



Recent Applications of NOAA's Observing System Architecture Analysis Capabilities

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(Abstract 9.4)

David Helms, M.Yapur, L. Cantrell, J. Goldstein,
B. Priest, and A. Pratt, R. Reining, V. Ries

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Overview

1

NOAA's Portfolio Management Responsibility

2

NOAA's Value Tree, Tools and Results

NOAA's Observing System Architecture Policy



NOAA

OFFICE OF THE CHIEF
ADMINISTRATIVE OFFICER

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

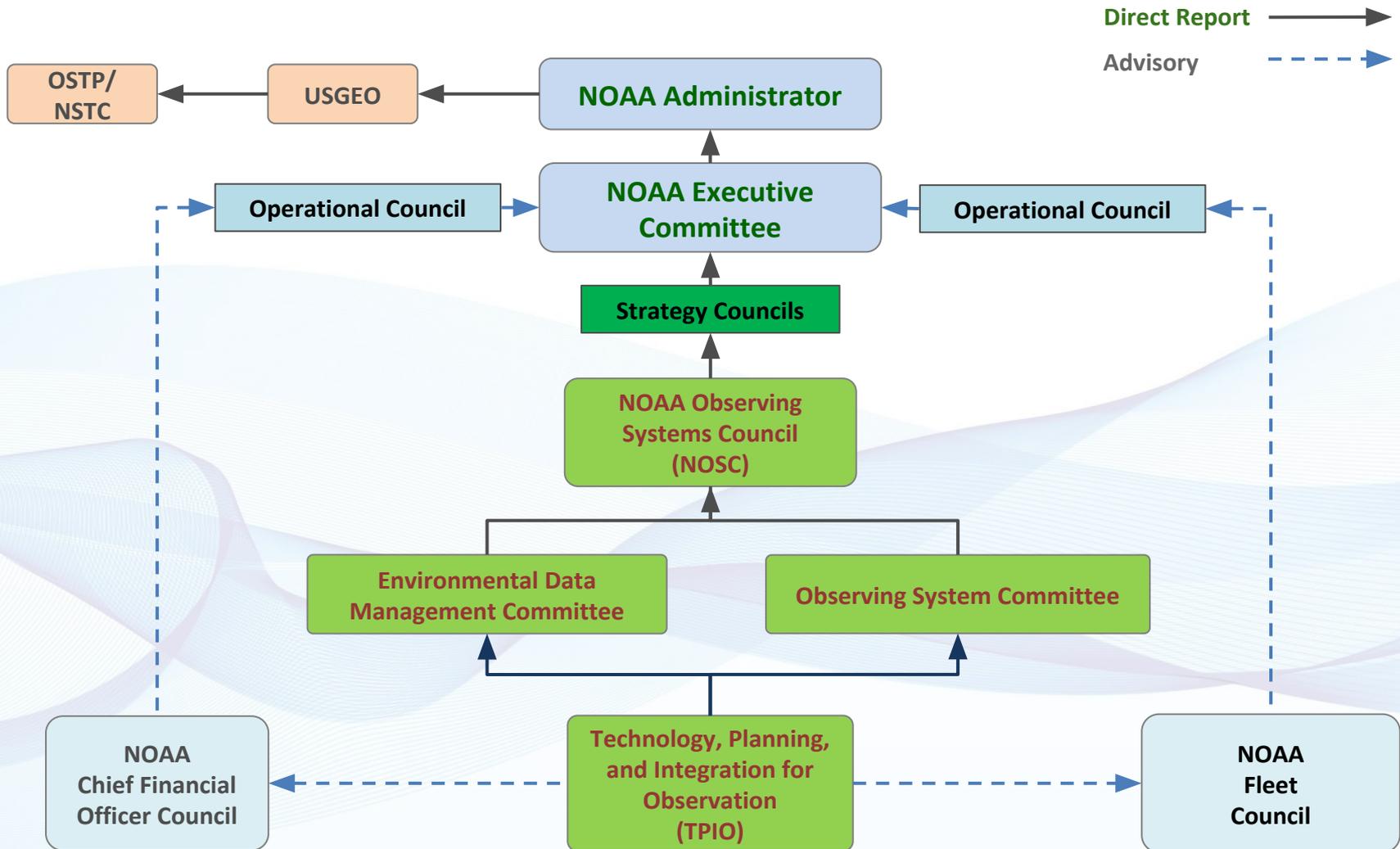
NAO 212-16: POLICY ON NOAA OBSERVING SYSTEMS PORTFOLIO MANAGEMENT

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[NAO 212-16: POLICY ON NOAA OBSERVING SYSTEMS PORTFOLIO MANAGEMENT PDF](#) 

Establishes policies, responsibilities, and requirements that relate to managing NOAA's portfolio of observing systems.

Policy Execution Through NOAA's Strategic Councils



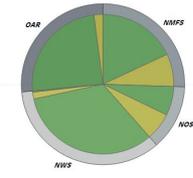
Observing System Portfolio Management



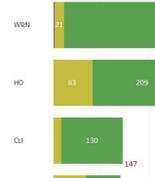
NOAA Observation Requirements
Total Requirements Displayed: 1,085

Priority	Line Office	Mission Service Area	GCMD Topic	GCMD Term	GCMD Variable	Show Priority & Validation Lev
All	All	All	All	All	All	Validation Lev
Requirement Status	Requirement Validation Level	Multiple values				

