

National Association of Marine Laboratories Annual Winter Meeting March 7-8, 2024 1201 New York Ave NW, 4th Floor Conference Room Washington, DC 20005

Prepared by Allison Hays and Meg Thompson, Federal Science Partners



Table of Contents

FY 2025 R&D PRIORITIES MEMO	22
SUMMARY OF FY 2024 CONSOLIDATED APPROPRIATIONS FOR NAML: COMMERCE-JUSTICE-SCIENCE (DIVIS	ION C) 14
Appropriations Committees	10 11
KEY CONGRESSIONAL COMMITTEES FOR NAML IN THE 118 TH CONGRESS	10
OCEAN SCIENCES	8 9
Session 6: Congressional Panel Session 7: Representative from the National Academies Committee to talk about the 2025-2035 Decadal Survey	7 Y OF
Session 2: Federal Ocean Science Priorities for FY 2025 Session 3: Priorities of Ocean and Coastal Partner Organizations Session 4: Enhancing Laboratory Culture	5 6 7
BIOGRAPHICAL SKETCHES OF SPEAKERS AND POTENTIAL QUESTIONS	5
Thursday, March 7, 2024 Friday, March 8, 2024	3 4
NAML WINTER MEETING 2024 AGENDA	3

NAML Winter Meeting 2024 Agenda

Thursday, March 7, 2024 9:30 AM: Coffee

10:00 AM: **Opening Remarks**

- Terry Donaldson, President, NAML
- Dave Eggleston, President-elect, NAML; Chair, NAML Public Policy Committee

10:15 AM: Session 1: Congress Budget and Policy Preview

• Allison Hays and Meg Thompson, Federal Science Partners

10:45 AM: Session 2: Federal Ocean Science Priorities for FY 2025

- Mary Glackin, Co-Chair, Ocean Research Advisory Panel (10:45-11:30 AM)
- Jim McManus, Division Director, Division of Ocean Sciences, National Science Foundation (11:30 AM - 12:15 PM)

12:15 PM: Lunch

1:00 PM: Session 3: Priorities of Ocean and Coastal Partner Organizations

- Gabby Ahmadia, Vice President, Area-Based Conservation, Oceans, World Wildlife Fund
- Katherine Tsantiris, Director, Government Relations, Ocean Conservancy

2:15 PM: Session 4: Enhancing Laboratory Culture

Kelley Bonner, Workplace Culture Strategist, Burn Bright

3:15 PM: Break

3:45 PM: Session 5: NAML Membership Business Meeting

- Approval of Minutes
- Membership Report
- Budget Report
- Reports from committees
 - Education Committee
 - DEI Committee
 - Public Policy Committee Dave Eggleston will use this time to review/discuss
 - FY 2024-2025 Public Policy Priorities
 - White Paper: Lessons Learned from Fukushima (Bob Richmond)
 - Revival of Briefings on the Hill

5:30 PM Wine and Cheese Reception

Dinner on your own

Friday, March 8, 2024

8:30 AM: Coffee and light breakfast

9:00 AM: Session 6: Congressional Panel

- Alexis Rudd, Senate Committee on Commerce, Science, and Transportation
- Alison Feinswog, Senior Legislative Assistant, Rep. Mike Levin's office, principal staff behind advancement of the "CZMA Light" bill known as the *Coastal and Estuaries Resilience and Restoration Program Act* (H.R. 6841)

10:00 AM: Session 7: Representative from the National Academies Committee to talk about the 2025-2035 Decadal Survey of Ocean Sciences

• Mona Behl, Associate Director of Georgia Sea Grant, Committee Member

10:45 AM: Break

11:00 AM: Session 8: The New Center for Ocean Leadership: Priorities and Opportunities for Partnerships

• Sonya Legg, Director, Center for Ocean Leadership at UCAR

Noon: Lunch and Adjournment

Note: All times are Eastern Standard Time

Biographical Sketches of Speakers and Potential Questions

Session 2: Federal Ocean Science Priorities for FY 2025 March 7 10:45 am

Mary Glackin

Co-Chair, NOAA Ocean Research Advisory Panel

Mary Glackin is the Chair of the Board of Atmospheric Sciences and Climate, NASEM and the past-President of the American Meteorological Society (AMS). From 2015-2019 she was the senior vice president (SVP) for science and forecast operations for The Weather Company, an IBM Business. Glackin had a long and distinguished career in public service, including 35 years at National Oceanic and Atmospheric Administration (NOAA); the last five years she served as the Deputy Undersecretary for Operations. During this time, Glackin represented NOAA to the US Global Change Research Program and served as the inaugural co-chair of the Subcommittee for Integrated Marine Resource Management and as the federal representative to the Marine Protected Areas federal advisory group. Glackin is a Fellow of the AMS and the National Academy of Public Administration (NAPA).

Jim McManus, PhD

Division Director, Ocean Sciences, National Science Foundation

Dr. Jim McManus has over 30 years of experience in marine and environmental research with a broad portfolio of accomplishments in marine chemistry, geology, biology, and physics. He received his BSc in Chemistry from Stockton State College and his PhD in Oceanography from Oregon State University. He also completed post-doctoral research at the University of Southern California and Oregon State University. Since 2016, McManus has served as the Vice President for Research and Administration at the Bigelow Laboratory for Ocean Sciences. He previously held positions as Chair of the Department of Geosciences at the University of Akron and faculty positions at Oregon State University and the University of Minnesota-Duluth. McManus was an IPA in the Division of Ocean Sciences from 2008-2009.

