



GCOOS FALL Board Meeting Minutes November 4 & 8, 2024

4 November 2024

Welcome and Roll Call: Kirsten Larsen thanked everyone for joining the meeting then introduced incoming Board Chair, Dr. Kim Rates. Roll call followed: Dave Driver, Sara Graves (via phone), Emily Hall (newly elected to board), Pat Hogan, Stephan Howden, Kate Hubbard (joining intermittently), Kirsten Larsen (starting as Past Chair), Suraida Nanez-James (Vice Chair), Ruth Perry, Brian Roberts (newly elected to board), Antonietta Quigg, Rafael Ramos (newly elected to board), Nick Shay, Joe Swaykos (rotating off board), Jan van Smirren, Nan Walker, Tom Wissing (joined at 11:00 ET), Kim Yates (New Chair). Others joining the meeting included Jorge Brenner, Grant Craig, Bob Currier, Susan Fox, Felimon Gayanilo, Carl Gouldman, Megan Howson, Sandeep Jilla, Ren Kamakura, Jerad King, Barb Kirkpatrick, Uchenna Nwanko, Xiao Qi, Tuomo Saari, Chris Simoniello, Nadine Slimak, Jen Vreeland and Kristen Yarincik.

A motion to approve the agenda was made by Yates, second by Swaykos and all in favor. The transition of GCOOS Board Chair was made from Kirsten Larsen to Dr. Kim Yates. Suraida Nanez-James stepped up as the new Vice Chair. Kim thanked Kirsten and board members Alyssa Dausman, Joe Swaykos and Bill Lingsch who will be rotating off the board after many years of service. New board members were introduced: Private sector representatives are Dr. Emily Hall, Mote Marine Laboratory, and Dr. Rafael Ramos, Woods Hole Group, and Outreach and Education representative: Dr. Brian Roberts, LUMCON. Meeting participants briefly introduced themselves.

IOOS Association updates and regional budget discussion: Kristen Yarincik, Executive Director, IOOS Association: FY2024 appropriations were not fully enacted until March 8—\$42.5M flat funding from prior year. The President’s budget proposed only \$10M for the IOOS line. The IOOS Association was going to request \$56M in 2025 for core funding plus other competitive funding including HABs, OTT and COMT grants. Not included was \$13M for the program office—there is no current direct funding line like the RAs have. Kristen and team worked to counteract the \$10M budget suggestion. A Dear Colleague letter was signed by ~80 Congressional members. See slides for the breakdown of House and Senate Appropriations. ME, FL and CA signed on, with several Republicans. More than 1000 signatures across a wide range of people/organizations were gathered as was a letter to the Secretary of Commerce noting concerns in the President’s budget. The House budget is currently \$56M and the Senate increased flat funding to \$43.5M—a \$1M increase. Overall, the budget is not very favorable for NOAA. What’s next depends on election results. IOOS authorization ends at the end of FY2025. The House agreed to a letter to OMB--15 signatures including three Republicans. Kristen is getting ready for an administration change, drafting letters for different scenarios. Equitable

Services Delivery (ESD) outreach activities are ramping up under IRA Topic 2 funding and she is in the process of hiring a project lead for the ESD work. An OE Tool Kit is being built with existing RA resources, work is being translated to Spanish, and the website is being refreshed. The target audience for the revised website is Congressional staffers. Work will begin on IOOS reauthorization soon.

Questions: Stephan asked if the K-12 Tool Kit can include resources about ocean science-related career opportunities. There is a lot of need; not as many students seem to be going through the pipeline now. Suraida said that educators always ask about career connections. Kristen says some of that is threaded in the lessons (e.g., Why We Observe) but there is no dedicated module yet. Topics currently include food sources, ocean change and coastal hazards. Ruth shared that the Congressional letters that were pulled together contained significant contributions of the RAs and asked if Kristen could share whether there's a plan to share the information on the value of IOOS. Kristen said that the input used to draft the letter is available to all regions and that Jorge has access. Kristen will be using some of the quotes in the website redesign work. Pat asked about the disaster supplemental—is anything moving forward for the recent disasters? Data collection is underway to articulate needs in a spreadsheet. Jorge is coordinating this for GCOOS. The national number is about \$36M. NOAA asked to report damage from recent hurricanes as well as FEMA, with the request going back about a year.

