AERE NEWSLETTER

Association of Environmental and Resource Economists (AERE) *Volume 24, No.2* *November 2004*

FROM THE PRESIDENT…

As noted in the last issue of this newsletter, Richard Carson of the University of California, San Diego (and Berkeley Agricultural and Resource Economics Ph.D.!) takes over as President of AERE on January 1, 2005 so this is my last column. It has been a great honor and a privilege to serve AERE for the past two years and I look forward to working with Richard and the other officers and board members to provide continuity over the coming year. The year 2004 marked the 25th anniversary of the founding of AERE and we have seen the membership grow and programs develop over the years. I want to extend my appreciation to all of you who have helped AERE to become the important association that it is today. In the remainder of this column, I highlight both a major new opportunity and a serious challenge, and pass along some information about upcoming events and ongoing AERE activities.

New AERE Journal. I'm very excited about the prospects for a new journal, to be owned by AERE (unlike our existing journal, *JEEM*). Hilary Sigman, a member of the ad hoc committee that put together the very thoughtful and detailed proposal for the journal, reports on the results of a survey of AERE members concerning the value of particular features, prospects for member and library subscriptions, and so on (see page 4). We owe a large debt of gratitude to Hilary and the other committee members: Charlie Kolstad (Chair), Kevin Boyle, and Bill Provencher.

The major innovation in my view is the emphasis on policy and literature reviews, which will both communicate with the environmental policy community beyond environmental economists and familiarize economists with developments in the field beyond their own areas of specialization. It appears that most of the survey respondents share this view, rating Policy Reviews, Policy Forum, and Literature Reviews as the most valuable sections of the proposed journal. More generally, a very large majority of about 83% agrees (and nearly 50% strongly agree) that creation of such a journal is an important undertaking for AERE. One cautionary note is that a small majority of about 55% say they would recommend that their library either not purchase a subscription (5%) or purchase only if it involves no sacrifice

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of another journal in the field (50%)—even if they had not purchased an individual subscription.

AERE Revenues and Institutional Memberships. One of the steps the Board voted to take at our last meeting to increase revenues is the recruitment of institutional members, who would pay substantially more than individual members─perhaps around $350─in return for a variety of benefits, including a copy of *JEEM*, a free ad in the *AERE Newsletter*, reduced membership and submission fees for affiliated economists, and recognition on the AERE web page, in *JEEM*, and the *AERE Newsletter*. Unfortunately, we have not made much progress since then. I've recently asked Board members to make exploratory contacts with potential institutional members. I'd like to ask each of you to think about this as well, and, in particular, about the possible interest of your own organization. Research institutes, consulting firms, government agencies, and perhaps even some academic units or programs might find the benefits of membership and the recognition they would receive in the environmental and resource economics community very attractive. If you think there is a possibility your organization, or perhaps another you're familiar with, might be interested, I ask you to contact me (fisher@are.berkeley.edu) with the information, so that I can bring it to the attention of the Board at our upcoming meeting in January.

AERE Committees. Much of the work of AERE is, of course, done by our standing committees. For this past year, Jim Wilen has served as Chair of the Program Committee, replacing Carlo Carraro, who rotated off. As of January 1, 2005, Carolyn Fischer will join continuing members J.R. DeShazo (Chair) and Nick Flores with Jim Wilen rotating off. Ted McConnell has replaced Bob Deacon as Chair of the committee charged with selecting the recipient of the award for Publication of Enduring Quality, joined by continuing member Margaret Slade and new member Andrew Plantinga. Following this year's workshop in June, chaired by Don Fullerton, ex-Chair Richard Ready rotated off the Workshop Committee, replaced by new member David Zilberman who joins Don, new Chair Gardner Brown, John Charbonneau, Al McGartland, and Norman Meade. I thank all of the members, incoming, continuing, and outgoing, for their hard work on behalf of AERE and its members.

Editorship of JEEM. Joe Herriges has informed me that he will be stepping down as Managing Editor of JEEM as of February 1, 2006. At that time Joe will have served for five years, as did Bob Deacon before him, and giving notice now allows us sufficient time to find a successor and manage a smooth transition. Elsewhere in the newsletter you will find an announcement of the editorial vacancy and a solicitation for proposals. I trust we'll be able to find someone who will carry on the fine work done by Joe both in maintaining high standards and providing authors with some of the quickest reviews in the business.

