

GCOOS Virtual Fall Board and Members Meetings

November 12-14, 2025

Wednesday, November 12th Board Meeting

Roll Call: 1) Board Members Present: Dave Driver, Nick Gagliano, Sara Graves, Emily Hall, Pat Hogan, Kate Hubbard, Stephan Howden, Suraida Nanez-James, Rafael Ramos, Brian Roberts, Nick Shay, Jan van Smirren, Nan Walker and Kim Yates; and 2) Staff and Invited Participants: Jorge Brenner, Marcus Ogle, Chris Simoniello, Kristen Yarincik and Shari Yvon-Lewis

Absent Board Members: Kirsten Larsen, Ruth Perry, Antonietta Quigg

Welcome, Election Results and Adoption of the Agenda: Dr. Kim Yates, GCOOS Board Chair, welcomed participants and shared a quote from the GCOOS web page quantifying resources including the number of PIs, sensors, data points, and institutional and individual members, stating she is proud to read it and will open other meetings with this statement. New board member Nick Gagliano representing the private sector (Kongsberg) was welcomed and brief introductions were made. Returning board members Nan Walker, LSU, Stephan Howden, USM, and Pat Hogan, NOAA NCEI, were thanked for their continuing interest and retiring members Ruth Perry, Tom Wissing (both absent) and long-time GCOOS Treasurer Jan van Smirren were thanked for their service. Rafael Ramos is replacing Jan as treasurer as of today's meeting. Following a review of the agenda, Pat made a motion to adopt, second by Sara and all in favor.

IOOS Regional Associations Updates and Discussion: Kristen Yarincik, IOOS Association Executive Director. The IOOSA leads communication and coordination across the RAs and aims to show value to raise awareness and gain support. It is a bi-partisan, policy-neutral organization that provided updates on policy related to IOOS. Fiscal Year 2025 ended well, with IOOS fully funded. The ICOOS Act, which provides the legislative mandate for IOOS, is up for reauthorization this year. A House ICOOS reauthorization bill led by Representative Ezell has 25 co-sponsors—six Republican and 19 Democratic supporters—and passed the House Natural Resources Committee unanimously in July. In October, the Senate reauthorization, led by Senator Wicker, bill passed unanimously out of the Commerce, Science, Transportation Committee and currently has seven bipartisan co-sponsors. The House CJS appropriations subcommittee has proposed FY26 funding for IOOS Regional Observations at \$56M (the authorized level), while the Senate has proposed \$43.5M; we are currently in a Continuing

Resolution (funding at the FY25 level) for this year through Jan 30. Efforts are now focused on getting the FY 2026 NOFO released by the end of November to meet our July 2026 funding cycle. Messaging focuses on content emphasizing how RA activities are supporting administration priorities. The loss of key NOAA leadership is a concern. Only one of four leadership positions that IOOS had a year ago are intact.

QUESTIONS: Jorge thanked Stephan who provided testimonials to the Senate this summer. Stephan asked about leadership in the IOOS office with all the changes. Acting Director Jeff Payne is doing double duty as Director of OCM but is planning to retire in January. Dave Easter is also retiring in December. Krisa Arzayus is the remaining leader and will be stepping into the role of acting director. There is currently a hiring freeze and any exceptions require significant reviews. It is unknown how the program office will deal with this loss of capacity. Regarding FY26 funding, signals from Congress suggest defunding, as proposed in the President's Budget, is not likely. Congress supports IOOS because of the critical data IOOS provides. Neil Jacobs was recently confirmed and understands the need for ocean observations and weather forecasts. The IOOSA is requesting a meeting with him.

