



**GLOBAL CHANGE RESEARCH  
MID-CYCLE REVIEW SUBCOMMITTEE**

**Conference Call Summary  
Tuesday, March 4, 2008  
1:00 p.m. – 3:00 p.m. EST**

**Welcome**

*Dr. Milton Russell, Institute for a Secure and Sustainable Environment, Subcommittee Chair*

Dr. Milton Russell, Chair of the Subcommittee, welcomed members of the Board of Scientific Counselors (BOSC) Global Change Research Mid-Cycle Review Subcommittee and other participants to the call and reviewed the agenda. He explained that Subcommittee members must reach agreement on an overall rating for the mid-cycle review of the Global Change Research Program (GCRP). They also would discuss the performance metrics section of the draft mid-cycle review report, the structure of the report, and any revisions or next steps.

**Administrative Procedures**

*Ms. Monica Rodia, U.S. Environmental Protection Agency (EPA)/Office of Research and Development (ORD), Subcommittee Designated Federal Officer (DFO)*

Ms. Monica Rodia, Designated Federal Officer (DFO) for the Global Change Research Mid-Cycle Review Subcommittee welcomed participants to the call. She explained that the BOSC provides independent, scientific peer review to the Office of Research and Development (ORD) of the U.S. Environmental Protection Agency (EPA). The BOSC Global Change Research Mid-Cycle Review Subcommittee was established by the BOSC Executive Committee to review the progress made by ORD's GCRP since the 2006 BOSC program review. The Subcommittee has been asked to respond to charge questions and provide a report for the BOSC Executive Committee's deliberation. The Executive Committee has the authority to evaluate the Subcommittee's report, revise it if necessary, and submit it to ORD.

Ms. Rodia explained that this was the Subcommittee's fourth conference call. The Subcommittee also met face-to-face on January 23, 2008.

As the DFO for the Subcommittee, Ms. Rodia serves as the liaison between the Subcommittee, the public, and EPA and ensures that all Federal Advisory Committee Act (FACA) requirements are met. In accordance with FACA, all EPA BOSC Subcommittee meetings and conference calls involving substantive issues—whether in person, by phone, or by e-mail—that include at least one-half of the Subcommittee members must be open to the public, and a notice must be placed in the *Federal Register* at least 15 calendar days prior to the call or meeting. A notice of this meeting was published in the *Federal Register* on January 11, 2008. All documents distributed for the meeting must be made public as well. The Chair oversees the Subcommittee and mediates its deliberations.

Regarding financial conflict of interest, Ms. Rodia works with EPA officials to ensure that all appropriate ethics regulations are satisfied. Each Subcommittee member has filed a standard government financial disclosure report and completed ethics training. Subcommittee members must notify Ms. Rodia if they have a potential conflict of interest with any of the topics discussed as the Subcommittee performs its work.

Ms. Rodia asked all Subcommittee members to use the homework forms she distributed previously to record the time spent reading documents and/or preparing written materials in preparation for Subcommittee calls. Subcommittee members should submit homework forms to Ms. Rodia by Thursday, March 6, 2008.

A writer from The Scientific Consulting Group (SCG) was present to take notes during the call. She will prepare a summary of the discussions that the Chair must certify within 90 days of the conference call. After certification by the Chair, the summary will be made available to the public via the BOSC Web Site (<http://www.epa.gov/osp/bosc>).

No requests for public comment were submitted prior to the call, but the agenda allows time for public comment at 1:15 p.m. Ms. Rodia noted that she would call for public comments at that time, and each comment must be limited to 3 minutes.

### **Public Comment**

At 1:15 p.m., Ms. Rodia called for public comments. No comments were offered.

### **Subcommittee Discussion**

#### *Global Change Research Mid-Cycle Review Subcommittee*

Dr. Russell asked for Subcommittee members' comments on the summary assessment and qualitative rating section of the draft report.

Ms. Claudia Nierenberg inquired about the intended meaning of the last sentence of the first paragraph in this section: "...particularly inappropriate for the GCRP because the nature of its work and of its product makes defining success and failure in a quantitative way difficult, and reaching a defensible summary is almost impossible." Dr. Russell explained that, although some aspects of the GCRP's performance can be quantified, such as the number of publications, other aspects are quantitatively indefinable. Subcommittee members agreed that, for the sake of clarity, the part of the sentence that reads, "...and reaching a defensible summary is almost impossible," should be deleted.