AERE Workshops. Following the very successful 2004 Workshop on "Distributional Effects of Environmental Policy" organized by Don Fullerton and held in Estes Park, Colorado, preparations are under way for the 2005 Workshop on "Natural Resources at Risk" on June 12-14, 2005 in Grand Teton National Park, Wyoming. A call for papers, along with information about the venue, is given elsewhere in the newsletter. Note in particular the very near term submission date for abstracts: December 15, 2004.

Other Upcoming Events. I look forward to seeing many of you at one or more of the AERE sessions at the ASSA meeting in Philadelphia, January 7-9, 2005, and at the AERE business meeting and luncheon on Saturday, January 8th, at the Philadelphia Marriott Downtown in Liberty A. (You can download a reservation form off the AERE web page at www.aere.org.) Looking further ahead, you can find calls for proposals beginning on page 9 for AERE sessions at next summer's July AAEA meeting in Providence, Rhode Island, due January 15, 2005; for the January 2006 ASSA meetings in Boston due May 15, 2005; and for the June 2005 EAERE meetings in Bremen, Germany due February 1, 2005. Although there are no official AERE sessions at the EAERE meetings, there has always been very substantial AERE representation throughout the program. I have found participation over the past few years and the opportunity to interact with our European colleagues stimulating and enjoyable, and recommend it especially to those who have not yet taken advantage of this opportunity.

Finally, I would like to close with words of thanks to all those who have worked hard on behalf of AERE and who have done so much over the past two years to make my term as President both manageable and rewarding: my fellow Board members, committee members, Joe Herriges, Managing Editor of *JEEM*, John Loomis, *AERE Newsletter* co-editor, Gernot Wagner, AERE webmaster, and Executive Director Marilyn Voigt.

Anthony C. Fisher, Professor
Dept. of Agricultural and Resource Economics
University of California, Berkeley
Berkeley, CA 94720-3310
Telephone: 510-642-7555
Email: fisher@are.berkeley.edu

AERE ANNOUNCEMENTS

AERE BOARD OF DIRECTORS' MEETING

The annual meeting of the AERE Board of Directors will be held on Friday, January 7th, from 5:30 to 8:00 p.m. at the Philadelphia Marriott Downtown, Room 301. Anyone with matters to be brought before the Board should contact the president, Anthony C. Fisher (see contact information above).

AERE ANNUAL MEETING AND LUNCHEON

All 2004 members of AERE are invited to attend the annual meeting and luncheon on Saturday, January 8th, at the Philadelphia Marriott Downtown in Liberty A. Luncheon reservation forms were mailed to all current members of AERE in mid-November. A form is also posted on the AERE Web Page with the option to pay on-line by credit card. Return the form to the AERE Membership Office in Ames, Iowa **by Wednesday, December 22nd**, to insure your place. Please make your reservation on time as we are unable to guarantee seating for walk-ins.

AERE FELLOWS

AERE has instituted a new program to recognize outstanding contributions to the field by members of the association. Details are given below.

Criteria: Awardees will have demonstrated a significant contribution to the advancement of the profession of environmental and resource economics. A candidate must be living at the time of nomination and be a current member of the association or have been a member for at least ten years (not necessarily continuously).

Nomination Process: Any member of AERE can nominate a candidate for Fellow. A nomination packet should include a vita of the nominee, three letters of support, and a two-page nomination letter outlining what contributions the individual has made that warrant the award. In addition, members of the AERE Board of Directors can consider candidates that have not been otherwise nominated that they feel are especially worthy.

Selection Process: Nomination packages are to be submitted **by June 1** to:

Richard T. Carson
Department of Economics, 0508
University of California, San Diego
La Jolla, CA 92093-0518
rcarson@ucsd.edu

The president will distribute copies to each of the Board members who will select newly appointed Fellows from the set of nominations. Nominations will not be carried over to future years. Announcements of the new Fellows will be made formally at the annual AERE luncheon; newly elected Fellows will be notified ahead of time to provide ample time for travel arrangements. In future years, a separate Fellows Committee may be impaneled to aid in the initial screening of candidates.

Maximum Number of Awards: Three per year after the third year. In the first three years, up to six Fellows can be selected per year.

