

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

**BOARD OF SCIENTIFIC COUNSELORS  
ECOLOGICAL RESEARCH PROGRAM SUBCOMMITTEE**

**Conference Call Summary  
February 17, 2005  
3:00 p.m. – 5:30 p.m. EST**

**Welcome**

**Introduction of Subcommittee Members**

Dr. Michael Clegg welcomed Subcommittee members to their first conference call and proceeded with introductions. Dr. Herbert Windom did not attend this conference call.

- Dr. Clegg (Chair) is a Professor of Biological Sciences at the University of California at Irvine. He also serves part-time as Foreign Secretary for the National Academy of Sciences and is a member of the Board of Scientific Counselors (BOSC) for the Office of Research and Development (ORD). His research background is in population genetics and molecular evolution.
- Mr. Russel Frydenborg works as an environmental administrator for the Florida Department of Environmental Protection. He performs ecological assessments of invertebrate and plant communities and has done restoration work on phosphate mining and artificial wetlands in Florida. He developed a total phosphate criterion for the Everglades and has developed biological assessment techniques for streams, lakes, and wetlands using invertebrate algae and plants.
- Dr. John Giesy is a Professor at Michigan State University in the Department of Zoology. He also serves on the faculties of the National Food Safety and Toxicology Center and the Center for Integrative Toxicology as well as serving on the Executive Committee of BOSC. His research interests include wildlife toxicology and aquatic toxicology.
- Dr. Richard Lowrance is an ecologist with the Agricultural Research Service, Tifton, Georgia. His research includes nutrient cycling in watersheds and watershed transport of nutrients and other contaminants. He has worked on riparian ecosystems and presently is working on modeling of riparian ecosystems in a watershed context.
- Dr. Sue Thompson is President of the Pennsylvania Biodiversity Partnership. This is a public-private partnership that brings together state and local

governments, academic institutions, business and industry, nonprofit organizations, and others concerned with biodiversity issues in Pennsylvania. She was trained as a systematic botanist, and also has worked on restoration projects, particularly in an urban context. Her main interest is biodiversity conservation.

- Dr. Gene Turner is a Professor in the Oceanography and Coastal Sciences Department at Louisiana State University's Coastal Ecology Institute. His research focuses on wetlands and coastal oceanography.
- Dr. Jianguo Wu is a Professor in the Department of Ecology, Evolution, and Environmental Sciences in the School of Life Sciences at Arizona State University. He is a landscape ecologist and also works on urban ecology. His research activities include landscape path analyses, ecological consequences of landscape change, and other research in urban ecology. He also works with the Long-Term Ecological Research Project in Phoenix, AZ.

Other conference call participants included Dr. Kevin Summers (ORD), Mr. Greg Susanke (ORD), Ms. Jennifer Robbins (ORD), and Dr. Steven Hedtke (ORD).

### **Purpose of Program Review**

The objective of this program review is to evaluate the relevance, quality, performance, and scientific leadership of ORD's Ecological Research Program. The panel's evaluation and recommendations will provide guidance to ORD to help plan, implement, and strengthen the program, compare this program with programs designed to achieve similar outcomes in other parts of the Environmental Protection Agency (EPA) and other federal agencies, make research investment decisions over the next 5 years, prepare EPA's performance and accountability reports to Congress under the Government Performance and Results Act, and respond to evaluations of research such as those conducted by the Office of Management and Budget (OMB).

### **Overview of the Federal Advisory Committee Act (FACA): The Big Picture**

Greg Susanke serves as the Designated Federal Officer (DFO) for the BOSC Ecological Research Subcommittee. He thanked the Subcommittee members and other members of EPA for their time and effort in preparing for and attending this meeting.

BOSC is a chartered federal advisory committee whose meetings and deliberations are held as public meetings according to the requirements of FACA. A DFO must be present at all open meetings to ensure the requirements of FACA are met, including the opportunity for public comment and maintenance of records for deliberations, which are made available to the public.