Dr. Russell stated that the Subcommittee still needed to reach agreement on the appropriate qualitative rating for the progress of the GCRP since the program review. Ms. Nierenberg commented that the variability in performance across the GCRP will make it difficult to determine an overall rating.

In response to a question from Dr. Patrick Mulholland, Dr. Russell explained that, according to the draft charge, the Subcommittee may choose from the following ratings: Exceptional, Exceeds Expectations, Meets Expectations, and Not Satisfactory. The rating of Exceptional is rarely used. Dr. Cliff Duke explained that he was on the BOSC committee that developed the rating system in conjunction with EPA and the Office of Management and Budget (OMB) and concurred with Dr. Russell's comment about the Exceptional rating. In fact, the Exceptional rating has not been assigned to any program since the rating tool was implemented; most programs receive a rating of either Exceeds Expectations or Meets Expectations. That does not mean, however, that this rating should be disregarded by the Subcommittee.

Dr. Russell asked Subcommittee members to ensure that their ideas and concerns are accurately captured in this section of the report in terms of both the tone and the substance. Subcommittee members agreed to examine this section paragraph-by-paragraph and to send any suggested changes to Dr. Russell via a Word document with the changes tracked.

Ms. Nierenberg stated that the paragraph within this section that summarizes Section III is comprehensive; other than that, she had no specific comments.

Dr. Mulholland pointed out that Section V of the draft report raises concerns about the limited geographic scope of the Annual Performance Measures (APMs) of the Multi-Year Plan (MYP). Perhaps the corresponding summary paragraph in the summary assessment section of the draft report should be revised to reflect this concern. Specifically, the GCRP has conducted several assessments in the Pacific Northwest and in western states, whereas the selection of representative watersheds throughout the United States may be a better approach. Dr. Duke asked if this observation would influence the GCRP's overall rating. If so, it should be included in the summary of how the rating was derived, but a lengthy explanation is not required. Dr. Mulholland responded that this observation does not affect his thoughts on the overall rating, but he did want this point reiterated in the summary paragraph. Dr. Russell commented that this raises the question of how well the Program has responded to the recommendation from the 2006 BOSC program review to move toward greater national significance. Even if GCRP leadership would like to increase the Program's national significance, resource constraints may play a role in limiting such progress. Dr. Mulholland agreed to revise the text to include these points.

Dr. Russell asked if the second part of this paragraph addresses concerns about the lack of clarity in the rationale for the MYP. Dr. Duke thought the paragraph captured the issue of coherency. Dr. Mulholland suggested that this discussion be moved toward the beginning of the report; this would allow the reader to consider other aspects of the report with this issue in mind. Dr. Russell agreed to revise the draft report in this manner.

Subcommittee members discussed the recommendations and the paragraph regarding the priority-setting process that begins with, "The Program has taken steps to fulfill three other BOSC recommendations." Ms. Nierenberg wondered whether the GCRP needs a clearly defined process by which to develop and adjust its priorities in addition to a clear mission statement. She agreed to review her notes regarding the Subcommittee's previous discussions on this issue and add verbiage to this section as needed. Dr. Mulholland agreed with the last sentence of the paragraph about resource constraints because the GCRP appears to receive many demands that may divert it from its primary purpose.

Regarding the paragraph on nonlinear responses, Dr. Mulholland commented that he was unsure of the meaning of some of the sentences. As written, the paragraph does not clearly advocate intramural efforts to address this issue. In particular, he did not understand the third sentence (beginning with "But..."). Dr. Russell agreed that the point regarding intramural research should be strengthened and explained that the third sentence addresses incremental effects of global change. In the private sector, incremental effects can be observed from year to year, signaling the need for adaptation. In contrast, non-incremental effects often do not produce such signals; instead, it may be necessary to predict potential non-incremental effects and advocate adaptation. Thus, the role of the GCRP may be to focus on the potential for tipping points that may be followed by rapid changes, rather than addressing incremental responses to climate change. Dr. Mulholland agreed and volunteered to revise this paragraph to reflect these ideas.

