



**Southern Association of Marine Laboratories
Annual Meeting
University of Texas Marine Science Institute
Port Aransas, Texas**

May 2016



Joel Widder, Partner

Meg Thompson, Partner

Federal Science Partners LLC

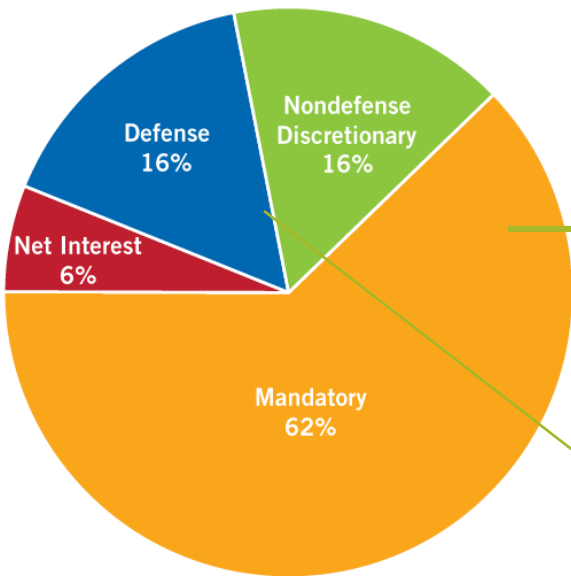
May 2016



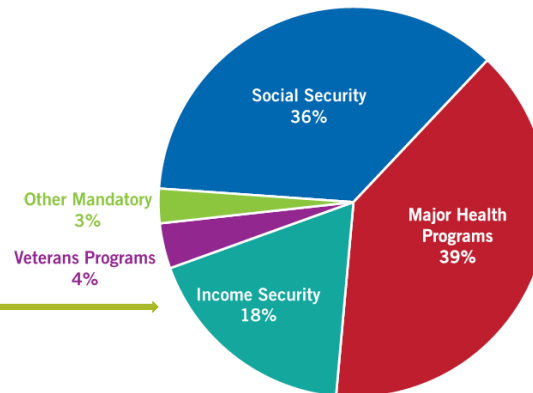


COMPOSITION OF THE FEDERAL BUDGET

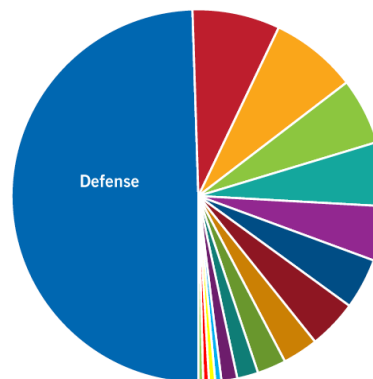
2015 Total Spending
\$3,688 Billion



2015 Programmatic Mandatory Spending
\$2,519 Billion



2015 Discretionary Outlays
\$1,169 Billion

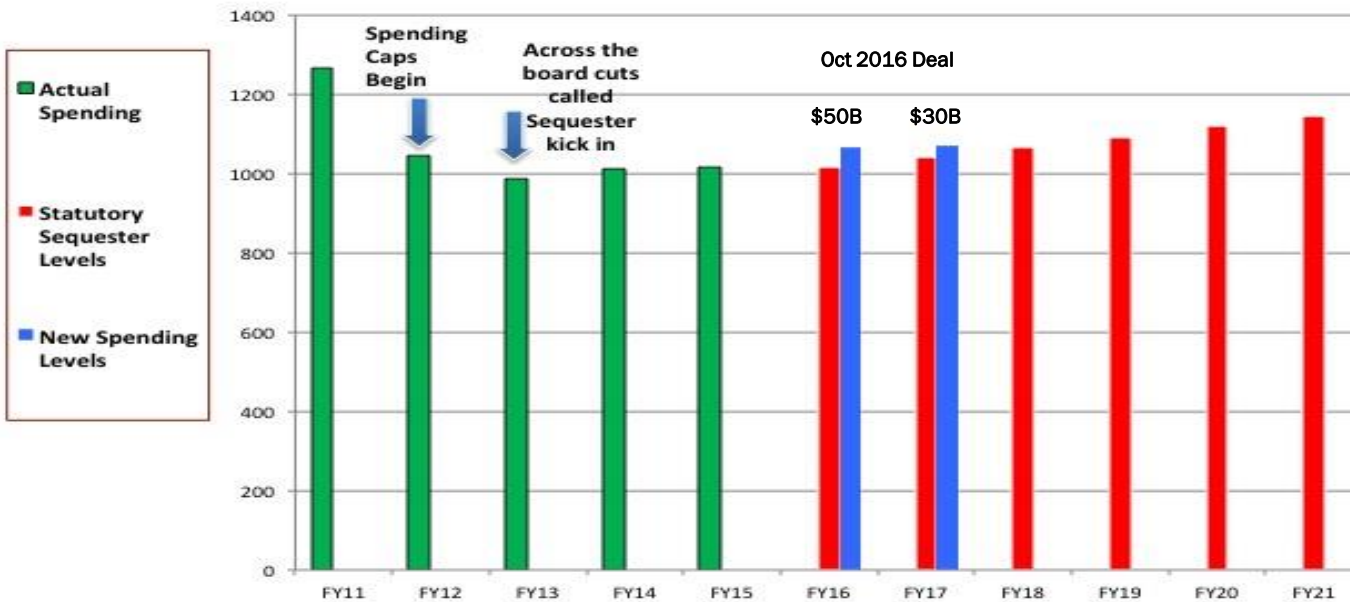


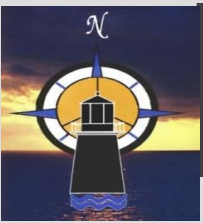
- Defense
- Education
- Transportation
- Veterans Benefits and Services
- Income Security
- Health (Discretionary Only)
- International Affairs
- Administration of Justice
- Natural Resources and Environment
- General Science, Space and Technology
- Community and Regional Development
- General Government
- Medicare Administrative Costs
- Agriculture
- Social Security Administrative Costs
- Energy



FEDERAL BUDGET ENVIRONMENT FOR FY 2017

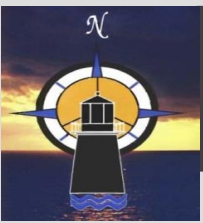
Total Federal Discretionary Spending for Defense and Nondefense Programs (in billions of dollars)





NAML ADVOCACY IN FY16 – EFFORTS AND RESULTS

- Funding cuts for geo-earth-climate research reversed
- Funding for extramural programs protected or restored – Prescott grants; Sea Grant; IOOS; climate research; cooperative institutes; coastal management grants;