Potential Questions

- [For Mary Glackin] How does the ORAP identify areas to address within the work of the Ocean Policy Committee?
- [For Mary Glackin] In your recent December meeting, Dr. Lubchenco tasked ORAP with identifying a subject it believes is important for the Ocean Policy Committee to receive recommendations for consideration. How can the broader community weigh in with the ORAP on this and other similar taskings?
- [For Jim McManus] Now that you've been at NSF for about two years, are there any
 insights you can share about the agency that you couldn't necessarily tell from the
 outside?
- [For Jim McManus] Can you talk at all about the process of developing NSF's annual budget priorities and your involvement in that?

Session 3: Priorities of Ocean and Coastal Partner Organizations March 7 1:00 pm

Gabby Ahmadia, PhD

Vice President, Area-Based Conservation, Oceans, World Wildlife Fund

Dr. Gabby Ahmadia is Vice President of Area-Based Conservation for the Oceans program at WWF-US, overseeing seascapes, fisheries, blue forest, and science teams that work together to inform integrated approaches in priority regions across the Arctic, Eastern Pacific, Western Indian Ocean, and the Western Pacific. Ahmadia has experience working with teams across the globe; she initially got her feet 'wet' in the conservation world working with local scientists in Indonesia to develop and implement social and ecological monitoring programs, before expanding to support broader community-based conservation across the Indo-Pacific and Western Indian Ocean.

Ahmadia is an established multi-disciplinary expert, with over 60 scientific articles related to oceans conservation published throughout her career, ranging from describing species to social and ecological impacts of marine conservation. Over the span of her career, she has been focused on inclusive conservation approaches—ensuring that underrepresented voices are informing conservation solutions. Ahmadia was lucky enough to grow up in Hilo, Hawaii sparking her interest in the oceans from a very early age. She may or may not have a tattoo of a turtle.

Katherine Tsantiris

Director, Government Relations, Ocean Conservancy

Katherine Tsantiris is Director of Ocean Conservancy's Government Relations team. Prior to joining Ocean Conservancy, she was a Sea Grant Fellow in Senator Wyden's office and worked in the Congressional Affairs Division of NOAA's Office of Oceanic and Atmospheric Research. Originally from Connecticut, her love for the ocean was inspired by frequent trips to the Connecticut shore with her family and spending summers in the small Greek fishing where her father grew up. Tsantiris received her bachelor's in environmental science from the University of Connecticut and a Master of Environmental Management from the Yale School of Forestry and Environmental Studies. Outside of work, Katherine likes to get outside with her dog and try new recipes.

Potential Questions

- Are you all looking to partner with organizations like NAML—either on the ground or in advocacy work—and if so, how would we go about developing those partnerships?
- [Gabby Ahmadia specifically mentions this in her bio, but the question could be relevant for all] Advancing DEI principles is an important part of NAML's work, both as NAML and at individual member organizations. Do you have any best practices or lessons learned you can share in your work to ensure underrepresented voices are heard when developing conservation solutions and policies?

Session 4: Enhancing Laboratory Culture March 7 2:15 pm

Kelley Bonner

Workplace Culture Strategist, Burn Bright

Called "a benchmark in her field" by the Pentagon, Kelley Bonner impacts culture and policy across the globe, evangelizing the way we talk about the cost of burnout in the workplace. Bonner is a licensed therapist with master's degrees in both social work and criminal justice, and leads a team of HR professionals, positive psychologists, instructional designers, and expert trainers with a combined 25+ advanced degrees and certifications, and collective 120+ years of professional experience.

Bonner served on the Gender Policy Committee for the White House as well as the International Women's Economic Security Council. Hand-picked by the Biden Administration to assist in developing a national framework for workplace safety and harassment, Bonner is a thought leader in the realm of sexual assault and DEI in the workplace. She has worked with several federal and international organizations to create safer environments and strategies for violence prevention, including the U.S. Military, Library of Congress, National Academy of Sciences, The United Nations, and NATO. Bonner built the number one behavioral modification program for the New York State men's prisons to reduce violence through policy development and program evaluation.

Potential Questions

- Can you talk more about your work on developing the national framework for workplace safety and harassment and what is needed next? Also, how can an organization like NAML weigh in when such a framework is being developed?
- What is the number one thing you would recommend that NAML as an association could do to encourage improved workplace culture at its member institutions?

Session 6: Congressional Panel March 8 9:00 am

Alexis Rudd, PhD

Policy Director, Committee on Commerce, Science, and Transportation, Minority Staff, U.S. Senate

Dr. Alexis Rudd is minority Policy Director for the Subcommittees on Oceans and Surface Transportation of the Senate Committee on Commerce, Science, and Transportation. She has responsibility for issues within the National Oceanic and Atmospheric Administration, Coast Guard, and the Maritime Administration. Prior to joining the Commerce Committee, she served as Acting Director of Legislative Affairs for the Maritime Administration and as staff for the White House Subcommittee on Ocean Science and Technology. Rudd has a Ph.D. from the University of Hawaii, where her research focused on the use of commercial shipping platforms and U.S. Navy assets for marine mammal bioacoustics research.