AERE MEMBERSHIP OFFICE

Please direct any questions or requests regarding your membership, subscription to *JEEM*, luncheon reservations, receipts, or related membership matters to:

AERE Membership Office
415 S Duff Avenue, Suite C
Ames, IA 50010-6600
Telephone: 515-598-5028
Fax: 515-233-3101
E-mail: info@aere.org

Marilyn M. Voigt, AERE's Executive Director, can be reached at:

AERE
1616 P Street NW, Room 510
Washington, DC 20036-1400
Telephone: 202-328-5125
Fax: 202-939-3460
E-mail: voigt@rff.org

MEMBERS' RESPONSES TO THE SURVEY ON THE AERE JOURNAL PROPOSAL

By Hilary Sigman
On behalf of the AERE Board's
Ad Hoc Journal Committee:
Charlie Kolstad, Chair
Kevin Boyle
Bill Provencher
Hilary Sigman

Over 400 AERE members generously took the time to complete the web survey on the proposal for a new journal. For background, here is the abstract for the journal proposal:

The Association of Environmental and Resource Economists (AERE) proposes to start a new economics journal that seeks to build a bridge between environmental economics and environmental policy. This journal would not replace AERE's current journal, the Journal of Environmental Economics and Management (JEEM), but supplement it as a second official AERE journal. AERE would own the new journal; we would expect most members to subscribe to it and it would be priced to achieve that. We would also expect the new journal to be widely read by those in the environmental policy community.

The new journal would be refereed and would include some standard research papers (with clear policy relevance). However, the new journal would also include symposia on controversial issues, reviews of either policy issues or areas of environmental economics, interesting applications of economics to solving environmental policy problems, and AERE news. The Journal of Economic Perspectives, applied to environmental economics, is a rough model for the new journal.

We emailed 651 AERE members a request to complete the survey (these were the successful emails; another 55 messages failed) and sent a reminder about four weeks later. 403 members (62%) responded. The survey began with a few questions about the perceived value of the proposed journal, including its overall merits, the value of specific sections, and willingness to pay for a subscription. A second section asked about library subscriptions. A third section asked about the likelihood that members would submit to the journal and determinants of this decision. The final substantive question addressed the possibility of an online only format. The survey then collected three characteristics of respondents: their tenure as AERE members, their region of the world, and their principal career activity.

Value of the Journal. Overall, the respondents supported this project. A near majority (49%) stated that they strongly agreed that the proposed journal is an important undertaking for AERE. A small minority (7%) disagrees with the project, but the intensity of opposition seems strong: opponents were greatly overrepresented among those submitting written comments. Figure 1 shows the breakdown of responses to this question by the respondent's principal career activity.

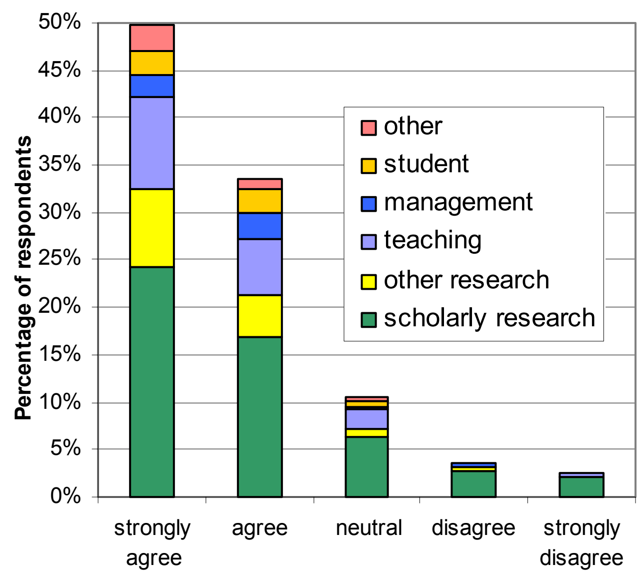

Figure 1: Is creation of such a journal an important role for AERE?

The survey also asked about the value of proposed sections in the journal. Respondents placed higher value on more original sections than traditional journal offerings. Policy Reviews (discussions of specific policies from around the world) and Policy Forum (applications of environmental economics that are not necessarily methodological advances) were the most popular with 69% and 68%, respectively, of respondents rating these as very or extremely valuable. Literature Reviews and Research Papers were next with 54% and 53% of respondents putting these in the highest two categories.

Median willingness to pay for a private subscription to the journal fell between $20 and $40 annually. Figure 2 reports its distribution.

