

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

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

**Conference Call Summary
March 3, 2005
3:00 p.m. – 5:30 p.m., e.s.t.**

Welcome

Dr. Michael Clegg welcomed subcommittee members to the second conference call for the BOSC Ecological Research Subcommittee. He commented that the minutes from the first conference call were very thorough and comprehensive; the Subcommittee members approved the minutes.

Conference call participants included:

- Dr. Clegg (Chair), University of California at Irvine.
- Mr. Russel Frydenborg, Florida Department of Environmental Protection.
- Dr. John Giesy, Michigan State University.
- Dr. Richard Lowrance, Agricultural Research Service, Tifton, Georgia.
- Dr. Sue Thompson, Pennsylvania Biodiversity Partnership.
- Dr. Gene Turner, Louisiana State University, Coastal Ecology Institute.
- Dr. Jianguo Wu, Arizona State University.

Mr. Greg Susanke reminded members that this call was a public meeting and subject to Federal Advisory Committee Act (FACA) requirements. Minutes are being taken by The Scientific Consulting Group, Inc., and will be made available to the public. No requests for public comments have been made for this meeting.

Ecological Research Program Budget

Dr. Kevin Summers presented budget information for the Ecological Research Program. Total Ecological Research Program resources averaged approximately \$100 million for fiscal years (FY) 2001 through 2004. For 2005, the President's Budget Request was \$94.1 million. There is an enacted budget for 2005, but it has not been completely vetted

and no operating plan has been set. Therefore, there is no official enacted level available, but it is believed that the program will operate with less than the \$94.1 million requested. The levels in the tables and charts provided do not include any earmarks, which are added as specific line items with defined funds for defined work. Levels provided represent the entire budget, including extramural activities as well as internal resources such as salaries and operating costs within the laboratories and divisions for work in support of the Ecological Research Program. This program has the largest budget for a single program within the Office of Research and Development (ORD).

In response to questions from Dr. Thompson, Dr. Summers explains that Congressional earmarks average between five to ten percent of the Ecological Research program budget annually. Congressional earmarks are normally additional monies appropriated by Congress for EPA to transfer to intended recipients outside of the federal government for specific projects. Congressional earmarks are added each year by Congress to the President's Budget. The Office of Research and Development manages distribution of funds for earmarks that are closely related to ORD's environmental research work. The Ecological Research program distributes and manages approximately two to five earmarks each fiscal year. The program's project officers make initial contact with the recipient, and develop the necessary paperwork and agreements (including peer review) with the recipient to transfer the monies for each specific earmark. The recipient then uses the monies to complete their specific project independent of ORD.

Dr. Clegg asked about Ecological Research Program budget fluctuations as compared to that of ORD or EPA. Dr. Summers answered that between 2004 (enacted) and 2005 (President's Budget), there was approximately a 10 to 15 percent decrease in the total Ecological Research Program budget. Although some elements within ORD are receiving increases in funding, such as Homeland Security activities, generally funding levels across EPA are declining.

Information was shown concerning full-time equivalent (FTE) ceilings for FYs 2001 through 2006. The numbers are fairly stable at around 330 to 335 FTEs, until the 2006 request when there is a reduction of approximately 37 FTE. Part of this reduction is due to general reorganization, but a portion of the decrease represents the movement of FTEs from the Ecological Research Program to the Water Quality Program in Goal 2. The Causal Analysis/Diagnosis Decision Information System (CADDIS) and Restoration Plus (RePLUS) programs were shifted to Goal 2, along with the associated FTEs. In response to a question concerning inclusion of contractor payment in the budget, Dr. Summers answered that the number of contractors working for EPA fluctuates, and funding for them is included in the overall resource funding levels shown. However, FTE levels provided only include federal employees. The number of contractors compared to the total number of FTEs varies throughout the agency. At the National Health and Environmental Effects Research Laboratory (NHEERL), for example, there is approximately one contractor for every FTE, but for the National Center for Environmental Assessment (NCEA), the contractor ratio is probably closer to 2 contractors for every 1 FTE.