GCOOS updates, budget report and approval: Jorge Brenner, Executive Director, and Jan van Smirren, Treasurer: GCOOS recently hired GIS Manager Jerad King who has good relations with ESRI, and is in the process of hiring a deputy director supported with IRA funds. Dave, Kim and Kirsten are on the hiring panel. GCOOS GRP fellow Dr. Ren Kamakura started in September and is working with GCOOS-supported graduate student Dev Rao, DISL, on a Marine Heat Wave project (that includes Dr. Brian Dzwonkowski). IRA and BIL proposals have been approved. MHW and Sargassum work is underway with CARICOOS and SECOORA and efforts continue to build pan-regional tools. The IOOS EPA nutrient project funded in Y1 and Y2 needs to be renewed to continue supporting Dr. Beth Stauffer, ULA-Lafayette. That should happen this week to enable satisfying the deliverables promised in Y4 and Y5. Fugro data remains uncalibrated and is not flowing to GCOOS. GCOOS is working with them to use Y4 funding to complete the calibration then transition to a partner—likely USM once costs to sustain and manage the system are assessed. The final decision will require board approval. BSEE will be providing some support for the NTL project. This is a first for GCOOS. Felimon is working on the comments to execute the agreement of ~\$125K that will pass through the FY2025 IOOS award. The GCOOS Strategic Plan ends in 2025 and discussions are needed to determine how to update the plan. Jan provided the Treasurer's report for the GCOOS non-profit. His talk was difficult to hear so see slide for details.

Questions: Pat asked Jorge if the budget items presented are confirmed or pending review. Jorge said everything he shared has been approved. The 2022 Hurricane Ian Supplement and IRA funds are all approved. The only pending funds are for the BIL2 proposal submitted for ~\$2M. Approval is expected in March 2025. Stephan asked about the \$10K for the Matt Howard fund in the NGO account. Kim suggested that because it was so difficult to hear Jan that he present again on this in person when we meet at the GOMA meeting in spring.

20th Anniversary Working Group report and discussion: Kirsten Larsen, Nadine Slimak and Jorge Brenner: Kirsten shared GCOOS 20th Anniversary planning activities that the Anniversary committee has been developing (Susan Fox, Megan Howson, Kirsten Larsen, Ruth Perry, Chris Simoniello, Nadine Slimak, Jen Vreeland, Kim Yates) and said the goal is to both celebrate what's been done and to look ahead to the future. What is our public benefit? We should highlight big data products and PI work, the work of members and partners, and raise awareness about activities. What tactics are needed? Identify different meetings to showcase our work, use social media, press releases, the website and branded merchandise. Nadine Slimak discussed the marketing of GCOOS materials, front line communities and the GCOOS website. She shared the anniversary logo that includes "20 years". The goal of selling merchandise is to create a funding mechanism for the Matt Howard award. It will be an on-demand print store so we don't have to front money for products. Jorge Brenner explained that our anniversary activities will also align with the GOMA meeting. We will support the meeting and host some events, including signing a MOU with Laura Bowie since the one from 2019 is expiring, and participating in the plenary, emphasizing coordination between the two organizations. We will also likely have a staff retreat at GOMA similar to the 2024 meeting.

Questions: Suraida asked about special social media hashtags so that everyone is using the same; Nadine will put together a package for everyone to streamline marketing information. Stephan asked if the relationship between GCOOS and GOMA is codified in some legislation? To everyone's knowledge, the two are backed by different pieces of legislation—IOOS and Regional Ocean Partnerships. Rafael asked if all GCOOS merchandise would be for purchase or if some would be purchased for meeting swag such as at GOMA. Ruth suggested that "GCOOS Board" be on board swag for recognition. She suggested nicer items that board members could contribute all or in part to support the Howard fund. Rafael said there is another conference May 5-8 that might be in conflict with the GOMA meeting. Pat said to make sure Jan is in the loop on how to handle taxes for these sales. Ruth said the Offshore Technology Conference Houston Hub can be an option for anniversary support/venue. Suraida has NGO experience and said there should be no issues selling merchandise.

Matt Howard Fellowship: Chris Simoniello, GCOOS Outreach and Education Manager: Dr. Matt Howard was a Texas A&M Oceanographer and a founding member of GCOOS. He developed a unique expertise in oceanography and ocean data management systems. Following his untimely death in 2018, GCOOS set up the Howard Scholarship Fund to annually support a student to attend a professional conference. The scholarship applicants must identify how they/their work embodies Matthew's commitments to data stewardship and the spirit of collaboration. The application process includes a cover letter expressing how professional and personal interests align with the scholarship and a resume. Three awards have been made to date: one in 2020 and two in 2023. There were no students in 2021 and 2022 due to covid. GCOOS needs to discuss the future of the award including: consistent branding (e.g., travel award, fellowship, scholarship); source of sustained funding, selection process, expectations of recipients and advertising the opportunity. A multi-tiered approach is needed to be responsive to funding availability. A Howard award committee is needed to flesh out details. Current volunteers include: Suraida, Ruth, Antonietta, Tom and Chris. Chris sent a request to board

members on 4 November 2024. Tom suggested a name to consider is the Matt Howard Open Ocean Data Award.

Board member activity: Kim Yates, Moderator: Each BOD member discussed highlights of their BOD activities or career activities of interest to GCOOS.

