

WATER QUALITY SUBCOMMITTEE**Conference Call Summary****March 6, 2006****10:30 a.m. – 12:30 p.m. EST****Welcome and Opening Remarks***Herb Windom, Ph.D., Chair, Water Quality Subcommittee*

Dr. Herb Windom (*Skidaway Institute of Oceanography*) welcomed the participants and explained that the purpose of the conference call was to discuss the draft program review report of the Water Quality Research Program and the poster session that took place at the face-to-face meeting in Cincinnati. Ms. Lori Kowalski (*U.S. Environmental Protection Agency [EPA], Office of Research and Development [ORD]*) substituted for Dr. Bernice Smith (*National Center for Environmental Research [NCER]*) as Designated Federal Officer.

Review of the Poster Session*Water Quality Research Subcommittee*

Dr. Windom commented that the poster session was well organized and useful. The draft report refers to several posters as examples of the program's accomplishments. Noteworthy accomplishments included examples of collaboration and leveraging of resources, as well as new approaches to combining social sciences with hard-edge physical science.

Dr. Judith Meyer (*University of Georgia*) asked if the poster presenters would see the Subcommittee's comments; she thought the feedback would be useful to EPA. Ms. Lorelei Kowalski replied that it would be best to discuss all comments/feedback from the poster sessions on this call in a public forum because the Board of Scientific Counselors (BOSC) does not include that type of information in its reports.

Dr. Meyer commented that she appreciated the consistent poster format as well as having paper copies of the posters. The posters that addressed stressor identification and the Causal Analysis/Diagnosis Decision Information System (CADDIS) were helpful in demonstrating leadership. Dr. Gary Sayler (*University of Tennessee*) appreciated the fact that the posters were organized around long-term goals (LTGs). He noted that the presenters were enthusiastic about their work and the posters provided an excellent overview of the state of the research. He agreed that there were good examples of collaboration, including work through the Science To Achieve Results (STAR) Program. The posters indicated leadership in certain areas, such as stressors, the Stormwater Management Model (SWMM), and CADDIS. Dr. Stephen Weisberg (*Southern*

California Coastal Water Research Project Authority) agreed with Dr. Sayler's comments and stressed the benefits of having the presenters there to discuss the posters. He found the discussions about how the research is used and interactions with stakeholders to be especially valuable. Dr. Windom also emphasized the importance of having the presenters available and noted that they were enthusiastic and forthcoming. He added that many researchers still considered their products to be outputs rather than outcomes. The Subcommittee members were able to explain the concept of outcomes to the researchers, which provided a two-way learning experience.

Dr. Kevin Kleinow (*Louisiana State University School of Veterinary Medicine*) agreed with the Subcommittee members' assessment of the poster session. He commented on the high quality of the science and the strong knowledge base demonstrated by the presenters. Dr. Kleinow was impressed with the work on aquatic life criteria, and he stressed the importance of updating old criteria. Dr. Windom added that he was impressed with the diversity in the program, especially the mix of social sciences with the hard sciences. He concluded the discussion by stating that the poster presenters did an excellent job.

Discussion of the Draft Report

Water Quality Research Subcommittee

Dr. Windom noted that the comments he received from the Subcommittee members were very useful. He suggested that all of the recommendations be included in the executive summary and presented in a table, as was done in another BOSC program review. Dr. Windom explained that the summary section would refer to the remainder of the document for a more detailed discussion of the recommendations. The summary section should serve as a stand-alone document that provides an overview of the program review. Dr. Windom explained that he had not moved all of the recommendations into the summary section yet. He requested that each section leader pull recommendations from his or her section and send them to him. The Subcommittee members then discussed the draft report section by section.

Introduction

Dr. Windom stated that he will expand the introduction to describe the Subcommittee's charge and its approach to the program review. He also will include a few details about annual performance goals (APGs) and annual performance measures (APMs) and how they relate to the LTGs.

Relevance

Dr. Meyer commented that the term "cross-walk" sounded like jargon and should be written more clearly. The word "cross-link" was preferred, and Dr. Meyer agreed to rewrite this sentence and send it to Dr. Windom. Dr. Windom reiterated that he will address the APGs and APMs in the introduction, and Dr. Meyer agreed to describe how they relate to the LTGs.

