



External Review of the Cooperative Institute for the North Atlantic Region (CINAR)

A Presentation to the
NOAA Science Advisory Board

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Science Review Panel

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CINAR



- Established in open competition in 2009
 - Cooperative Institute for Climate and Ocean Research (CICOR) was previous CI at the Woods Hole Oceanographic Institution (WHOI)
- Consortium CI
 - WHOI (lead)
 - University of Maryland Center for Environmental Science
 - Rutgers University
 - University of Maine
 - Gulf of Maine Research Institute



CINAR Themes



- Ecosystem Forecasting
- Ecosystem Monitoring
- Ecosystem Management
- Protection and Restoration of Resources
- Sustained Ocean Observations and Climate Research
- Education and Outreach



Overall Assessment



- CINAR is conducting high-quality research and education/outreach projects across all its themes and contributing positively to NOAA's management needs, particularly at the Office of Oceanic and Atmospheric Research and the National Marine Fisheries Service.
- The management of CINAR is in capable hands, though the CINAR business plan will need to be responsive to challenging fiscal times.
- The review panel noted a sense of frustration within CINAR centered on an inability to directly involve colleagues with expertise of value to NOAA and to create new opportunities for partner institutions.



Findings and Recommendations: Strategic Plan



- Currently, CINAR scientists and NOAA sponsors work one-on-one to develop proposals that respond to specific needs. Given the lack of discretionary or programmatic funding, CINAR does not have the capacity to operate as an integrated team with the strategic vision that was proposed.
- The CI has facilitated some awareness of the expertise available at CINAR and needs of NOAA partners, but there is still not a broad recognition among researchers within CINAR and potential NOAA sponsors of the available expertise and potential collaborations across institutions.
- In several instances, CINAR investigators have responded rapidly and successfully to urgent management issues (e.g., Harmful Algal Blooms (HABs))
- CINAR leadership, in coordination with NOAA, should identify critical research gaps and prioritize the scientific research that should be pursued with any additional funding.
- NOAA and CINAR should create additional opportunities for sustaining existing partnerships and developing new relationships (e.g. co-locating personnel, hosting workshops, creating a strategy for sharing information on CINAR expertise and NOAA needs).
- CINAR and NOAA should build on past successes and further refine their capability to respond to crisis events (e.g., HABs, oil spills, and others).



Findings and Recommendations: Science Review



- CINAR has a strong focus on NOAA's mission, with important research results on regional ecosystem impacts of climate and resource exploitation behavior, and with significant forecasting/management relevance.
- Significant progress has taken place in developing observational and modeling systems that transmit ocean climate information from global to regional to local scales.
- CINAR science and technology are highly leveraged through productive scientific partnerships with NOAA and other federal and state agencies, with fisheries consortia, and within CINAR.
- CINAR investigators responded rapidly and successfully to NOAA's critical needs for information (e.g. oil spill and HABs).
- The individual ecosystem research components are of high quality, but the ecosystem research within CINAR would benefit from greater cohesion. CINAR should work to integrate its ecosystem research from fundamental observations and modeling through to applications and outreach.



Findings and Recommendations: Education and Outreach (E&O)



- CINAR added E&O as a sixth theme because the CI viewed it as an important topic deserving of its own emphasis (although funding is limited).
- CINAR supports E&O through both individual grants as well as the allocation of one-third of its Task I (administrative) funding.
- The review panel was impressed by the broad array of E&O efforts.
- The review panel encourages CINAR to continue working with Sea Grant partners to ensure appropriate coordination of outreach efforts.
- The review panel encourages outreach efforts aimed at leveraging the already ongoing outreach efforts as a way to better inform partner institutions and CINAR scientists about CINAR activities.



Findings and Recommendations: Science Management



- The current funding level does not allow for regular meetings of CINAR leadership, broad-scale visioning, integration of work among the participating institutions, or for fostering collaboration between CINAR and NOAA.
- Task I funding arrives from the Office of Oceanic and Atmospheric Research and the National Marine Fisheries Service at different times each year.
- It is important that discretionary funding be provided to support development of collaborations between and among CINAR and NOAA scientists. Without this type of support, CINAR is essentially functioning as a clearinghouse for NOAA.
- All Task I funding provided by NOAA should arrive at the same date each year in order to facilitate planning for its expenditure.
- To show how CINAR research is synergistic, CINAR and NOAA should maintain a catalog of CINAR-related scientific research that is funded by other agencies or by NOAA through other mechanisms.



Final Comments

- In summary, the Review Panel concluded that CINAR is a valuable member of the NOAA CI community and assigned an overall rating of **Outstanding**.
- The CI community is clearly beneficial to NOAA, but given the limitations of the CI framework, there exists an opportunity for NOAA and the SAB to reassess the official review guidelines to ensure realistic expectations.