GCOOS Update and Budget Review: Dr. Jorge Brenner, Executive Director: See slides GCOOS welcomed 10 new members over the past six months, and two new staff-GIS Administrator Pallavi Tummeti and GRP Science Policy Fellow Dr. Natalia Lopez who will be serving as GCAN coordinator. Pallavi is based in College Station, TX, and will be working on All Things Beaches, CETACEAN and the Sea Turtle Atlas. Updates on glider missions were provided. Upgrades to GANDALF are being made--version 2.0 and now moving to 3.0 using AI machine learning tools to ask questions via an interface. Felimon has upgraded the NTL project webpage with new functionality requested by operators using the subsurface current data for offshore operations. The Regional Model Handler was expanded to include more models such as the TX-LA shelf model and there are plans to include others such as the LSU-Galveston model and ECCOFs. GCOOS continues to work with DISL partners on an app for Marine Heat Wave forecasts. Xiao Qi added buoy data and the next step is to fill gaps with satellite and other temperature data. The team also released a collection of 17 MHW reports available in English and Spanish and hosted a summer webinar series. The RESTORE-funded CETACEAN and Sea Turtle Atlas data bases continue to grow with more than 1M views since the hub was created last year. Outreach and Education activities include continuation of the Matt Howard Fellowship which will solicit 2026 applications in February; creation of a Storymap created by DISL summer intern Ivan Keomanyvong; co-hosting with NERACOOS and SECOORA a storytelling workshop, and progress on IRA-funded activities that will be further advanced during the December OEC meeting in Orange Beach, AL. Work is recently underway to develop the GCOOS Acoustics Work Plan and Flow, with funding for developing AI classifiers for Rice's whale and black grouper. Upcoming activities include finalizing the IOOS 5-yr proposal, updating the Strategic Plan, working with the DMAC team on requirements for a new data viz platform, and planning the in-person 20th anniversary meeting to be held in the spring.

QUESTIONS: Pat asked for details about the new visualization effort—who will lead it, how much will it cost and if the focus will be on particular core capabilities. What will be different compared to pages like GANDALF and NTL? The idea is for it to serve as the main landing

page for data and address discoverability challenges. People currently need to go to separate places to access data.

GCOOS Budget Update See slides: \$4.2M is \$80K more than received in Y4 but still short of \$4.3M we received in Y1. Core funds are appropriated by congress to the RAs plus any add-ons. GCOOS continues to award more than 50% of annual RA funds—currently 52% goes to 11 institutions as subawards, some with more than one PI. There were some pass-through funds (e.g., \$33K OAP, \$65K for DMAC to host the 2026 IOOS Code Sprint; \$500K for Beth Stauffer from EPA to continue nutrient sensor testing). There is uncertainty for add-on funds in the current political climate. We hope to find out when the shutdown ends.

QUESTIONS: For the new NOFO, we are creating different funding scenarios and plan to have ready by the end of November. We are identifying priorities for the \$3M level and what can be accomplished at the \$6M level. Two previously funded PIs will not be in the renewal--Nan Walker for SST work and Bob Leben for SSH work. Bob's workflow will be picked up by Tuomo. All other projects are renewing their interest over the next five years. Kristen commented that \$2.5M is what we received over the past three years before add-ons and that things cost more now so this may lead to major changes. If this is the case, with inflation and the rising costs of doing business, we need to articulate the impacts of a flat budget for GCOOS. This will help IOOS office advocacy and communications. Stephan commented that this is a big issue because it includes salaries beyond annual increases for technicians moving up in careers and support for students -the future of ocean observations. Nick agreed—only modest increases in salary for technical staff over the past 20 yrs. We need to specify how a flat budget impacts personnel hours, operations and work force training. Kim said funding is the major challenge voiced by PIs for these reasons. It is easy to determine the cost value of things that might get cut; the real challenge is quantifying the loss of Return on Investment relative to the loss of cost in personnel. How can we determine the economic value on return relative to what it costs to get it? The IOOS office has been trying to get regions to articulate this in recapitalization plans. BIL is a one-time influx but a regular recapitalization plan is needed. It is not just the life cycle of equipment but also how much personnel is funded to operate and maintain equipment. Are personnel hours decreasing because of flat funding? Does this equate to down time for observations? These impacts need to be quantified. A concern with flat funding is that it is increasingly difficult to hire people to learn how to manage these assets. As skilled technical people retire or move on, there is nobody in the university pipeline to replace them. Also, there is concern that as PIs are retiring, observing systems are at risk if the institutions are not invested in sustaining. Should we ask PIs what will be lost if full funding is not received? This would provide information to the IOOSA to document impacts of flat funding. To determine ROI, we can work on scenarios from past events where assets were crucial. If we did not have these observations, how much would it have cost? It is much harder to show value into the future but we can relate to benefits gained from past events, e.g., money saved by not having to evacuate from a hurricane. It is challenging to get feedback from stakeholders and summarize in a quantifiable way. The last attempt at ROI was about 5 yrs ago and showed a 5X ROI but it was based on a Willingness to Pay model for data people were already getting for free.

