

***U. S. Environmental Protection Agency Science Advisory Board (SAB) Workshop
December 13-14, 2005
Science for Characterizing Ecological Benefits for EPA's Environmental Decisions
and Programs
Ronald Reagan Building, Washington, DC***

Introduction

This proposal has been developed for discussion at the October 25-26th 2005 meeting of the Committee on Valuing the Protection of Ecological Systems and Services. It was also discussed at the September 28, 2005 meeting of the Chartered SAB.

Background

Protecting human health and the environment is the core mission of EPA and EPA's Strategic Plan lists protecting "healthy communities and ecosystems" as one of EPA's five major goals. Several environmental statutes administered by the Agency mandate the assessment of ecological benefits. Cost-benefit analysis is required by Executive Order 12866 for economically significant regulations. EPA is required, by good management practice and by federal law, to assess the effectiveness of its programs. Finally, effective environmental protection requires communication about the value of ecological protection decisions at the regional and national levels.

Reflecting this need at the Agency, the SAB and the Advisory Council on Clean Air Compliance Analysis (Council) have undertaken many projects in recent years. Some projects advised the Agency in reporting on the environment. Other projects focused on methods for identifying critical ecosystems at the regional level. Some have focused on benefit assessment issues in particular programs, such as the Clean Air Act programs or the Superfund program.

One SAB project, initiated in October 2003, involved the establishment of a Committee on Valuing the Protection of Ecological Systems and Services (C-VPES). This multi-disciplinary committee was charged with conducting a broad assessment of Agency needs and the state of the art and science of valuing protection of ecological systems and services and identifying key areas for improving knowledge, methodologies, practice, and research. The C-VPES has developed advice for the Agency on its draft *Ecological Benefits Assessment Strategic Plan*. The C-VPES is also planning reports to help strengthen EPA's approaches for valuing the protection of ecological systems and services, use of such information by decision makers, and the key research areas needed to strengthen the science base.

The workshop will provide a forum to discuss the initial work of the C-VPES; to provide an opportunity for SAB, Council, and Clean Air Scientific Advisory Committee (CASAC) members to learn from each others' work; to feature feedback and insights from Agency clients; and to identify innovative ways scientific advisory committees

supported by the SAB Staff Office can further assist the Agency in characterizing the ecological benefits of environmental protection.

Purpose

This workshop is designed to showcase and discuss the initial findings of the C-VPES. Presentations and discussions with advisory committee members, Agency Staff, and invited experts are designed to stimulate scientific cross-disciplinary exchanges so that future advice can be most effective in helping the Agency address the most important scientific issues related to characterizing the ecological benefits of EPA's actions.

There are multiple audiences for the workshop: the members of the SAB, Council, and CASAC; EPA managers concerned with decision-making affecting ecological resources and documenting ecological benefits; EPA ecological scientists and risk assessors who support those decisions; EPA social and behavioral scientists supporting those decision; EPA economists responsible for regulatory impact analyses and other economic analyses supporting ecological protection; EPA regional staff concerned with demonstrating the benefits of protecting and restoring specific ecosystems and ecological resources; and scientists in other federal and state agencies concerned with characterizing ecological benefits.

Format

The proposed format will be a 2-day workshop. The start of Day One will feature:

- Invited presentations from authors of recent major international, national, and local studies of ecological valuation or senior decision-makers using those documents.
- Presentation on major findings from recent SAB C-VPES work on an expanded and integrated approach for valuing ecological benefit assessment and the potential use of different methods to support decision-making.

Initial presentations will be followed by two sets of break-out sessions. These break-out sessions would follow a standard format [i.e., short presentation(s) either by an SAB member or outside expert assessing major science issues and recent advances; presentation by an EPA manager or technical expert describing EPA's current approach related to the topic; and group discussions addressing a set of core questions]. Break out groups would include SAB, Council, and CASAC members; EPA staff; and invited experts.

The break out sessions to be held on September 13, 2005, will address methodological issues raised by the C-VPES work. The break out sessions to be held on September 14, 2005 will each address possible application of a suite of methods to particular examples covering various contexts (e.g., regulatory efforts, regional environmental protection efforts, and program performance and outcome measurement)

in which EPA is concerned with valuing the protection of ecological systems and services.

