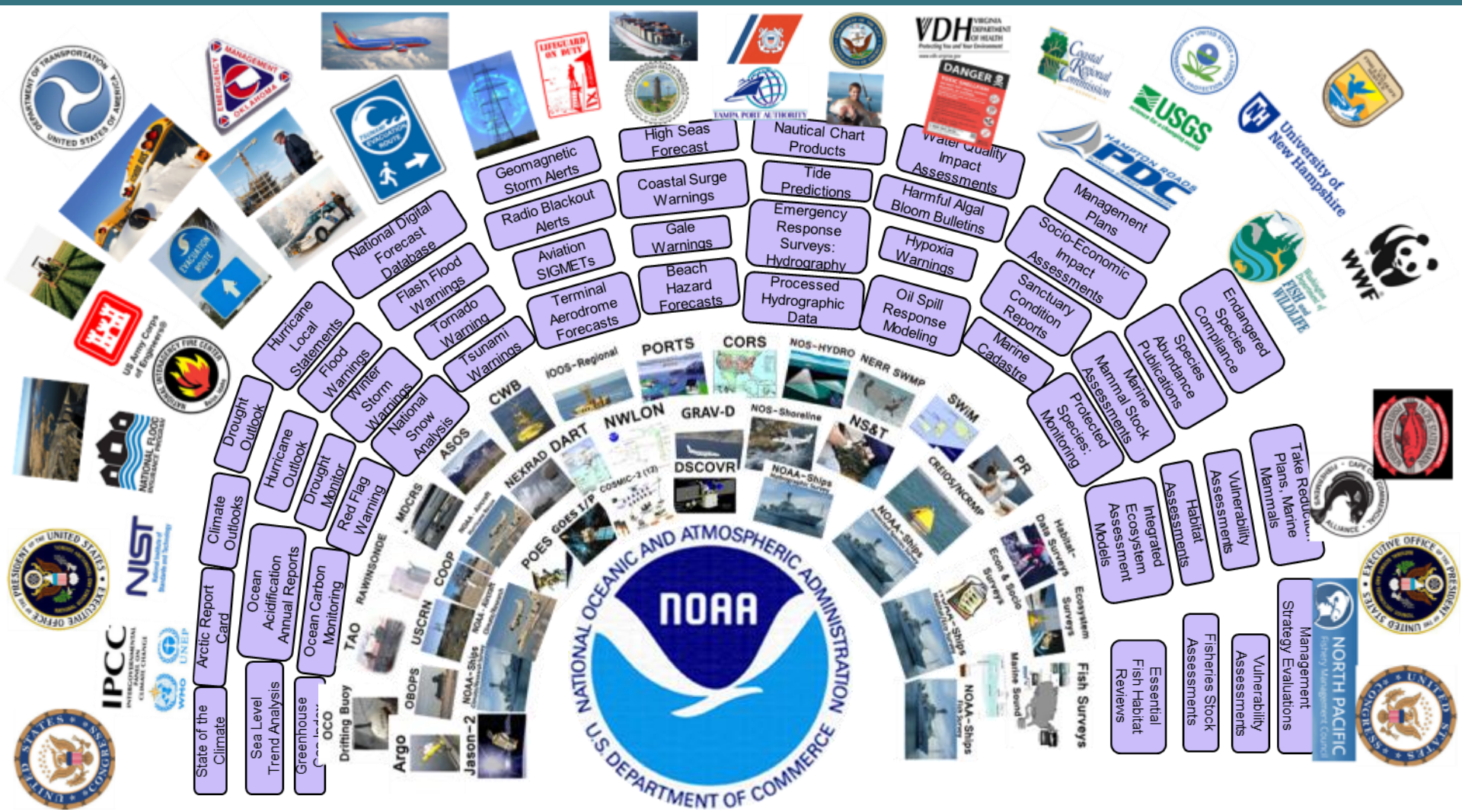
Portfolio Management Capability

- **Observing Requirements (System Independent)**
  - Consolidated Observations Requirements List (CORL)
- **Observing Systems and Capabilities**
  - NOAA Observing System Architecture (NOSA)
- **Data Source Impact to Mission Services**
  - NOAA Observing System Integrated Analysis (NOSIA-II)



Intrinsic Value of Observations

Systems, Services, Stakeholders



Observing System Architecture

Total NOAA Observation Requirements = 1518

NOAA Requirements met by

Observing System Owner	Location of Observing Systems				
	Terrestrial	Marine	Atmosphere	Space	Total
NOAA	42	50	12	7	111
U.S. Federal	36	6	13	21	76
State and Local	11	10	0	0	21
Academia	7	1	0	0	8
Commercial	1	3	0	3	7
International	10	9	3	12	34

Where We Stand Today

NOSIA Performance Summary

NOAA & Mission Goal Overall Status-Quo Performance Levels

NOAA	**66**
Weather-Ready Nation	**74**
Resilient Coastal Communities and Economies	**70**
Climate Adaptation & Mitigation	**69**
Healthy Oceans	**53**

Performance (Satisfaction) Scale		
100	Ideal	Meets all requirements and exceeds some
90	Fully Satisfied	Meets all requirements
80	Good	Meets all major requirements, with minor limitations
60	Fair	Meets most major requirements, with significant limitations
40	Poor	Fails to meet many major requirements, but provides some value
20	Very Poor	Fails to meet most major requirements, but provides minor value
1	No Capability	Provides no value

Next Steps

Transitioning Portfolio Management from Development to Operations

- Refresh environmental observing requirements
- Routinely examine functionality of existing observing systems to determine gaps and overlaps in meeting requirements
- Continue to refine and develop practices, policies, standards, and protocols for managing NOAA's observing systems
- Develop observing architecture alternatives, including emerging technologies, to best meet NOAA's mission requirements
- Provide portfolio management toolkit education for ingrainment into corporate processes and culture

Conclusion

NOAA is driving toward a portfolio management framework to develop an observing enterprise that strategically addresses mission priorities and is flexible, responsive to evolving technologies and economically sustainable.

Questions?