

## **Remarks by Rear Admiral Tim Gallaudet, U.S. Navy (ret)**

Date: Wednesday, July 22, 2020  
Event: NOAA Science Advisory Board Meeting  
Time: 1:30-2:00 pm (30 minutes for remarks and discussion)  
Duration: 30 minutes  
Press: No  
Recording: No

## **NOAA Update for the Science Advisory Board (SAB)**

### **I. WEATHER, WATER & SPACE INNOVATION.**

#### **A. Weather & Water**

- EPIC RFP: <https://www.hpcwire.com/off-the-wire/noaa-seeks-partnership-to-help-develop-worlds-best-weather-model/>
- Flood mapping: <https://coast.noaa.gov/digitalcoast/stories/txflood.html>
- Supercomputer press: <https://wvhtf.org/2020/06/29/fairmont-based-noaa-supercomputer-ranked-among-top-500-in-the-world/>
- NWS operational update: IMET deployments, Hurricane Season, Barry Arm in AK, Spring Tornado outbreak, heat, rip currents, BHR ship fire,
- IOOS + AOML:
- UxS: <https://research.noaa.gov/article/ArtMID/587/ArticleID/2647/Unmanned-ocean-gliders-heading-to-sea-to-improve-hurricane-prediction>
- commercial ship obs: <https://ajot.com/news/maersk-fleet-to-improve-ocean-and-climate-science>
- NHC changes: <https://www.thewashingtondailynews.com/2020/06/30/noaa-unveils-new-tools-for-hurricane-season/>
- HazSimp: <https://www.weather.gov/hazardsimplification/revampprogress>
- Disaster preparedness: <https://federalnewsnetwork.com/workforce/2020/07/emergency-responders-pivoting-to-virtual-training-as-coronavirus-collides-with-hurricane-season/>
- NCEI COVID19 support to DHS NBACC
- leadership moves: <https://www.maritimeprofessional.com/news/reiss-named-director-noaa-ocean-357992>, <https://www.weather.gov/news/181210-brian-gross>

#### **B. Space Innovation**

- COSMIC-2: <https://spacenews.com/just-in-time-for-severe-weather-radio-occultation-data-feeds-noaa-weather-models/>
- CWDP: <https://spacepolicyonline.com/news/noaa-declares-commercial-weather-data-pilot-program-a-success/>
- JPSS cost savings: <https://spacepolicyonline.com/news/noaa-claims-significant-cost-reduction-for-polar-weather-satellites/>
- SARSAT record: <https://www.noaa.gov/media-release/noaa-satellites-helped-save-record-421-lives-in-2019>
- leadership moves: <https://www.executivegov.com/2020/06/karen-st-germain-on-nasas-earth-science-decadal-survey-implementation/>

- engagement at CHOW, NOSB, and other Virtual events

## II. BLUE ECONOMY.

- NOAA Blue Economy Executive Committee establishment, purpose to continue follow up from the ocean S&T partnerships summit.
- Ocean Enterprise Study: <https://ioos.noaa.gov/project/ocean-enterprise-study/>
- Ocean Economic Satellite Account: <https://coast.noaa.gov/data/digitalcoast/pdf/oesa.pdf>
- 2014-2018 Marine Economy Statistics: <https://www.noaa.gov/media-release/june-2-noaa-bea-to-announce-first-of-its-kind-us-marine-economy-estimate>

### A. Ocean mapping and exploration and observation

- Ocean Mapping PM, National & Alaska Strategy, Permitting Recommendations & Implementation Plan, NOMEAC.
- OE work led to new species discovered: <https://www.fisheries.noaa.gov/feature-story/magnificent-new-sponge-deep-gets-name>
- OE and OCS Partnerships status ( Caladan, OceanX, Ocean Infinity, Vulcan, Viking, SOI, Fugro, Woolpert)
- BGC ARGO: <https://globalocean.noaa.gov/News/noaa-research-awards-3-million-for-biogeochemical-argo-float-research>
- leadership moves: <https://www.pmel.noaa.gov/news-story/dr-michelle-mcclure-joins-pmel-new-director>