Budget information under the former Multi-Year Plan (MYP) Long-Term Goal (LTG) structure for FY 2003 was shown. This structure was reviewed by the Office of Management and Budget (OMB) and ORD determined that restructuring of the LTGs was warranted, which led to the present three LTG system. During the transition from the old four-goal structure to the new three-goal structure (over FY 2004, 2005, and 2006), funding for LTG1 was reduced from approximately \$41 million to \$29 million, for LTG 2 from approximately \$55 million to \$44 million, and for LTG 3 dollars remained stable at approximately \$11 million. The reduction in funds under LTG1 comes mainly from funds for extramural activities. Charts illustrating the relative distribution of funds to each of the LTGs for FY 2003-2006 were provided to give the Subcommittee a full picture of fund allocation for this program.

Dr. Turner asked whether dollars per FTE could be compared across LTGs. Dr. Summers answered that ORD did not have these numbers. Dr. Turner also asked whether ORD tracked matching or leveraged dollars. Dr. Summer answered that this is tracked by program, but not for ORD overall. Most of the activities that include matching dollars take place under LTG1, which includes projects involving extramural relationships with states and universities; matching dollars may have also been associated with STAR grants for research performed under all four of the original LTGs. He offered to try to find exact numbers, but cautioned that these numbers would not be easy to find. Dr. Turner commented that these numbers might help reviewers evaluate the collaborative aspects of the program, because the numbers of grants that have significant matching dollars would be an indication of the degree of cooperation or collaboration. Dr. Summers added that collaboration goes beyond simple investment, for example the Environmental Monitoring and Assessment Program (EMAP) cooperative agreements require a 5 to 15 percent match. However, some states provide funds at several hundred percent above the required match level.

Dr. Clegg commented that numbers of FTEs have remained relatively stable while the dollar budget has declined, suggesting less money for support of research. Dr. Summers responded that ORD and EPA made the decision not to eliminate FTEs. Instead, most of the cuts for 2005 and 2006 were taken out of extramural funds, discretionary money that would allow ORD to enter into specific agreements with external sources, which did not affect the direct salary base. Dr. Clegg commented on a small increase in funds for LTG3 and asked for a rationale for the shift. Dr. Summers answered that the small increase was probably not significant. The increase might have been the result of integrating different elements that existed under the old four-goal system into three goals. Also, LTG3 is one of the most forward-looking LTGs, looking at alternative futures and the ability to forecast the impact of future scenarios. Expectations are that these activities would grow.

Dr. Clegg asked about what appears to be a 10 percent reduction in FTEs, based on 2006 budget projections. Dr. Summers clarified that part of the reduction in FTEs are a result of the transfer of FTEs from the Goal 4 Ecological Research Program into the Goal 2 Water Quality Research Program. Some of the reduction is due to projected attrition, including retirements or staff voluntarily leaving; those who leave may not be replaced

because the present funding level is not adequate to replace them. Dr. Clegg commented that lack of replacements could leave imbalances in expertise. Dr. Summers acknowledged that they will lose employees with the most memory and history within the program, and they will have to depend on others in the Agency to provide this expertise.

Dr. Clegg asked if, given diminished resources, it was realistic to have the same goals. Dr. Summers answered that this was one reason the program developed three LTGs to replace the original four LTG structure. It was necessary to focus on higher priority items, and shift resources toward achieving outcomes, as recommended by the OMB's Program Assessment Rating Tool (PART) process. Each year as the President's Budget Request and enacted budget are submitted and approved, the program is asked to review, through the Government Performance and Results Act (GPRA) process, the Annual Performance Goals and Annual Performance Measures to which the program is committed, and determine the impact of budget reductions; some projects might not be accomplished, and others might take longer to complete.

Meeting Agenda

When developing the agenda for the face-to-face meeting (available at the end of this document), Dr. Clegg and Mr. Susanke decided it would be most effective to schedule presentations related to each LTG sequentially, during the first day and half of the meeting. During the time allotted for presentations, there will be time for questions. Many of the presentations will provide a "roadmap" to the posters, briefly reviewing research projects conducted under each LTG. A 1.5-hour subcommittee work session is scheduled for Monday afternoon. Subcommittee members agreed that this time would be used to collectively discuss the two LTGs presented earlier that day. This will allow all subcommittee members to provide input on all the LTGs, not just for the LTGs to which they have been assigned in their work groups. A dinner is planned for Monday evening, March 7, 2005, at 7:00 p.m.