The purpose of BOSC is to provide independent scientific peer review and advice to EPA's ORD. The BOSC Ecological Research Subcommittee was established by the BOSC Executive Committee to review ORD's Ecological Research Program by

responding to a series of charge questions and providing a report to the Executive Committee for their deliberations. The Executive Committee has the authority to evaluate the Subcommittee's report, revise it if necessary, and submit it to ORD. The report will provide advice and recommendations to ORD, but the rights of decision-making and implementation remain with EPA. The Subcommittee will develop a draft report at the conclusion of the face-to-face meeting at Research Triangle Park (RTP) and a final report by mid-March, which will be presented to the BOSC Executive Committee for deliberations.

The DFO serves as liaison between the Subcommittee, the Agency, and the public and ensures all FACA requirements are met regarding nomination and selection of members of this Subcommittee. FACA rules require that all meetings on substantive issues, whether in person, by phone, or by e-mail are open to the public if the communications include at least half of the Subcommittee and are on the record. Issues that are solely administrative or preparatory in nature are exempt from these requirements. FACA rules also do not apply to smaller work groups of 2 to 3 people. Meetings are announced in the Federal Register at least 15 days in advance and notice of meetings must be sent to the Federal Register 21 days prior to the meeting. The DFO approves the agenda and attends all meetings and the meeting minutes must be certified by the chair within 90 days of the meeting. All Advisory Committee documents must be made available to the public. The DFO also ensures that all appropriate ethics regulations are satisfied, including filing of standard government financial disclosure reports for all Subcommittee members. The Deputy Ethics Officer reviews these reports for the Office of Science Policy and the DFO in consultation with the Office of General Counsel to ensure that there are no conflicts of interest. Additionally, all Subcommittee members must complete EPA ethics training.

The contractor will write today's meeting minutes and for accuracy, Subcommittee members were asked to identify themselves before speaking. This meeting is open to the public and all meeting minutes and announcements are available electronically at [www.epa.gov/edocket](http://www.epa.gov/edocket), edocket number ORD-2005-0005.

Dr. Clegg informed Subcommittee members that he received a jury summons for March 7, 2005. He has requested a deferment, but if this is denied the DFO will serve as chair during the meeting at RTP.

### **EPA/ORD Programmatic Issues – OMB PART Review**

Ms. Jennifer Robbins provided an overview of OMB's Program Assessment Rating Tool (PART) and Research and Development (R&D) criteria along with background on external events contributing to these reviews that might provide a context for the charge questions.

OMB developed PART to evaluate the budget and performance integration element of the President's Management Agenda. The purpose of this tool is to evaluate program effectiveness in four areas: Purpose and Design, Strategic Planning, Program

Management, and Program Results. PART is a questionnaire for R&D comprising approximately 30 questions. Each of the questions is given a different weighting, and each of the sections then is weighted resulting in a numerical score and a qualitative rating. The Results Section is weighted as 50 percent of the total score, and the Strategic Planning and Results Section questions are linked to questions in the Results Section, giving the Results section more weight than the 10 percent it technically has. The subprograms receive a numerical score, and based on that score will receive an adjectival rating of effective, moderately effective, adequate, ineffective, or results not demonstrated; programs receive a “results not demonstrated” rating if there is a lack of agreement with OMB on appropriate outcome measures, or if the program has appropriate measures but no data to adequately demonstrate progress or achievement of goals. The Ecosystems Protection Research Program received a “results not demonstrated” rating because of inadequate goals and measures to monitor program performance.

In addition to Goals and Measures, external evaluations and reviews of the program inform program managers of needed improvements and qualitative assessments of program progress on Goals and Measures. PART process requires the program to complete a self-assessment that answers questions and provides evidence for the OMB examiner. The OMB examiner reviews this material and discussions are held; ideally, there is significant interaction between the program and the examiner. This process is performed during the lead-up to the release of the President’s Budget the following year. For the FY 2005 budget, the Ecosystems Protection Research Program was reviewed using PART and received “results not demonstrated” as did two other ORD programs (Particulate Matter Research and Pollution Prevention Research). These programs are resubmitting responses to PART questions this spring in hopes of receiving a higher score. Some of the information presented today is revised information based on recommendations received from OMB concerning improvements to the program. The Endocrine Disrupting Chemicals research program was reviewed and received an “adequate” rating as part of a joint PART with another related EPA program. Drinking Water Research and Human Health Research also will receive a PART evaluation.