Alison Feinswog

Senior Legislative Assistant, U.S. Representative Mike Levin (CA-49), Minority Staff, U.S. House of Representatives

Alison Feinswog currently serves as Senior Legislative Assistant for Congressman Mike Levin (CA-49). Her policy portfolio includes coastal issues, education, labor, judiciary, health, and financial services. Prior to joining Rep. Levin's office in February 2019, she served as a Campaigns Research Assistant at EMILY's List. She received her undergraduate degree in political science and English from Tufts University.

Potential Questions

- How can organizations like NAML support your policy priorities? And what is the best way that we can generate support on the Hill for our priorities?
- You regularly meet with advocates—is there anything you wish you could tell people to be more effective/make the best use of your time?
- During your time on the Hill, have you noticed any trends—either positive or concerning—and what can the community do to support/address them?

Session 7: Representative from the National Academies Committee to talk about the 2025-2035 Decadal Survey of Ocean Sciences

March 8 10:00 am

Mona Behl, PhD

Associate Director, Georgia Sea Grant, Committee Member

Dr. Mona Behl was appointed the associate director of Georgia Sea Grant in 2015. In this role, she provides administrative and financial leadership to Marine Extension Georgia Sea Grant by directing the unit's research and fellowship portfolios, building partnerships, and ensuring the quality, relevance, and impact of the unit's activities in Georgia. Behl also holds public service and academic appointments at UGA and is a Non-Residential Fellow with the American Meteorological Society (AMS) Policy Program. Her applied research, education, and extension projects focus on building the adaptive capacity of local communities to impacts of extreme weather and climate change, and broadening participation in science.

Behl is passionate about improving access, engagement, and leadership development of women and minorities in science. She serves on the leadership board of Earth Science Women's Network, is a member of the AMS Culture and Inclusion Cabinet, and co-chairs the Mentoring Physical Oceanography Women to Increase Retention program. Behl is the founding member of AMS Early Career Leadership Academy, and Sea Grant's Community Engaged Internship program. She earned her bachelor's and master's degree in physics from Panjab University in India and a doctorate in physical oceanography from Florida State University.

Potential Questions

• How much has the committee taken into consideration *Sea Change, 2015-2025 Decadal Survey of Ocean Sciences,* as they've worked on the new decadal?

Session 8: The New Center for Ocean Leadership: Priorities and Opportunities for Partnerships

March 8

11:00 am

Sonya Legg, PhD

Director, Center for Ocean Leadership at UCAR

Dr. Sonya Legg earned a bachelor's in physics from Oxford University and a PhD in dynamical meteorology and physical oceanography from Imperial College. Following postdoctoral research at the University of Colorado and the University of California, Los Angeles (UCLA), the latter as a NOAA Climate and Global Change postdoctoral fellow, she worked as a scientist at Woods Hole Oceanographic Institution for seven years before moving to Princeton University. At Princeton she was the Associate Director of the Cooperative Institute for Modeling the Earth System, and served on the faculty of the graduate program in Atmospheric and Oceanic Science. She is currently serving on the Scientific Steering Group of the World Climate Research Programme CLIVAR project and as an associate editor of the Journal for Advances in Modeling the Earth System. Legg was previously co-chair of MPOWIR (Mentoring Physical Oceanography Women to Increase Retention), a mentoring program committed to improving gender balance in the oceanography field.

Potential Questions

- What role do you see the Center playing in the broader ocean community?
- What type of partnerships are you looking to grow?
- Have you taken on any new programs?

Key Congressional Committees for NAML in the 118th Congress

Appropriations Committees

The Appropriations Committee decides funding levels for federal departments and agencies. It is also responsible for supplemental spending bills, which are drafted on an as-needed basis to compensate for emergency expenses.

House Appropriations Committee Subcommittee on Commerce, Justice, and Science

Website (majority): https://appropriations.house.gov/ Website (minority): https://democrats-appropriations.house.gov/

Majority

Rep. Hal Rogers (R-KY-5), Chair Rep. Robert Aderholt (R-AL-4) Rep. John Carter (R-TX-31) Rep. Ben Cline (R-VA-6) Rep. Mike Garcia (R-CA-27) Rep. Tony Gonzales (R-TX-23) Rep. Andrew Clyde (R-GA-9) Rep. Jake Ellzey (R-TX-6)

Minority

Rep. Matt Cartwright (D-PA-8), Ranking Member
Rep. Grace Meng (D-NY-6)
Rep. C.A. Dutch Ruppersberger (D-MD-2)*
Rep. David Trone (D-MD-6) (Running for Senate)
Rep. Joe Morelle (D-NY-25)

Senate Appropriations Committee Subcommittee on Commerce, Justice, and Science

Website: https://www.appropriations.senate.gov/

<u>Majority</u>

Sen. Jeanne Shaheen (D-NH), Chair Sen. Jack Reed (D-RI) Sen. Chris Coons (D-DE) Sen. Brian Schatz (D-HI) Sen. Joe Manchin (D-WV)* Sen. Chris Van Hollen (D-MD) Sen. Jeff Merkley (D-OR) Sen. Gary Peters (D-MI) Sen. Martin Heinrich (D-NM) *retiring

Minority

Sen. Jerry Moran (R-KS), Ranking Member Sen. Lisa Murkowski (R-AK) Sen. Susan Collins, Committee Vice Chair (R-ME) Sen. Shelley Moore Capito (R-WV) Sen. John Kennedy (R-LA) Sen. Bill Hagerty (R-TN) Sen. Katie Britt (R-AL) Sen. Deb Fischer (R-NE) Authorizing Committees

House Natural Resources Committee

Website (majority): https://naturalresources.house.gov/ Website (minority): https://democrats-naturalresources.house.gov/

The committee considers legislation about American energy production, mineral lands and mining, fisheries and wildlife, public lands, oceans, Native Americans, irrigation and reclamation.