Antonietta Quigg attended the SACNAS conference on behalf of GCOOS last week and will report on ways GCOOS can connect better with these communities. There is a plethora of low-hanging fruit where we can connect. She is the Board liaison to the Community Empowerment Task Team and hosted the last GCOOS meeting at TAMU-Galveston.

Brian Roberts is newly elected to the board. He maintains the long-term LUMCON station with data that goes to GCOOS and will be leading work with the PACIT under the IRA award. He is part of the Strategic Plan review team. LUMCON is a consortium of 42 public and private state institutions —Nan/LSU is part of this. Brian is working on hosting data for two NEP projects (Barataria-Terrebonne NEP and soon-to-be Atchafalaya NERR) and will coordinate data from these into GCOOS.

Chris Simoniello, GCOOS OE Manager, is leading GCOOS Equitable Service Delivery work, represents GCOOS on the IPO ESD executive team, leads GCOOS/IPO Environmental Quality/NEPA compliance activities, is PI or co-PI on grants including the GCOOS IOOS, MBON and COMT. She is a member of the NOAA Regional Collaboration Team, IOOS Association DEI Work Group, IOOS Association Education and Engagement Committee, steering committee of the GOMA Education and Engagement Priority Issue Team and NOAA CPO Coral Reef Task Force. She supports Jorge and the Board, as requested, including meeting agenda development and facilitation.

Dave Driver retired about seven years ago. While he has little to report on career activities, he contributes to GCOOS in many ways, including as a panel member for the hiring of a GCOOS associate director, and has an organizer for the Threshold session and breakout lead for the Currents/NTL session at the 2024 Members meeting at TAMU-Galveston.

Emily Hall is a newly elected board member. She is on the steering committee of GCAN, is a co-coordinator for SOCAN and was on the organizing committee and presented for the GCOOS Spring Webinar Series focused on building synergy across the MBON-GCAN-SOCAN networks.

Jan van Smirren is the GCOOS treasurer in charge of NGO finances. He is an active participant in the UGOS project with Nick, Rafael and Stephan. His role is to ensure any skills/assets secured through UGOS get transitioned into GCOOS or into another body or program by 2027. He believes that GCOOS represents one of most important transition parts of UGOS.

Joe is retiring from GCOOS, having served on the EXCOM as secretary, VP, president and past-chair. He encourages everyone to join GCOOS staff calls every other Thursday to learn about the wide range of activities the group is undertaking. The new assistant director will be a huge help to Jorge. He hopes GCOOS continues to thrive and IOOS stays healthy. There is always room for improvement but so much has been accomplished. He encourages the Board to be proactive!

Jorge works with everybody on everything! He frequently talks with Board members, holds meetings to discuss operational issues and appreciates all the support he gets from the board and staff. In particular, he thanked Stephan for all his help.

Kate is in the middle of dealing with a red tide event. She is happy to have made it through Helene and Milton. USF had a glider deployed through both storms. It is a great example of a HAB network. MML deployed a glider after the storms. It is important to have the gliders “eyes” especially when the weather is dicey and can’t get offshore. She represents GCOOS through the HAB task force and is working with Sea Grant on a state of the science symposium. This will be by invitation-only and will take place before July 1, 2025.

Kim Yates served as the Steering committee chair of GCAN for the past six years. She worked with Joe to review the bylaws to allow international members, served on interview panels for the GIS, product developer and associate director positions and is a member of the 20th anniversary committee team. USGS has been funded to work with NOAA and the NPS on WQ data collected by Gulf Islands and Padre Island NPs.

Kirsten Larsen; served as the Board Chair the past two years and is now the past Chair.

Nan Walker’s main contributions have been to help with hiring the GIS position, serving on committees for computer/IT hires, contributing to the OEC team, giving talks as a data provider and as GCOOS board member, and regularly contributing images and content for GCOOS enews.

Nick Shay continues to try to get HFR in SW Florida to map currents associated with red tide. He continues to advocate for measurements from aircraft to resolve the thermal structure of the upper ocean during tropical cyclone formation; XBTs, GPS sondes, floats and drifters are some of the arsenal he is working to deploy ahead of storms.

Pat Hogan helped organize the MHW session at the 2024 GCOOS Members meeting at TAMU-Galveston. He makes indirect contributions via his work with the NAS UGOS program. As co-chair of the NOAA Offshore Wind team, he helps directly and indirectly support GCOOS. He shared that the IPO is hiring two data managers at NCEI. He is looking to revitalize GCOOS modeling and forecasting efforts.

Rafael Ramos is a newly elected board member. He has a BS in civil engineering (structural), worked with the oil and gas industry before moving to the marine environment where he got his MS in ocean engineering and PHD in applied marine physics. Nick was on committee. His work now is focused on physical oceanography measurements.