### B. Marine Transportation

- Precision Navigation development: <https://oceanservice.noaa.gov/navigation/precision-navigation/>
- 1m high def charts: <https://www.nauticalcharts.noaa.gov/updates/high-definition-charts-advance-precision-marine-navigation/>
- PORTS: 5 x enhancements to systems at: Cape Cod, NY/NJ, Houston, Corpus, & Mobile and 3 x new systems to be installed: Valdez, Portsmouth, & Kings Bay.
- new OFSs: <https://nauticalcharts.noaa.gov/news/estofs-micronesia-release.html>, <https://tidesandcurrents.noaa.gov/models.html>
- NSRS modernization: <https://amerisurv.com/2020/06/23/ngs-announces-delayed-release-of-the-modernized-nsrs/>
- one of NWS's many contributions: <https://docs.google.com/presentation/d/1wEaKhp6EBfzn50n3LCYb79eCDnQJPWjz5bQTfZEpAcc/edit#slide=id.p1>

### C. Seafood Competitiveness

- Seafood Executive Order, Seafood Trade TF, Aquaculture.
- habitat big data: <https://www.fisheries.noaa.gov/feature-story/explore-thousands-habitat-restoration-projects-noaa-restoration-atlas>

- whale rescues and notable protective efforts: <https://sanfrancisco.cbslocal.com/2020/05/19/u-s-coast-guard-helps-noaa-team-rescue-whale-tangled-in-fishing-gear-in-monterey-bay/>
- wind energy collaboration: <https://www.fisheries.noaa.gov/feature-story/wind-team-fishery-biologist-embraces-opportunities-innovation-collaboration>
- industry collaboration: <https://www.fisheries.noaa.gov/feature-story/fishermen-and-scientists-pioneer-cooperative-rockfish-survey>
- observer waiver adaptability: <https://www.fisheries.noaa.gov/leadership-message/noaa-fisheries-adapts-changing-circumstances-different-requirements-call-different>
- leadership moves: <https://www.fisheries.noaa.gov/feature-story/kelly-denit-appointed-new-director-noaas-office-sustainable-fisheries>,  
<https://www.fisheries.noaa.gov/feature-story/danielle-blacklock-appointed-new-director-noaa-fisheries-office-aquaculture>,  
<https://www.fisheries.noaa.gov/feature-story/carrie-selberg-robinson-appointed-new-director-noaa-fisheries-office-habitat>

#### D. Tourism & Recreation

- NMNS Expansions & New Designations
- partnerships: NMMA, Blue Star, Force Blue, GGGI, NFWF.
- coral reefs: <https://www.aza.org/connect-stories/stories/collaborating-to-save-the-florida-reef-tract>,
- marine debris: <https://marinedebris.noaa.gov/funding/funding-opportunities>,  
<https://www.maritime-executive.com/editorials/infographic-marine-debris-and-the-coastal-tourism-economy>
- spill response advances: <https://www.maritime-executive.com/editorials/how-the-science-of-spill-response-has-changed-since-deepwater-horizon>
- HAB forecasts: [https://tidesandcurrents.noaa.gov/hab\\_info.html](https://tidesandcurrents.noaa.gov/hab_info.html)

#### E. Coastal Resilience

- NOAA & NFWF grants: <https://www.nfwf.org/media-center/press-releases/nfwf-announces-release-national-coastal-resilience-fund-2020-request-proposals>

### III. S&T

- 5 Strategies now released: <https://nrc.noaa.gov/NOAA-Science-Technology-Focus-Areas>
- Implementation plans being developed
- NRC adding S&T innovation to their TOR.
- S&T Synergy Committee established under the NRC and will include the 5 S&T Focus Areas as well as citizen science and social science.
- NOAA Center for AI legislative update.
- NOAA DOD, DOE AI consortium for HADR