Subcommittees:

- Energy and Mineral Resources
- Federal Lands
- Indian and Insular Affairs

<u>Majority</u>

Rep. Bruce Westerman (R-AR-4), Chair Rep. Doug Lamborn (R-CO-5) (Retiring) Rep. Rob Wittman (R-VA-1) Rep. Tom McClintock (R-CA-5) Rep. Paul Gosar (R-AZ-9) Rep. Garret Graves (R-LA-6) Rep. Amata Coleman Radewagen (R-AS-1) Rep. Doug LaMalfa (R-CA-1) Rep. Daniel Webster (R-FL-11) Rep. Jenniffer González-Colón (R-PR-1) Rep. Russ Fulcher (R-ID-1) Rep. Pete Stauber (R-MN-8) Rep. John Curtis (R-UT-3) Rep. Tom Tiffany (R-WI-7) Rep. Jerry Carl (R-AL-1) Rep. Matt Rosendale (R-MT-2) Rep. Lauren Boebert (R-CO-3) Rep. Cliff Bentz (R-OR-2) Rep. Jen Kiggans (R-VA-2) Rep. Jim Moylan (R-GU-1) Rep. Wesley Hunt (R-TX-38) Rep. Mike Collins (R-GA-10) Rep. Anna Paulina Luna (R-FL-13) Rep. John Duarte (R-CA-13)

- Oversight and Investigations
- Water, Wildlife and Fisheries

<u>Minority</u>

Rep. Raúl M. Grijalva (D-AZ-7), Ranking Member Rep. Grace F. Napolitano (D-CA-31) (Retiring) Rep. Gregorio Kilili Camacho Sablan (D-MP-1) Rep. Jared Huffman (D-CA-2) Rep. Ruben Gallego (D-AZ-3) Rep. Joe Neguse (D-CO-2) Rep. Mike Levin (D-CA-49) Rep. Katie Porter (D-CA-47) Rep. Teresa Leger Fernández (D-NM-3) Rep. Melanie Stansbury (D-NM-1) Rep. Mary Sattler Peltola (D-AK-1) Rep. Alexandria Ocasio-Cortez (D-NY-14) Rep. Kevin Mullin (D-CA-15) Rep. Val Hoyle (D-OR-4) Rep. Sydney Kamlager-Dove (D-CA-37)* Rep. Seth Magaziner (D-RI-2) Rep. Nydia M. Velázquez (D-NY-7) Rep. Ed Case (D-HI-1) Rep. Debbie Dingell (D-MI-6) Rep. Susie Lee (D-NV-3)

Rep. Harriet Hageman (R-WY-1)

House Committee on Science, Space, and Technology

* Vice Ranking Member

Website (majority): https://science.house.gov/ Website (minority): https://democrats-science.house.gov/

The committee has jurisdiction over much of non-defense federal research and development. This includes exclusive jurisdiction over NASA, NSF, NIST, and OSTP and the research and development activities of agencies including NOAA, DOE, and EPA.

Subcommittees:

- Energy
- Environment
- Investigations and Oversight

Majority

Rep. Frank Lucas (R-OK-3), Chair Rep. Bill Posey (R-FL-08) Rep. Randy Weber (R-TX-14) Rep. Brian Babin (R-TX-36) Rep. Jim Baird (R-IN-04) Rep. Daniel Webster (R-FL-11) Rep. Mike Garcia (R-CA-27) Rep. Stephanie Bice (R-OK-05) Rep. Jay Obernolte (R-CA-23) Rep. Chuck Fleischmann (R-TN-3) Rep. Darrell Issa (R-CA-48) Rep. Rick Crawford (R-AR-1) Rep. Claudia Tenney (R-NY-24) Rep. Ryan Zinke (R-MT-1) Rep. Scott Franklin (R-FL-18) Rep. Dale Strong (R-AL-05) Rep. Max Miller (R-OH-07) Rep. Rich McCormick (R-GA-06) Rep. Mike Collins (R-GA-10) Rep. Brandon Williams (R-NY-22) Rep. Tom Kean (R-NJ-07)

- Research and Technology
- Space and Aeronautics

Minority

Rep. Zoe Lofgren (D-CA-18), Ranking Member Rep. Suzanne Bonamici (D-OR-1) Rep. Haley Stevens (D-MI-11) Rep. Jamaal Bowman (D-NY-16) Rep. Deborah Ross (D-NC-2) Rep. Eric Sorensen (D-IL-17) Rep. Andrea Salinas (D-OR-06) Rep. Val Foushee (D-NC-04) Rep. Kevin Mullin (D-CA-15) Rep. Jeff Jackson (D-NC-14) Rep. Emilia Sykes (D-OH-13) Rep. Maxwell Frost (D-FL-10) Rep. Yadira Caraveo (D-CO-08) Rep. Summer Lee (D-PA-12) Rep. Jennifer McClellan (D-VA-4) Rep. Gabe Amo (D-RI-1) Rep. Paul Tonko (D-NY-20)

Senate Committee on Commerce, Science, and Transportation

Website (majority): https://www.commerce.senate.gov/ Website (minority): https://www.commerce.senate.gov/minority

The Senate Commerce Committee authorizes the programs of NOAA, NSF, NASA, NIST, and OSTP. This includes marine and ocean navigation, safety, and transportation; marine fisheries; non-military aeronautical and space sciences; ocean, weather, and atmospheric activities; science, engineering, and technology research and development and policy; and transportation and commerce aspects of Outer Continental Shelf lands.