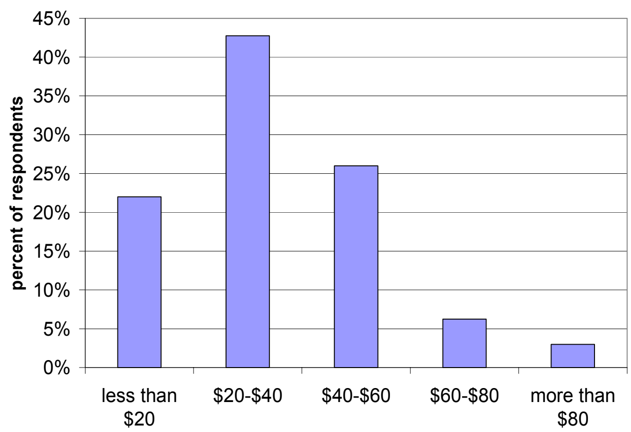

Figure 2: Distribution of reported willingness to pay

Library Subscriptions. In response to a request from a publisher, we also included questions on institutional subscriptions. Demand appeared somewhat weaker with 12% of respondents unwilling to recommend the journal to their library and 59% unwilling to trade-off another journal in the field for a library subscription, if they themselves had a subscription. Without their own subscriptions, however, 44% of respondents would trade-off one or more journals in the field for a library subscription.

Submissions. Most respondents judged themselves likely or almost certain to submit to the journal (69%). Editors will not have to fear rejection themselves: 63% of respondents would almost certainly respond to an invitation. (Veteran AERE members are no harder to get. Of the 33% of the sample reporting membership longer than 10 years, 65% reported almost certain response to a solicitation.)

Members reported themselves most likely to submit to the traditional research paper section, with 62% responding that they would likely or almost certainly do so. Among the approximately half of respondents who described their primary activity as research for scholarly publication, 74% reported themselves likely or almost certain to submit papers. Literature reviews were the least likely to be contributed, with 41% of respondents stating they would be unlikely to or would definitely not contribute literature reviews.

The quality of editorial response was the leading factor in the decision to submit and the speed of editorial response was the next most important factor. Readership from the scholarly and policy community was judged of intermediate importance by the largest number of respondents. However, somewhat more respondents chose the extreme ends of the distribution for policy readership (both positive and negative) than scholarly readership. Members judged the scholarly rank the least important of the five factors listed.

Journal Format. Respondents split on whether publishing the journal on-line only would adversely affect its success. About 15% picked each of the extreme answers ("not at all" and "greatly"). The remaining responses leaned toward a somewhat negative effect.

Written Comments. Not surprisingly, written responses tended to be either strongly supportive of or strongly opposed to the proposal. Some of those in support criticized existing outlets or emphasized the need for a bridge to the policy community. For the most part, those in disagreement either cited an excess of journals or some specific other publication they felt served this role. Respondents did not focus particularly on AERE's ownership to the journal, which the committee feels would improve the Association's bargaining position with the for-profit publisher of *JEEM*. A few respondents raised valid objections to our survey design.

A more detailed summary of the survey responses and the raw data are available at:

http://aere.org/journal/survey.html

Thanks to all who participated!

JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT (JEEM)

Managing Editorship of *JEEM*

After completing his five-year term as managing editor of *JEEM*, Joe Herriges is stepping down from this position. The AERE Board is beginning the search for a new managing editor. It is hoped that this new editor could begin taking over near the start of 2006, although Joe will stay through the transition phase.

This announcement seeks proposals from individuals interested in assuming the responsibility of managing editor. Although *JEEM* has been edited by a single managing editor with help from many co-editors, this search will not rule out, *a priori*, proposals from individuals who may wish to serve as an editorial team. In such cases, the coordinating arrangement must be spelled out carefully in the proposal. It is also possible that the AERE Board will require one individual on the team to be designated as lead editor.

Proposals should include:

- Curriculum vita(s) of proposed editor(s), including evidence of substantive participation in and contributions to the discipline of environmental and resource economics;
- Detailed information on how the editorial tasks will be organized and accomplished;
- Information on the other commitments of the individual(s) and the time that the individual(s) can commit to the editorial task;
- Evidence that the institution(s) of the proposed editor(s) will support, at the minimum, release time and space requirements needed for the editorship. Information on any additional resources that can be provided by the institution would be useful but not required;
- Any future plans that may bear on the usual five-year term that is currently expected.

Proposals should be sent **by September 15, 2005** to the AERE President:

Richard T. Carson
Department of Economics, 0508
University of California, San Diego
La Jolla, CA 92093-0518
rcarson@ucsd.edu

In the interim, we invite requests for further information about the position. Please direct those requests to Richard Carson, by e-mail: rcarson@ucsd.edu.

Information will be obtained from Joe Herriges that will be forwarded.

AERE WORKSHOP 2004

The 2004 AERE summer workshop was held at The Stanley Hotel in Estes Park, Colorado on June 13-15, 2004. The topic of the workshop was "Distributional Effects of Environmental Policy." The forty-seven participants enjoyed presentations of fourteen interesting papers, stimulating remarks from discussants and other participants, excellent food, great views of the mountains, opportunities for hiking and wildlife, and a stay in this stately old hotel (where "The Shining" was filmed).

