

**NOAA Science Advisory Board**  
**NOAA Priorities**  
**January 2020**

The SAB has developed several priorities over the past eight months in conjunction with its four standing working groups (subcommittees).

The following list of priorities was developed with the NOAA leadership over the course of discussions from Dec 2019 - Jan 2020. The SAB should integrate these priorities into its work going forward, particularly over the next year (2020).

- Cloud and Artificial Intelligence (AI): two separate priorities that are linked in weather and ocean observing and forecasting. To that end EPIC progress is key and will need constant review by SAB Subcommittees and a briefing at each SAB meeting in 2020. Further, and generally related, advice is requested on EPIC-related matters: numerical weather prediction (NWP), Unified Weather Forecasting (UFS), Subseasonal to Seasonal forecasting (S2S), data assimilation.
- Resilience: define, understand NOAA's responsibility within the federal and national structure and advise on observations and predictions pertaining thereto.
  - Resilience relates to coastal weather/ocean dynamics; weather impact on coastal and non-coastal areas and flooding impact; focus on coastal resilience first.
- NOAA programs should leverage the innovations that are apparent in the private sector. Every SAB activity should consider how NOAA programs are taking advantage of ideas, processes, capabilities and talent from the private sector (industry, academia, philanthropic NGO's) and other federal partners; NOPP is one mechanism that is currently quite important, but not the only one.
  - For NOPP specifically and as a model, how can NOAA encourage co-investment by the private sector in NOPP efforts?
- Provide advice on a strategy for mitigation of 5G interference with weather satellite water vapor sensors.
- Provide advice on NOAA activities, partnerships and technology development to follow up from the White House Summit on Ocean S&T Partnerships and implement the Presidential Memorandum on Ocean Mapping of the US EEZ.
- The SAB and/or appropriate SAB Subcommittees should get briefings, gain knowledge and discuss:

- NOAA's Space Weather capability, responsibilities and how those relate to new national emphases on space operations and security.
  - NOAA's UxS enterprise operation at the end of 2020.
  - NOAA's progress in comprehensively including 'omics data collection in its observation programs.
  - NOAA strategies to observe noise in Marine Sanctuaries.
- Review and comment on the draft revised Science Integrity Policy, when available.
  - Within NOAA's Climate program what other climate observations should be considered?
  - Set up a Tsunami S&T Advisory Panel, per the Weather Act of 2017.

NOAA is in a dynamic business; new science opportunities and challenges emerge all the time; so do priorities from the Administration and Congress. To that end, NOAA Leadership may alter these priorities from time to time to ensure timely SAB advice.