



National Oceanic and Atmospheric Administration
Science Council

CALL-IN INFORMATION

This meeting will be held remotely. Please view your calendar entry to join this meeting via Google Hangouts and/or to join by phone.

1. BUSINESS

(10:30 AM – 10:40 AM)

Welcome [Tab 0]

Chair Announcements -

Welcome Kristen Koch!

New OSTP Guidance

Minutes & Action Items [Tab 2] [Tab 3]

Update from OAR Principal Gary Matlock regarding CRC ToR Motion (minutes from May meeting here)

2. BRIEFINGS

- **Annual Briefing from the NAS BASC – Amanda Staudt**

10:40 AM - 11:05 AM (25 min) [Tab 4]

Informational

- **Update from the S&T Synergy Committee: Kelly Goodwin, Chair of the S&T Synergy Committee**

11:05 AM – 11:35 PM (30 min) [Tab 5]

Directional

- **Update from the NOPP-C: Jeremy Weirich, Chair of the NOPP-C**

11:35 AM – 12:05 PM (30 min) [Tab 6]

Directional

- **Dr. Spinrad’s request regarding PGAFF/Vulcan visit: Sarah Kapnick, Chair**

12:05 - 12:25 (20 min) [Tab 7]

Directional

SUMMARY AND ACTION ITEM REVIEW

- **Announcements – Executive Secretariat**

ADJOURN

SCHEDULED BRIEFINGS	Presenter	Sponsor	Category
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October	Update Ecosystems Indicators Working Group	Jason Link	Chair and Vice Chair	Informational
October	Data Governance and the new OSTP policy	Tony LaVoi	Chair and Vice Chair	Informational

NOAA SCIENCE COUNCIL MEETING

September 13, 2022

10:30 AM to 12:30 PM EST

Google Meet

MEETING MINUTES

ATTENDEES

<p><i>Executive</i> Sarah Kapnick, Chair Cisco Werner, Vice Chair Anita Harrington, Exec Sec</p> <p><i>Principal</i> Mitch Goldberg, NESDIS Gary Matlock, OAR Kristen Koch, NMFS Greg Piniak, NOS (alternate) Hendrik Tolman, NWS (alternate) Randall TeBeest, OMAO</p> <p><i>Advisory</i> Cynthia Decker, Scientific Integrity Committee and NOAA Science Advisory Board Hendrik Tolman, Council of NOAA Fellows Frank Indiviglio, CIO Representative Monica Grasso, Social Science Committee Chair Gary Matlock, LOTMC and RDEC Chair Kelly Wright, TPO Liaison Kelly Goodwin, S&T Synergy Committee Chair Deirdre Clarkin, NLAC Chair Shannon Louie, Cooperative Research Committee Natasha White, Office of Education Liaison Jeremy Weirich, NOPP-C Chair</p>	<p><i>Other Attendees</i> Abigail Arnold, OAR Chris Beaverson, OAR Sandra Byers, OAR Jack Conroy, OAR Melissa Yencho, NMFS Elizabeth Gugliotti, OAR Joseph Fillingham, OAR Terence Lynch, OAR James Herzog, OAR Daniel Melendez, NWS Julie Price, NESDIS Jennifer Fagan-Fry, OAR Ishrat Jabin, OAR Andrew Peck, OAR Sarah Davis, OAR Laura Newcomb, OAR Victoria Moreno, OAR Eric Bayler, NESDIS Evan Howell, NMFS, Fiona Horsfall, OAR James Jenkins, OAR Tony LaVoi, OFA OMAO PCO Jennifer Mahoney, OAR Isha Renta, OAR Brooke McHansen, NESDIS Annette Hollingshead, OAR</p>
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APPROVAL OF MINUTES AND REVIEW OF ACTION ITEMS

Notify Exec Sec at science.council.execsec@noaa.gov within two weeks of the following meeting if any changes to the minutes are needed. Minutes from the August 16th NOAA Science Council meeting were **approved**. The Exec Sec reviewed all current action items (TAB 3).