Ms. Nierenberg asked if the recommended intramural efforts with respect to nonlinear responses are intended to strengthen the GCRP's focus on the Agency's mission or to strengthen the Program's connection to the regions. Dr. Mulholland responded that he had been thinking more in terms of aligning the Program with the Agency's mission and addressing gaps not covered by extramural research; he had not considered the contributions of the regions. Many of the threshold responses will be region-specific. The Subcommittee asked Dr. Darrell Winner for clarification of the connections between intramural

researchers and the regions. Dr. Winner explained that, because extramural researchers are at universities within the regions, they are better connected to the regions than are intramural researchers. Dr. Russell commented that he was under the impression that the only planned extramural efforts on nonlinear responses will be through the Science To Achieve Results (STAR) grants program and that such efforts are not part of the mission of any office or program within the Agency. Dr. Duke agreed, adding that it appears that the extramural program will be limited and will not be developed for quite some time. Ms. Nierenberg commented that the 2006 BOSC program review had recommended stronger ties between extramural and intramural efforts. Dr. Russell observed that, although the Program had taken steps in this direction, the progress had not been significant. Dr. Mulholland agreed to incorporate these ideas into his revision of this paragraph.

The Subcommittee considered the paragraph in this section regarding the Program's harvesting of research and assessment results. Ms. Nierenberg commented that the paragraph is fair and reasonable and that its message is appropriate. This paragraph identifies means by which the GCRP could provide outputs and outcomes. In response to a question from Dr. Duke, Dr. Mulholland stated that "they," as used in this paragraph, refers to those who use the Program's products. Dr. Russell agreed to improve the wording to clarify this.

Regarding the next paragraph, on the Program's resources, Dr. Mulholland suggested that using the term "funding" may provide more clarity if it is not too specific. Dr. Russell explained that his intention was to convey that the Program lacks both funds and researchers. Using the term "funding" might not convey both concepts. Because "resources" can be a broad term, however, Dr. Mulholland suggested that a parenthetical definition of "resources" be inserted. The majority of the Subcommittee members present agreed with using the term "resources," especially considering that this report will be supplied to OMB. Dr. Mulholland agreed that the term could stand but expressed his concern that if it is not specific enough, OMB may not respond with the intended resources. Dr. Russell thought that OMB probably would understand the meaning, but said that he would attempt to find a more descriptive term.

In response to a question from Ms. Nierenberg, Dr. Russell explained that the phrase, "near line responsibilities" refers to the new responsibilities that the Office of Water and the Office of Air and Radiation are placing on the GCRP as a result of new mandates. Ms. Nierenberg wondered whether "near line responsibilities" could be misunderstood. Dr. Russell explained that he wanted to distinguish between the role of initiating an action and the role of actually performing the action. He asked Ms. Nierenberg to write a sentence or two to clarify this point.

Regarding the next paragraph on the qualitative rating of the GCRP, Dr. Russell expressed his opinion that the Program merits a rating of "Meets Expectations" in terms of its accomplishments; however, if the available resources are taken into consideration, the Program has earned a rating of "Exceeds Expectations." Subcommittee members agreed with this assessment. Dr. Duke explained that the other BOSC subcommittees also had found this part of the review to be a challenge. The Program meets expectations because it does not control its resources; EPA and Congress do. Judgment about how well the Program is doing must include the context of resource constraints imposed by the Agency, the administration, and Congress. Dr. Mulholland expressed his concern that programs that are not doing as well as expected often are cut; this should not happen to the GCRP. Ms. Nierenberg approved of the wording because it mentions the availability of resources. Dr. Duke also agreed with the wording and explained that such resource constraints had been reflected in each of the BOSC reviews that had occurred since the rating system was implemented. It is a challenge to recognize programs and their abilities in light of their resources. Dr. Russell summarized the Subcommittee's consensus that the Program's resources should be increased rather than decreased.

Dr. Russell suggested an overall rating of "Exceeds Expectations" with an accompanying explanation indicating that the choices made by Program leadership, in the context of available resources, merit this rating. The GCRP's mission and resources must be considered because it is a high-quality program that is

being stretched beyond its limits. Other Subcommittee members agreed with this rating and the accompanying explanation. Dr. Russell noted that he would consult with Drs. Rita Colwell and Ruth Reck concerning this rating; if they disagree, the Subcommittee will revisit the discussion via e-mail.

Dr. Russell explained that the structure of the report probably will be revised. Section II will become Section I. The introduction, the Subcommittee's conclusions, the discussion of the qualitative rating, and a numbered list of specific recommendations will comprise a summary section that will be placed at the beginning of the report as Section I. Section VII will be left where it is, but the final paragraph will be moved into Section I as part of the summary. Subcommittee members agreed with these structural changes.