- Congressional briefings on ocean acidification; coastal resiliency; coastal science and coastal economies;
- Collaborative dialog/program consultation with NCCOS
- Continued growth of NSF FSML program
- Collaboration with like-minded advocacy groups – IOOS Association, OBFS, Friends of NOAA, Consortium for Ocean Leadership, AGU, UCAR, etc.
- Protection of STEM education programs at NSF and mission agencies – NOAA, EPA, etc.
- NAML Testimony to House and Senate Appropriations Committees



NAML ADVOCACY FOR GEOSCIENCES FY16

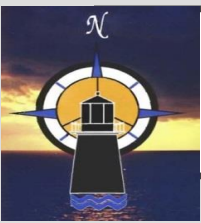
GEO Funding (Dollars in Millions)

| | FY 2015 | FY 2016 Estimate | Change Over FY 2015 | |
|--|-------------------|---------------------|---------------------|-------------|
| | Current Plan | | Current Plan | Amount |
| Atmospheric and Geospace Sciences (AGS) | 251.15 | 253.67 | 2.52 | 1.0% |
| EarthSciences (EAR) | 177.20 | 179.39 | 2.19 | 1.2% |
| Integrative and Collaborative Education and Research (ICER) | 83.74 | 83.74 | - | - |
| Ocean Sciences (OCE) | 355.95 | 359.89 | 3.94 | 1.1% |
| Polar Programs (PLR) | 436.35 | 441.85 | 5.50 | 1.3% |
| <i>U.S. Antarctic Logistical Support (USALS)</i> | <i>[67.52]</i> | <i>[67.52]</i> | - | - |
| Total, GEO | \$1,304.39 | \$1,318.54 | \$14.15 | 1.1% |

Totals may not add due to rounding.