Poster sessions will begin at 11:00 a.m. on Tuesday, March 8, 2005. The poster session has been divided into two 1.5-hour sessions. The Subcommittee members decided that during the first session, the Subcommittee members would review posters pertaining to the LTGs they have not been assigned to write about; during the second session, members will review posters falling under the LTG about which they are to write. A book containing miniaturized copies of the posters, organized by LTG, will be provided to the Subcommittee members. The posters are a primary source of information on the status of research within the program, and these sessions will allow the Subcommittee members to review all posters and develop an overview of research performed as part of the Ecological Research Program. Most posters integrate information from several different projects. Posters will be presented by EPA scientists, STAR grantees, or state resource agency scientists. After the poster sessions, the Subcommittee members will discuss the posters and prepare summary statements. The results of this discussion, in the form of a list of bullet points, will be presented by Dr. Clegg to inform the public of Subcommittee deliberations and provide documentation of the deliberations for the public record.

Time has been reserved for public comments on Tuesday afternoon, March 8, 2005. At this point, Mr. Susanke has not received any requests for comments. Dr. Summers commented that Dr. Scott Urquhart, who is giving a client presentation, might choose to make a public comment at that time.

During Tuesday's work session, the Subcommittee members planned to compare notes on the day's presentation and posters, and reach a consensus so that each work group will have the perspective of non-work group members.

During Wednesday morning's work session, the Subcommittee members plan on working separately in their work groups. Dr. Clegg will work on developing a broad overview, with Subcommittee members' input and advice, while work groups work on their reports. The entire Subcommittee will work together to integrate their reports and develop a draft report. The draft report will be presented by Dr. Clegg, followed by a response to the report by Dr. Summers. The Subcommittee's goal is to develop a draft report for Dr. Summers to use for resubmission of the program's PART review.

Discussion of Draft Report Outline

The Introduction of the report, which will be written by Dr. Clegg, will include panel composition, FACA requirements, and the objective of the review. Each LTG section should address relevance, charge questions, and specifics of program elements. Subcommittee members asked for clarification of what should be included when they discuss future directions for the program. Dr. Summers answered that the meeting presentation would include the program's anticipated activities over the next several years and Subcommittee members should discuss whether they agree or disagree with the proposed future directions.

The Subcommittee members discussed organization of the written report. Three work groups have been established to write the appropriate material for each LTG; Dr. Clegg suggested that Subcommittee members might wish to organize the report by LTG because this might result in a more easily integrated report. He suggested that each LTG constitute a separate section; within each LTG section, each of the charge questions and issues such as relevancy, quality, performance, leadership, collaboration, and resources will be addressed. The report would conclude with recommendations. Dr. Summers answered that he understood that organizing the report in this matter would make it easier for the Subcommittee to produce the report, but asked that Subcommittee members be sure to address the areas described above because this will help with the Program's resubmission of their PART review; Subcommittee members also should keep in mind that the Program is reviewed in its entirety, not as three separate LTGs. Dr. Clegg added that the last section of the report would bring together the three LTGs as an integrated report on the entire research program. Budget constraints also should be kept in mind throughout the assessment of program progress and goals. Dr. Clegg asked that the work groups try to have their writing finished by 12:00 noon on Wednesday, March 9, 2005. That afternoon, the Subcommittee as a whole will work on synthesizing the LTG reports

and developing the final overview of the report. Dr. Clegg suggested that the Subcommittee use the last 30 to 45 minutes of Tuesday afternoon to discuss specifics of the written report and how the separate LTG sections will be integrated into a single report. Dr. Lowrance suggested that during that session they could flag issues that are common to all three LTGs, providing a synthesis out of which the Subcommittee could develop recommendations. The Subcommittee members asked that a projector be available for their use during development of the integrated report.