Quality

Dr. Christian Chauret (*Indiana University Kokomo*) stated that he added a sentence at the beginning of Question 1: “The review process for research proposals and RFAs [Requests for Applications] themselves are both determinants in the ultimate quality of the funded research.” He added that Dr. Laura Ehlers, who was not present on the call but had provided written comments, thought that the discussion of STAR Program funding was not relevant to peer review and should be moved elsewhere. Dr. Chauret, however, thought that funding was related to quality. Dr. Meyer agreed with Dr. Ehlers that it related more to the previous section, which states that the program responds to emerging issues through the STAR Program; if STAR funding is limited, the ability to respond to emerging issues is limited. She noted that this documents the point that funding is being reduced. The Subcommittee members, however, decided that the discussion should remain where it is.

Dr. Chauret explained that the next few paragraphs provide background about external reviews of the STAR Program. He had added some text and recommendations from other BOSC Subcommittee program reviews and a sentence stating that the Subcommittee generally agrees with the assessment of the STAR Program. This assessment was summarized in three bullets, the third of which referred to peer review for RFAs. Dr. Chauret noted that there was further discussion in the next section about the peer review process. Dr. Windom suggested stating: “The Subcommittee agrees in principle with this assessment, but see the recommendation below.” Dr. Chauret agreed to make that revision.

Dr. Chauret explained that he added some information to the next section, which describes ORD’s process for developing RFAs. He suggested adding: “NCER would benefit from a more systematic use of external reviews of RFAs to improve the originality of these RFAs. External reviews of RFAs would bring different perspectives and ideas and enhance the quality of the RFAs. Without external reviews, it is possible that the scope of the RFAs may be limited by the expertise of the internal reviewers. This does not need to be the case.” Dr. Windom replied that this should be in the form of a recommendation (i.e., that the Subcommittee would recommend more systematic use of external reviews). Drs. Sayler and Meyer thought this was too strong, and suggested recommending that “...NCER evaluate the need for more systematic use of external reviews of RFAs.” Referring to a sentence in the next paragraph, “NCER would benefit from a more systematic use of external reviews of cooperative grants and contracts,” Dr. Sayler asked if NCER has a role in establishing cooperative grants. Dr. Charles Noss (*Office of Research and Development*) thought NCER was not involved in this, and the Subcommittee agreed to substitute “the Program” for “NCER.”

Dr. Windom requested that each Subcommittee member extract the recommendations for his or her section and include them at the end of each section under a Recommendations heading. Dr. Chauret recommended putting a direct link to the NCER Web Site from EPA’s main page. Dr. Windom thought such a link was in place, but suggested recommending a clearer link.

Because Dr. Weisberg was able to participate in the call for the first hour only; he offered his comments at this time. He indicated that he agreed with the discussion so far and added three points. First, the questions ask for descriptions rather than evaluations of the program’s

processes. He thought it was important to include judgments on the processes. Second, he noted that the answer to Question 4 under Performance is only a few sentences. This question leads into one of the critiques of the program—that sequencing is not apparent in the Multi-Year Plan (MYP). He considered this to be a substantial point and recommended that the bullet be expanded. Dr. Windom replied that this recommendation was included elsewhere in the report, but that redundancy was not a problem; he will ensure that the document references this point consistently. Dr. Kleinow agreed to expand this and write it as a recommendation. Dr. Weisberg's third comment was that he had taken material about citations from the Leadership section, and this text should go in one place or the other. He added that it had been a pleasure working with the Subcommittee members.

Dr. Chauret explained that Question 2 under Quality is a description of the peer review process. He added a statement that reads: "For any scientific product, regardless of its origin, high quality depends to a large extent on whether the research project was subjected to an objective peer review process. High quality peer review is one of the fundamental principles of scientific research." He also included a review of the peer review process of the Aquatic Stressor document and added: "This is a good example of a product that went through a very thorough peer review process; because of the scope of this project, it was logical to seek reviewers from a variety of different organizations. In addition, the product was further improved by collaboration among various federal agencies." Dr. Chauret explained that he will edit the overall recommendations in the last section based on today's discussion. Dr. Meyer suggested making the point about peer review more specific. Dr. Windom agreed and asked Dr. Chauret to write this, not as a strong recommendation, but as a comment stating that the Subcommittee encourages this kind of process.