Ruth Perry is on the 20th anniversary committee. She just rotated off the Federal Advisory Committee and a NOAA committee where she represented GCOOS. She was part of the team that built the glider monitoring program, is on the FGBNMS advisory committee and BOEM environmental studies committee. She works with BOEM and BSEE on renewable energy

permitting, including offshore wind, carbon sequestration and others to which GCOOS is a primary data partner. She represents the energy industry and GCOOS where relevant.

Sara Graves was traveling and was unable to contribute here.

Stephan Howden has been a board member since 2010 and is on the executive committee (secretary). He is active in the Radial Operator WG meetings for HFR, a national group for IOOS and also participates in GCOOS HFR meetings. He is part of the GCOOS GoM Hurricane Glider team, IOOS hurricane glider meetings, and the NOAA Extreme Events Task Team. He recently had a meeting to discuss GCOOS HFR data with the USCG SAR. He is currently working with Tom and Brian to review the GCOOS Strategic Plan.

Suraida Nanez-James recently stepped up as the GCOOS Board VP. Her work is focused on OE and she is the founder of the Gulf Reach Institute. She is co-Chair of the GCOOS Community Empowerment Task Team and is working with on Jorge on data access issues targeting indigenous communities. Environmental justice and climate action issues are an important part of her work as is working with youth.

Susan Fox represents five RAs for the IPO, including GCOOS and SECOORA. She sits in Charleston and is on the GCOOS 20th anniversary team. Grant facilitation is one of her many roles.

Tom Wissing is finishing his PhD which is sponsored by the DOD. The US Navy relies on precise environmental information from the seafloor to the sky. As his role in GCOOS grows, he sees three main area to contribute: support education, R&D and exploration. We have to encompass this entire data cycle. What he is most familiar with is growing cooperation between entities to improve certain elements of this cycle. As our website shows, GCOOS is an important element to sustain –GCOOS is the HEART of data collection. He is working on reviewing the Strategic Plan to contribute to the new five-year plan, working to expand the observing system with new assets—inside government and navy channels to connect the dots to support new asset deployment; and working to ingest more/new data into GCOOS.

Nick echoed what Tom said regarding the need to support research that leads to new observations; a lot of modern tools used today were developed 10 yrs ago. A transition plan is needed to take tools that have promise and show that they work now...this is where it's at! Getting new tools to operations is critical.

Jen is the GCOOS Program Coordinator who also coordinates GCAN activities with Kim and Emily. She serves as staff liaison to the board, including providing meeting logistical support. She is an organizer for 20th anniversary activities, serves on the NOAA Regional Collaboration Team, hosts bi-monthly staff calls and provides supports to other projects, as requested.

GCOOS 5-yr strategic plan and build-out plan addendum: Stephan Howden, Brian Roberts and Tom Wissing. The goal of this session was to inform a path to build the next 5-year plan, including self assessment and identifying gaps, challenges and lessons learned. Kim explained

that this self-reflection is to think about what GCOOS has accomplished so far and to assess whether this aligns with what we said we wanted to accomplish. Where are we going? What are the challenges?

Howden stated that, overall, the SP is a good document that needs updating, especially the sections on deliverables, metrics and outcomes. There are some things that GCOOS does not have control over due to lack funds. Thus, including them without being able to do them is setting us up for failure (e.g., the cross-cutting theme with numerical modeling and forecasting-GCOOS does not have funds to routinely provide forecasts, as stated). A self-assessment was not completed. What do we want to do for the next SP? Review goals, action items and deliverables. Make sure we only include metrics for actions GCOOS is positioned to be able to accomplish. We don't want to get graded on things we did not have the resources to do.

Brian thinks the SP is a good aspirational document but that we can't evaluate success from the topics covered. We need to balance how we do this--over the next five years, align the funded projects better to the SP. We can also have a vision section so that we can work to position the program for funding and success. Set ourselves up for more quantitative self-assessment.

Tom asked what we did specifically for each action. Did we offer the data services in such a way that it was all-encompassing or did we only hit 50% of the mark? Was the outcome useful for a specific segment of the population? We need to look from a project-to-project standpoint—this will take a lot of work. What marks are we hitting? What marks are we missing? The information can be used to inform a new plan.

Ruth asked if we could incorporate social and community metrics. How would we do it? Who will do? How will it be funded? Kim said a lot more work needs to be done here Can we cross-walk metrics with actual funded projects by the spring meeting? We need to incorporate IRA and BIL work. Stephan says we should already have information from each funded project—what parts of SP their project addresses—can collate this from proposals.

Brian said that with the 2020-2025 SP ending soon, progress on the new plan is needed by spring or we won't meet the 2026 deadline. GCOOS should consider both assessment content and identifying new priorities. The Table Jorge presented showing recently funded IRA and BIL projects should be aligned in the new SP. There is currently little in the SP that is quantifiable for evaluation metrics. What should an assessment look like? Ideally, some targets can be identified before the May meeting so that there is at least six months to flesh out details and have the board approve.