### **PART Questions**

A core set of PART questions apply to all federal programs and additional specific research and development questions can be included. These questions are based on the OMB and Office of Science and Technology Policy (OSTP) investment criteria for federal research and development and primarily focus on relevance, quality, and performance. The criteria are released every year as part of a joint memo from OMB and OSTP and have been incorporated into the PART questions and the charge questions provided for review of this program.

Program relevance requires planned investments to respond to specific existing problems relevant to national priorities, agency missions, and customer needs. Programs must have an outcome-oriented design with clear benefits and linkages to outcomes such as improved environmental or human health. Duplications with other programs should be

avoided and the program should have a small number of performance goals focused on key scientific questions.

Programs must maximize the quality of research they invest in, and ensure that the work is of high quality. OMB assesses program quality in part through evaluation of competitive awarding of funding within a program. Merit-based procedures must be used to ensure scientific quality and leadership, and merit-based competition used for extramurally awarded funds. If funds are awarded noncompetitively, appropriate merit-based procedures must be used. The program also may conduct benchmarking of scientific leadership and other factors as another means of assessing program quality.

Programs must demonstrate performance by setting annual and long-term goals, demonstrating progress toward outcomes, and obtaining client feedback to help demonstrate progress. The program must identify relevant inputs to ensure that implementation results in the intended research activities and outputs and demonstrate ability to properly manage and track performance according to performance goals. The program periodically must assess research progress and priorities as new scientific knowledge is developed.

### **Implementing an ORD Evaluation Framework**

Linkages between ORD resources and activities, when properly managed, produce research outputs. If these outputs are transferred successfully to clients, the clients use the outputs to contribute to intermediate and long-term outcomes, such as reduced pollution, improvement in water quality, reduction in risk to human health, etc. A research output may be a product, such as a paper, journal article, or model. An outcome is defined as use of a product by a client, resulting in a contribution to the long-term outcome of improved environmental or human health. The program's long-term goals must focus on customer use of outputs to be outcome-oriented. ORD may have an important research output, but the states may be unable to implement the output, perhaps because of insufficient funding. This situation would be identified as an external variable outside control of ORD, but would not change the program's goal of developing useful outputs.

OMB has defined outcomes for the purpose of PART and R&D criteria as issues slightly outside the absolute control of the program. The program directly controls implementation of resources and activities for program outputs and has direct influence over whether program customers and clients use those products; program outcomes are targeted at program customers and clients. EPA as a whole has an indirect impact on achievement of reductions in environmental and human health risks, which involves numerous externalities outside EPA's control.

Dr. Wu asked whether core research at EPA, which is 60 percent of EPA research, is expected to produce the outcomes. Ms. Robbins explained the difference between basic core research and applied research—applied research is tied more closely to regulatory support and other programmatic missions of EPA, though basic research ultimately has

application for those areas but is not tied as closely to the programmatic needs of the rest of the agency. Dr. Wu commented that the significance or influence of basic research will go beyond EPA and may have an impact on development of scientific areas beyond EPA projects and asked whether this contribution to the field was part of the program's evaluation. Ms. Robbins commented that program contribution to the state-of-the-science should be part of the Subcommittee's evaluation. Dr. Summers added that evaluation of the program regarding contribution to the advancement of science is important, but is not viewed by OMB as constituting a major outcome. The program's core research is not, therefore, directed toward basic research in general but to basic research activities that advance the specific needs of EPA.

Ms. Robbins next described a model showing the path from resources to activities to outputs to clients and how this aligns with the areas OMB evaluates through PART. Evaluation of program purpose and design is focused on the outcome side of the program, strategic planning spans the entire design of the program, program management examines use of program resources through technology transfer to a client, and results focus on program outputs and outcomes.