Performance

Dr. Windom asked about Dr. Ehlers' suggestion to delete the discussion of how products are disseminated because it addresses program outcomes. Dr. Kleinow stressed that dissemination of products is an important part of the program design, which is the focus of the question. Dr. Meyer suggested that they keep the first part of that text and delete everything after "...as evidenced from." Dr. Kleinow agreed to make that revision and to change "outcomes" to "outputs."

Dr. Meyer asked about the last part of Question 1, which recommends that the program have a more visible proactive component. Dr. Kleinow explained that the program appears to focus more on environmental restoration than environmental protection; the program has proactive components, but these should be more evident. He agreed to rewrite this more clearly as a recommendation.

Dr. Windom asked about Dr. Ehlers' suggestion to delete the second paragraph under Question 2, which she thought was discussed more extensively in the answer to Question 6. Dr. Meyer suggested that a reference to the answer in Question 6 would suffice. Dr. Kleinow agreed to delete the paragraph and add the reference.

There were no comments associated with Question 3, and Dr. Kleinow agreed to expand the answer to Question 4, as Dr. Weisberg suggested. Dr. Meyer commented that there might not be recommendations in cases where the program is doing well. Dr. Windom replied that the summary section will explain that the program is doing well and that the document provides more details. He thought it was important to include the recommendations in the summary section, but it would be difficult to highlight positive examples evenly.

Dr. Windom explained that under Question 6, Dr. Ehlers suggested that the second bullet, "Does the research provide the best return in terms of products and outcomes for the investment?" be deleted. Dr. Ehlers' comment was that return on investment should not be a criterion for prioritizing research because it cannot be known in advance. Dr. Windom thought that research results were an important factor in determining how to improve the program. Dr. Meyer suggested replacing the word "best" with "positive." Dr. Sayler replied that, in an era of diminishing resources, it is necessary to identify those efforts that produce the best return. It was decided that the bullet should remain as written.

Program Progress

Dr. Meyer commented that Question 1 suggests six metrics that should be incorporated into an accounting of each APM. She thought this should be included in the recommendations. Dr. Windom agreed and commented that using specific examples helps to convey the rationale behind the recommendations. He added that details pertaining to Questions 2 and 3 were included in the appendices.

Scientific Leadership

Dr. Windom noted that Dr. Chauret added some text about molecular methods and that Question 2 had only editorial changes.

Coordination and Communication

Dr. Meyer thought that the last paragraph under Question 1 contained a recommendation. Dr. Windom agreed and added that it should be expanded to include other stakeholder groups. Dr. Sayler noted that the paragraph about EPA taking a leadership role in microbial source tracking was too strong. It would be more accurate to say that EPA is taking a leadership role in promoting molecular methods.

Dr. Windom commented that Question 2 looked fine. He thought that the discussion about interagency collaboration in Question 3 could be written as a recommendation, and he asked for ideas about suggesting specific agencies. Dr. Meyer advised against specifying particular agencies because the Subcommittee was not familiar with all of the possibilities. She added that collaboration also included technology transfer between the STAR Program and the laboratories and promoting sabbaticals for faculty and internships for students. Dr. Windom noted that there were no comments on Question 4.

Dr. Kleinow thought that the answer to Question 5, “To what extent have research results been published and cited in peer reviewed literature?” sounded too generous and noted that publication rates vary from institution to institution. Dr. Windom pointed out that publication rates also vary according to discipline. He did not think it was necessary to include a high level of detail, but one or two publications per investigator per year seemed like a fair target. Dr. Meyer noted that, in the next paragraph, ORD scientists were encouraged to aim for higher tier journals. Dr. Windom agreed that this should be included as a comment but not as a recommendation.

Dr. Windom thought that Question 6 looked fine, and the group agreed with the recommendation in that section. Regarding Question 7, the Subcommittee agreed to recommend that the program’s benefits be articulated more clearly in the MYP.

