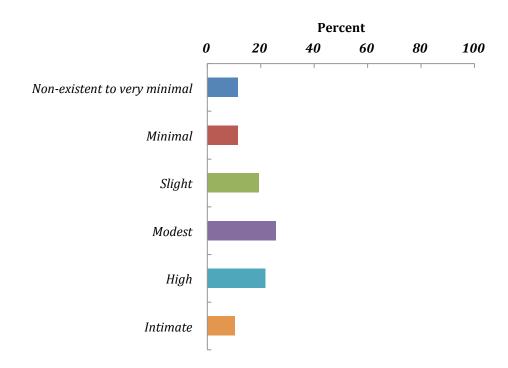
Summarized responses to 2016 Chesapeake Research Consortium Survey

In the Fall of 2016, the Chesapeake Research Consortium (CRC) conducted an open survey to gauge constituent understanding of CRC's mission and to solicit input on perceptions of how well CRC was achieving its mission and suggestions for possible changes in mission focus. The survey was distributed via Survey Monkey and consisted of both quantitative and qualitative questions and received 79 responses. Respondents had the option of providing their names or remaining anonymous. Respondents were solicited directly and were also encouraged to distribute the survey link to colleagues. The survey link was also distributed in the Fall edition of the CRC Quarterly Newsletter.

What follows is a summary of the results. Because each qualitative response was unique, we have chosen to show some select responses that were either generally representative of the majority of responses for that question OR provided a unique perspective and response. The entire collection of responses is available upon request.

Question 1 What is your level of familiarity with the Chesapeake Research Consortium (CRC)?



Do you feel that the following vision statement accurately summarizes what the CRC is?:"The Chesapeake Research Consortium is a nonprofit association of six institutions that support research and education on problems affecting the Chesapeake Bay and other regions. The consortium works to assemble multi-disciplinary scientific expertise to advance scientific understanding and otherwise foster improved science-based management of estuarine systems and watersheds across the region and throughout the world." Please respond with "Yes" or "No" and a brief explanation.

A lot of disagreement with "other regions" & "throughout the world".

"Yes, though the words I do not see are those that I typically associate with CRC like "broker", "facilitate", "network", and "synergy""

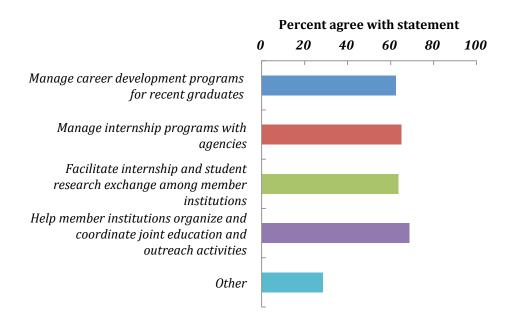
"No. but. . . I think the contribution of multidisciplinary science on the Bay is accomplished - to a limited degree through the CRC contributions to STAC. In the last 5-1- years I am unaware of any significant interdisciplinary multi-institutional initiatives that have been directed to informing science based management by the CRC members - as CRC; i.e. beyond individual researchers efforts to engage management."

"Yes, but it does not always assemble strong multi-disciplinary scientific expertise. It seems to be that there are certain people affiliated with the CRC, and those are the ones always called upon, even when there are others who might have more pertinent expertise."

"As far as I can tell, CRC supports the Bay program with staff interns, maybe pays for some of their own post-doc level staff to do some modeling, and doesn't do much else. Back in the day, CRC submitted cross-institutional proposals for CB research, but I haven't seen or been involved in one of those since before Sellner came on board"

"Yes, but I also think it is an incomplete summary because it doesn't fully capture the efforts of the career development program, which is a major facet of CRC's work."

Question 3
What can the CRC do to fully realize its potential in advancing scientific training, and education? (respondents could choose multiple responses)



Answers for "Other"

"CRC used to organize public meetings of various kinds to foster communication between researchers and managers. When appropriate it published synthesis in books and etc. to promote new ideas What happened?"