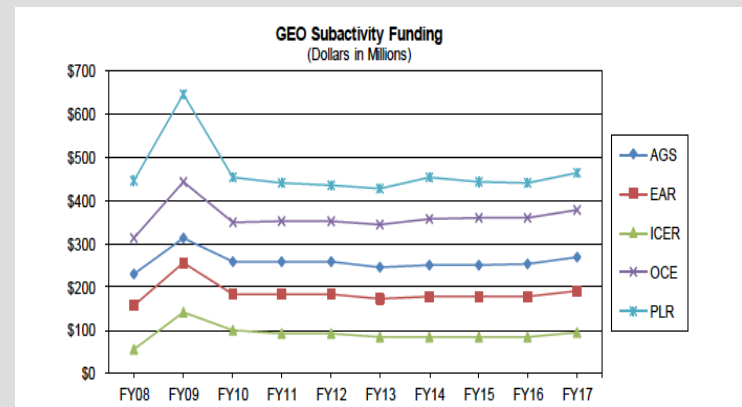
- Largest \$ increase at NSF in FY16
- Removal of a Directorate-Specific Allocation for GEO

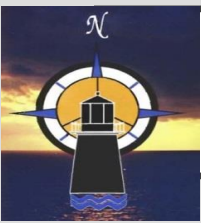




HIGHLIGHTS OF FY17 NSF BUDGET

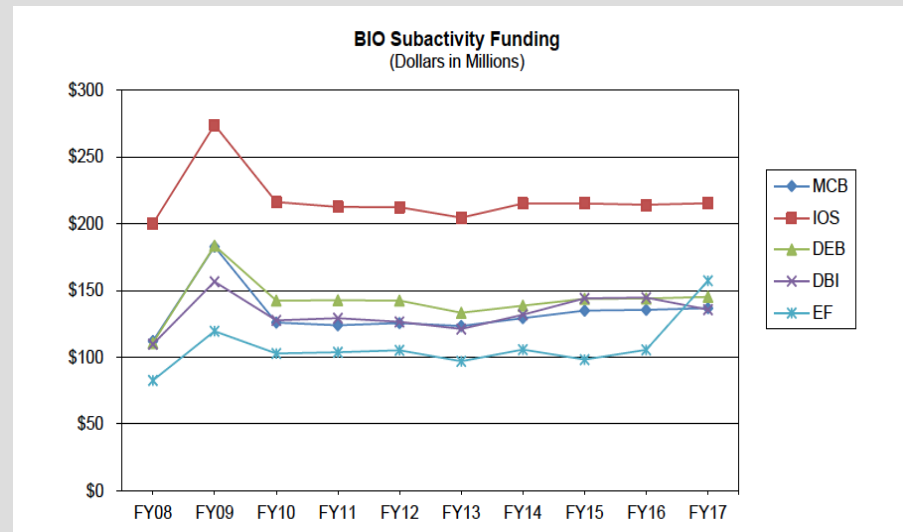
- Overall increase proposed is \$500M or 6.7%. Research up 6.5% and Education and Human Resources up 8.3%. Of the \$500M increment, \$400M is supposed to come from the mandatory side of the Federal Budget.
- NSF-wide initiatives; Understanding the Brain; Risk and Resilience; Food-Energy-Water; INCLUDES (Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science)
- Geosciences slated to grow by 6.1% or \$80M. However \$79M of the \$80M is mandatory funding
- All geoscience divisions essentially flat since FY 2010.
- OCE plan heavily influenced by *Sea Change*





HIGHLIGHTS OF FY17 NSF BUDGET

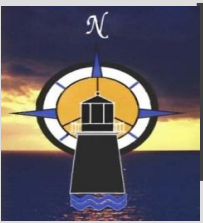
- NSF BIO Directorate is slated to grow to \$790.5M – that would be a \$46.35M (6.2%) increase over FY16. However, \$45M of the \$46.35M is mandatory funding.
- BIO's top priority is “core research across biology”. \$13M increase in Rules of Life program; NEON grows by \$21M to a level of \$65M to cover its annual O&M costs.
- Support for biological infrastructure declines by 6.2% or \$9M as collection and instrumentation development programs are re-assessed.
- BIO division funding flat since FY10





HIGHLIGHTS OF FY17 NOAA BUDGET

- Overall NOAA budget to increase by 1.3%. NOAA budget does not use mandatory funding for its increase.
- NOS – IOOS level at \$29.5M; Coastal Science Assessment to grow by \$4M for competitive research; Ocean & Coastal Management and Services grows by \$29M with coastal management grants to grow from \$75M to \$91M; Coral Reef, NERRS and Sanctuaries essentially level funded.
- OAR – to grow from \$482M to \$520M; Ocean, coastal and GL research drops from \$189M to \$179M; Climate research grows; weather and air quality research drops slightly; Coop Institutes for oceans, coasts and GL drop from \$32M to \$27M; Sea Grant is cut \$4.5M, ocean exploration by \$13M, OA grows by \$11M.
- NOAA Education to decline by 38%.