Subcommittees:

- Aviation Safety, Operations, and Innovation
- Communications, Media, and Broadband
- Consumer Protection, Product Safety, and Data Security
- Oceans, Fisheries, Climate Change, and Manufacturing
- Space and Science
- Surface Transportation, Maritime, Freight, and Ports

<u>Majority</u>

Sen. Maria Cantwell (D-WA), Chair Sen. Amy Klobuchar (D-MN) Sen. Brian Schatz (D-HI) Sen. Ed Markey (D-MA) Sen. Gary Peters (D-MI) Sen. Tammy Baldwin (D-WI) Sen. Tammy Duckworth (D-IL) Sen. Tammy Duckworth (D-IL) Sen. Jon Tester (D-MT) Sen. Krysten Sinema (I-AZ) Sen. Jacky Rosen (D-NV) Sen. Ben Ray Luján (D-NM) Sen. John Hickenlooper (D-CO) Sen. Ralph Warnock (D-GA) Sen. Peter Welch (D-VT)

<u>Minority</u>

Sen. Ted Cruz (R-TX), Ranking Member Sen. John Thune (R-SD) Sen. Roger Wicker (R-MS) Sen. Deb Fischer (R-NE) Sen. Jerry Moran (R-KS) Sen. Dan Sullivan (R-KS) Sen. Dan Sullivan (R-AK) Sen. Marsha Blackburn (R-TN) Sen. Todd Young (R-IN) Sen. Todd Young (R-IN) Sen. Ted Budd (R-NC) Sen. Eric Schmitt (R-MO) Sen. J.D. Vance (R-OH) Sen. Shelly Moore Capito (R-WV) Sen. Cynthia Lummis (R-WY)

Summary of FY 2024 Consolidated Appropriations for NAML: Commerce-Justice-Science (Division C)

On Sunday, March 3, 2024, the House and Senate Appropriations Committees released the Fiscal Year (FY) 2024 Consolidated Appropriations Act with bill text and joint explanatory statements for six of the twelve appropriations bills:

- Commerce-Justice-Science (CJS),
- Interior-Environment,
- Energy-Water,
- Agriculture-Rural Development-Food and Drug Administration,
- Military Construction-Veterans Affairs, and
- Transportation-Housing-Urban Development

The House is expected to vote on the six-bill package on Wednesday and the Senate on Thursday, with the president receiving it for signature by March 8, which would avoid a partial government shutdown. The House is likely to pass this bill with a majority of Democrats voting for it, causing House conservatives to further question Speaker Johnson's leadership. The remaining six appropriations bills are still being negotiated and have funding under a continuing resolution (CR) through March 22.

As FY 2024 final appropriations are finalized, the FY 2025 appropriations process is beginning. The president will deliver his State of the Union address on March 7 and is expected to send highlights of the administration's FY 2025 budget request to Congress on March 11. House and Senate Appropriations Committees likely will begin in earnest their process of reviewing the administration's FY 2025 budget request; however, do not expect any bills to be signed into law before the start of the fiscal year on October 1 due to the November presidential and congressional elections.

FY 2024 Omnibus Appropriations bill text and accompanying joint explanatory statements, which provide more detail than bill text and indicate congressional intent, can be found here. The following document goes into detail on items of interest found in Division C, the *Commerce, Justice, Science (CJS), and Related Agencies Appropriations Act, 2024*, which funds the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), and the National Aeronautics and Space Administration (NASA). Funding for virtually all agencies in the CJS bill is either flat or reduced to comply with the two-year budget caps included in the June 2023 *Fiscal Responsibility Act* negotiated by Congress and the Biden Administration. This law, while restraining spending, also raised the debt ceiling until January 2025, so expect consternation about needing to raise the caps again to start peppering the conversation in the coming months.

The joint explanatory statement for Division C states that, unless otherwise noted, language in the Senate Report "carries the same weight as language included in this joint explanatory statement and should be complied with unless specifically addressed to the contrary in this joint explanatory statement or the act. While some language is repeated for emphasis, it is not intended to negate the language referred to above unless expressly provided herein." Typically, the House Report would also be referenced here, but the House Appropriations Committee did not approve a FY 2024 CJS Report.

The joint explanatory statement also notes that spend plans are due to the appropriations committees no later than 45 days after the enactment of this act and that the Government Accountability Office (GAO) shall conduct ongoing reviews of large NASA projects and major research equipment and facilities construction at NSF, with reports to committees on a semiannual basis. These spend plans are a means for appropriators to review agencies' execution of congressional intent.

The following information from the explanatory statement includes more detail on programs at NSF, NOAA, and NASA.