GCOOS Strategic Plan Discussion: See Slides in Board Google Drive folder: Kim provided a summary of reviewer comments for the GCOOS Focus Areas and Cross-Cutting Themes. Slides include information about:

- Key findings from strategic plan review based on BOD Reviewer Responses
- Successes and remaining challenges
- Approach for strategic plan update
- GCOOS mission statement, focus areas, and goals

Following an overview of the SP review process, Kim summarized comments from the 18 reviewers. Results were summarized in two ways: 1) By questions asked of reviewers; and 2) By focus area and x-cutting theme. Six questions were asked. Many details in SP can be found in the Buildout Plan (BOP). Does the SP need to be more focused? Is it too high level? Should details be added to the SP or maybe add references to addendums/BOP where needed? Consider better aligning goals, action items and deliverables. Maybe do this by using the current LOIs and requesting this information from PIs? Tier 2 projects would be the more visionary part of the SP—things we'll do if we get additional funding. Use SMART objectives where possible. Some outcomes are too broad as written. Provide progress on GCOOS-specific work and how these relate to other interests across RA/IOOS. Kim summarized results of each question. Briefly:

Question 1: Are SP deliverables directly linked to actions and measurable? We need to be able to communicate economic value of efforts to policy makers.

Question 2: Are outcomes GCOOS/IOOS specific? Are they trackable and measurable? Some sections are too high level.

Question 3: Did activities address focus areas?

Question 4: Identify key projects and task team outcomes. Do they align with planned outcomes? Question 5: Did project and task teams contribute to listed deliverables/metrics and inform strategic goals?

Question 6: What are past and new challenges? How were these addressed? What remains?

Generally, we need to improve communications related to project progress. Stephen said the Marine Operations section is problematic because the achievable part is outside our focus area. It states we improve Water Level in harbors and ports when in reality hydrographers do this. Should we remove this content? Think about what GCOOS can do with the resources we have and focus on what we can directly be accountable for. Rafael says the USCG keeps metrics on things like incidences in coastal areas but the hard part is tying numbers to improvements made by GCOOS investment. It is hard to link safety about accidents that did not happen and then even tougher to link to our data. Jan says that on a number of occasions our derivative products have been used and that these are easier to track. Dave asked if there is an official repository of information from stakeholders. There is no one place it is gathered. Rather, it is in email messages from individuals, input into stakeholder surveys, gathered as information in PI reports and other places. It would be helpful to discuss a central repository. The purpose would be to use the information to demonstrate to lawmakers that what we're doing has a lot of value to many people. Kristen stressed that stakeholder letters and feedback are important for Hill visits. Rafael asked about website traffic. Do we know who is using and where they are going? We have high level stats but not specifics. Nick S asked if we share a draft of the SP with stakeholders before

publishing. We solicit input from them to draft the SP but have not yet sent back for comment prior to publishing. The by-laws state that we review the SP every three years. There were suggestions by reviewers to consider making the SP a living document so it can update as needed. We should get the plan done with the information we have then within three years, send to key stakeholders who are not on the board for feedback. Nan thanked Kim for the great summary. The current SP seems like a high-level summary of the BOP. Stephan shared that the BOP was written with projections of funds coming to IOOS. There are new platforms and sensors since it was written. BOP addendums were important content used for the SP. Valuable parts of the plan are results of stakeholder workshops and the resulting repository of stakeholder priorities. Have these changed over the years? A suggestion is to update the SP then create fact sheets for high level policy makers, focusing on priorities, applications and outcomes.

Details by Focus Area and X-cutting theme:

Marine Operations (Dave, Jan and Rafael): Better link action items to deliverables and metrics and better communicate value to policy makers. Key products are identified but don't link to deliverables (e.g., HFR, gliders). Overall, Jan did not think the website is consistent with the SP and that we need to align them better.

Coastal Hazards (Nan, Nick and Kim): Agree that there is a disconnect between the SP and website. Goals 1 and 2 are too similar. It's difficult to track use, especially if stakeholders are going directly to GCOOS-funded partners and not the GCOOS website. Actions need to be better organized. Fewer buzz words should be used. Nick used the example of rip currents expressing concern that to improve forecasts requires non-trivial work that is difficult to convey. We need to make clear what is going into coastal hazard forecasts, perhaps using diagrams with dialogue (see Nick's review to see diagram).