Pat agreed that GCOOS did not have resources to implement many of the details in the SP and actions in the plan were not prioritized. The next plan should prioritize actions over the next five years and avoid items that are not priorities over the next five years. In 2019, GCOOS had a stronger modeling component (e.g., Modeling Task Team) but then no support for activities was provided. Make sure priorities and SP are in as close alignment as possible.

Nick agrees with Pat but also said we need to gaps identified by stakeholders. What do they want from GCOOS? There is research to be done as well--not everything is operationally ready. What

current projects can contribute to needs identified in past plans? Are they still relevant? If so, how to we make it happen? We need to integrate across disciplines. Understanding key gaps of stakeholders will help do well with funding requests. Nick volunteered to help with the SP.

Brian used the President's IOOS budget cut to emphasize the need to prioritize projects and identify gaps. We could also have a separate vision statement for items that are important but not yet funded. This way, we can demonstrate that we succeeded in what we set out to accomplish without sacrificing the longer-term build-out vision. The vision statement is more than a SP but tangible and can be taken to legislators to show what is being done. It can be a good marketing tool and we don't want to lose that. Kim suggested that to put us in a better position for the next round, we can have stakeholders share how their needs were met. Stephan said that there are many others in the Gulf doing work (e.g., UGOS) and the new plan should leverage these relationships.

Nan contributed to the satellite section of the current SP and suggested for the new one, the focus be on the issues/problems and less on the technology. Kim agreed that a more functional approach that brings in stakeholders would be better. Rafael commented that it would be ideal to connect how multiple observations support common challenges and issues. It could cost millions even on one subset of issues in the current plan so narrowing down priorities is essential, if not for the public then at least for use within the organization.

Ruth reiterated Stephan's point that past plans have not done an adequate job highlighting collaborations with other planning bodies. If added, the document could be used to seek Congressional funding and other support. For the new SP, consider adding a discrete section on collaboration with IOOS, RAs, regional planning bodies, etc. Keep the section succinct and tailored to purpose. This content could also help the IOOS Association when they have to advocate and identify cross-cutting RA themes. Susan thought this would be an excellent approach.

Tom asked the group to think about what people want, what it would cost and with budget cuts, what would we lose or gain? For example, what would it take to deliver more accurate and timely hurricane landfall and evacuation information? Stephan said it seems like we have a good idea of the direction to take and now need time to implement. Brian pointed out that the SP is already written around themes that remain important in the GoM so we already have a solid structure in place. We still need a better idea of what GCOOS can accomplish with other RAs and other agencies and incorporate this into the SP. (Note: Pan-regional work with SECOORA and CARICOOS on HABS and MHWs can be added to the SP.)

Tom, Brian and Stephan are willing to continue with the SP review process. Nick and Nan also expressed willingness to help. One suggestion is to meet in-person at the GOMA meeting to identify gaps and make progress on the next SP.

Jorge shared that recent funds to develop a Water Level network come with limited capacity to sustain into the future. It is a good decision to invest in new strategies and partners but long-term operations of the WL network may be better suited to another partner. Who might we work with to hand off operations after the initial round of funding? GCOOS needs to figure out current

priorities, pending priorities and a wish list. Joe said that six years ago we were having discussions just like this. The ocean observing enterprise is too big to get arms around the entire system. To develop the current SP and stay focused on our mission, GCOOS worked with Mel Briscoe on a SWOT analysis. Do we need a professional moderator again for the new plan? It is a non-trivial task that takes a lot of work and requires input and review from everyone on the board. With 17 board members, why are only three reviewing the plan? Rafael asked how people can become more involved. Kim said to reach out to her or committee members. Chris suggests sending board members a spreadsheet where they can sign up for opportunities/committees to serve on with POCs for each opportunity included.

Ruth reminded Brian, Tom and Stephan that as they continue thinking about the SP to include how best to leverage the IOOS Association so that what we do better fits into IA appropriations. Be politically savvy with our planning efforts at the front-end, especially regarding the budget. Stephan suggested that maybe Kristen Y can join some of the SP planning calls to make sure the plan gets used optimally by GCOOS, IOOS and the IOOS Association.

Board follow-up call: Tuesday Nov 12th from 3-4 pm ET. Kim would like feedback from new board members at this time. What did they think about the process? What did they learn? What might they do differently? If interested in participating in the SP process, let Kim know before Nov 12th; Nan, Nick and Chris are willing to participate. Kirsten thanked everyone for supporting her time as Chair. A motion to adjourn was made by Ruth, second by Kirsten and all in favor.

