Teleconference Meeting of the NOAA Science Advisory Board
June 18, 2019
1 PM -4 PM Eastern Daylight Time

Location: Webinar and NOAA Campus, Silver Spring, MD

Presentations for this meeting have been posted on the Science Advisory Board (SAB) website: https://www.sab.noaa.gov/SABMeetings/SABMeetingDocuments.aspx#10424266-meeting-documents-for-18-june-2019-sab-webinar

SAB members in attendance:
Ms. P. Lynn Scarlett, Vice President for Policy and Government Relations, The Nature Conservancy (Chair); and from the SAB: Dr. Robert Grossman, University of Chicago; Dr. Eugenia Kalnay, University of Maryland; Mr. W. Christopher Lenhardt, University of North Carolina Chapel Hill; Dr. Denise Reed, University of New Orleans; Dr. Robert Rheault, East Coast Shellfish Growers Association; Dr. Martin Storksdieck, Oregon State University; and Mr. Robert S. Winokur, Consultant (ret. NOAA, Navy)

NOAA senior management and Line Office representatives in attendance:
Dr. Neil Jacobs, Assistant Secretary of Commerce for Environmental Observation an Prediction, performing the nonexclusive duties and functions of Under Secretary and NOAA Administrator; Cisco Werner, NMFS; Mary Wolgemuth NESDIS, Stephen Smith NWS, Michelle Harmon NOS, Gary Matlock OAR

Staff for the Science Advisory Board in attendance:
Dr. Cynthia Decker, Executive Director and Designated Federal Officer; Ms. Elizabeth Akede; and Ms. Caren Madsen

Call to Order and Roll Call

Opening Statement of the Chair

Recommendations on the NOAA Strategic Research and Development Plan

Lynn Scarlett, The Nature Conservancy and SAB Chair
Gary Matlock, Deputy Assistant Administrator, NOAA Oceanic and Atmospheric Research

Summary

Chair Scarlett reminded the SAB that the purpose of this agenda item was to review the full draft Plan as a follow-up to the review done in the spring of the R&D Plan Outline. NOAA had provided the draft Plan and a matrix of the SAB comments received on the outline and how comments have been addressed in the Plan. She thanked members for their input and reminded the group that the agenda item was decisional. She then turned it over to Gary Matlock for a few remarks.

Dr. Matlock briefly covered the status of the R&D plan. He said comments would be used to revise it and then publish a Federal Register Notice to give the public an opportunity to comment. He said the latest round of comments from the SAB would be used in a revised document that would be sent to the SAB. He said the goal is to finish the Plan by the end of September 2019.

He said two recurrent concerns emerged:

- The provision of the comments matrix so commenters would understand the responses to what had been provided.
- Social Science topic. He said no matter what NOAA does in social science, the topic continues to be raised as an area the agency needs to pay more attention to. He said writers of the R&D draft plan have tried to integrate social science in a way so that it would not be simply tacked on but more a part of what NOAA does in the future just as the physical sciences are.

Discussion

Chair Scarlett said the draft reads well. She said the matrix and the justification for how and why comments were used, or not, was appreciated. She noticed the integration of social science and thanked him for having that woven into the draft plan.

Mr. Winokur seconded her positive comments but suggests that the word "priorities" be inserted before the word "plan" in the title. He had minor editorial comments on page 9. He questioned whether it's relevant to note NOAA's history dating back to 1970. He also said the plan does not talk about the three vision areas until page 11. He suggested moving the paragraph on page 12 dealing with the three vision areas up in the document and more as an introduction of those areas so readers have a better understanding of what the plan is about.

Chair Scarlett said she had the same comments and that she had sent these to the NOAA SAB office. She said the three vision areas should be moved and noted that Mr. Winokur's suggestion is an easy way to improve the document readability and structure.

Dr. Rheault mentioned the ocean acidification example used on page 20 and asked if there is another example that can be used.

Dr. Storksdieck thanked the writers of the draft for their diligence and for providing the matrix of comments. He said it's a good document and agreed with the others about readability and structure (as above). He said he's a strong proponent of the social sciences and their inclusion in the draft. He had a minor suggestion on page 11. He said it would be useful for readers to know "why" and that one sentence could be added to address the reasoning noted on page 11.

Dr. Lenhardt said he echoed the positive comments and appreciated the responsiveness to the SAB's comments. He mentioned the notion of team or collaborative science and said it's another relevant aspect of social science.

Dr. Grossman agreed on the quality of the document and raised a small point about section 3.3 on page 27. He suggests adding a sentence to address relevance in that section to clarify. In that section, there is a statement about the importance of data science but it is made only in the context of ocean science when it is statement that is true about everything NOAA does. Dr.

Grossman said this should be rewritten or there should be additional language to make it clear this is a larger issue.

Chair Scarlett reiterated that the report is well done, especially the transition made from outline to draft report. She said on page 4, the term "including climate change" might be inserted in the sentence about evolving changes in the world. She noted on page 9, regarding tracking, which research documents are all outputs; NOAA is striving for outcomes. She added that on page 14, the discussion of generating information begs the question of how one does this in a way that attracts attention. She said not only does information need to be generated but communicated effectively.

