

TOS NEWS — March 26, 2018

## 1. From the President(s)

### **OPINION: FY2019 NSF Ocean Sciences Budget Request**

The US Federal Administration's FY2019 budget request for NSF (and in particular the Division of Ocean Sciences, OCE) is not good news. Funds requested for infrastructure including ships and operations of the Ocean Observing Initiative (OOI) and "core" competitive research are both down significantly from FY2016 levels, by about \$12 Million and \$8 Million, respectively (the FY2018 budget is still not resolved as of this writing in spite of recent congressional action).

Infrastructure costs have been difficult to control as OOI operations came on line; OOI (proposed at about \$40M/year) is down by about \$15M/year from a high of \$55M in FY2016. Although this is a net cost decrease to NSF, it is a cost increase to OCE because the full cost is now shifting from the Directorate for Geosciences (GEO), which contributed in the past, into OCE. This cost shift impacts other parts of the ocean sciences research portfolio. At the same time, the FY2019 budget request plans to divert significant funds from OCE (mostly from the research account) and other GEO Divisions toward the NSF "Big Ideas" initiative. The net result is the total OCE budget request for FY2019 is \$340 million, down from \$360 million in FY2016 (and \$361 million in FY2015). This does not include the effects of inflation, which has averaged about 2% since 2015 (consumer price index data) and is expected to move higher. In inflation-corrected terms, the current budget request is about \$50 million below what would be equivalent to FY2015 budgets, and those budgets were already austere.

The administration's proposed \$8M cut in FY2019 to the OCE research account (compared to FY2016), if enacted, will continue to put the US oceanographic community in a difficult position. This new cut comes just as we should be growing research budgets, recognizing the importance of ocean sciences for many national and international security, economic, and environmental interests. This is the time we should be ramping up OCE budgets and joining with our international partners in preparing for the [International Decade of Ocean Science \(2021-2030\)](#). Although ocean scientists certainly have big ideas and can compete for NSF's new Big Ideas initiative, successful proposals likely will require broader objectives than would be the case for OCE proposals focused on specific ocean challenges. New initiatives are welcome when accompanied by new money, but we question the wisdom of taxing already stressed core science budgets for this purpose, as it puts many essential programs (including recent new starts) at extreme risk.

The National Academies report commissioned by NSF, "*Sea Change: 2015-2025 Decadal Survey of Ocean Sciences*" (DSOS report, NRC 2015) outlined future scientific needs and recommended that NSF reverse the long-term budget erosion within OCE while reducing

fractional support to operate ocean infrastructure and increasing fractional support for core research programs. We reaffirm the DSOS recommendation that there is little point in funding infrastructure if the community cannot accomplish the science that the infrastructure is intended to enable. For example, in 2004 core research accounted for about 60% of the total OCE; this fraction was reasonably healthy. At the time of the DSOS report (2015), the research share was less than 50% and projected to drop even lower; that crisis precipitated the report. Thankfully, hard work by the NSF Division of Ocean Sciences temporarily stopped the erosion of research, but the FY2019 budget submission again would drop this fraction of funding to just 47% of the total. In just a few years since the DSOS report, considering inflation, the OCE research account will have lost 17% of its effective purchasing power. We appreciate the efforts of the current OCE leadership on behalf of the research community. We note that the FY2019 numbers reported here are a budget request, and not yet a budget reality. We urge the incoming OCE Division Director to redouble the existing OCE efforts to maintain an appropriate balance of core research and technology programs relative to infrastructure. We ask members of Congress and the NSF leadership to look again at the budget for ocean sciences research, and the practice of starting new initiatives by taxing core programs, with a goal of investing in the fundamental research that will move the science forward – this is in the nation’s and the world’s best interests. We further encourage members of the scientific community to share their vision both with the NSF leadership, and with their elected officials.

For additional analysis of NSF-OCE budget histories, see [Mix, A.C. \(2017\)](#), and the [DSOS Report](#).

**Alan C. Mix** (President of TOS; Distinguished Professor, College of Earth, Ocean, and Atmospheric Sciences, Oregon State University)

**James Yoder** (President Emeritus of TOS; Dean Emeritus, Woods Hole Oceanographic Institution, former Division Director, NSF-OCE)

Both were committee members and co-authors of the DSOS Report.

## References

Mix, A.C. 2017. Follow the money. *Oceanography* 30(2):7–9, <https://doi.org/10.5670/oceanog.2017.202>.

NRC (National Research Council). 2015. *Sea Change: 2015–2025 Decadal Survey of Ocean Sciences*. The National Academies Press, Washington, DC, 98 pp., <https://doi.org/10.17226/21655>.

## 2. New Corporate members

We would like to welcome the newest TOS corporate members, [Integral Consulting, Inc.](#) and [Science Media, NL](#). TOS has updated the [Corporate and Institutional membership](#) program, and we invite all corporate or nonprofit organizations interested in ocean sciences to join as members in this category. With the implementation of a flexible pricing strategy, TOS hopes to attract small “start-ups” as well as larger companies and institutions. Check out the list of

benefits [here](#), and send suggestions for organizations that could be good prospects for corporate or institutional membership to Jenny ([jenny@tos.org](mailto:jenny@tos.org)).

### **3. New TOS-Supported Events**

To further the society's goal of promoting broad understanding of oceanography across all disciplines of oceanography, the TOS Council recently agreed to provide support for two additional conferences, the [13th International Conference on Paleoceanography](#) and [Ocean Obs '19](#). Check out all the events TOS supports [here](#), and if you are planning to submit an abstract for [Ocean Optics XXIV](#), be sure to register and submit by May 4, 2018.

### **4. Self-Nominations Sought for OSM 2020 Vice-Chair and Student Representative Positions on Planning Committee**

Are you interested in representing TOS on the the 2020 Ocean Sciences Meeting Planning Committee? TOS is seeking self-nominations for the positions of vice-chair and student representative. The vice-chairs for TOS, ASLO, and AGU serve alongside the OSM 2020 co-chairs from each society to guide the planning process for the upcoming conference. The expectation is that the vice-chairs from each society assume the position of co-chair for the 2022 conference.

The student representatives from each of the three societies work together to plan student workshops and special events for the 2020 Ocean Sciences Meeting. Please visit [this page](#) to see examples of the types of events planned for 2018.

To learn more about these opportunities and to submit your self-nomination, please contact [Jenny Ramarui](#) by email by **April 30, 2018**.

### **5. Publications Update**

Several publications have recently been completed and are available for viewing on the [Oceanography website](#). Additionally, all members should have recently received e-mail messages from our new electronic publishing partner, Advanced Publishing, providing instructions on accessing the December and March issues. If you don't recall receiving these messages, please search for "Oceanography Magazine" or contact [Jenny Ramarui](#) if you are having any difficulties with the new system.