Time was limited for the remaining topics—review slides for details on:

Healthy Ecosystems: Chris, Suraida, Brian and Kirsten

GCAN: Emily, Kim and Kate

Human Health & Safety: Antonietta, Emily and Kate Outreach and Education: Chris, Sara and Suraida DMAC: Sara, Felimon, Bob, Pat and Kirsten

Numerical Modeling: Rafael, Jan, Pat, Dave and Nick

Long-term change: Antonietta and Brian

A strategy going forward will be discussed on Friday. Discussions on NOFO Tier 1 and Tier 2 projects will help identify how to proceed with the SP update. Nick added that being specific with forecast needs will help us adjust the program to where we should be making future investments.

Sara made a motion to adjourn. All in favor.

End Day 1 Board Meeting

Thursday, November 13th Members Meeting

Dr. Kim Yates, GCOOS Board Chair, welcomed the 77 Participants and Emily Hall made a motion to adopt the agenda which was passed unanimously. Election results (summarized above) were shared with participants and retiring Board members Ruth Perry, Tom Wissing and Jan van Smirren were thanked for their services. A summary of Board activities was then provided and included reviewing PI reports and Letters of Intent for the next five-year IOOS NOFO, and updating the GCOOS Strategic Plan. Improving the tracking and outcomes of projects is a topic of discussion for the SP update. The focus of today's meeting is to identify stakeholder challenges and needs to inform the SP updates.

Dr. Jorge Brenner, GCOOS Executive Director, provided program updates. See Slides and summary above for details about new GCOOS members and staff, and progress in multiple program areas including the GANDALF and NTL platforms, MHW forecasting capabilities, CETACEAN and Sea Turtle Atlas, Outreach and Education activities, IRA-funded activities and more. He regrets that the meeting could not be held in person due to the government shutdown and hopes to hold the 20th anniversary celebration in person in April.

Dr. Jeff Payne, Acting IOOS Director, provided IOOS Program Office updates. See slides. Jeff is happy to return to work after the 43-day government shutdown, the longest over his career. He thanked the contract work force in IOOS who were busy throughout the shutdown. He has been acting director of IOOS since May and plans to retire in January. Krisa Arzayus, Deputy Director, will be stepping up as acting director. No money has left OAR or come into NOS. The president's budget zeroed out the RA budgets but there is great bi-partisan support. There is a Continuing Resolution prospect through January 2026. There has been a 20-25% loss of staff across NOAA with much of the leadership gone and many acting directors in place. Success stories are keenly important to make IOOS visible within and beyond NOAA. The AI work being done in the RAs is a big deal because it is of great interest to the administration.

Mr. Joe Nicholson, Office of U.S. Representative Mike Ezell

Following a welcome by Jorge, Joe shared that Representative Ezell has been a champion for GCOOS/IOOS, garnering 27 bipartisan sponsors for the ICOOS reauthorization bill. He is proud to support IOOS which plays a vital role to strengthen the economy, public safety and national security. All RAs received full support for FY2025. Industries rely on the real-time data to keep maritime transportation and ports safe, support USCG SAROPs and USACOE activities. The information is critical for environmental and national security and we have the full support of the office to maximize the program. Jorge expressed that we could not do what we do without their support. Joe concluded by saying his main message is that Representative Ezell and his team support and understand the program and are engaged in it because they live and grew up on the Gulf coast and understand the importance of our work.

Panel 1: Marine Operations and Coastal Hazards: See collated slide deck. Moderator, Dr. Tracie Sempier, Mississippi-Alabama Sea Grant Consortium. Panelists for this session were Dr. Chris Fuller, RATES, Inc (HFR), Dr. Tony Knap, TAMU-GERG (HFR and gliders), Dr.

Chunyan Li, LSU (met-ocean stations), and Tuomo Saari, TAMU-GCOOS (SSH). The goal of the panel was to share the work of GCOOS PIs, highlighting their engagement with stakeholders. Examples included use of RATES HFR data by the Texas Water Development Board for their Texas Flood Framework and by the USACE, especially for inshore data to inform design criteria for flood mitigation projects. Another example is use of GERG's HFR data by the USCG for SAROPs. Tuomo shared Bob Leben's foundational work on SSH products and what he is developing for future overlays of SSH and SST.