Dr. Lowrance asked how the Subcommittee's review and evaluation was related to PART and whether OMB would use their evaluation for PART. Ms. Robbins explained that PART and R&D criteria are not the sole impetus for these reviews. These reviews provide important evidence, however, to use on PART to defend the program or provide feedback concerning program progress. It also is considered a "best practice" in the federal research community to have independent expert panels review programs and assess their performance and management, and qualitatively verify progress. This helps with PART, but feedback also helps program managers to improve the program.

Dr. Summers clarified that this review will not be used directly for the PART review. This is a programmatic review of the Ecological Research Program for ORD, but the individuals who perform the PART process value independent review of the program; confirmation by an independent source of certain outcomes or outputs created by the program carries weight with PART evaluators. Dr. Thompson asked if the Subcommittee could be provided with PART questions. Ms. Robbins agreed to provide PART questions, with the caveat that these are to provide background information and are not relevant directly to the charge questions. The charge questions were developed to encompass both the needs of the PART review and to provide an in-depth evaluation of the program.

### **Review of Subcommittee Charge Questions**

The charge questions are available in the program review binder under Tab 2, Part 3.0. These questions will provide the framework around which the Subcommittee's report will be organized.

1. Is the focus of the program relevant to and consistent with EPA's strategic goals? Does it develop a scientific foundation that will lead to attainment of the

- program's stated environmental outcomes? Are potential public benefits of the program clearly articulated? What would be the minimum research program that would be effective and successful?
2. Does the program have a logistical and comprehensive design with clear goals by ORD's schedule to track progress towards these goals?
  3. Do the design and implementation of the program's structure facilitate attainment of outcomes through integration of research across the program?
  4. Has the program made significant progress toward each of its long-term goals?
    - a) Do research results address key research questions?
    - b) Is the rationale to address the questions clearly articulated?
    - c) Does the program have a long-term plan to address a logical sequence of questions?
    - d) Is progress to address the questions being made in a timely fashion?
    - e) Does the research reflect the current state-of-the-science and meet the current and future needs of EPA science and program customers?
  5. What is the scientific quality of the program's research products? Does the program ensure high-quality research through competitive merit-based funding? If funds are not competitively awarded, what process does the program use to allocate funds? Does this process assure that quality is maintained?
  6. Is the stakeholder involvement in the development of the program clearly and adequately articulated?
    - a) Does the program effectively engage stakeholders in its planning?
    - b) Does the program have a process for using the results of the research along with stakeholder's feedback to identify key research gaps and to update the program's research agenda?
    - c) Are potential public benefits clearly articulated?
  7. Are the program's research results being used by clients and stakeholders? Are these research results consistent with the needs articulated by the agency's program and regional offices?
  8. Will the program's completed and planned outputs lead to the intended outcomes, which are the protection of our ecological resources?

### **Discussion of Charge Questions**

Dr. Turner asked whether the uncertainties of science and management are explored; for example, focusing all research on a predetermined outcome could exclude potentially important yet currently unknown issues in a way that compromises addressing them in the future. He also asked how administration of the program could allow for exploration of new issues yet remain focused and not interfere with the progress of the program. Dr. Summers responded that the panel should evaluate whether the program has the ability to be able to adjust to or modify expectations based on new scientific findings, while at the same time having constraints in place to prevent program research from digressing too far from its stated goals. Some of the charge questions were drafted with these questions in mind.

Dr. Clegg commented that the charge questions provide a basis for discussion of these issues—is the program adaptive to new questions, opportunities, and changes in the science? He also thought the evaluation should discuss the larger question of whether goals are the right ones and whether they have been defined in a way that is independent of short-term political or other considerations. He added that under Question 1, Subcommittee members can discuss whether the goals reflect the overall EPA strategic goal or if they are trivialized by focusing on inappropriate questions. Mr. Frydenborg commented that the questions are comprehensive and that the Subcommittee should have access to detailed information about EPA strategic priorities, including implementation of EPA basic research outputs by the states.