FY 17 BUDGET SUMMARY OF SELECTED NSF AND NASA PROGRAMS (\$ IN THOUSANDS)

| NATIONAL SCIENCE FOUNDATION | | | | | | |
|--|------------------|------------------|------------------|-----------|------------|------------------|
| | FY15 | FY16 | FY17 Request | FY17/FY16 | FY17 House | FY17 Senate |
| Research and Related Activities | 5,934,000 | 6,033,645 | 6,425,440 | 6% | | 6,033,450 |
| Major Research Equipment & Facilities Construction | 200,760 | 200,310 | 193,120 | -4% | | 246,573 |
| Education and Human Resources | 866,000 | 880,000 | 952,860 | 8% | | 880,000 |
| Agency Operations & Award Mgt | 306,560 | 330,000 | 373,020* | 13% | | 330,000 |
| Total NSF | 7,344,205 | 7,463,485 | 7,964,020 | 7% | | 7,509,788 |

*AOAM increases by \$43M none of which is "mandatory funding" and \$34M is for the agency's relocation to Alexandria, VA

| NATIONAL AERONAUTICS & SPACE ADMINISTRATION | | | | | | |
|---|-------------------|-------------------|-------------------|-----------|------------|-------------------|
| | FY15 | FY16 | FY17 Request | FY17/FY16 | FY17 House | FY17 Senate |
| Science | 5,244,700 | 5,589,400 | 5,898,500 | 6% | | 5,395,000 |
| Earth Science | 1,772,500 | 1,921,000 | 2,092,000 | 9% | | 1,984,000 |
| Education | 119,000 | 115,000 | 100,100 | -13% | | 108,000 |
| Total NASA | 18,010,000 | 19,285,000 | 19,788,100 | 3% | | 19,306,000 |





FY 17 BUDGET SUMMARY OF SELECTED NOAA PROGRAMS (\$ IN THOUSANDS)

| | FY15 | FY16 | FY17 Request | FY17/FY16 | FY17 House | FY 17 Senate |
|---|-----------|-----------|--------------|-----------|------------|--------------|
| National Ocean Service - Ops, Res & Facilities | | | | | | |
| Navigation, Observation & Positioning | 137,961 | 149,000 | 143,406 | -4% | | 149,094 |
| Integrated Ocean Observing System - Regional | 29,500 | 29,500 | 29,500 | 0% | | 31,500 |
| Coastal Science, Assessment, Response & Restoration | 71,000 | 72,600 | 87,112 | 20% | | 74,177 |
| Competitive External Research | 9,000 | 9,000 | 13,000 | 44% | | 13,000 |
| Coastal Management Grants | 71,146 | 75,000 | 90,646 | 21% | | 85,000 |
| Coral Reef Program | 26,000 | 26,000 | 26,100 | 0% | | 26,100 |
| NERRS | 21,300 | 23,000 | 23,000 | 0% | | 23,900 |
| Nat'l Marine Sanctuaries | 48,400 | 49,000 | 49,800 | 2% | | 49,800 |
| NOS - Ops, Research, & Facilities | 481,107 | 500,100 | 528,411 | 6% | | 522,071 |
| NMFS - Ops, Research & Facilities | | | | | | |
| Marine Mammals, Sea Turtles, etc | 115,219 | 110,246 | 125,107 | 13% | | 115,293 |
| Aquaculture | | 6,300 | 7,906 | 25% | | 9,300 |
| Fisheries Science & Management | 520,011 | 536,680 | 558,715 | 4% | | 543,959 |
| NMFS - Ops, Research & Facilities | 822,138 | 849,497 | 904,734 | 7% | | 854,831 |
| OAR - Ops, Research & Facilities | | | | | | |
| Climate Research | | | | | | |
| Labs & Coop Institutes | 60,000 | 60,000 | 70,913 | 18% | | 60,000 |
| Regional Climate Data and Info | 38,000 | 38,000 | 52,703 | 39% | | 38,000 |
| Climate Competitive Research | 60,000 | 60,000 | 66,250 | 10% | | 60,000 |
| Total Climate Research | 158,000 | 158,000 | 189,866 | 20% | | 158,000 |
| Ocean, Coastal, and Great Lakes Research | | | | | | |
| Labs & Coop Institutes | 27,000 | 32,000 | 27,389 | -14% | | 32,000 |
| National Sea Grant College Program | 62,800 | 64,000 | 61,900 | -3% | | 64,000 |
| Sea Grant - Aquaculture | 4,500 | 9,000 | 7,000 | -22% | | 10,000 |
| Sustained Ocean Observing and Monitoring | 41,300 | 41,596 | 41,823 | 1% | | 41,823 |
| Ocean Acidification | 8,500 | 10,000 | 21,775 | 118% | | 13,500 |
| Ocean Exploration | 28,000 | 32,000 | 19,568 | -39% | | 20,000 |
| Total Ocean, Coastal & GL Research | 172,100 | 188,596 | 179,455 | -5% | | 181,323 |
| Total OAR - Ops, Research & Facilities | 432,900 | 461,898 | 493,410 | 7% | | 451,878 |
| NOAA Education | 27,600 | 26,631 | 16,481 | -38% | | 26,931 |
| Total NOAA | 5,440,973 | 5,765,569 | 5,850,589 | 1% | | 5,691,169 |