Discussion: In addition to the open discussion forum, two questions were posed to participants: 1) What is the greatest challenge or need (and potential solution) for improving stakeholder application of observation data; and 2) How can we improve tracking of outcomes related to stakeholder data applications and measure economic value of activities? Chris S asked Tony and his stakeholder USCG SAR specialist Christina Forbes about the SAROP list of requirements. Did GERG reach out to the Coast Guard and ask what they need, did the USCG reach out to GERG with a particular request, or is there some other way to determine how to support SAR efforts? The relationship was built following a connection made through a UGOS meeting Christina attended. It has been a two-yr dialogue since then. She is now working with Dr. Uchenna Nwankwo on high quality data needs so that SAROP uses the best available data. It has been a great partnership with two-way interaction, mainly targeting surface currents and wind to increase search accuracy for missing people and crafts. Validated (with buoy data) and quality controlled HFR data is imperative for their operations and she has high confidence in the information. She wishes other areas of the U.S. had a similar system of quality control. The USCG uses a model that depends on HFR and TPS data. It is recently taking HFR data from the Yucatan Peninsula, installed to quantify the inflow of water coming into the Gulf, and de-tides and de-winds it to forecast into the future. Tony said that a big step has been achieved with models like ECOFS and TOFS that are now assimilating HFR data.

Rafael asked the panel if model outputs are archived and accessible to stakeholders. Not necessarily from a hindcast but as a collection of nowcasts that can shed light on historical trends. Christina says the USCG does archive. Tony said some of GERG's models are archived. Christina added that high resolution models are great but if someone drifts outside the area of coverage, a lower resolution model like HYCOM is needed to expand the range. They use particle drift and other simulations to track flow and would like models to have more coverage in the Gulf. Also, more validation of models would be valuable. It is the top layers of models that are most important because that is where most things drift from as a starting point. Scaling on the order of one meter is ideal. If using a 10 m model and the direction is off, over time it could lead to completely wrong search patterns. Tony added that TGLO users their data to run oil spill models and knows they are effective because mitigation is achieved before spills reach the coast.

Christina Forbes provided a USCG perspective. She attended a UGOS meeting that opened the door to collaboration. Incorporation of HFR data into SAROPS planning in 2026 would not have happened if not for talking with UGOS team members at the meeting. Since then, cameras installed from GCOOS as part of webcoos at the University of Texas Marine Science Institute and in Corpus Christi were both great outcomes of the collaboration. Tony said that it is difficult to engage stakeholders but that he has been fortunate in getting the oil and gas industry involved and that he can share a list of requirements from various industries that he has accumulated over

the years. Stephan commented that for marine operations, a big development is the new electronic nautical chart (ENC) standards that allow for environmental data overlays. This is an opportunity to reach marine operations stakeholders. The new standards become legal in January 2026, with a period of several years of the old and new standards being legal. The new standards will allow, for example, an overlay of surface currents from HFR. GCOOS and IOOS need to discuss the development data streams that support products in the new standards for ENCs.

Panel 2: Healthy Ecosystems and Human Health & Safety: See collated slide deck. Moderator, Dr. Steve Sempier, Deputy Director, MS-AL Sea Grant Consortium. Panelists for this session were: Dr. Brian Dzwonkowski, Dauphin Island Sea Lab (ARCOS); Dr. Eric Milbrandt, Sanibel Captiva Conservation Foundation (RECON); and Dr. Chuanmin Hu, University of South Florida (Sargassum). The goal of the panel was to share the work of GCOOS PIs, highlighting their engagement with stakeholders. Because of the government shutdown, stakeholders such as DISL collaborator Dr. Jonathan Howell, NOAA NWS, could not participate but panelists shared content on their behalf. Eric shared that it is tremendously valuable having a natural resource policy professional on staff at SCCF (Ally Pecenka) and that the value of long-term monitoring cannot be overstated. Getting people to understand this should be a priority. RECON data was valuable in the Ft. Myers area when Hurricane Ian made landfall in 2022, helping responders understand where flooding was likely and informing how to allocate and stage response services. Stakeholders have requested more data in the Gulf for algal blooms and water level--there is currently only one NOAA WL station in Ft. Myers. Given all the surges, there are a lot of gaps.