Additional Information Needs

Dr. Lowrance asked whether the meeting would clarify the names of projects or larger programs to which the various posters belonged, because this was not clear on the list of posters. Dr. Summers answered that it was difficult to develop labels beyond the definitions of each of the LTGs. There are large programs existing with each LTG, for example, EMAP falls under LTG1, CADDIS under LTG2 and RePlus under LTG3. LTG1 could be defined as National Ecosystem Condition, LTG2 as State, Regional, Diagnostic, Forecasting, and Restoration, and LTG3 as Alternative Decision-Making. The major programs and projects within each LTG will be described in the presentations and posters. Each poster will describe a project or a group of projects working in a common area. Many projects encompass work in several laboratories, and the posters are an attempt to draw this information together. Dr. Lowrance asked whether the posters will describe in detail all people who worked on a project or whether they will just be representative of the different laboratories and collaborators working on a project. Dr. Summers answered that poster authors will be representative because approximately 300 people are working on these projects. Posters will include major projects, especially those that integrate activities of different laboratories. Dr. Lowrance asked whether projects in a given poster were chosen to be grouped together in a formal way. Dr. Summers answered that there was no formal mechanism for grouping posters, but that they did try to group posters in an organized way. The goal was to combine between 75 and 100 projects into 35 posters.

Dr. Lowrance asked whether publications would be listed to correspond with the projects detailed in the posters; publication record can be an important way to judge quality. Dr. Summers answered that many of the posters will have lists of recent publications associated with the different projects. The bibliographic material in the binders also is arranged by LTG. Dr. Summers offered to try to obtain and organize more publication information.

Draft Report Writing Assignments

The Subcommittee previously organized themselves into work groups consisting of two members each. Under the revised outline, each work group will write their work group-specific portions of the report (each work group will write on one LTG), and Dr. Clegg will write the introductory material. The entire subcommittee will reconvene at lunch on Wednesday to write the integrated part of the report and develop recommendations. A

suggestion was made to project Subcommittee members' comments on a screen during this session, so they will all be able to track one another's comments and suggestions.

Public Comments

No public comments were made during this conference call.

Dr. Clegg adjourned the conference call at 4:40 p.m.

List of Action Items

- Dr. Summers will try to find numbers tracking matched or leveraged dollars for the Ecological Research Program.
- Dr. Summers will try to obtain and organize more information concerning publications.

List of Participants

Subcommittee Members:

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The Scientific Consulting Group, Inc.

BOSC Ecological Research Subcommittee Teleconference
March 3, 2005
3:00 – 5:30 p.m., e.s.t.
(202) 275-0170, access code 4321#

Agenda

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|--|---|
| Welcome (5 min) | Dr. Michael Clegg Chair, Ecological Subcommittee |
| Ecological Research Program Budget (15 min) | Kevin Summers, EPA/ORD National Program Director Ecological Research Program |
| Review March 7-9 Meeting Agenda (5min) - general overview - discuss poster review process | Dr. Michael Clegg |
| Identification of Additional Information Needs (5 min) | Subcommittee |
| Discuss and Develop Draft Report Outline (60 min) - review ORD straw outline as example | Subcommittee |
| Discuss Draft Report Writing Assignments (15 min) | Subcommittee |
| Public Comments (15 min) | |

**U.S. EPA BOARD OF SCIENTIFIC COUNSELORS
Ecological Research Subcommittee**

**AGENDA
March 7-9, 2005**

**Environmental Protection Agency
Room C-111A/B/C
109 T.W. Alexander Drive
Research Triangle Park, NC 27711**

Monday, March 7, 2005

| | | |
|----------------|---|--|
| 8:00-8:30 a.m. | Registration | |
| 8:30-8:40 a.m. | Welcome and Opening Remarks - Introduction of Subcommittee Members - Overview of 3 Day Agenda | Dr. Michael Clegg Chair, Ecological Subcommittee |
| 8:40-8:45 a.m. | Designated Federal Officer's Welcome and Charge | Greg Susanke (EPA) DFO, Ecological Subcommittee |
| 8:45-9:00 a.m. | ORD's Welcome | Dr. Gary Foley (EPA) Director, NERL |
| 9:00-9:30 a.m. | National Program Director's Welcome | Dr. Kevin Summers (EPA) NPD of Ecological Research |

Ecological Research Program Long-Term Goal 1: By 2010, national policy makers 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.