CONGRESSIONAL REACTION TO FY17 BUDGET PROPOSAL

- Congress rejects mandatory funding increase proposals.
- NSF: Senate levels funds NSF research and education at FY16 level thus eliminating Administration's proposed 6% (\$500M) increase; increases NSF major equipment by \$46M with funding for a third RCRV while reducing NSF internal administrative and relocation expenses by similar amount;
- NSF: Calls on NSF to fund all disciplines; balance funding between research and infrastructure; calls on the National Science Board to assess mechanisms for funding large scale facilities' operations in light of constrained research budgets
- NOAA: Rejects Administration's: cuts in Sea Grant; proposed growth in ocean acidification; increases IOOS by \$2M; provides \$4M for Prescott grants; increases aquaculture in both NMFS and OAR/Sea Grant; rejects Admin's cut in ocean/coastal cooperative institutes – funded at FY16 level of \$32M; Ocean Exploration declines to \$20M (\$12M below FY16 level); Applauds NERRS Blue Ribbon "build out" report and calls on NOAA to act on report's recommendations.
- NASA – rejects mandatory funding proposal. Funds NASA at \$19.3B, \$1B above the budget request (entirely with discretionary resources). NASA Science is funded at \$5.4B of which \$1.98B is for earth science
- House Subcommittees expected to mark up later this month (May 2016)



SENATE DIRECTION ON NERRS, IOOS, AND NCCOS

“...Additionally, NOAA is encouraged to increase its monitoring and research activities with partners through its NERRS, Integrated Ocean Observing System [IOOS], and National Centers for Coastal Ocean Science offices to improve and expand a collective state of the art environmental observing system...”

Source: Page 25, Senate Report 114-239, Report that accompanies S. 2837, the Departments of Commerce and Justice, and Science and Related Agencies Appropriations Act, 2017, April 21, 2016.



OTHER PENDING ISSUES

- Geosciences, climate, USGCRP – all remain targets;
- NERRS Blue Ribbon Report – Build Out Plan
- NOAA CI-21 Plan – NOAA mission, synchronize and adapt, performer of choice, complement NOAA workforce
- America COMPETES legislation;
- Science in the National Interest bill;
- Sea Grant Reauthorization pending;
- IOOS legislation is pending;
- Talk of a new CZM bill;
- Administration’s Talk of STEM Ed consolidation seems to have died down



WHAT IS NAML'S PUBLIC POLICY POSTURE FOR FY 2017

- FY 2017 public policy priorities, appropriations testimony, March public policy meeting with key federal policy and decision makers
- Conducted Congressional briefings on ocean acidification and coastal science impacting coastal economies;
- NAML continues its interactions with key agency decision makers on coastal science, observing, extramural research;
- NAML joins with like-minded organizations to advocate for the health of federal research funding; geo and environmental research funding; STEM education; ocean, coastal and Great Lakes research and education;
- Increasing its visibility and partnerships with key agency and Administration decision makers;
- Preparing for the next Administration



WHAT TO EXPECT IN THIS ELECTION YEAR

- FY 2017 Appropriations – mandatory funding proposals have been dismissed out of hand making Administration proposed increases for science hard to come by; House and Senate Appropriations Committees are moving to mark up bills but conferenced by Oct 1 doubtful. Expect stop gap level funding (CR) to run until
- This time next year – new Administration; new Congress will convene; new leadership at many agencies and key Congressional committees;
- NAML to collaborate with like-minded organizations to increase the impact of its messages with key decision and policy makers;
- NAML to continue to increase its visibility and influence as a key and trusted voice with respect to the health of the oceans, coasts, and Great Lakes research and education community.