Discussion: Chris asked Eric if the water level gaps he mentioned are known to him and if so, who provided input to identify? The type of input is valuable to guide GCOOS planning efforts and the reason hearing from stakeholders is mission critical. Eric replied that since the flooding from Hurricanes Ian, Helene and Milton, communities in Fort Myers, Punta Gorda and Port Charlotte have reached out to ask for more WL observations near their homes. Local governments have been installing more WL sensors including Lee County and the City of Sanibel, FL.

Vishwarmithra Sunkara asked about measures to prevent and mitigate damages to buoys and sensors caused by vandalism, vessel collisions, and severe weather events. Brian replied that there is not much you can do once deployed other than let the Coast Guard mark the obstacle on nautical charts. Using signage identifying as federal property might also be helpful but ARCOS has not been seriously affected by vandalism. Eric has purposely attached equipment to Coast Guard aids to navigation making it a federal offense to vandalize. A more recent issue is boat strikes and he is not sure how to handle. For engaging stakeholders, Chuanmin sent an online survey to 50 people and had a 25% response. Established, ongoing personal relationships are key to successful engagement, with trust built over time.

In addition to the open discussion forum, two questions were posed to participants: 1) What is the greatest challenge or need (and potential solution) for improving stakeholder application of observation data; and 2) How can we improve tracking of outcomes related to stakeholder data applications and measure economic value of activities? Question one

responses included: 1) Meeting with stakeholders can be challenging because it takes time and effort and you have to find a place where you can meet (Brian); 2) Having the right experts and funding to tailor the applications that best fit the user (Chuanmin); 3) For new data types like wave data from HFR, stakeholder confidence in the data is a challenge (Chris Fuller); and 4) Maintaining data flow is the biggest challenge because once you start providing, users expect it and if it goes offline, there is pressure on the provider. An example is when funding for the FGBNMS buoys V and N ended. Divers, boaters, fishermen, etc. were very disappointed that the FGB real-time data went dark (Tony).

Question two responses included: 1) Routine communications and a well-prepared digital survey can help track outcomes related to stakeholder data applications (Chuanmin); 2) Talking directly with end-users is critical to understand their real needs, including the density, frequency and depth of observations. For example, the USCG does not need deep-water currents. They are interested in accurate and frequent surface current and wind data (Tony). Christina added that an additional request from the USCG is Rio Grande flow speed—who can provide this?; 3) Economic value for ecosystems, tourism, fisheries etc all depend on marine life. One of the greatest needs is organized, standardized marine life products using data collected from multiple sources and also new data to fill gaps (Frank Muller-Karger); and 4) We need an IOOS-wide doi database to track who produced the data and then subsequently track users (Stephan).

Following closing remarks by Kim who thanked the speakers, panelists, facilitators and GCOOS staff, a motion was made by Emily Hall and second by Sara to adjourn the Members Meeting.

Friday, November 14th Board Meeting

Roll Call: 1) Board Members Present: Dave Driver, Nick Gagliano, Sara Graves, Emily Hall, Pat Hogan, Stephan Howden, Kirsten Larsen, Suraida Nanez-James, Rafael Ramos, Brian Roberts, Nick Shay, Nan Walker, Kim Yates; and 2) Staff Participants: Jorge Brenner, Marcus Ogle, Chris Simoniello

Absent Board Members: Kate Hubbard, Ruth Perry, Antonietta Quigg, Jan van Smirren

Kim welcomed participants, roll call established a quorum and a motion to adopt the agenda was made by Sara, second by Nan and all in favor.

Because of changes in the employment status of several board members, there was discussion about the impact to the composition and potential size change of the Board. Jim Kendall was elected but will now retire from BOEM on Dec 31, 2025. He can serve on the Board starting in January but is unable to represent BOEM. A vote to allow Jim to start in January 2026 will be held. Both Ruth and Tom Wissing retired from their positions and will no longer serve on the Board. A member election is not needed to fill the vacant seats until the terms of the vacant positions end. GCOOS now has 17 board members, more than the staff number. Should we consider reducing the size of the board through natural attrition? It was suggested to reduce to