Dr. Kalnay noted that she agreed with the Chair that what is happening with climate change is not normal change; she agreed with the Chair's suggestion. She also expressed thanks for the quality of the draft plan.

Mr. Winokur offered another suggestion that NOAA consider the comments about evaluation and outcomes. He asked, what's the desired outcome of investment of research and development dollars?

Dr. Matlock said the SAB comments in the meeting were very positive and helpful. He said there would be no trouble in responding to the comments and that the feedback would improve the next version of the document. He thanked the SAB for thoughtful input.

Dr. Reed said she had found the R&D draft plan useful and had no additional comments.

Chair Scarlett then asked the SAB members present for their decision. The members agreed their detailed comments should be captured in writing and forwarded to the NAA team that is developing the R&D Plan. Dr. Decker said the SAB would have one more chance to review the Plan after it is revised.

The Chair asked Dr. Jacobs if he had any comments. He said he wanted to address the new Executive Order about reducing the number of federal advisory committees. He said it will in no way affect the SAB; there is no desire to get rid of the SAB. Chair Scarlett thanked him for the reassurance.

Recommendations on the Draft Strategic Aquaculture Science Plan

Robert Rheault, East Coast Shellfish Growers Association and SAB Member

Summary

Dr. Robert Rheault presented a draft report with recommendations on the NOAA Draft Strategic Aquaculture Science Plan (SASP). Dr. Rheault worked with a team to develop the plan that included Dr. Susan Avery, SAB member Emerita and Dr. Peter Betzer, member of the National Sea Grant Advisory Board. The SAB had been asked by NOAA to review the Strategic Aquaculture Science Plan (SASP) and provide recommendations on "tactics" for implementing the Plan. The NOAA Marine Fisheries Advisory Committee's (MAFAC) Aquaculture Task Force (ATF) was asked to review the scientific topics contained in the Plan. In order to respond

to the request, NOAA provided both the SAB and MAFAC with a Google form to provide feedback; the SAB team did not think the form was useful nor suited to their task. The team chose to approach its task by identifying the various available funding mechanisms and considering their strengths and weaknesses. Mechanisms considered included NOAA laboratories, external grant programs of different types, public-private partnerships of different types, and prizes. Dr. Rheault went through this list in more detail per the report submitted.

Discussion

Dr. Storksdieck expressed concern about the recommendation that NOAA consider finding ways to reduce or cap the overhead rate on external grants. He was not sure the team fully appreciates the consequences of doing this. He said this is a general complaint from federal agencies about academic institutions, but they do not realize what it will cost them. He said many people to do not understand how overhead works and what the actual cost is to the university to implement such grants. He suggests the recommendation could be that NOAA investigate the issue of overhead on grants and whether there is an opportunity to change these, being sure consider the consequences of any reduction. Chair Scarlett provided the perspective of a research-oriented NGO and indirect cost rates. Overhead rates vary widely but often are capped below the actual cost of doing research which then requires the NGO to fund raise or cover costs another way. Dr. Reed noted that capping overhead is considered a means of getting more funds for projects. Are there other ways of finding cost efficiencies that could maximize project funds? Dr. Rheault responded to these comments by stating that he was not an expert on this topic but that if SAB members are not comfortable with the recommendations, then he was find with deleting it. Dr. Grossman and Chair Scarlett agreed that there are ways of rephrasing the recommendation to make it less directive and more exploratory. In the end, Dr. Rheault believed it made more sense to simply delete it. Chair Scarlett said this might be an issue to take up later in a broader context. Dr. Reed agreed it would be useful to consider cost efficiencies generally in awarding grants.

Mr. Winokur stated that he could not really see the relationship between Section 1 and Appendix 1 of the report and Section 2. He believed Section 1 is generic enough to simply be transplanted to the NOAA Research and Development Plan the SAB discussed previously. He said there is nothing about it that is specific to aquaculture; only Section 2 is really specific to that and could stand alone.

Chair Scarlett asked if there were any further comments on the recommendations on the Plan or to any of the language in the draft report from the SAB. Dr. Reed noted that a number of the recommendations articulated have a broad application, not just germane to aquaculture. An example is coordination of RFPs across agencies. These are things that would be good practices for all grants in general, not just for aquaculture. The Chair agreed and said some of these things could be taken up in a broader context in the future by the SAB.

Dr. Rheault noted that there was some additional thoughts on innovation that were not captured in the report that could also be taken up at another time.

Chair Scarlett asked for a motion to accept the report with the deletion of the recommendation on overhead. Dr. Reed made a motion to accept; Dr. Storksdieck seconded the motion; the motion passed unanimously with no further discussion.

Action: SAB will take up the topic of best practices for grants in a broad NOAA context in the future.

Action: The SAB accepted the draft Report on Recommendations to NOAA on the Draft Aquaculture Science Plan with revisions. The report will be revised and transmitted to NOAA.