National Science Foundation (NSF)

The FY 2024 CJS bill provides \$9.06 billion for NSF. In FY 2023, NSF received a total of \$9.9 billion; however, \$1.0 billion of that was provided through supplemental emergency funding. The \$9.06 billion included for NSF in FY 2024 is an \$816.5 million decrease (an 8 percent decrease) compared to the \$9.9 billion, but it is a \$221.2 million dollar increase (a 3 percent increase) when compared to the \$8.8 billion enacted in FY 2023 through regular appropriations. As we noted in our final FY 2023 funding summary, "while we should celebrate the high overall number for FY 2023—thanks to the supplemental funding—NSF supporters should be prepared for an uphill slog when it comes to increasing agency funding through regular appropriations in FY 2024." An increase over the \$8.8 billion enacted through regular appropriations in FY 2024." An increase over the \$8.8 billion enacted through regular appropriations in FY 2023 was not a given this year, particularly given the return of spending caps.



*Combined total of regular and supplemental appropriations

The following includes relevant funding for NSF's accounts.

Research and Related Activities (R&RA): Explanatory statement: \$7.2 billion Senate bill: \$7.6 billion House bill: \$7.9 billion President's budget request: \$9.0 billion FY 2023 enacted*: \$7.8 billion



*Combined total of regular and supplemental appropriations

The explanatory statement encourages NSF to equitably distribute funding to support all basic research directorates within R&RA, as well as the Technology, Innovation, and Partnerships Directorate.

Established Program to Stimulate Competitive Research (EPSCoR)

The agreement provides \$250 million for the EPSCoR program and reiterates direction in the Senate report regarding supporting projects in EPSCoR states across all initiatives and centers. Additionally, the agreement encourages NSF to increase investment in statewide research capacity development through the EPSCoR Collaborations for Optimizing Research Ecosystems Research Infrastructure Improvement (E-CORE RII) program.

Regional Innovation Engines (NSF Engine)

In lieu of the funding specified in the Senate report, the agreement supports the NSF Engines and notes the recent award of the first Type-2 projects.

Mid-Scale Research Infrastructure

In lieu of the funding level in the Senate report, the agreement supports the Mid-scale Research Infrastructure program.

Harmful Algal Blooms

The agreement supports the work of the Oceans and Human Health program to support research into the human health impacts of HABs in marine coastal regions, the Great Lakes Basin, and freshwater systems. The agreement further encourages research to better understand how the influx of nutrients, including dissolved nitrogen and phosphorous, contribute to HAB outbreaks.

Major Research Equipment and Facilities Construction Explanatory statement: \$234.0 million Senate bill: \$187.2 million House bill: \$254.0 million President's budget request: \$304.7 million FY 2023 enacted: \$187.2 million



The agreement provides \$234.0 million for Major Research Equipment and Facilities Construction to support the Vera C. Rubin Observatory, the High Luminosity-Large Hadron Collider Upgrade, the Antarctic Infrastructure Recapitalization, the Leadership Class Computing Facility, and Mid-scale Research Infrastructure. The bill designates this funding as an emergency. This doesn't impact how it is spent in FY 2024 but means the base discretionary amount for FY 2025 is \$0.

> <u>STEM Education</u> Conference report: \$1.2 billion Senate bill: \$1.2 billion House bill: \$1.0 billion President's budget request: \$1.5 billion FY 2023 enacted*: \$1.4 billion



* Combined total of regular and supplemental appropriations

The agreement includes \$1.172 billion for STEM Education. In lieu of the funding amounts specified in the Senate report, NSF is directed to continue support for STEM Education programs at no less than the fiscal year 2021 enacted amounts.

STEM Workforce

The agreement supports investments in STEM education in regions of the country that have historically faced challenges, including lower educational attainment and higher rates of poverty, recognizing that STEM education can contribute to the economic development of such regions by fostering a skilled workforce and diversifying the economies of the region. The agreement encourages NSF to support funding for programs that create partnerships between NSF and local community colleges to promote STEM education.

National Oceanic and Atmospheric Administration (NOAA)

The bill provides \$6.3 billion for NOAA. In FY 2023, NOAA received a total of \$7.0 billion; however, \$827.5 million of that was provided through supplemental disaster relief funding. The \$6.3 billion included for NOAA in FY 2024 is a \$709.8 million decrease (a 10 percent decrease) compared to the \$7.0 billion, but it is a \$117.7 million dollar increase (a 2 percent increase) when compared to the \$6.2 billion enacted in FY 2023 through regular appropriations.

The following includes more detailed information on relevant NOAA line offices in the Operations, Research, and Facilities (ORF) account.



National Ocean Service (ORF) Explanatory statement: \$671.5 million Senate bill: \$680.7 House bill: \$636.2 million President's budget request: \$679.2 million FY 2023 enacted: \$679.4 million



Harmful Algal Blooms

Within funding for Competitive Research, the agreement provides up to \$14,000,000 to accelerate deployment of effective methods of intervention and mitigation to reduce the frequency, severity, and impact of HAB events in marine and freshwater systems. Due to concern with duplication, incompatibility, and separation of data related to the causes and effects of HABs, NOAA is directed to submit a report, no later than 180 days after the enactment of this act, that includes a survey of all existing large freshwater body HAB-related data. NOAA is encouraged to include recommendations for streamlining access to this data, creating a centralized, all-in-one access point, and cost effective synthesis and hosting of disparate data sets.

National Harmful Algal Bloom Observing Network

The agreement provides not less than \$3,500,000 for the National Harmful Algal Bloom Observing Network.

Blue Carbon

The agreement encourages NOAA to use previously appropriated funds to support a pilot program on blue carbon to advance NOAA's work to assess the carbon sequestration potential of various coastal habitats, account for regional differences, and identify some of the biophysical, social, and economic pathways and impediments to coastal blue carbon ecosystem protection, management, or restoration.

