

## TOS NEWS — June 12, 2017

### 1. Message from TOS President Alan Mix

Paris, Quo Vadis?

Nations, states, organizations, and industries are now responding to the US withdrawal from the Paris (COP21) climate agreement. Although US withdrawal will certainly have some negative impacts, progress will continue. Industry now sees clean energy and environmental sustainability as economic opportunities. Citizens (in a recent poll, nearly 60% of the US public) support the Paris climate goals. Many states (my own Oregon included) have joined the US Climate Alliance in a bipartisan effort to uphold the Paris Agreement. As I write, 12 states (about one-third of the US population and economy) have joined and are already creating productive relationships abroad. More states and many cities are supportive and are considering joining.

What about The Oceanography Society? TOS is as global as the ocean. Oceanographers know that climate change is real, and that the ocean will mediate its future course. The ocean is already storing a portion of the excess CO<sub>2</sub> and heat in its upper layers, is moving it in ocean currents, and eventually will reach its limits to buffer change. As a result of ocean warming, sea level is rising, storms are intensifying, and vast expanses of coral reefs are dying off. Marine ecosystem and food supply disruptions are likely, for example, from acidification as excess CO<sub>2</sub> enters the ocean, and from regional oxygen loss associated with warmer waters. We have seen the beginnings of these impacts, and we know that much more is in store.

But there is hope. Solutions may also lie in the ocean, with innovative approaches to offshore energy production, desalinization of water where needed, biochemical sources of new medicines, valuable (if well managed) resources including food, and more.

We know what to do, and we are doing it. That said, I've never been a fan of the phrase, "the science is settled." Science is never really settled. It is often unsettling, as it uncovers hard truths. Although there is no longer serious doubt about the broad strokes of human-caused climate change, and the science is certainly sufficient to warrant coordinated global action as provided by the Paris framework, further research is needed.

Just as climate change will play out for centuries, so must the science. Unfortunately, along with withdrawing from the Paris climate agreements, the US administration has proposed devastating cuts to funding of science in all fields, but especially in fields that address various aspects of climate change and environmental science. This may be more damaging than short-term political withdrawal, and comes at just the time we should be accelerating research to better inform mitigation and adaptation strategies in a continuous cycle of improvement.

Congress is now considering the US budget proposal. We encourage Congress to do the right thing by both affirming the need for action on climate (including stronger measures beyond the Paris Agreement), and by increasing funding for fundamental research, including ocean science, that will move us toward broader and more detailed understanding of our beautiful

blue planet. We all need to do our part to get the message about the importance of science not just to politicians but to our neighbors. In the end, the environments that support us know no political boundaries and make no deals. The Oceanography Society affirms the reality of climate change, supports the need for coordinated action, and asserts that ocean sciences are an essential part of our grand challenge of sustaining a healthy planet. TOS stands ready to help.

## **2. Early Online Releases in *Oceanography* magazine**

Don't forget to check out the *Oceanography* [Early Online Release page](#) for the latest articles. Just posted: The 2017 Revelle Lecture given by Dawn Wright on "Swells, Soundings, and Sustainability... but 'Here Be Monsters.'"

## **3. Student Newsletter Coming Soon!**

Students — look out for the first issue of the TOS Student Newsletter, which will be emailed to you later this week!

## **4. 2018 Ocean Sciences Meeting Announcements**

The planning committee is working on organizing the sessions this week, and the abstract submission system for the Ocean Sciences Meeting will open in mid-July. TOS members will receive notice by email when the system is available.

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TOS is making great strides toward fulfilling its [mission](#) as we grow to represent more members of the oceanographic community worldwide. Please invite your colleagues to [join](#) by forwarding them [this link](#) to the membership page. If you would like to support TOS initiatives and programs, please consider [contributing](#) by following [this link](#).

Please contact Jenny Ramarui ([jenny@tos.org](mailto:jenny@tos.org)), TOS Executive Director, with any questions about items in this message or your membership.