

Proposed SAB Work Plan 2020-21 Topic from the Environmental Information Services Working Group

Title: An assessment of NOAA’s progress toward meeting the sub-seasonal and seasonal forecasting requirements.

Description of Planned Work:

TITLE II of the Weather Act of 2018 uniquely addresses “Sub-seasonal and Seasonal Forecast Innovation” and places clear priority on it as it relates to food security (the Act actually amends the Food Security Act of 1985), value to industry, and the mitigation of severe events on society. The Act defines NOAA’s Sub-seasonal and Seasonal (S2S) forecast responsibilities and authorized \$26M in each of the years 2017 and 2018 for the NWS to meet the provisions of the Act. For the purpose of this work, we will adopt the Act’s definitions, with sub-seasonal being defined as the period from 2 weeks to 3 months; and seasonal ranging from 3 months to 2 years.

Given NOAA has had two years and substantial funding directed at this topic it is critical that an assessment be completed on their overall progress toward establishing targeted activities and meeting stated S2S goals. The Act specifically calls for:

- Not later than 18 months after date of enactment (18 Oct 2018), the Undersecretary shall submit to Congress (relevant House and Senate Committees) a report including:

1. An analysis of how NOAA’s S2S forecasts are used for public planning and preparedness,

2. NOAA plans for the continued improvement of an S2S forecasting capability, including products to meet the need described in 1, and

3. An identification of the needed research, monitoring, observing and forecasting requirements for number 2.

The EISWG covered S2S last year in one of our meetings and developed a list of important questions that we would intend to answer in this effort:

- What is NOAA doing and on what timeline to address Weather Act priorities for S2S?
- Have stakeholders been properly identified? and if not, what is the plan to do so? This should be a first step.
- Will S2S implementations address these stakeholders' needs and have immediate societal value?
- What is NOAA's role? Where are the boundaries between NOAA and other information providers (e.g., the private sector)? NOAA needs to define where it is appropriate to provide foundational research and data and where to provide end-user products.

- After identifying stakeholders and their needs, NOAA should evaluate the upstream data, infrastructure and research needed. What is the process to do this?
- What research is underway already? What is planned? What is the role of OAR research and how are NWS and OAR coordinating on S2S?
- How are ocean observations being used to improve S2S predictions and products?

Proposed Deliverables: (Expected Product or Outcome—note that this may, but need not necessarily be, a report, memo, slide deck presentation, recommendations, workshop, etc.)

The core deliverable of this work plan topic from the EISWG will be a review of the NOAA report required by the Act.

Participants: (SAB Members, NOAA liaisons, NOAA Federal Advisory Committees, SMEs to work on this Topic—list and explain your choices. Please note that specific names do not have to be provided in all categories.)

The EISWG has several key members who will be both leaders of this effort and represent critical core areas that need to be explored. For example, Xubin Zeng and Bob Weller will be able to provide the needed technical expertise in the content related to climate. Justin Sharp and Brad Colman can provide expertise that is stakeholder and product focused, and Tom Altshuler has expertise in the area of political stakeholders and working toward ensuring the expectations of Congress are met.

In addition to these core members, we will evaluate whether there are any gaps that need to be filled with additional outside subject matter experts. In addition, we will depend upon our SAB representatives for their input and guidance.

Potential Challenges:

A potential challenge of this effort will be the timing and receipt of the NOAA report. The report was due on 18 October 2018. It is now in draft form and working its way through the system. We have received estimates that it may still be six months before it is finally submitted to Congress.

The EISWG will explore alternative ways to learn about and assess NOAA's efforts, including working with LO Liaisons to facilitate discussions with those NOAA scientists central to meeting the requirements of the Act.

Please be sure to answer the questions below for the SAB to consider this topic:

How does this topic relate to the Terms of Reference for the SAB or your Working Group?

The Weather Act explicitly calls out the EISWG and its role in assessing progress in meeting the Act's requirements and in providing recommendations back to the SAB and NOAA. This high priority and highly visible topic will be an important focus moving ahead.

In addition, the SAB's CWG has identified the area of ocean observations and their role in improving S2S predictability as a partner SAB work plan topic. The EISWG recognizes the fundamental role of the ocean in meeting the Act's objectives and is excited to partner with the CWG on the overall work related to S2S.

Is NOAA interested in this topic? If so, who from NOAA expressed interest?