Coral Reef Conservation Act

The agreement adopts the Senate direction regarding "Coral Reef Program" and directs NOAA to report to the Committees not later than 60 days after enactment of this act on the establishment of the Atlantic Reef Research Coordination Institute and the Pacific Reef Research Coordination Institute, as required under section 212 of the Reauthorization of the Coral Reef Conservation Act of 2000 (title C of division J of Public Law 117-263).

Office of Oceanic and Atmospheric Research (ORF) Explanatory statement: \$656.1 million Senate bill: \$661.3 million House bill: \$597.6 million

President's budget request: \$677.8 million FY 2023 enacted: \$661.3 million







Office of Education: \$35,450,000

National Aeronautics and Space Administration (NASA)

The bill includes \$24.9 billion for NASA. This is a \$508.7 million decrease (two percent decrease) over the FY 2023 enacted level. It includes \$7.3 billion for Science (a \$460.8 million, or 6 percent decrease over FY 2023 enacted) and \$2.2 billion for Earth Science, which is equal to the FY 2023 enacted level.

Earth Science

In lieu of the funds designated in the Senate report for Earth Science, the agreement provides up to the request level for Plankton, Aerosol, Cloud, ocean Ecosystem (PACE), Earth System

Explorers, the four Earth System Observatory missions, and Commercial SmallSat Data Acquisition. Further, as recommended in the 2023 Senior Review, NASA is directed to continue supporting the Terra, Aqua, and Aura missions at a level sufficient to provide high quality data to the scientific community.



EXECUTIVE OFFICE OF THE PRESIDENT WASHINGTON, D.C. 20503



August 17, 2023

M-23-20

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: SHALANDA D. YOUNG Chalande D. Yeng DIRECTOR OFFICE OF MANAGEMENT AND BUDGET

ARATI PRABHAKAR Augh Prall DIRECTOR OFFICE OF SCIENCE AND TECHNOLOGY POLICY

SUBJECT: Multi-Agency Research and Development Priorities for the FY 2025 Budget

Our Nation has immense aspirations today: achieving robust health and ample opportunity for each person in every community; overcoming the climate crisis by reimagining our infrastructure, restoring our relationship with nature, and securing environmental justice; sustaining global security and stability; building a competitive economy that creates good-paying jobs; realizing the benefits of artificial intelligence while managing its risks; and fostering a strong, resilient, and thriving democracy. The purpose of public science, technology, and innovation is to open doors to make these aspirations possible.

Because Federal research and development (R&D) is integral to the just, vibrant, and ambitious future that America seeks, President Biden is prioritizing R&D funding and mobilizing America's powerful R&D ecosystem. To make its vital contribution to our future, federal R&D must sustain America's leadership position in science and technology. It must take aim at and achieve bold, barely feasible goals. Federal R&D must translate into new products and services, new industries and jobs, new policies and regulations, and new standards and practices. And it must bring the power of innovation to important national missions that have not traditionally benefitted from R&D—from K-12 education and workforce training to construction and traffic safety.

This memorandum outlines the Administration's multi-agency R&D priorities for formulating fiscal year (FY) 2025 Budget submissions to the Office of Management and Budget (OMB). These priorities should be addressed within the FY 2025 Budget guidance levels provided by OMB. Clear choices will be required given constrained discretionary funding caps. Agency budget submissions should include an addendum that details how each request level addresses these priorities. Agencies engaged in complementary activities are expected to consult with one another during the budget formulation process to maximize impact by coordinating resources and avoiding unnecessary

duplication. As in previous years, the investments supported by the Budget for the R&D priorities listed below will be highlighted in the 2025 Analytical Perspectives Volume.

Multi-Agency Priority Guidance

Advance trustworthy artificial intelligence (AI) technology that protects people's rights and safety, and harness it to accelerate the Nation's progress. AI is one of the most powerful technologies of our time. The choices we make in the coming years about advancing and using AI will have important consequences for civil rights and civil liberties, safety and security, jobs and the economy, and democratic values. The federal government plays multiple essential roles, including mitigating AI risks and using AI technology to better deliver on the wide range of government missions, advance solutions to the Nation's challenges that other sectors will not address on their own, and tackle large societal challenges. Agency submissions should fund R&D activities to support and fulfill multiple critical purposes:

- Build tools, methods, and community engagement to guide the design of regulatory and enforcement regimes for mitigating AI threats to truth, trust, and democracy; safety and security; privacy, civil rights and civil liberties; and economic opportunity for all.
- Design, pilot, and assess the results of new approaches to apply AI to improve government functions and public services.
- Develop trustworthy, powerful advanced AI systems that help achieve the Nation's great aspirations.

Lead the world in maintaining global security and stability in the face of immense geopolitical changes and evolving risks. Agencies should support R&D that will create the next generation of national security technologies and capabilities, mitigate critical national security risks, and accelerate the pace of responsible technology adoption in a competitive global environment. Agencies should fund world-leading research, development, and innovation activities that:

- Advance critical and emerging technology areas. such as microelectronics, biotechnology, quantum information science, advanced materials, high performance computing, and nuclear energy.
- Mitigate emerging and evolving national security risks, including the risks associated with biosafety, biosecurity, and nuclear weapons.
- Mitigate cybersecurity risks through resilient architectures; building in security by design; strengthening security and resilience for critical infrastructure, and integrating social, behavioral, and economics research.
- Address the national security impacts of autonomous systems and artificial intelligence.
- Leverage R&D investments, including those focused on advanced manufacturing, digital engineering, and robotics, to increase the capacity and agility of government and industry to accelerate the transition of new national security capabilities from demonstration to deployment at scale.
- Harness science and technology intelligence and analytic capabilities to assess and benchmark U.S. competitiveness.