Public Comments

Dr. Windom asked if there were any members of the public who would like to comment. There were no such requests.

Discussion of the Draft Report

Conclusions and Recommendations

Dr. Windom reiterated that this section will be deleted and the conclusions and recommendations in this section will be moved into a table in the summary section. He added that a few more of Dr. Ehlers’ suggestions needed to be discussed. Dr. Meyer agreed with Dr. Ehlers’ comment that, without the exploratory component of the STAR Program, the Water Quality Research Program’s flexibility is limited. The draft report can state, however, that the program has addressed emerging issues.

Dr. Windom explained that there are two lists of questions that the program should consider as it prioritizes research, and Dr. Ehlers thought that the two lists should be identical. Dr. Meyer agreed and suggested using the shorter version of the third bullet.

It was agreed that the recommendation about an annual accounting of program outcomes should include program outputs.

Dr. Sayler thought that the exploratory part of the STAR Program had been reinstated. Cynthia Nolt-Helms (*NCER*) explained that this is the intent, but the funds are uncertain. The Subcommittee agreed to leave the recommendation as is.

Dr. Windom stressed the importance of encouraging partnering and collaboration, particularly with the states, for which there is no institutionalized mechanism. It was agreed that this recommendation be expanded to mention collaboration with ORD laboratories and other agencies. The Subcommittee also agreed to expand upon the recommendation to improve the MYP.

The final recommendation stated that biosolids research should be subsumed under the other LTGs. Earlier in the document, it was suggested that this research belonged under LTG 3. Dr. Windom proposed that the recommendation be written to encourage the program to decide where to include this research. The Subcommittee agreed with this suggestion.

Wrap-Up

Dr. Windom explained that he will follow up with an e-mail listing the specific items he needs to finalize the draft report. Each Subcommittee member should identify recommendations from the section he or she wrote and send them to Dr. Windom along with any additional points that the group decided to include. He will delete the conclusions section, put the recommendations into a table, and expand the summary to include a discussion of the relationship between the APGs and LTGs. He will send the draft report back to the Subcommittee members for their final comments.

Ms. Kowalski reminded the Subcommittee members to send their material directly to Dr. Windom and not to copy the entire Subcommittee. She explained that Dr. Windom will consolidate everything and produce a final draft, which he will return to the Subcommittee members for final sign-off. Dr. Windom will submit the final draft of the Subcommittee's consensus document to the BOSC Executive Committee Chair. Ms. Kowalski will set up a conference call with the BOSC Executive Committee to review the final draft and provide feedback. After completion of the Executive Committee's revisions and approval, the document will become final.

Ms. Kowalski explained that any report generated by a BOSC Subcommittee becomes a report of the BOSC Executive Committee. The Subcommittee members will receive a final draft of the report and will be informed of any substantive changes that require their input. It is the prerogative of the Executive Committee to make any changes to the report; however, to date, changes to subcommittee draft reports have not required the subcommittees to reconvene for an additional meeting. Ms. Kowalski added that if the Subcommittee members have any major substantive changes they can inform Dr. Smith and another conference call will be arranged. If there are no more substantive changes, the process will continue as described.

Dr. Windom thanked the Subcommittee members and adjourned the conference call at 12:30 p.m. EST.

Action Items

- ✧ Each Subcommittee member will send recommendations from the section he or she wrote to Dr. Windom, along with any additional points to be included in the summary.
- ✧ Dr. Windom will delete the conclusions section and put the recommendations into a table in the summary.
- ✧ Dr. Windom will expand the introduction to describe the Subcommittee's charge and approach to the program review. He also will prepare a description of the APGs and APMs.