NOAA Line Office



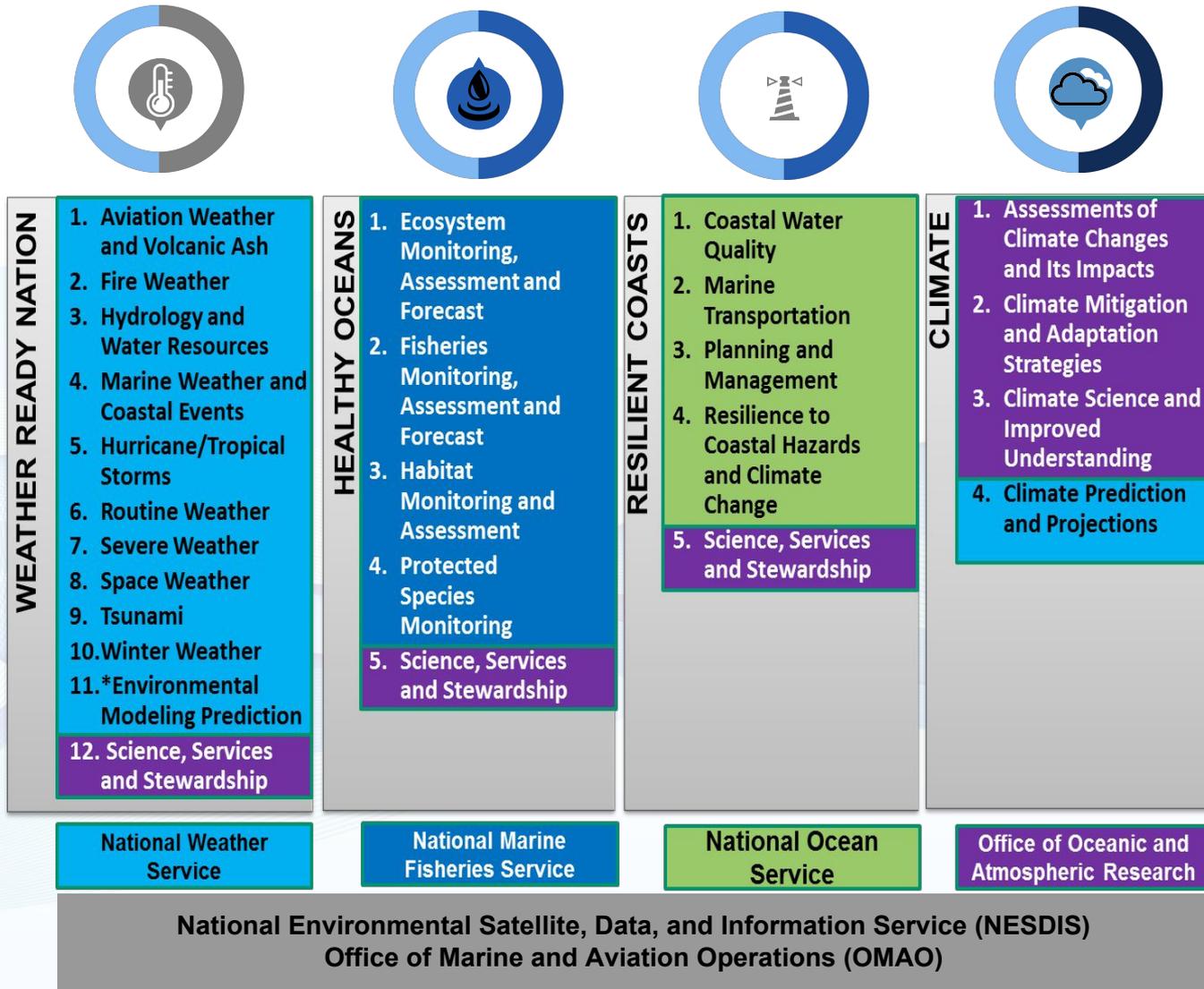
NOAA Goal



	HMPS	NOFS	NWS	OAR
1	277	142	431	288
2	51	117	99	110
3	25	16	39	3
Total	344	275	569	401

NOAA Mission Value Tree
Goal
Level
1 (Operational documentation)
2 (Subject Matter Experts (SME))
3 (Not validated)