8 November 2024

GCOOS Board Participants

GCOOS Board members in attendance: Dave Driver, Sara Graves, Emily Hall, Pat Hogan, Stephan Howden, Kate Hubbard, Kirsten Larsen, Suraida Nanez-James, Brian Roberts,

Antonietta Quigg, Rafael Ramos, Nick Shay, Jan van Smirren, Nan Walker, Tom Wissing and Kim Yates. Others were asked to put their name and affiliation in the chat to have a record of participants (see below).

Welcome and GCOOS Board Leadership Transition

GCOOS Board leadership transitions every two years. At this meeting, Kirsten Larsen became the past-Chair, Dr. Kim Yates began her term as Chair and Suraida Nanez-James stepped up as the new Vice Chair. New board members were welcomed and introduced: Private sector representatives are Dr. Emily Hall, Mote Marine Laboratory, and Dr. Rafael Ramos, Senior Oceanographer, Woods Hole Group, and Outreach and Education representative: Dr. Brian Roberts, LUMCON. Three members rotated off the board: Joe Swaykos and Bill Lingsch, both former Board Chairs, and Dr. Alyssa Dausman were thanked by Yates for their long-time service that helped build GCOOS and its business, strategic and operational plans.

GCOOS Program Office Updates

GCOOS Executive Director Dr. Jorge Brenner provided program office updates (see slides). He thanked the board and staff for their work, introduced Jerad King, GCOOS GIS Developer, and Dr. Renata Kamakura, National Academies GRP Science Policy Fellow at GCOOS, and shared examples of the many projects GCOOS staff are working on. These included: a data portal for Notice To Lessees information; development of GANDALF 2.0; biological data mobilization activities; Marine Heat Wave projects; and hosting a joint GCOOS/SECOORA webinar series to better connect MBON, GCAN and SOCAN. There is a change in GCAN leadership with Dr. Xinping Hu stepping up as chair. GCOOS is also contributing to a national HAB strategy for Sargassum, providing funding to support five HF radars in Galveston Bay and Louisiana, funding STOPS (Surge and Tide Operational Forecast System) model development, and developing with partners new data atlases for cetaceans and sea turtles. Twenty new projects supported by the ~\$8.2M in IRA funds will be undertaken over the next five years. Additional funding from the Bipartisan Infrastructure Law will enable the replacement and buildout of core observations. Upcoming activities include the hiring of a GCOOS Deputy Director, planning for 2025 20th Anniversary activities and development of the next GCOOS five-year Strategic Plan.

View Brenner's presentation, the Board update by Yates and the subsequent discussion at https://www.google.com/search?q=gcoos+youtube&oq=&gs_lcrp=EgZjaHJvbWUqCQgAECMYJxjqAjlJCAAQIxnGOoCMgkIARajGCcY6gIyCQgCECMYJxjqAjlJCAMQIxnGOoCMgkIBBAjGCcY6gIyCQgFECMYJxjqAjlJCAyQIxnGOoCMgkIBxajGCcY6gLSAQw4NjY0MDA1NmowajeoAgiwAgE&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:989679f5,vid:e0VROBNjY0M,st:0

GCOOS Board Highlights

An overview of GCOOS Board duties was provided by Yates. These include providing support for the GCOOS-RA Office, providing leadership on policy guidance, assisting with coordination efforts throughout the region, developing and approving fiscal policy and helping to define ocean and coastal policy and management strategies. She then shared recent board highlights. A task team was formed to

review and refine goals of the Matt Howard Scholarship; a review and updating of the Strategic Plan is underway; board members participated in the hiring process of several GCOOS positions (GIS Developer, Product Developer, Marine Biologist and Deputy Director positions); and assisted with Inflation Reduction Act and Bipartisan Infrastructure Law proposals and budget reviews. Board members were thanked for their service and participants encouraged to become more engaged.

IOOS Program Office Updates

Carl Gouldman, Director of IOOS, provided Program Office updates (see slides). He congratulated GCOOS for successful BIL and IRA proposals, for work coordinating HF radars and gliders, and for collaborative efforts to build the MBON and OA networks. A flowchart showing the components of IOOS as an interagency group was shared. Funding opportunities in addition to core funding were described. These included Ocean Technology Transition, Climate Resilience Accelerator, and Coastal Ocean Modeling Testbed opportunities. Coming soon are a HAB webinar series and a webinar series to promote dialogue with industry. View the presentation at <https://www.youtube.com/watch?v=GSSCQHRgrEI>.

Inflation Reduction Act Funding

An overview of new projects taking place with Inflation Reduction Act funds was presented by Jorge (see slides). Twenty new projects are being launched, including deployment of new equipment, maintenance of existing observation infrastructure, support for a GCOOS Deputy Director, upgrades to the GCOOS website, product development, and numerous other activities.