### **Overview of ORD and the Ecological Research Program**

An overview of ORD and the Ecological Research Program was presented. Relevant materials are located within Tabs 4 and 5 of the binder.

#### **Overview of ORD**

Dr. Steven Hedtke, from National Health and Environmental Effects Research Laboratory (NHEERL) provided an overview of ORD, focusing on its structure, interactions with other agencies, and its decision making processes.

The section on Understanding EPA's ORD (Tab 4) has three parts:

1. Organization of ORD
2. Roles of ORD
3. How we decide what we will do—planning process

EPA has both scientific and regulatory functions and is organized into three functional groups:

1. Program offices are located mainly in Washington, D.C., set policy and work regulations, and respond to Congressional deadlines.
2. Ten regional offices are located across the country and are engaged in implementation and execution of EPA programs. Regional offices support and interact with individual states.
3. ORD provides the scientific basis for EPA decisions.

Risk assessment is a primary function and activity within EPA. In 1995 ORD was reorganized into five primary labs and centers following the basic principles of the risk assessment paradigm:

1. National Exposure Research Lab
2. National Health and Environmental Effects Research Lab
3. National Center for Environmental Assessment
4. National Risk Management Research Lab – includes research on EPA management and risk reduction activities.

5. National Center for Environmental Research – responsible for most of the extramural programs, grants, and fellowships that are awarded to academia.

All five groups are engaged in the Ecological Research Program under review. ORD also includes two new, smaller centers, one focused on Homeland Security, the other on Computational Toxicology. ORD has facilities in 13 locations across the country, with major facilities in Washington, D.C., Cincinnati, OH, and RTP.

ORD has three primary goals (principle elements for the activities of ORD):

1. Research – In response to a National Research Council report from the late 1990s, ORD adapted the concept of core research and problem-driven research, rather than basic research. Basic research has the implication of science for science's sake, which is not the mission of EPA. EPA's core research is directed toward fundamental understanding of problems that EPA faces, requiring a strong need for relevancy even in the core research program. This program encompasses research that may have applicability to a number of different problems that EPA faces and includes developing tools or models, or examining basic or essential environmental mechanisms (such as fate and transport or pharmacokinetics). Problem-driven research is focused on the unique problems of a program office (such as the Office of Drinking Water or the Office of Pesticides). ORD must address specific scientific needs required by the offices to improve their regulatory function and decisionmaking. There is a strong interaction between core research and problem-driven research because ORD develops tools in core research that can be applied to a specific problem that leads to greater understanding of a fundamental environmental process.
2. Leadership – A goal of ORD is to provide leadership both within EPA and within the scientific community. Within EPA, ORD attempts to shape the research agenda and ORD members also serve on task forces to keep EPA informed of the latest science. ORD also works with the scientific community, including industry, state governments, and academia, to help shape the agenda for people practicing science outside of EPA.
3. ORD has a primary role in providing scientific and technical assistance not only to EPA but also to organizations that work with or are regulated by EPA, or are partnering with EPA, including state, local, and tribal governments.

## **Science Planning**

EPA strategy for science planning starts with identification of national priorities and national environmental goals. ORD determines the science needed to achieve the environmental goals, improve the science, or increase the understanding of the science necessary to make relevant decisions for achieving the goals. Various research strategies comprise important priority areas, such as the Ecosystems Protection Program whose research strategy and multiyear plan (MYP) currently are being updated. Each of the priority areas within ORD has a research strategy and a MYP, which is essentially a narrative to provide information concerning the goals of ORD research efforts. The MYP

provides a critical path detailing the expected flow of research for achieving the program's long-term goals (LTGs); within the MYP are performance measures for determining completion of the LTGs.

Annual planning is needed for several reasons:

1. EPA's needs may change as new priorities arise. ORD does not shift all efforts to new priorities but requires flexibility to react to and address new priorities.
2. As ORD makes scientific progress and solves problems, research efforts must focus on new problems.
3. Flexibility may be required to adapt to budget realities, influencing the amount of research that can be performed.