NOAA's Services Value Tree

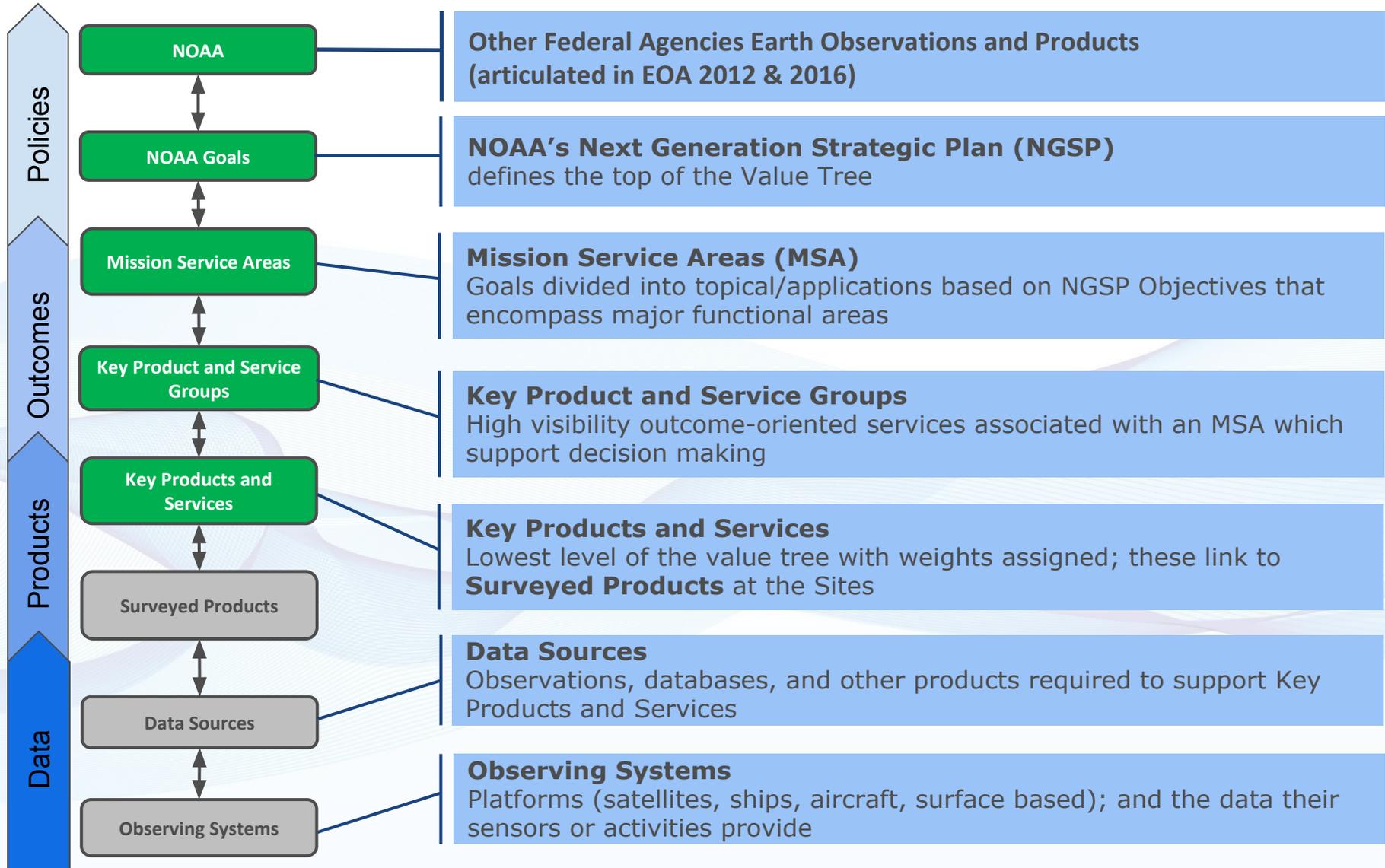


NOAA Business Units Surveyed

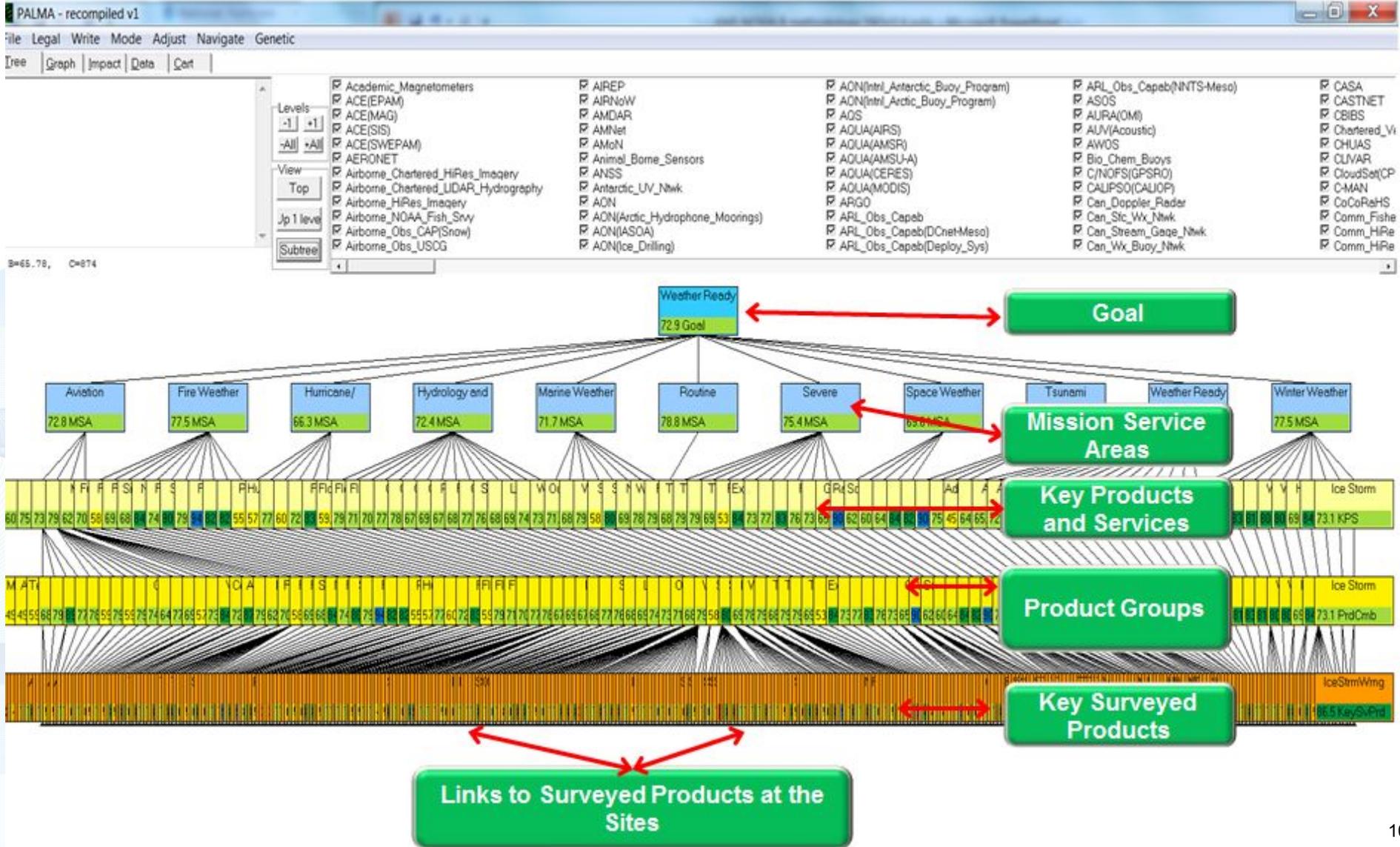


NOAA Value Tree Hierarchy