GCOOS Outreach and Education Manager Dr. Chris Simoniello shared GCOOS plans for the Equitable Service Delivery component of IRA-funded activities. IOOS priorities include engagement (e.g., trainings, meetings, information transfer processes), user-driven delivery (e.g., products and tools, including translations, data management and administrative needs), and community assets (e.g., data sharing and collaborative projects). The GCOOS Community Empowerment Task Team will help develop a strategy to implement these priorities. Time for discussion was provided following the IRA and ESD presentations. The talks and discussion are available at <https://www.youtube.com/watch?v=nhBEVoCAIQ8>.

Understanding Gulf Ocean Systems Project Update

GCOOS Board member Jan van Smirren provided an update on the National Academies GRP-funded Understanding Gulf Ocean Systems (UGOS) Project. Current work is focused on transitioning project results to operations and creating metrics to demonstrate improvements to forecasting. Alex Kurczyn is working on the Yucatan Shelf and eager to have glider missions in that region. He inquired about co-planning a mission. Jan replied that the shallow water depth makes it challenging for glider mission there but that a conversation with Steve DiMarco is needed. Stephan Howden shared that Hefring Engineering has new gliders that work well on the shelf but that current missions are only about two weeks in duration.

Gulf HF Radar Network Update

Dr.

Uchenna Nwankwo presented on the status, challenges and plans for the Gulf HF Radar Network. There remain gaps in the GoM making it challenging to generate local surface current maps. There have also been security challenges for GERG's instruments with issues ranging from bullet holes in the equipment trailer to theft of a trailer to hurricane-caused breaks in power lines. View this presentation at https://www.youtube.com/watch?v=XSr_RTk5ECw.

Marine Life Projects

Four speakers presented in a session highlighting recent Marine Life Projects. Watch these presentations moderated by GCOOS's Megan Howson at <https://www.youtube.com/watch?v=9p2eROCfQsE>.

Megan Howson and Jerad King presented on the CETACEAN and Sea Turtle Atlas Projects that are being conducted in partnership with NOAA. The CETACEAN team is increasing information accessibility by providing a data pipeline to AOML where the web interface will be created. Data for the Build 1 phase includes population data (e.g., federal, GoMAP movement surveys, tag data) and species distribution models and is focused on stressors such as vessel traffic, noise, fishing pressure and offshore lease sales. Build 2 is focused on environmental data. The platform is being built in ESRI ArcGIS to maximize points of access (e.g., making it searchable by population data, threat data, environmental data, ancillary data or by collections). The Sea Turtle project that began in September is focused on a comprehensive understanding of leatherback habitat uses, and loggerhead and Kemp's Ridley breeding movements. There is overlap of nesting habitats around Port Aransas, TX. Data will be released in delay mode to protect species.

Clay George, NOAA NMFS Large Whale Recovery Coordinator, provided an update on the critically endangered Rice's Whale that is endemic to the GoM. Named for Dale Rice, the species is found from one to about 400m. NOAA RESTORE and BOEM funding post-DWH led to the first targeted workshop on the species in 2014. Up until 2021 when it became a unique species, it was thought to be a GoM subspecies of Brydes's whale. Skull morphology, geographic isolation and genetics proved otherwise. Few calves have been seen and there is uncertainty in the size of the population. Many animals that have been seen are in poor condition. There are many threats to the species. Tagging indicates the animals spend time near the sea bottom during the day and are near the surface at night, posing higher risk for vessel strikes.

Dr. Kristen Hart, USGS, gave an overview of Turtle Telemetry work, explaining how their complex life history makes it difficult to study spatial ecology: they start out on sandy beaches, move out to sea and do not return for many years. Males are rarely seen. Most of what is known is from nesting beach animals and/or females. Her work includes studying the life histories of other reptiles such as terrapins and crocodiles and requires partnerships across multiple disciplines. Biologging tools are rapidly improving, creating opportunities to address new research questions. There is a great need to optimize knowledge for management, especially to identify connectivity across the globe. Demonstrating use of local MPAs by mapping hot spots is a large part of how spatial data are being applied. BOEM is interested in turtle behavior throughout the water column.

Questions and comments included the following: 1) Rafael Ramos has interest in the Sea Turtle Atlas being linked to GANDALF—Howson said there are plans to link some of the environmental and acoustic data in the future; 2) Hart explained that BOEM and the Army Corp of Engineers are funding tagged animals with accelerometers to help understand fine-scale behaviors in the water column; 3) Clay George was asked about Rice's whale off the Texas coast and said that less is known about this area. This past April, surveys were conducted over Galveston and researchers did find some. He is hoping to do more surveys this summer with discretionary funds or possibly with a RESTORE grant. Brenner then asked about recent observations in Mexico based on the work of Melissa Soldevilla (NOAA SE Fisheries Passive Acoustic Monitoring program lead for marine mammals and sea turtles). There is information becoming available from Veracruz—two detections just deeper than 400m. There is interest in expanding acoustic monitoring in Mexico; 4) Nick Shay asked if turtles follow isotherms. Hart said it is unclear with post-nesting turtles which seem to optimize currents, not temperature. By the time tagged turtles return

from offshore, the tags are usually expired so there is little data; and 5) Laura Bowie asked if industry has made any effort to study the whales. George said restoration projects with NRDA funds (Libby Featherston work) engages with industry and used the Gulf Quieting project and Gulf Vessel Strike projects as examples.