CHAIR ANNOUNCEMENTS:

- Welcome Kristen Koch!
- New OSTP Memo & Guidance
 - Follow up on email sent to SC yesterday.
 - Offices and Labs should not alter their existing PARR plans
 - New Guidelines: December 2024 the NOAA PARR plans will need to be updated; need to develop policies on data not associated with peer-reviewed publications; identifiers for grants, publications, and data; machine readable publications.
 - This will be a multi-year effort to update the NOAA PARR plan. The NOAA CDO and Chief Scientist are working closely on this.
 - Further instructions will be sent out.

MINUTES

- Consider the August Science Council meeting minutes accepted.

UPDATE FROM CRC WORK GROUP

- Motion regarding Cooperative Research Committee ToR from May 2022 Science Council Meeting - Gary Matlock
 - Should focus on developing a charter for the Cooperative Research Committee.
 - There is no CI committee, waiting on SC ToR update to be finished
 - Will come back to the SC when the ToR is done to see what's next.

BRIEFINGS: Briefing materials are available in the Science Council Meetings 2022 folder on Google Drive.

Annual Briefing on the NAS Board of Atmospheric Science and Climate – *Amanda Staudt*

<https://www.nationalacademies.org/climate> - Website for all things climate going on at the National Academies
The BASC has a weekly newsletter available and monthly webinar series called climate conversations. Fall BASC Meeting: November 30th - December 3rd (fall meetings will be fully virtual, spring will be in person) (<https://www.nationalacademies.org/basc>). The Fall meeting will address the National Nature Assessment that OSTP released and discuss greenhouse gas emissions. The BASC is recruiting people to be on a committee to review the NCA5. Next Generation Earth System Science Report provides NSF advice on creating next-gen earth systems science - will be hosting several engagement opportunities going forward including 2 workshops. These workshops are open for NOAA to attend. The BASC is finishing up a study that will be used in developing a framework for evaluating global greenhouse gas emissions information for decision making. The report is in review with anticipated release in October, 2022. The Climate Security Roundtable supports the Climate Security Advisory Council (CASC) to better understand and anticipate the ways climate change affects US national security. Upcoming workshops on South Asia and Central America. There is also a Roundtable on Macroeconomics and Climate-Related Risks and Opportunities - finalizing nominations for roundtable members and talking with agencies about participating. Upcoming Workshops include: Integrating public and ecosystem health systems for foster resilience - next week (Sept 19th - virtual; 29-30 - hybrid) workshop, Communities, Climate Change and Health Equity workshop (Oct 2021, May 24 & 26 2022, and two additional workshops over the next 12 months). New Studies include 'Modernizing Probable Maximum Precipitation (PMP)' - sponsored by

NOAA and 'Environmental Effects of Nuclear Warfare' - sponsored by DOE. Polar Research Board - the BASC would like NOAA to participate in dialogue about this going forward.

DISCUSSION

OAR asks about the next-gen earth system modeling workshops - what is the plan there? How do you see this evolving? Amanda Staudt responds the NSF is looking to cultivate research connections among different types of expertise. Hoping that workshops will create an opportunity to identify areas of prominent research and help speed along conversations for collaboration. NESDIS mentions the Climate services vision in 2001 - shared this report in the chat and there was a scenario for 2020 and it seems like we did pretty well. Notice in the list of activities that observing systems were not addressed - how will the academies address this, do they work with the Keck institute? Amanda Staudt responds that there is a need to do something about climate services and as for the observing systems and aren't currently partnered with the Keck Institute but looking into people to partner with. Cynthia Decker (in chat) - The NOAA Science Advisory Board Climate Working Group is preparing a white paper on Climate and Air Quality. It should be coming out this fall. It will provide recommendations to NOAA but they will be looking at GHG and wildfires as part of that. Who from the BASC would be interested in this topic? Amanda Staudt (in chat) - Thanks for mentioning the white paper on Climate and Air Quality. We look forward to seeing it! Feel free to reach out to me (astaudt@nas.edu) and I can help you get in touch with folks interested in wildfire GHG emissions. NWS/CNF (in chat) - Amanda / Cisco: Confirming that modeling is a main topic of the NOAA-NSF Round table next week. Also, the NOAA Modeling Board and its Strategy Working Group are developing a NOAA Modeling Strategy. As co-chair of the latter group I would love to be in the loop regarding the future modeling meeting. NWS asks Amanda if the future of modeling meetings also deal with modernizing software in particular for rapidly evolving hardware? Amanda Staudt (in chat) - Will follow up to connect you with the lead staff for the Earth Systems workshop series, on the software/hardware question, we covered some of that in the ML/AI workshop BUT we haven't really covered that topic in detail. I tried to get a study going on future computing needs for climate/atmospheric/earth sciences a few years ago, in partnership with our computer sciences board. We weren't able to get it launched at the time, but still could revisit that topic if there would be interest.