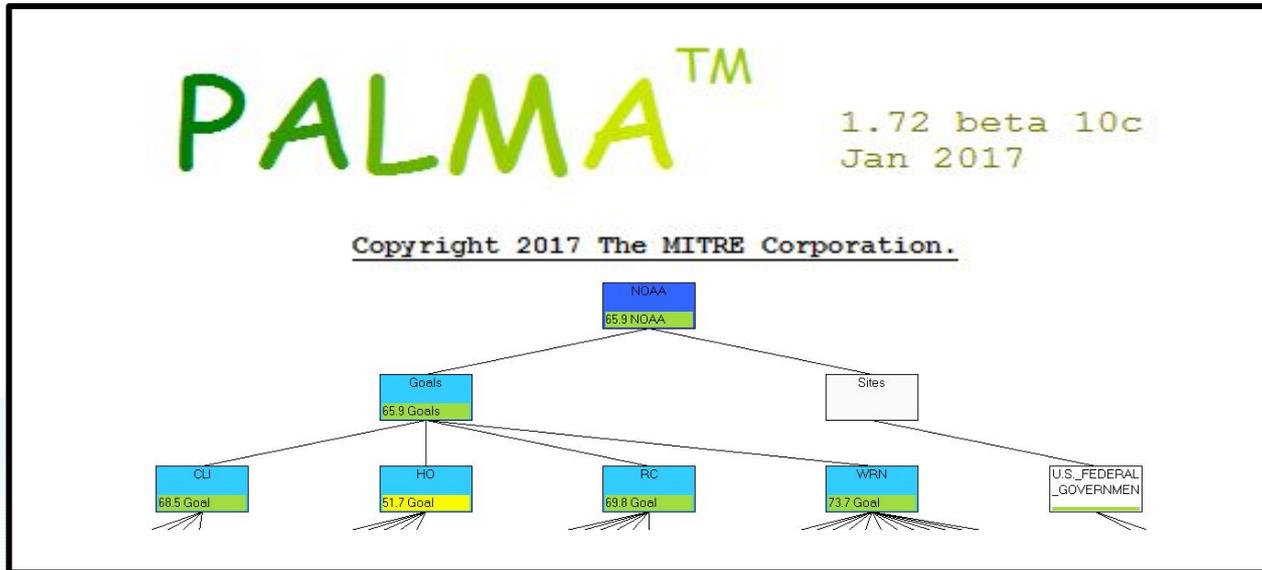
Vertical Slice



NOAA Value Tree Hierarchy Weather Ready Nation Tree



Portfolio Analysis Tools



EORES
Technology, Planning, and Integration for Observations
NOAA Home
TPIO Home
Contact TPIO

Earth Observation Requirements Evaluation System (EORES)

HOME LOG IN

Welcome to the EORES Application!