Lightning Talks

Six speakers presented during a Lightning Talk session moderated by Simoniello. Watch the presentations and discussion at <https://www.youtube.com/watch?v=rbU46ksng6Q>. Speakers were: Dr. Ren Kamakura, National Academies GRP Science Policy Fellow at GCOOS, who presented on Marine Heat Waves; Nick Gagliano with Sofar Ocean who presented on new spotter buoy technology; Emily Cooley, Florida Department of Health, who provided information about Florida red tide monitoring; Jerad King, GCOOS GIS Manager, who explained ERDDAP on ArcGIS Online as a tool to customize map layers; Dr. De'Marcus Robinson, NOAA Center for Coastal and Marine Ecosystems and Florida A&M University, who shared results of his postdoctoral work studying the impact of ocean deoxygenation on ocean biogeochemistry; and Dr. Kevin Xu, LSU, who updated the group on new HF radars for the Gulf coast.

GCOOS 20-year Anniversary Planning

GCOOS Program Coordinator Jen Vreeland shared 20-Year Anniversary ideas planned for 2025 and revealed the anniversary logo. GCOOS will align with the 2025 GOMA meeting by supporting the meeting, hosting some events and signing a MOU with Laura Bowie since the one from 2019 is expiring. There will likely be a staff retreat at GOMA similar to the 2024 meeting.

The 2025 GCOOS Spring Meeting will be virtual to save funds for the larger, celebratory Fall meeting. View the presentation at

https://www.google.com/search?q=gcoos+youtube&oeq=&gs_lcrp=EgZjaHJvbWUqCQgAECEMYJxjqAjlJCAAQIxnGOoCMgkIARajGCcY6gIyCQgCECEMYJxjqAjlJCAMQIxnGOoCMgkIBBAjGCcY6gIyCQgFECEMYJxjqAjlJCAyQIxnGOoCMgkIBxajGCcY6gLSAQw4NjY0MDA1NmowajeoAgiwAgE&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:4a0ca482,vid:WFmhUkklHvc,st:0

Closing remarks were made by Yates who thanked everyone and asked participants to reach out to the GCOOS Board and staff to become more involved. A motion was made to adjourn the meeting.

Participants who provided their name and affiliation in Chat: Debra Hernandez, SECOORA; Brian Zelenke, NOAA IOOS; Kate Hubbard, FWC; Felimon Gayanilo, TAMUCC/GCOOS; Chris Simoniello, TAMU/GCOOS; Jen Vreeland, GCOOS; Bob Currier, GCOOS; Ren Kamakura, GCOOS; Emily Hall, MML; Megan Howson, GCOOS; Tuomo Saari, GCOOS; Rhyann Grech, IPO; Sandeep Jilla, GCOOS; Cherie Matherne, Pointe-au-Chien Indian Tribe; Morgane Dackiw, Scripps Oceanography; Jerad King, GCOOS; Xiao Qi, GCOOS; Alex Kurczyn, UNAM Sisal; Elizabeth Hieb, NOAA Disaster Preparedness Program; Nadine Slimak, GCOOS; Suraida Nanez-James, Gulf Reach Institute; Robert Moorhead, MS State University and NGI; Zhankun Wang, NOAA NCEI; De'Marcus Robinson, NOAA CCME and Florida A&M University; Katie Wallace, GOMA; Randy Clark, NOAA NCCOS; Stephan Howden, USM; Brian Roberts, LUMCON; Breanna Vanderplow, NOAA IOOS Office; Sharon Mesick, NOAA Regional Climate Sciences; Isabel Hernandez Candelario, LabMMar, UV, Mexico; Caitlin Baldwin, NOAA NCEI; Emily Cooley, FL Dept of Health; Enric Pallas Sanz, CICESE, Ensenada, Mexico; Rafael Ramos, Woods Hole Group; Nan Walker, LSU; Yun Liu, TAMU/GERG; Chris Fuller, RATES Inc.; Carl Gouldman, NOAA IOOS; M. Leopoldina Aguirre-Macedo, CINVESTAV, Mexico; Chelsie Bowman,

TAMU; Amy Newbold, RESTORE Council; Keith Kurrus, RPS; Catherine Hancock, FSU; Mike Yang, Chevron; Benjamin Jaimes de la Cruz, University of Miami; Amanda Richey, GRP Science Policy Fellow at the RESTORE Council; Sara Graves, UAL-Huntsville; Jorge Herrera, Cinvestav, Mexico.