12, three representatives for each of four sectors. This was the original board size before it increased to 15 around 2008. Discussion ensued about board size, with examples of other RAs provided (SECOORA 10; MARACOOS 14; CARICOOS 15; PACIOOS 18 and NERACOOS 20). Several questions were asked: How many board members are fully engaged at any given time? About 12. Do we need an odd number for voting purposes? No because the Board chair typically does not vote unless needed to break a tie. This raised a concern from Sara because the Chair is a representative for one of the four sectors so if not participating in the voting process, it is not fair to that sector. Stephan asked about the number of government representatives and whether three is enough given their large stakeholder base. Sara shared that there's been difficulty over the years getting government employees to participate, especially at the state level. Historically, Florida and Texas have had the strongest representation. If we opt for 12 seats and allot five for government, it would not be fair to reduce other sectors to less than three. Several people do not think it makes sense to reduce the number and have unequal representation across sectors. This led to revisiting Jim's retirement discussion. He will be retiring from government so which sector should he be in as of January? Because he was elected while in that role, he would remain in that sector until his term ends. Is a new sector (Emeritus) needed for retired board members?

A factor in the board size discussion is the ability to meet quorum which is a simple majority for in-person actions and 75% for online voting. Before reducing, consider what it means for meeting the threshold if one or two people do not show. Could the online quorum be reduced to 60%? What is reasonable to make sure you can meet the requirement? Two members suggested that retired individuals should be eligible but that there should be a time range within which they fall. Another suggestion was to use language that states a minimum number of people are needed for each sector rather than an absolute number. This would provide guidance with flexibility so that the by-laws do not have to be rewritten as often. There was agreement to move on with the agenda and revisit the topic. Kim will craft language for the by-laws to reflect the conversation and share with the board for comment before proposing a vote, ideally by January.

Comment and Discussion on Meeting Perspectives, Outcomes: Participants were asked to share their thoughts about the Members meeting. Kim kicked off the conversation with an explanation about use of the GoTo Webinar platform. It was difficult for people to share microphones, cameras and screens. Marcus is working on addressing the issues. He is also addressing the calendar invite issue that some experienced because the webinar link was not automatically added to their calendars. For the next meeting, he will email reminders with links before the meeting. Kirsten would have liked more time for discussion during the panels. Stephen suggested more time be built into the first part of the meeting between talks. Rafael thought it was good to learn about details of the IOOS Program Office. Regarding metrics, the number of agencies using his data is not a metric by itself. How many times, where and how they are using specific information is what's useful. In general, getting at this level of detail is a persistent challenge in academic settings. Emily said that it is difficult to capture who and how people are using data when it is openly shared via different portals. She enjoyed the panels and said it would be better when people can turn on their mics to participate. Dave suggested that for the next virtual meeting, we have one panel and more time for discussion. Kim shared that we had two panels because the meeting was designed to be in-person and people were already

committed to participating. Regarding standard metrics, Jorge said the Data Assembly Center is addressing some of this for gliders, web cameras and HFR. QARTOD also has some metrics in place. It is feasible for us to track GCOOS-funded projects but more difficult to get feedback from stakeholders engaged with partners. Professional evaluation is costly and project budgets do not allow for this expense. Should GCOOS provide guidance on what is needed but not implement without additional funding? Pat added that there are some metrics our IT team can do but that it requires conversations about privacy concerns for users. Assessing value is complicated because there are many moving parts—to observation work, benefits to stakeholders, quantifying benefits, translating to economic value and communicating all this in the right places. Saying "we prevented this from happening" is a tall order. The IOOS Association is providing a template for this effort to start developing a strategy across the RAs. Suraida liked seeing the slides with questions to prompt conversation during the panels and Sara enjoyed the presentations and appreciated having facilitators. GCOOS has a long, successful history working with the private sector and now is the time to increase engagement. Emphasis on operational aspects of our work is key. Marcus shared that 99 people registered for the meeting and 79 joined.

Notice of Funding Opportunity Next 5-Yr Award: The next IOOS 5 yr NOFO has not been released but preparations are underway. The GCOOS proposal is being informed by the record number of Letters of Intent received (45), the Strategic Plan review and stakeholder input from a variety of meetings and workshops. Jorge shared the breakdown of the RA budget with \$2.5M from the main award for annual operations and about \$1.5M in add-on funds. Core funds are Congressionally appropriated on an annual basis and support observing elements and RA operations aligned with NOAA priorities. Additional funds include things like disaster supplements and other federal projects. Stephen said that it would be helpful to know the duration of the projects funded with additional funds. Without the NOFO, there is no clear criteria or budget but the target Y1 start date of the new award to continue operations without a lapse is 1 July 2026. Project budgets are being written for two funding scenarios—\$6M and \$3M—and the target date to submit to TAMU is by December 31, 2025. All PIs included in the proposals have been contacted and the intent is to have the proposal written by the first week of December. There is concern about the release date of the NOFO. Depending on how delayed, it can push our submission date into January or worse, miss the July 1 start date.