The purpose of EORES is to:

- Collect • Store • Visualize • Analyze • Report •

Utilizing data within and across the following entities:

- Earth Observation Requirements (EOR)
- Earth Observing Systems (EOS)
- Value Tree Information (VTI)

Employing an enterprise system providing capabilities which are:

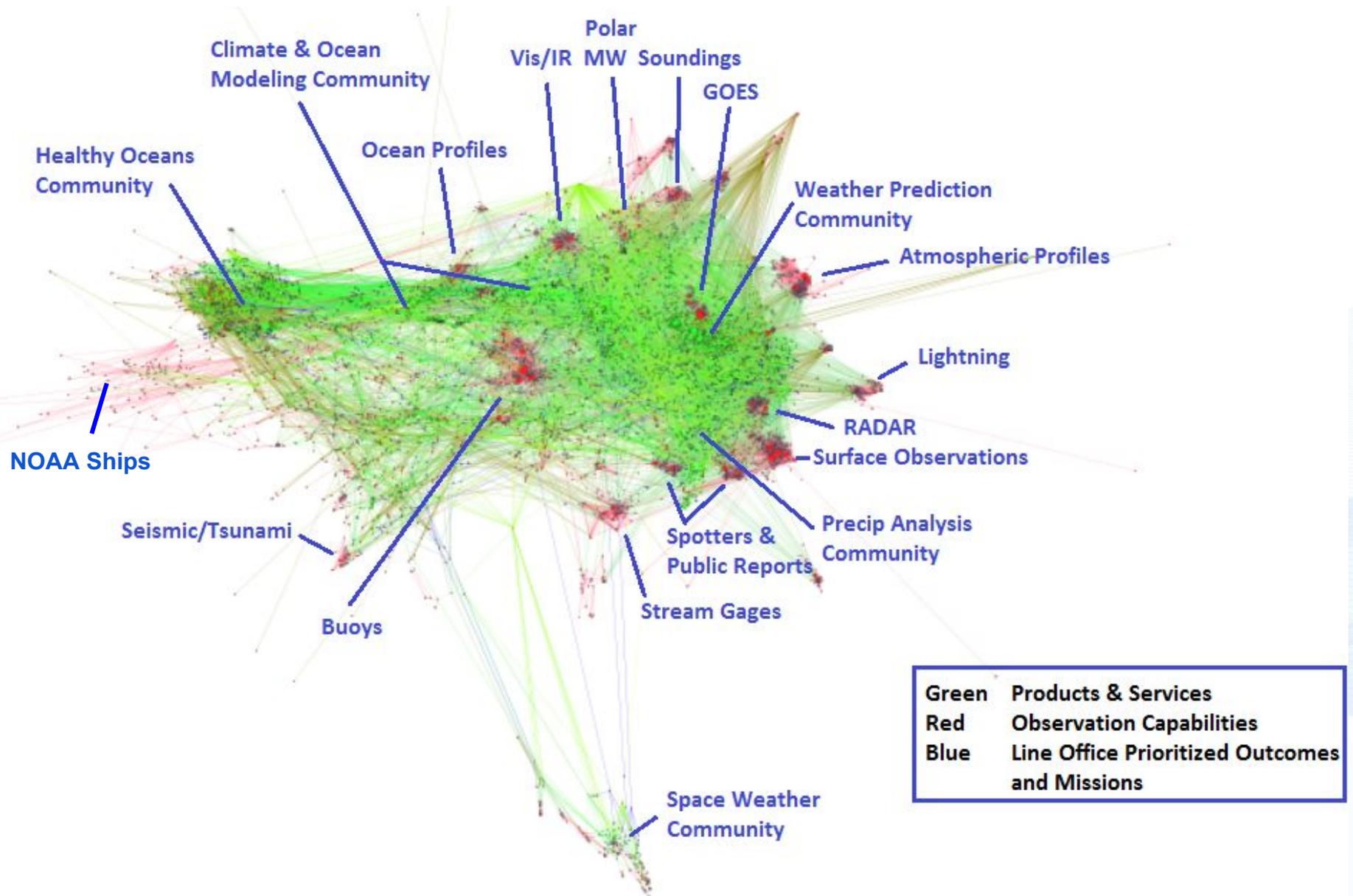
- ★ Online Accessible ★ Responsive ★ User-Friendly ★