Dr. Russell described the next steps. He will integrate the sections as described above and provide Subcommittee members with a revised draft to which they may respond. Subcommittee members should send their revisions to Dr. Russell with the current section numbering, which will be changed later. Drs. Russell and Duke will discuss performance metrics via a conference call during the afternoon of March 5, 2008.

In response to a question from Ms. Nierenberg, Ms. Rodia clarified that Mr. Philip Juengst of ORD's Accountability and Performance Section had provided a presentation during an earlier Subcommittee conference call. Ms. Nierenberg described an e-mail that she had received from an EPA/American Association for the Advancement of Science Fellow regarding the Evaluation Support Division that mentioned stakeholder involvement, evaluation of research and partnerships, and so forth. Dr. Russell thought that this could be part of the Program Analysis Division of the Office of Policy, Economics, and Innovation.

Ms. Rodia suggested that the deadline for submitting homework sheets could be extended to the close of business on Monday, March 10, 2008 since Subcommittee members were working toward a Friday deadline.

Dr. Russell thanked the Subcommittee members for their participation and adjourned the conference call at 2:07 p.m.

### **Action Items**

- ✧ Dr. Russell will delete "...and reaching a defensible summary is almost impossible." from the first paragraph in the ratings section.
- ✧ Dr. Mulholland will revise the text regarding the MYP in the summary assessment section of the report by adding the point about the limited geographic scope of the APMs; he will send the revisions to Dr. Russell via e-mail.
- ✧ Dr. Russell will move text in the summary assessment section regarding the clarity of the MYP's rationale to the beginning of the report.
- ✧ Ms. Nierenberg will review her notes regarding the Subcommittee's previous discussions of the Program's priority-setting process and will add verbiage to the draft report as needed; she will send any revisions to Dr. Russell via e-mail.
- ✧ Dr. Mulholland will revise the second paragraph of the summary assessment section to strengthen the remarks about nonlinear responses and to address intramural and extramural efforts on this topic; he will send the revisions to Dr. Russell via e-mail.

- ✧ Dr. Russell will clarify who is meant by “they” in the paragraph discussing the harvesting of research and assessment results.
- ✧ Ms. Nierenberg will write a few descriptive sentences about the Program’s near line responsibilities and will send them to Dr. Russell via e-mail.
- ✧ Dr. Russell will consult with Drs. Colwell and Reck regarding the Subcommittee members’ decision about the overall program rating.
- ✧ Dr. Russell will restructure the report, integrating the introduction, conclusions, summary assessment and qualitative rating, and specific recommendations into Section I; he will send the restructured report to Subcommittee members for their review.
- ✧ Dr. Russell will call Dr. Duke during the afternoon of Wednesday, March 5, 2008, to discuss performance metrics.
- ✧ Subcommittee members will send their homework forms to Ms. Rodia no later than the close of business on Monday, March 10, 2008

## **PARTICIPANTS LIST**

### **Subcommittee Members**

**Milton R. Russell, Ph.D., Chair**

Senior Fellow  
Institute for a Secure and Sustainable  
Environment

**Clifford S. Duke, Ph.D., Vice-Chair**

Director of Science Programs  
The Ecological Society of America

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Senior Scientist  
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**Claudia Nierenberg, M.A.**

Acting Director  
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### **Designated Federal Officer**

**Monica Rodia**

U.S. Environmental Protection Agency  
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### **EPA Participant**

**Darrell Winner, Ph.D.**

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### **Contractor Support**

**Kristen LeBaron, M.S.**

The Scientific Consulting Group, Inc.



## **Teleconference Agenda**

### **GLOBAL CHANGE RESEARCH MID-CYCLE REVIEW MEETING**

Telephone Number: 866.299.3188, Code: 2025648322#

**Tuesday, March 4, 2008**

#### **AGENDA**

1:00 p.m. – 1:10 p.m.	Welcome - Roll Call - Purpose of Teleconference Call	Dr. Milton Russell Chair, Global Change Mid-Cycle Subcommittee
1:10 p.m. – 1:15 p.m.	Administrative Procedures	Ms. Monica Rodia Subcommittee DFO
1:15 p.m. – 1:25 p.m.	Public Comment	
1:25 p.m. – 3:00 p.m.	Subcommittee Discussion - Review of Changes to Draft Report - Developing Conclusions and Executive Summary - Finalizing and Approval of the Mid-Cycle Report	Dr. Milton Russell Chair, Global Change Mid-Cycle Subcommittee
3:00 p.m.	Adjourn	