Forty-five LOIs were received from 28 institutions and included 14 currently funded PIs, totaling more than \$50M in requests. Several existing projects received a bump up in funds to support additional work. This includes maintaining the longest IFCB data set in the Gulf with Darren Heinrich, TAMU, receiving field support from Sharon Herzka's team at the University of Texas; additional HFR operations for USM as they take on responsibility for the system previously handled by Fugro; and new glider missions operated by the DISL. The \$3M funding scenario includes a modest compound average annual increase over five years of 2.8% to existing PIs. There is still a disparity across the RAs regarding core funding. Those at the low end receive up to \$300K less than others. For example, some RAs receive additional core funding for acoustic telemetry (e.g., ACT and FACT networks) and modeling (e.g., MARACOOS funding for the East Coast Community Ocean Forecast System--ECCOFS). A conversation is planned once new leadership is identified. Board members commended Jorge for striking a balance across projects with the limited budget. Everyone agrees bringing new PIs to the program is important but that it

cannot be at the expense of losing core infrastructure. Until the NOFO is released, we cannot finalize decisions about new projects. Nick is concerned about the difficulty maintaining HFR with a flat budget and Jorge appreciated the comments by Christina Forbes, USCG SAROPS, about how valuable these systems are to protecting life and property. If level-funded, GCOOS will renew nine existing projects plus the HFR work led by Chris Fuller, RATES Inc. At the \$6M level, there is opportunity to support 13 new projects/new PIs, increase funds to existing PIs by 20% and include four add-on projects for existing PIs. Overall, this would allow support for nearly 50% of funding requested in the LOIs (22 of 45 projects supported). The negotiated IDC rate that GCOOS receives from TAMU will also affect what can be supported. In the past, there were two IDC rates used, one for on campus and one for off campus staff. Now, two IDC rates are no longer possible. Jorge is working on an IDC waiver justification to get the off-campus rate for the entire project. If successful, more funds will be available for projects. Nick and Pat emphasized the value in bringing new partners who can help maximize the utility of core observations by building applications, improving models and other products, and reaching broader audiences. Product delivery and communicating the value of these products to policy makers and funders is key.

Strategic Plan Process Revisited: The GCOOS proposal for the new 5 yr IOOS cycle should be used to inform the SP update. Consider using the Tier 1 projects as the detailed activities that can be tracked and quantified and the Tier 2 projects as the visionary piece to be conducted as funding becomes available. It might make sense to see the NOFO priorities first then revisit the SP and priority projects to best align. A decision needs to be made about how best to strike a balance between detail and flexibility. IRA, BIL and projects conducted with other funds provide information that can be used to get the SP revision started. Think about focusing on applied aspects of the work that align with government priorities. Introductory language can be updated stating priorities are operations and applications, expanding collaboration and partnerships, etc. then specify projects, objectives, actions, outcomes and metrics.

Another potential shutdown in January and a hiring freeze leaving the IOOS office understaffed is motivating action to complete the proposal amidst uncertainty. Time for subawards to be processed also needs to be factored into the timelines established.

Upcoming Actions

- Bylaw language is being crafted regarding the size of the Board of Directors. A meeting will be called to discuss, wordsmith and vote.
- Recommendations to improve the meeting platform and invitation method will be implemented.
- Jorge will share NOFO guidance once he learns more
- Once NOFO guidance is released, the SP will be revisited. Some updates based on IRA, BIL and other work that is already underway can be used to start the process.

Kim thanked everyone for their contributions to reviewing the Strategic Plan and Letters of Intent and said that the plan for the Spring meeting is to have it in person, likely in Ocean Springs, MS. A comment was made that GulfCon 2026 will be held in Mobile, AL, the first week in May. Sara made a motion to adjourn, Suraida second, all in favor.