Step up to the global challenge of meeting the climate crisis by reimagining our infrastructures, renewing our relationship with nature, and securing environmental justice. The United States and the world face a profound climate crisis with a rapidly narrowing window to avoid the most catastrophic impacts of climate change. Agency R&D programs should advance the Administration's

climate goals, including by harnessing the power of nature, reimagining and updating our infrastructure, strengthening and protecting the health of communities, lowering energy costs for families, protecting biodiversity, and creating good-paying jobs here in the United States. These investments should advance economic and environmental justice, equity, and public health by reducing vulnerabilities and increasing resilience to climate change. Agency submissions should:

- Support R&D efforts that will help the nation achieve net-zero greenhouse gas emissions by 2050, including priorities identified in the Net-Zero Game Changers Initiative, goals articulated in the Ocean Climate Action Plan and the U.S. Global Change Research Program's Decadal Strategic Plan, and investments that enhance the Nation's ability to measure and monitor greenhouse gas emissions and removal.
- Address climate observations, monitoring, modeling, and research gaps ahead of the 6th National Climate Assessment, including in parts of our Nation beyond the contiguous United States; address risks and opportunities for future generations, including beyond 2100; and advance and use Indigenous Knowledge and social science research to achieve climate goals.
- Advance, through coordination with the U.S. Global Change Research Program, the development of actionable climate services consistent with the Federal Framework and Action Plan, to support communities, governments, and businesses in enhancing resilience and taking action.
- Fund R&D efforts to improve analysis for difficult-to-monetize or -quantify policy options and technologies such as ecosystem services, track natural assets through the emerging national system of environmental and economic statistics, support the National Nature Assessment, and advance recommendations in the Nature-Based Solutions Roadmap.

Achieve better health outcomes for every person. Current U.S. health outcomes are unacceptable. Science, technology, and innovation must open pathways to reverse the course. Agencies should propose R&D activities to achieve better health outcomes in communities across the United States, including those that:

- Robustly fund activities to help the Cancer Moonshot achieve its goal of ending cancer as we know it, including efforts in prevention, early detection, novel therapies, and care delivery and support.
- Bolster the capacity to mitigate current and emerging health threats, including addressing antimicrobial resistance and identifying and eliminating infectious disease outbreaks before they become pandemics.
- Support behavioral and mental health for all Americans, including at-risk communities like our veterans, caregivers, medical professionals, youth, and members of the LGBTQI+ community.
- Improve public health, health equity, and innovation in disease prevention.
- Achieve progress to improve clinical trials, enhance nutrition, advance cures for rare diseases, combat neurodegeneration, and address other high-need areas.
- Reduce the cumulative impacts of environmental burdens and advance environmental justice by preventing exposures to harmful chemicals (such as lead and per- and polyfluoroalkyl substances), and mitigating the health effects of climate change, especially for communities that experience these burdens disproportionately.

Reduce barriers and inequities. This is our Nation's great and unfinished work. Agencies should undertake R&D and apply technology advances to ameliorate inequities and create opportunity in ways that strengthen our values. Agency budget submissions should:

- Support regional innovation and workforce development in science, technology, engineering, mathematics, and medicine all across America with an emphasis on emerging research institutions and historically underserved communities.
- Design and implement rigorous experiments and evaluations, data sharing agreements, and prototyping exercises to answer critical policy questions by generating comparative evidence about how well different approaches can help us reach national goals more equitably, effectively, and expeditiously, with appropriate privacy protections in place.
- Broaden public participation and community engagement in regulatory and civic processes and in R&D.

Bolster the R&D and industrial innovation that will build the Nation's future economic competitiveness from the bottom up and middle out. Global competition is growing, and the pandemic cast a harsh light on the fragility of worldwide supply chains. In this environment, agencies should focus on harnessing science and technology to foster good paying jobs, raise the standard of living, and boost supply chain resilience. Agency submissions should:

- Support applied research, experimental development, pre-commercialization, and standardsrelated efforts that will facilitate the adoption of a broad range of new technologies.
- Pursue regional innovation and resilience by invigorating communities and traditional or emerging industries to spark growth and create good-paying jobs.

Strengthen, advance, and use America's unparalleled research to achieve our Nation's great aspirations. Basic and applied research is the bedrock upon which our capacity for innovation is built. Agency budget submissions should continue to improve our richly complex research system so it becomes increasingly effective for the greatest challenges of our time. Submissions should:

- Support and enhance the basic and applied research that has been a hallmark of the American innovation enterprise and the envy of the world.
- Assist emerging research institutions to compete effectively for federal funding.
- Provide support to both the industrial and academic sectors in identifying and addressing research security challenges.
- Support the infrastructure and capacity for providing free, immediate, and equitable public access to federally-funded research results, while developing mechanisms to incentivize and reward open, reproducible, and secure research practices, in ways that benefit individuals, industry, and innovators everywhere.
- Experiment with funding processes to better achieve agency R&D missions by designing, trying, and assessing new approaches such as streamlining processes to minimize administrative burdens, engaging new R&D performers, exploring new R&D methods, and forging new partnerships.