### **Overview of the Ecological Research Program**

Dr. Kevin Summers provided a brief overview of the Ecological Research Program. This program has undergone a PART review, based on the MYP provided within Tab 18 of the binder. This program received a "results not demonstrated" rating. Part of this review process and repeat of the PART review is to determine whether the poor rating was because of structural problems or difficulties in explaining to and convincing the examiners that ORD activities and research are not expected to result in direct outcomes themselves but are meant to be key activities that allow others to realize those outcomes at national, regional, state, or local levels. Goals of this review include discovering ways to best communicate important aspects of the research performed by ORD and the contributions this research makes to achieve environmental outcomes for EPA clients and customers. Reviewers should keep in mind six primary topic areas (three can be found within the appendix to the charge questions and refer to relevance, quality, and performance) to address:

1. Relevance to agency needs
2. Quality of research results (competitiveness and scientific quality)
3. Performance in terms of creating usable results
4. Leadership in the EPA and scientific community
5. Collaboration with other federal, state, and academic partners
6. Budget and resources

The definition of "quality" should be expanded beyond the definition in the appendix, which refers largely to the competitive nature of research activities outside of ORD, to include the quality of the scientific programs and the science itself. The competitiveness issue refers primarily to the extramural research done through the grants program but also may include intramural programs that result in different collaborations, such as cooperative agreements and interagency agreements, that might be assessed for competitiveness. Assessment of performance encompasses a combination of results, planning, and demonstration of progress toward intended goals. BOSC also is interested in leadership within EPA and the scientific community and EPA collaborations with

other state and academic partners. Assessment of budget and resources includes questions about the minimum resources necessary, both dollars and people, to have a successful program and achieve what the Subcommittee believes are the goals of ORD's Ecological Research Program. Because the program received a poor PART rating, restructuring of this program is underway. Tab 18 has the 2003 multiyear research plan, which has four LTGs concerning condition, diagnosis, forecasting, restoration, and management. PART evaluators determined that those LTGs did not provide the information necessary for determining whether or not the program was achieving its outcomes.

Dr. Clegg asked to see the PART critique of the Ecological Research Program. Dr. Summers and Mr. Susanke informed Subcommittee members that the report was available at a public OMB Web page; they also agreed to provide Subcommittee members with hard copies of the report. Mr. Frydenborg asked whether the OMB staff reviewing the program were qualified ecologists. Dr. Summers answered that the review panel consisted mainly of business people focused on budget issues, and reviewers did not have expertise in ecology or environmental sciences. It is hoped that the Subcommittee's review will help program managers convey information to PART reviewers that provides substantive answers to their questions.

### **Explanation of Background Material**

Dr. Summers clarified that the old MYP had four LTGs; the proposal for the new MYP, including the three new LTGs, is in the binder under Tab 5. The binder still has information organized by the four old LTGs, which will not be used but provides historic information on the program. Dr. Summers will inform Subcommittee members how this material fits into the new LTG structure. The overview chapter in Tab 5 describes the three new LTGs, explains why they are constructed the way they are, and discusses what is done within each goal to realize that goal. The LTGs are intended to be interactive, with overlap at national, state, and local levels.

New logic charts have been developed that describe how the program uses resources (dollars and people) to conduct research and produce research outputs, and how, with the exception of outreach and transfer, ORD controls this directly. The outcomes that EPA has and that OMB examiners are interested in are largely under control of the regulatory arms of EPA, states, regions, and localities. The diagrams were constructed to show how the program's research products end up as important, if not critical elements, for achieving these outcomes, even if they do not result directly in the outcomes. The Subcommittee also is asked to evaluate the program's approach to communicating the achievements of the program to the OMB examiners, including ways to translate the information so it is provided in a way that the OMB examiners can best use.