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| 9:30-10:30 a.m. | Presentation of LTG 1 Research | Dr. Michael McDonald EPA-ORD Ecological - Research Team |
| 10:30-10:50 a.m. | Break | |
| 10:50-11:15 a.m. | Relevance of Ecological Research Program Program Office/Regional/State Perspective | Rona Birnbaum (EPA) Office of Air and Radiation |
| 11:15-11:40 a.m. | Relevance of Ecological Research Program Program Office/Regional/State Perspective | Tom Wall (EPA) Office of Water |

11:40-12:00 noon Relevance of Ecological Research Program Academic Institutions Dr. Scott Urquhart
Colorado State University

12:00-1:30 p.m. Lunch

Ecological Research Program Long-Term Goal 2: By 2010, states and tribes apply improved tools and methods to protect and restore their valued ecological resources.

1:30-2:30 p.m. Presentation of LTG 2 Research Dr. Rochelle Araujo
EPA-ORD Ecological
Research Team

2:30-3:00 p.m. Relevance of Ecological Research Program Program Office/Regional/State Perspective Mr. Bill Jenkins
Director, Landscape and
Watershed Analysis
Division, Maryland
Department of Natural
Resources

3:00-3:30 p.m. Relevance of Ecological Research Program Program Office/Regional/State Perspective Dr. Tom Atkeson
Mercury and Applied
Science, Florida Department
of Environmental Protection

3:30-4:00 p.m. Break

4:00-5:30 p.m. Subcommittee Work Session

5:30 p.m. Adjourn

Tuesday, March 8, 2005

8:30-8:45 a.m. Review of Yesterday's Activities Dr. Michael Clegg
Overview of Today's Agenda Chair, Ecological
Subcommittee

Ecological Research Program Long-Term Goal 3: By 2012, decision makers have the guidance and tools to better understand ecological processes and the value of ecological services and resources enabling them to make wiser resource management decisions.

8:45-9:45 a.m. Presentation of LTG 3 Research Iris Goodman
EPA-ORD Ecological
Research Team

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| 9:45-10:00 a.m. | Break | |
| 10:00-10:30 a.m. | Relevance of Ecological Research Program Program Office/Regional/State Perspective | Roger Batterman Bureau of Watershed Management, Wisconsin Department of Natural |
| Resources | | |
| 10:30-11:00 a.m. | Relevance of Ecological Research Program Program Office/Regional/State Perspective | Vicki Bott (Bowman) Director, Land Use and Environmental Planning Division, UNC-Charlotte Urban Institute |
| 11:00-12:30 p.m. | Poster Session | ORD Presenters |
| 12:30-1:30 p.m. | Lunch | |
| 1:30-3:00 p.m. | Poster Session | ORD Presenters |
| 3:00-3:15 p.m. | Break | |
| 3:15-3:45 p.m. | Poster Discussion - Preparation of Summary Statements | Subcommittee Workgroups |
| 3:45-4:15 p.m. | Presentation of Poster Summaries | Subcommittee Chair |
| 4:15-4:30 p.m. | Public Comments | |
| 4:30-5:30 p.m. | Subcommittee Work Session | |
| 5:30 p.m. | Adjourn | |

Wednesday, March 9, 2005

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| 8:30-12:00 noon | Subcommittee Work Session | Subcommittee/Workgroups |
| 12:00-1:30 p.m. | Working Lunch | Subcommittee/Workgroups |
| 1:30-3:30 p.m. | Subcommittee Work Session - Write Draft Report | Subcommittee/Workgroups |
| 3:30-4:15 p.m. | Presentation of Draft Report | Dr. Michael Clegg |

Chair, Ecological
Subcommittee

4:15-4:45 p.m. ORD Response to Draft Report

Dr. Kevin Summers (EPA)
NPD of Ecological Research

4:45-5:00 p.m. Wrap-Up

Dr. Michael Clegg
Dr. Kevin Summers

5:00 p.m. Adjourn