Cross-cutting issues would be explored in a number of the Break-Out Sessions may include:

- What recent advances seem most promising for EPA to explore?
- What would be needed to encourage collaboration among technical experts?
- What are the barriers to adoption of promising new approaches and how might they be best overcome?
- Which issues would benefit from additional exploration and detailed science advice? How could the SAB and Council be helpful in providing such advice?

The Workshop would conclude with a plenary session featuring a panel discussion with representatives from the SAB C-VPESS, Chartered SAB and Council, Council Ecological Effects Subcommittee, SAB Environmental Economics Committee, SAB Ecological Processes and Effects Committee, other SAB panels with potential interest, outside experts, and the Agency.

*U. S. Environmental Protection Agency Science Advisory Board (SAB) Workshop
December 13-14, 2005
Science for Characterizing Ecological Benefits for EPA's Environmental Decisions
and Programs
Ronald Reagan Building, Washington, DC*

Purpose: forum to discuss the initial work of the SAB Committee on Valuing the Protection of Ecological Systems and Services (C-VPESS); to provide an opportunity for advisors across the SAB, Advisory Council on Clean Air Compliance Analysis, and Clean Air Scientific Advisory Committee to learn from each others' work; to feature feedback and insights from Agency clients; and to identify innovative ways scientific advisory committees supported by the SAB Staff Office can further assist the Agency in characterizing the ecological benefits of environmental protection.

December 13, 2005

9:00 - 9:05	Welcome	Dr. Angela Nugent, EPA, SABSO Dr. Vanessa Vu, EPA, SABSO
9:05- 9:10	Introduction to Workshop	Dr. Barton H. (Buzz) Thompson, Jr., Chair, SAB C-VPESS
9:10-9:25	Remarks	Mr. Marcus Peacock, EPA Deputy Administrator (unconfirmed)
9:25-10:00	Global View from the Perspective of the Millennium Ecosystem Assessment	Dr. Walter V. Reid: Stanford Institute for the Environment Operations, Stanford University; former head of the Millennium Ecosystem Assessment
10:00-10:45	Wetland Valuation and the Gulf of Mexico	EPA Office of Water speaker(unconfirmed)
10:45 - 11:00	Break	
11:00 - 11:45	Local View: Lents Project Case Study	Ms. Gillian Ockner, Environmental Consultant and Corporate Sustainability Coordinator, David Evans & Associates
11:45 - 12:00	Charge to Breakout Groups; Review of	Dr. Barton H. (Buzz)

Afternoon Agenda

Thompson, Jr

12:00-1:15	Lunch	
1:15-2:15	Introduction to C-VPESH Issues and Progress	Dr. Kathleen Segerson, C-VPESH Vice-Chair Dr. Stephen Polasky Dr. Gregory Biddinger
2:15-4:30	Break-out Groups on Method Issues - (Topics to be identified after C-VPESH October meeting) (Break as needed)	Chaired by C-VPESH members with designated Agency person as lead Resource Person
4:30-5:30	Plenary Session Reports from Break-Out Groups	Facilitated by Dr. Barton H. (Buzz) Thompson, Jr.
5:30	Distribution of materials/write-ups for Second-Day Break-Out Sessions Adjourn	

December 14, 2005

8:30 - 8:35	Opening of Second Day of Workshop	Dr. Angela Nugent, EPA, SABSO
8:35 - 8:45	Introduction to Second Day Break-out Sessions - Valuation topics to be decided. Ideas so far include: <ul style="list-style-type: none"> • Ozone secondary National Ambient Air Quality Standards (NAAQS) • Wetland Protection in Gulf of Mexico • Performance Assessment for an eco-protection program (e.g., Non-point source, watershed program) 	Dr. Barton H. (Buzz) Thompson, Jr.
8:45-10:45	Break-out Sessions (Breaks as Needed)	Chaired by C-VPESH members with designated Agency person as lead Resource Person
11:00-11:45	Plenary Session Report Outs	Facilitated by Dr. Kathleen Segerson.
11:45-12:00	Summary	Dr. Barton H. (Buzz) Thompson, Jr.
12:00	Adjourn	