Tabs 6 – 17 provide information about major research programs in the ORD Ecological Research Program. These include:

1. EMAP – Environmental Monitoring and Assessment Program

2. REVA – Regional Environmental Vulnerability Assessment Program
3. CADDIS - Causal Analysis/Diagnosis Decision Information System
4. REPLUS- Restoration Plus
5. STAR Grants Program

The information provided in those tabs is relevant directly to the charge questions and the six topical areas. At the end of the overview chapter in Tab 5, information is provided for a “road map” from the charge questions to different areas within the binder that provide information to evaluate a specific charge question. The old MYP is provided under Tab 18; this MYP will be replaced with a new MYP for 2005, which will be based on materials found in Tab 5. Ongoing efforts will be evaluated to determine how they can be used within the new program framework. This tab also provides budget information showing long-term dollars and people associated with the Ecological Research Program. No dollars or full time equivalent (FTE) amounts are provided for 2005 because specific dollar amounts will not be available until Congress passes the budget. Some information will be provided concerning program expectations for the difference between the enacted budget and the 2005 Presidential request.

Dr. Summers requested that the Subcommittee focus its review on the charge questions and the six topical areas. If there are questions or more information is needed, FACA rules require that Subcommittee members ask Dr. Clegg or the DFO, Mr. Susanke, to ask Dr. Summers for the additional information. Dr. Summers also asked Subcommittee members to be as balanced as possible in accentuating both the positive and negative aspects of the program.

Dr. Summers described some changes to the material that Subcommittee members have already received. Most information is current and ongoing. The dollars previously associated with the STAR program may not be available for 2005 and 2006. The STAR program has multiyear research activities. Although cuts were taken within the program, there are still active programs through approximately 2008 within STAR. The program now must convince examiners that the resources that were removed need to be replaced, by demonstrating the significant and important contributions STAR activities have made toward the outcomes within the Ecological Research Program.

From 2004 through 2006, more than \$30 million has been lost as a direct result of the last PART review. Materials from this review will be used in the re-PART process to show the OMB examiners that their inability to determine program progress was simply a result of inadequate communication on the importance of ORD research activities and how others use the outputs of this research. The agenda for the face-to-face meeting includes several presentations from clients and customers who will describe material from the Ecological Research Program that they have found useful in their own programs. The agenda also includes sessions at which Subcommittee members can interact with specific scientists from ORD, including STAR grantees and other collaborators.

Dr. Thompson asked whether a memo from Mr. Susanke outlined as First Tier, Second Tier, etc., could be translated to tabs in the binder. Dr. Summers answered that the titles on the tiers will be similar to those on the tabs, but he and Mr. Susanke will provide clarification of this.

### **Subcommittee Organization**

Dr. Clegg commented that this review must be completed quickly. A draft of the report must go to BOSC by March 15, 2005. BOSC will provide comments, and the final version of the review is due mid-April for PART review. Dr. Summers added that whether he has a final draft of the report or extensive notes from the last day of the Subcommittee's evaluation, he hopes to use this material for the PART process. He needs to submit a package to OMB by the end of April, so it must be ready to go through EPA by the end of March.

Dr. Clegg commented that a decision had been made to try to complete a draft report while at RTP. The proposed agenda is under Tab 1; he noted that the entire third day is set aside for work sessions. Next, he read the three new LTGs.

- 1) By 2010, national policymakers will have the tools and technologies to develop scientifically defensible assessments of the state of our nation's ecosystems and the effectiveness of existing national programs and policies.
- 2) By 2010, states and tribes apply improved tools and methods to protect and restore their valued ecological resources.
- 3) By 2012, decisionmakers have the guidance and tools to better understand ecological processes and the value of ecological services, and they have the resources enabling them to make wiser resource management decisions.

Three Subcommittee working groups were organized around the LTGs. LTG1 consists mainly of examining the conditions of the nation's ecosystems, including national efforts within the EMAP system. LTG2 includes diagnosis, forecasting, and, to some degree, restoration of ecosystems at the state and regional level. LTG3 will examine restoration as well as other programs, sometimes diagnostic and forecasting, with regard to how environmental and other information, such as cultural activities and socioeconomic information, are infused into decisionmaking. All working groups should use the eight charge questions as a template for addressing the LTGs. As a whole, the Subcommittee will develop an overview of the program. Mr. Susanke added that a representative list of documents specific to each LTG was available in the transmittal memo; working groups should focus on their set of documents.