Update from the S&T Synergy Committee: *Kelly Goodwin, S&T Synergy Committee Chair*

Emerging technologies, tools and abilities that have broad mission applicability, operational efficiency, are rapidly evolving and can be applied NOAA-wide. The Committee's greatest achievement is getting action plans finished.

5 'omics articles highlighted in the NOAA Scientific Publications Report. NOAA 'Omics in the Chips + Science Act; Data Leadership and governance actions executed; leveraging S&T networks to increase knowledge about transition plans. The committee's challenges include the inability to get to the strategies pages easily on the Science Council website and the platform is not usable for updates so no public facing progress. The Cloud, Citizen Science, and Data plans are still pending. There is a data overload, bandwidth for organization and reporting, uncertainty in staff and funding. The S&T Synergy Committee provides the NSC with a single access point to all the focus areas and their network of SMEs and simplified communication (quarterly updates from synergy (standing) with rotating individual briefings from the six individual strategies. NSC support provides motivation and socialization across the agency. S&T Synergy Committee is an innovative group that can support some risk and smart failure, they are here to serve, and can leverage expertise to share information. The committee asks for Science Council Assistance to help identify and/or develop best budget processes (Knauss/LANTERN support to do secretarial work) and need champions for each focus area to maintain enthusiasm for plan progress (provide visibility to leadership and congressional liaisons). What would be the most useful way to communicate with the NSC?

DISCUSSION

NESDIS asks, how do we tie this committee to the needs being reflected/discussed by the WWCB and the Social Science Board? Need to think about how to make those connections. Kelly agrees and with the portfolios, that

committee has some overlap with the other portfolios but members are more of the boots-on-the-ground people. Evan Howell agrees with NESDIS and likes that there is this interface layer too with people that understand the execution process. NMFS responds that these are really a rich source of information from bench level scientists on these issues that the Council should use more. Are the groups putting together budget initiatives? Cross-LO funding has always been difficult but maybe calling out specific LOs might make that easier. Kelly responds that all the strategies have a lead in a specific LO even though they are matrixed, they do have a budget behind the budget - this takes a lot of time and talking with the SMEs trying to build it up as to how to implement it but the face of it has to be somebody and then there is a handshake deal. Sometimes when the rubber hits the road, it is in the lead LOs stovepipe. It is a challenge for the committee to move past their budgetary constraints and maybe the NSC can help think of ways to address this. The Chair (in chat) suggests as the Council goes through these, they should also update the underlying info on the council website on committees. Double check description on the public website and take it as an opportunity to update committee membership.

Update from the NOPP-C: *Jeremy Weirich, Chair of the NOPP-C*

NOPP-C receives NOAA funding and then the programs have to provide 50% match. FY21 NOAA NOPP projects (\$2.6M + \$19M leveraged) these tend to be small, multi-year projects. 1M should be used to support the establishment of an externally completed NOPP program office and the Ocean Research Advisory Panel . This actually limited the available funds for FY23 and so can't fund as many projects. Looking ahead - collaboration across line offices and working groups has been great. The challenge is budget uncertainty which makes outyear planning difficult, SOST guidance has increased participation with philanthropies and private industry, looking to identify 2-3 "flagship" NOPP programs - this could use help from the NSC to come up with ideas for this.

DISCUSSION

The NWS has seen an enormous benefit from NOPP - NOPP project modernizing wave modeling which is also a community model. NOPP allows NWS to work in ways that appropriations wouldn't otherwise allow them to. The Chair asks if NOPP-C has been getting inquiries from philanthropies from the ocean space and if they have their own network that they talk to and have big ideas that they want to work on. The Chair would like to find a way to increase engagement with them. Jeremy Weirich responds that next-gen ocean altimetry has come up in the NOPP space. The aerospace community has been working with philanthropy in this space too. Would like to get a return on other peoples investment. Would love to have discussions on getting involved with the aerospace community and bring the philanthropies along with the NOPP-C.