- Citizen Science Strategy being developed, mPING caution:
- other interesting developments:
- UxS deployments during COVID19: <https://www.noaa.gov/stories/noaa-ramps-up-use-of-drones-to-collect-fish-seafloor-and-weather-data>
- <https://alaska-native-news.com/autonomous-vehicles-help-scientists-estimate-fish-abundance-while-protecting-human-health-and-safety/49433/>
- demonstration in AK: <http://www.m2ocean.com/hydrographic-products.html>
- looking to AI for coral: <https://www.forbes.com/sites/jeffmcmahon/2020/06/22/robot-divers-will-use-artificial-intelligence-to-save-coral-reefs-noaa-hopes/>,  
<https://qcn.com/articles/2020/04/22/nemo-net-coral-mapping.aspx>
- tuna tracking: <https://www.sciencedaily.com/releases/2020/06/200605121521.htm>
- mapping w/ASVs: <https://www.theverge.com/2020/3/5/21157791/drone-autonomous-boat-ben-shipwreck-alley-unh-noaa-great-lakes-thunder-bay>
- now sharing this data with Navy to create AI training datasets:  
<https://storymaps.arcgis.com/stories/e245977def474bdba60952f30576908f>
- IFCBs + AUVs + AI for HABs: [https://cdn.coastalscience.noaa.gov/page-attachments/about/reviews/NCCOS%20HAB%20hypoxia%20science%20review\\_Partner%20pres\\_2.27.18.pdf](https://cdn.coastalscience.noaa.gov/page-attachments/about/reviews/NCCOS%20HAB%20hypoxia%20science%20review_Partner%20pres_2.27.18.pdf)

#### IV. INTERAGENCY, INTERNATIONAL, ACADEMIA

##### A. Interagency

- OSTP: 4 x details for Wx, satellites, oceans, & resilience.
- WSC.
- MDA ESC.
- CMTS CB.
- National Space based PNT EXCOM.
- OPC, ORM, OST.
- NISC.
- NSTC: ICAMS, USGEO, CoSTEM, Select Committee on AI.
- IARPC.
- DOD SERDP.
- NCA5.
- DHS S&T MOU.
- Navy MOU Annex on CENOTE.
- OLE IUUF patrols with USCG

##### B. International

- NSC, Pacific PCCs, Maritime Security PCCs, Arctic Security PCC.
- Arctic Council.
- WMO.
- IHO

- ICCAT.
- Pacific MPA Partnership: <https://www.oceanographicmagazine.com/news/palau-national-marine-sanctuary/>
- MOSAiC: <https://research.noaa.gov/article/ArtMID/587/ArticleID/2557/A-Year-Locked-in-Ice>
- ATOMIC: <https://www.barbadosadvocate.com/news/students-enjoy-tour-noaa-vessel>

### C. Academia

- New CIMAS award to UM
- new CIMEAS award to UCSD
- new CICOES award to UW
- COVID19 GOMO Assist: <https://globalocean.noaa.gov/News/cce-1-moored-buoy-rescued-days-after-breaking-from-anchor>

## V. PEOPLE

- SASH.
- LDCP.
- Environmental Leadership Seminar Series.
- Leadership Seminar Series.
- Mentoring Program.
- Coaching & facilitating.
- New supervisors orientation.
- New hire orientation.
- Work- life branch Services.
- continuing scholars, interns, fellow, and honors programs virtually
- leadership moves: <https://www.noaa.gov/organization/human-capital/our-people/sean-clayton>
- continued outreach: <https://docs.google.com/forms/d/e/1FAIpQLSdt8xkY5NsGcrGJLD2RnETMeIQgpSzqi5rUTtJQ5eDRIGFCeA/viewform>

## VI. HOT TOPICS

- COVID19: reintegration.
- Racism, Diversity & Inclusion: listening sessions, action plan pending
- Research Security: <https://www.foxnews.com/opinion/coronavirus-china-science-kelvin-droegemeier>
- NAPA, IG reports: we are moving forward.

## VII. AND A POSITIVE ENDING

- NOAA 50th: <https://www.noaa.gov/noaa-50th-home>
- Sanctuaries 45th: <https://sanctuaries.noaa.gov/news/oct17/celebrating-45-yrs-of-americas-underwater-parks.html>
- TAS 30th: <https://www.fisheries.noaa.gov/feature-story/looking-back-30-years-teachers-sea>
- CRCP 20th: <https://coralreef.noaa.gov/aboutcrp/news/featuredstories/jan20/welcome.html>
- FFE 10th: <https://www.tillamookcountypioneer.net/fishing-for-energy-marks-10-years-4-million-pounds-of-marine-debris/>
- DWH 10th: <https://www.fisheries.noaa.gov/feature-story/restoring-gulf-10-years-after-deepwater-horizon-oil-spill>
- and I can't resist reminding of this: <https://oceanexplorer.noaa.gov/ex10years/welcome.html>