Another teleconference is planned for March 3, 2005. Mr. Susanke still is developing the agenda, based on the outcome of today's teleconference, but the March 3 teleconference will discuss the charge questions in more detail, discuss the face-to-face meeting agenda and the report format, and develop a draft report outline. He asked Subcommittee members to contact him by e-mail if they have questions than can be addressed during the March 3 teleconference.

The working groups were established as follows:

LTG1 – Drs. Wu and Turner

LTG2 – Mr. Frydenborg and Dr. Thompson

LTG3 – Drs. Lowrance and Giesy

Contact information will be sent by Mr. Susanke.

### **Public Comments**

No public comments were made during this teleconference.

### **Administrative Procedures**

Mr. Susanke asked Subcommittee members to fill out timesheets he had sent them earlier (Mr. Frydenborg and Dr. Lowrance do not need to fill these out because they are government employees). Subcommittee members should keep track of the time they spend outside of official meetings working on this review; Mr. Susanke will track meeting and travel times. EPA will purchase plane tickets but Subcommittee members must make their own hotel reservations for the face-to-face meeting. Subcommittee members will receive a voucher at the meeting and should write down amounts spent on transport to the airport, parking, etc. Receipts are required for amounts over \$75. Subcommittee members will be transported from the airport to the hotel by shuttle; a courtesy phone is available in the baggage claim area to call the hotel (Radisson Research Triangle Park). Transportation also will be provided from the hotel to the meeting site.

Dr. Clegg adjourned the meeting at 5:30 p.m.

### **List of Action Items**

- Mr. Susanke will send information concerning the location of materials specific to the LTGs within the tabs of the binder. Budget information, organized by LTG, will be included.
- Mr. Susanke will send the Web site address for the OMB PART Review and a hard copy of the review to Subcommittee members.
- Mr. Susanke will send a list of working group assignments along with contact information for all Subcommittee members.
- Subcommittee members should contact Mr. Susanke with items for the March 3, 2005, teleconference agenda.

## List of Participants

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**EPA Attendees:**

**Steven Hedtke**

Office of Research and Development

**Jennifer Robbins**

Office of Research and Development

**Kevin Summers**

Office of Research and Development

**Greg Susanke**

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**Other Participants:**

**Stefanie Nelson**

The Scientific Consulting Group

**BOSC Ecological Research Subcommittee Teleconference**  
**February 17, 2005**  
**3:00 – 5:30 EST**  
**(202) 275-0170, access code 4321#**

**Agenda**

Welcome (10 min)

- Introduction of Subcommittee Members
- Purpose of Program Review

Dr. Michael Clegg, Chair  
Dr. Herb Windom, Vice-Chair  
Ecological Subcommittee

Overview of FACA: The Big Picture (10 min)

- What it is, Why it is, and Role of Subcommittee
- FACA Rules and Procedures (do's and don'ts)

Greg Susanke (ORD)  
DFO, Ecological Subcommittee

EPA/ORD Programmatic Issue (10 min)

- OMB PART Review

Jennifer Robbins (ORD)

Review of Subcommittee Charge Questions (5 min)

Dr. Michael Clegg

Overview of ORD and Ecological Research Program (60 min)

Dr. Kevin Summers (ORD)  
National Program Director for  
Ecological Research

Explanation of Background Material (10 min)

- Familiarize Subcommittee with Contents

Dr. Kevin Summers (ORD)

Subcommittee Organization (15 min)

- Subcommittee to discuss expertise/interests relevant  
to program research areas/long term goals
- Determine leads/workgroups for each Long Term Goal

Dr. Michael Clegg and  
Dr. Herb Windom

Questions and Discussion (10 min)

Subcommittee and ORD

Public Comment (10 min)

Administrative Procedures (10 min)

- Receipts, Time Sheets, etc.
- Logistics for Face-to-Face Mtg

Greg Susanke (ORD)