"Cultivate a management-oriented Scientific voice, as a CRC voice of scientific fluency and literature. Perhaps more collaborative management oriented scientific publication - e.g. regular special issue of Estuaries and Coasts devoted to the best science addressing specific management issues. CRC has ceded the "scientific expertise" on bay management to the so-called expert panels that systematically avoid true peer review. Maryland recently questioned the fundamental technical approach used in a recent BMP expert panel and had to seek out its own peer reviewers, external to the Bay Workgroup Process, This seems to me to be the natural role for CRC as an organization."

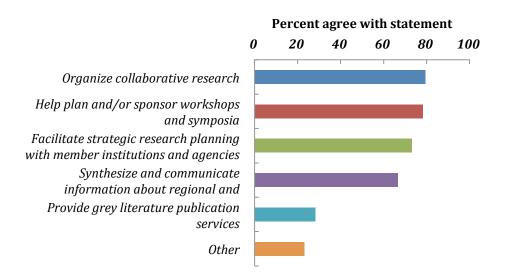
"It's not clear how career development, internships, education, and outreach will meet the mission to bring together experts to 'advance scientific understanding'. The options listed here seem focused on students. Perhaps I missed the point of the 'internship'? I usually think of an internship as something appropriate for students."

"An annual research conference with graduate students from the CRC Universities making presentations of their current research related to estuarine systems and watersheds. Annual conferences could be hosted by one of the universities with rotation

between the universities. It would generate a lot of interest among the students at the respective universities and in related research areas."

Question 4

What can the CRC do to fully realize its potential in advancing scientific understanding? (respondents could choose multiple responses)



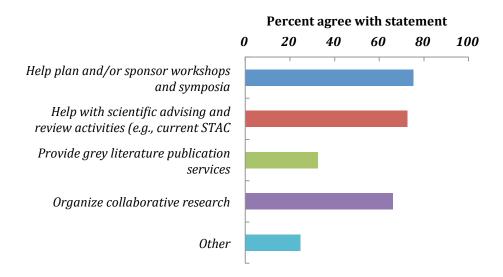
Answers to "Other"

"Identify funding opprounties and be the faciliator that actually brings together multple partner universities to go after the funding opportunity -- there is a lot more potential for collaboration among the member insitutions and take a look at the paucity of collaborative reseach among the group members (some, but far from what could be done)."

"Produce factsheets and white papers on critical science and management issues"

"Move forward "research needs" so that funding agencies can see where knowledge gaps exist and where progress can be made."

Question 5
What can the CRC do to fully realize its potential in fostering science-based management?



Answers to "Other".

"A specific workshop/symposia could be centered around ecosystem-based management. It seems like an obvious concept to many of us, but I have heard from multiple stakeholders that there are a number of different ideas/definitions floating around, and a primer/background session on what EBM means to CRC and the CBP could be useful."

"Yes, collaborative reseach by way of pulling together member institutions around a topic where the crc has the 30k foot view of the strengths among the several member insitutions."

"Develop technology transfer among coastal watersheds, i.e., Long Island Sound, Tampa Bay, NC Estuaries, and others, and the Chesapeake."

"Factsheets and white papers from 'experts'"

Do you have recommendations on what else the CRC could be doing to further its role in promoting the best science for the Chesapeake Bay and its watershed?

"I would like to see more activities regarding the connection between terrestrial and aquatic science."

"At present it appears that CRC consumes resources that might go other places with little or no peer review. This leads to a lack of trust which erodes collaborative endeavors instead of fostering them."

"Serve as an educational resource. Help develop a science plan for the region to develop a path forward on needed research and policy options."

"See above answers. Not sure how CRC is organized and governed, but the institutions themselves may have to subordinate their individual aspirations as they pertain to Chesapeake Bay and watershed in order to more fully collaborate with their partner institutions. Would probably take incredibly strong leadership (might have to overcome lots of administrative/political barriers) to achieve this goal."