EORES
... to begin using EORES!
• Report a problem/enhancement request

FOIA Privacy Policy Information Quality Disclaimer



Value Tree Node Graph



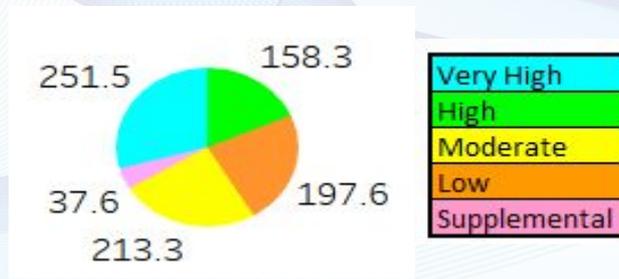
Top 20 Observations Programs

NOAA	
Observation Program	Impact Category
1 International Joint Polar System	Very High
2 NOAA Ships	Very High
3 Geostationary Operational Environmental Satellite 12-15	Very High
4 Next Generation Weather Radar	Very High
5 National Water Level Observation Network	High
6 Jason Ocean Surface Topography Mission (2, 3 & CS)	High
7 NOAA Aircraft	High
8 Commercial Fisheries Dependent Data Surveys	High
9 Global Argo Profiling Floats	High
10 Upper-air Rawinsonde Network Program	High
11 Fisheries Science Center Observing and Lab Capabilities	High
12 National Observer Program	High
13 ASOS/AWOS/SAWRS Group	High
14 University-National Oceanographic Laboratory System	High
15 AQUA	High
16 Habitat Assessment	High
17 National Estuarine Research Reserve System-Wide Monitoring Program	High
18 Coral Reef Ecosystem Integrated Observing System/National Coral Reef Monitoring Plan	Moderate
19 Global Drifter Program	Moderate
20 Animal Borne Tagging and Bar Coding System	Moderate