- ✧ Dr. Meyer will write about how APGs and APMs relate to the LTGs. Dr. Windom will include the text from Dr. Meyer in the introduction.
- ✧ Dr. Meyer will rewrite a sentence in the Relevance section to replace “cross-walk” with “cross-link” and send it to Dr. Windom.
- ✧ Dr. Chauret will add: “The Subcommittee agrees in principle with this assessment, but see the recommendation below,” to the Quality section.
- ✧ Each Subcommittee member will identify the recommendations in his or her section and include them at the end of the section under a Recommendations heading.
- ✧ Dr. Windom will ensure that the draft report consistently references the point that sequencing is not apparent in the MYP.
- ✧ Dr. Kleinow will expand the bullet on sequencing and write it as a recommendation.
- ✧ Dr. Chauret will edit the overall recommendations in the Quality section, based on discussion during the conference call.
- ✧ Dr. Chauret will write the point about peer review more specifically, not as a strong recommendation, but as a comment that the Subcommittee encourages this effort.
- ✧ Dr. Kleinow will replace the deleted text (i.e., the discussion about dissemination of products) in the second paragraph under Performance, eliminating everything after “...as evidenced from.” He also will change “outcomes” to “outputs.”
- ✧ Dr. Kleinow will rewrite the last part of Question 1 in the Performance section more clearly as a recommendation (i.e., that the program should have a more visible proactive component).
- ✧ Dr. Kleinow will delete the second paragraph under Question 2 in the Performance section and reference Question 6, where the issue is discussed more extensively.
- ✧ Dr. Kleinow will expand the answer to Question 4 in the Performance section, in accordance with Dr. Weisberg’s suggestion.
- ✧ Dr. Windom will send an e-mail listing the specific items he needs from the Subcommittee members to finalize the draft report.
- ✧ Dr. Windom will send the revised report back to the Subcommittee members for their final approval.

- ✧ Dr. Windom will consolidate any final comments and produce a final draft for sign-off by the Subcommittee members.
- ✧ Dr. Windom will submit the final draft of the Subcommittee's consensus document to the BOSC Executive Committee Chair.

Participants List

Subcommittee Members

Herb Windom, Ph.D., Chair

Professor Emeritus
Skidaway Institute of Oceanography

Gary S. Sayler, Ph.D., Vice Chair

Professor of Microbiology and Ecology
Director, Center for Environmental
Biotechnology
University of Tennessee

Christian Chauret, Ph.D.

Associate Professor
Department of Natural, Information, and
Mathematical Sciences
Indiana University Kokomo

Kevin Kleinow, D.V.M., Ph.D.

Professor of Toxicology
Department of Comparative Biomedical
Sciences
Louisiana State University School of
Veterinary Medicine

Judith Meyer, Ph.D.

Distinguished Research Professor
Institute of Ecology
University of Georgia

Stephen Weisberg, Ph.D.

Executive Director
Southern California Coastal Water Research
Project Authority

Designated Federal Officer

Lorelei Kowalski

Office of Science Policy
Office of Research and Development
U.S. Environmental Protection Agency

EPA Attendees

Benjamin Blaney, Ph.D.

National Risk Management Research Laboratory
Office of Research and Development
U.S. Environmental Protection Agency

Cynthia Nolt-Helms

National Center for Environmental Research
Office of Research and Development
U.S. Environmental Protection Agency

Charles Noss, Sc.D.

Office of Research and Development
U.S. Environmental Protection Agency

Kathryn Saterson, Ph.D.

National Health and Environmental Effects
Research Laboratory
Office of Research and Development
U.S. Environmental Protection Agency

Laurel Staley

National Risk Management Research Laboratory
Office of Research and Development
U.S. Environmental Protection Agency

Jordan West

Office of Research and Development
U.S. Environmental Protection Agency

Contractor Support

Amy Lance

The Scientific Consulting Group, Inc.

APPENDIX

Conference Call Agenda



WATER QUALITY SUBCOMMITTEE

Conference Call Agenda

March 6, 2006

10:30 a.m. - 12:30 p.m. EST

Participation by Teleconference Only

(866) 299-3188

Conference Code: 2023439766

MONDAY, MARCH 6, 2006

10:30 a.m.	Welcome and Opening Remarks	Dr. Herb Windom, Chair
10:40 a.m.	Discussion of January Poster Sessions	Chair/Subcommittee
10:50 a.m.	Discussion of Draft Report for BOSC Executive Committee Review	Chair/Subcommittee
12:15 p.m.	Public Comments	
12:30 p.m.	Adjourn	