"Though I hate to say it, it may be appropriate to undertake some serious strategic planning to evaluate the 2017 role for /CRC. One should be able to clearly explain what CRC is trying to accomplish in, say, the next 5 year, 10 years. I.e. not just advance science, but "If CRC is successful, 5 years from now we will see..., or CRC will have accomplished...X,Y,Z" What (specifically) is it that the CRC members jointly expect to accomplish together?. How realistic is it for CRC to play some sort of coordinating role for research among its members as the funding climate requires competing for a larger slice of a shrinking pie? What is CRC's role in coordinating a consistent scientific messaging to the member states elected officials?"

"Perhaps an annual meeting with presentations and posters. To start, they may want to organize a special session in one of the major society's annual meeting (e.g., American Fisheries Soc)"

Who do you feel is the primary audience for the CRC website? What kind of information might this audience come to the CRC website to find?

Responses for audience were broad – Academics, Managers, Environmental professionals, & Research professionals were the main ones identified.

Responses for what information they would be looking for – Funding opportunities, job opportunities, STAC and CCMP news.

Question 8

Are there specific functions or sections you would like to see within a revised CRC website?

"I have never visited it. I could be wrong, but there is a general impression CRC has grown into a "closed shop" with no real intent to share information, RFPs or other resources with outsiders. A website can do just so much to change this image."

"More information about why the CRC is important. Include some of the most ground-breaking papers and articles that really shook up the scientific world, and world of academia. Also include some of the past scientist that have played a role in getting the CRC started. I think telling the story of the CRC is important because it will create a greater buy-in for those who may not be aware of its significance and prestige."

"I would like to see a specific section dedicated to upcoming events - meetings, seminars, workshops, etc. A separate section with materials such as reports and publications would also be useful."

"A more thorough "publications" section, perhaps sorted by subject matter. A lot of literature has been collected and reviewed by groups like BMP expert panels, and to have those resources and publications collected all in one place could be very valuable."

"Expanded communications and updates from member institutions could benefit the website and expand its importance for the member audience."

"The "Regional Events and Funding Opportunities" would be helpful if updated. Listing staffers on CRC's website may help show the connection between CRC and CBP."

In addition to an updated website and a new quarterly newsletter, how can CRC best improve communications and outreach?

"More coordination with each Bay state to assist in communicating science specifically relevant to that state. More coordination with Bay Program GITs to help keep work and decisions scientifically sound as well as improved understanding of scientific uncertainty."

"Having more of a presence on the websites of other affiliated institutions. For example, while navigating websites like Johns Hopkins or Smithsonian Environmental Research Center, CRC does not jump out and is fairly difficult to even search for in these websites. The more platforms that we can communicate our message and efforts, the better!"

"social media presence"

"A small amount of diverse communication does little. Determine who you want to communicate to and make a significant effort. This could be: 1. member institution scientists - make them aware of each other, management needs for science, and funding opportunities 2. reporters - identify a CRC spokesperson, foster relationships with reporters, and get them to call you for science information."

"Annual or bi-annual gatherings of the member institutions to foster collaborative research."

CRC has previously sponsored some large-scale Chesapeake Bay science and management oriented conferences. Is this an area where the CRC should be doing more, e.g. by promoting more stand-alone events or in conjunction with other events? Or should more CRC time and resources be dedicated elsewhere?

"This is one of the most important activites of CRC. Don't change it."

"It would be my top priority. San Francisco Bay has annual conferences, I would love to see a representation of the best of the Chesapeake research enterprise"

"I think the idea of more high-end conferences is a good one, but these should be organized in a way that promotes collaboration among scientists at the various institutions to achieve a common goal. Is there a way of developing a type of "peer pressure" among the partner institutions as a way of challenging the institutions to participate in collaborative research at a higher level?"

"I would think in conjunction with other events first"

"I definitely think that beyond the modeling conference, there should be a symposium that stands as the premier Chesapeake wide scientific symposium that brings all science, ecology, land management and social science research together to highlight a few things. One, the often neglect to the interconnectedness of the Chesapeake Bay Watershed. Two, the need to identify the relationships to create better transparency of research findings to shape behavior change. And third, diversifying the conversation of whom needs to be involved and what needs to be down to create more inclusivity and direction in reaching the water quality goals set by the EPA and CBPO."