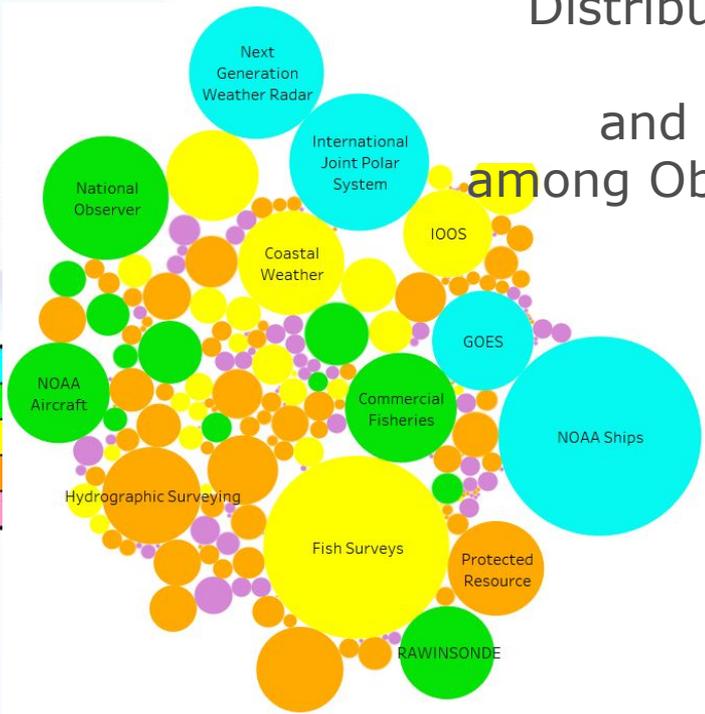
NOAA's Observing System Portfolio

Observing Systems	Space		Land		Air		Marine		Total	
	NOAA	Other	NOAA	Other	NOAA	Other	NOAA	Other	NOAA	Other
# in Operations	6	35	37	27	12	9	42	6	97	77
# in Development	3	5	1	1	2	0	2	0	8	6
# in Research	0	0	4	0	2	0	4	0	10	0
Measurement Domain	Space, Land, Air, Marine		Land, Air		Land, Air, Marine		Air, Marine			
Platforms Include (but not limited to)	Polar Satellites Geo Satellites Alt Satellites		Radars Towers Surface Systems		Aircraft Balloons UAVs		Ships Buoys Other Vessels			

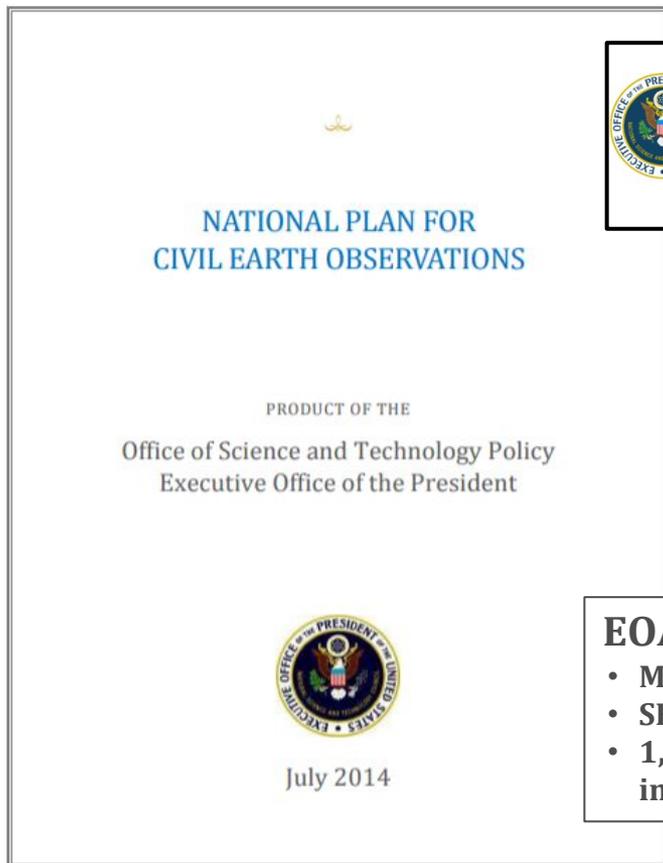
Distribution of Cost (\$M) among Impact Categories



Distribution of Cost (\$M) [Size] and impact [Color] among Observation Programs



Earth Observation Assessment



EOA 2016

- More than 600 SMEs.
- SBA value tree has 53,700+ nodes
- 1,300+ unique Earth observation inputs with impact.

Societal Benefit Areas (SBAs)	
	Agriculture and Forestry
	Biodiversity
	Climate
	Disasters
	Ecosystems (Terrestrial and Freshwater)
	Energy and Mineral Resources
	Human Health
	Ocean and Coastal Resources and Ecosystems
	Space Weather
	Transportation
	Water Resources
	Weather
	Reference Measurements

2016 NATIONAL EARTH OBSERVATION ASSESSMENT

2017 NATIONAL PLAN FOR CIVIL EARTH OBSERVATIONS

The second *National Plan for Civil Earth Observations* is pending, it will be released by the Office of Science and Technology Policy (OSTP), Executive Office of the President (EOP)

NOAA Technical Report NESDIS

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**NOAA Observing System Integrated Analysis (NOSIA-II)
Methodology Report**

Washington, D.C.
December 2015



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Environmental Satellite, Data, and Information Service

TPIO
Technology, Planning and
Integration for Observation