Ask from Dr. Spinrad regarding the upcoming meeting with PGAFF/Vulcan: *Sarah Kapnick, Chair*

The Chair describes the upcoming meeting with Vulcan Inc. that will be a discussion of key areas around ocean sciences of interest to NOAA. Vulcan wants to have a discussion around key challenges that the ocean faces. There will be presentations from SME on the issues and then we come together and talk about ways to work together. Dr. Spinrad would like to get ideas from the NSC of discussion topics that we would like to bring to them. The topics the foundation wants to focus on are IUU, Sustainable Fisheries, Food Security, Future of Ocean Observations, and AI. This is an opportunity to shape what they are thinking because our discussion with the foundation might shape what they are funding.

DISCUSSION

NWS asks if software modernization is part of the discussion? The Chair responds that is not part of this discussion, this discussion is focused on the ocean. Part of the reason that AI is there is that we have a MOU for AI. Vulcan is really excited about ocean observation systems and wants to be involved in the use of observation systems and the use of data from ocean observation systems. NESDIS suggests that with IUU fishing there might be uses of high-resolution commercial imagery, more commercial data might be able to help with this. Kelly Goodwin informs the Council that Vulcan/PGAFF were really interested in eDNA and then there was a change in personnel and the progress was stalled. The Chair says that part of this is to gather new ideas so that Vulcan

knows what they should be funding. Also, NOAA can see ways that we can work together and shape where that project is going. Vulcan sees that eDNA is a part of the puzzle but not as a major topic that they want to fund. There is always the risk of turnover and changing interests. A lot of these ocean philanthropies really care about the ocean and want to fund things but they really need help in figuring out what that should look like. NOAA can bring these different groups in and coordinate across the philanthropy networks. NOS is interested in the topics that Vulcan is proposing. NMFS says that there are lots of fisheries engagement in this list, this is an interest in the agency for a long time as to how to engage with these groups. NWS mentions that it would be useful to have NDBC involved in that discussion - Bill Burnette. NWS works closely with the army corps of engineers regarding coastal in situ observations so it might be good to have them around the table too. The Vice Chairs asks, how do we enter this meeting and approach it knowing that some of our past efforts with them have fizzled. How do we put our best foot forward with projects that will be sustained? The Chair responds that we have to make sure that we know what we can get from shorter discrete time frames since they are going through a restructuring process. We want to bring them along on those longer-term things but if they drop off of those longer-term projects and goals then we can drop them and cut our losses. Vulcan has also requested read-aheads on the topics that we plan on, so please send suggestions on those read aheads. NMFS asks if the Council has guidance on how we can work with these groups and what are the best practices? The Chair responds that this is a great point and that we should ask for a presentation on best practices for engagement. Vulcan is the intermediary with the Paul Allen Foundation board, so some of the delay that we are experiencing is because of the reorganization and so it would be good to know when they will be done with the reorganization process.

ANNOUNCEMENTS

- The next NOAA Science Council meeting is on **October 11th at 10:30am - 12:30pm ET**

ACTION ITEMS

Science Council: This spreadsheet lists all current open action items currently assigned to the Council. Additional information for each entry can be found in the original email assigning this task. If you have any questions, please email science.council.execsec@noaa.gov.

Date Assigned or Action Number	Subject Line	Assigned To	Due Date	Status
20220426	DEI Integration Best Practices	NSC	September 2022	The first round of review is complete and comments were addressed. Will be sent out for final review next week (9/19)
20220531	State of the Science Factsheet on Emerging Technologies	S&T Synergy Committee	TBD	In the process of being drafted
	Social Science Committee Terms of Reference	Social Science Committee	TBD	In final review process
20220510-01	Cooperative Research Committee ToR	Group of NSC principals and advisory members	Update during September meeting	The group is following up on the motion proposed by Gary Matlock at the May Science Council meeting

20220808	NAO 216-115B Handbook	RDEC	August 29th	Showstopper review sent out (8/8) RDEC is currently reviewing comments
20220830	Science Council ToR	NSC	Sept 13	NSC is reviewing the first draft of the 2022 Science Council ToR. The Exec Sec will address comments and revisions before sharing with the Council for a showstopper review
2022	Science Report	RDEC	February 2023	Vignettes and introductory sections are currently being reviewed.