The topic is broad because it can relate to any environmental or natural resource problem, and it can relate to any type of policy such as taxes, permits, or mandates. Furthermore, the fourteen papers study different socio-economic breakdowns of households into groups based on income, age, gender, or ethnicity (including issues of "environmental justice"). The difference from earlier workshops is that these papers take distributional effects seriously, rather than focus on economic efficiency (such as how to measure total costs and benefits, the optimal amount of protection, or the cost-minimizing choice of policy).

Theoretical papers at the workshop investigated conditions under which environmental policy is likely to raise an output price and affect consumers, or to lower a factor price and affect suppliers of that factor. Some empirical papers estimated the distribution of the costs of protection and others estimated the benefits of protection (i.e., the costs of pollution). Other studies used dynamic models to investigate distributional effects of water resource pricing, and computable general equilibrium models to simulate the distributional effects of other major policies. Still other studies used existing valuation methods to measure the benefits of protection separately for demographic groups. The results of the workshop provide important information for policymakers who must weigh distribution with other objectives. Moreover, these papers investigate how distributional results affect the best policy design, and how they affect actual policy design.

Interested readers can see the program and links to the papers themselves at:

http://www.aere.org/meetings/workshops.html

2004 Workshop Committee:

Chair: Don Fullerton, The University of Texas at Austin
Richard Ready, The Pennsylvania State University
Gardner Brown, University of Washington
John Charbonneau, U.S. Department of the Interior, Fish and Wildlife Service
Carol Jones, U.S. Department of Agriculture, Economic Research Service
Norman Meade, U.S. Department of Commerce, National Oceanic Atmospheric Administration (NOAA)

AERE WORKSHOP 2005

The next AERE Workshop will be held on June 12-14, 2005 at Jackson Lake Lodge, a full service resort with picturesque views of the majestic Grand Teton Mountain Range. The lodge is situated on a bluff with spectacular views across the water of Jackson Lake to the skyline of the Tetons. The selected topic is “Natural Resources at Risk.” Please see the Call for Abstracts on page 8.

2005 Workshop Committee:

Chair: Gardner Brown, University of Washington
Richard Ready, The Pennsylvania State University
Don Fullerton, The University of Texas at Austin
John Charbonneau, U.S. Department of the Interior, Fish and Wildlife Service
Al McGartland, U.S. Environmental Protection Agency
Norman Meade, U.S. Department of Commerce, National Oceanic Atmospheric Administration (NOAA)

AERE Newsletter

Co-Editors
John Loomis
Dept. of Agricultural and Resource Economics
Colorado State University
Fort Collins, CO 80523-1172
Telephone: 970-491-2485
Facsimile: 970-491-2067
E-mail: jloomis@lamar.colostate.edu

Marilyn M. Voigt
AERE Executive Director
1616 P Street NW
Washington, DC 20036
Telephone: 202-328-5125
Facsimile: 202-939-3460
E-mail: voigt@rff.org

Publisher:
Association of Environmental and Resource
1616 P Street NW
Washington, DC 20036

CALLS FOR PAPERS

AERE 2005 WORKSHOP

Natural Resources at Risk

June 12-14, 2005
Jackson Lake Lodge
Grand Teton National Park, Wyoming

Call for Abstracts

We are interested in abstracts addressing the joint economic and biological origin and control of risks to specific natural resources, especially those of an irreversible nature. General topics include problems of loss of biodiversity and loss of individual species and ecosystems. Welcome topics include the assessment of processes and activities that may endanger natural resources and policies and mechanisms to avoid, control and mitigate these risks. We are interested in conceptual and empirical analyses of the causes of actual or uncertain risks to natural resources, the severity of the losses, the remedies available and the costs and consequences of these remedies.

Some of the major issues to be considered include but are not limited to the economic analysis of invasive/introduced species; genetic modification of plants; pest and resistance control; management of threats to fisheries, forestry and water resources; risks to individual species and ecosystems as a result of harvest pressure or resource development (dams, deforestation, urbanization); and the use of reserves and other interventions as antidotes to these risks.

We encourage studies that address spatial aspects of management and control of risks to natural resources and studies that tackle problems of dimensionality and uncertainty in designing policies to control the risks. What are the risks entailed in reducing the damages to one resource that lead to an increase in risks to other resources?

To present a paper at this workshop, please submit an abstract of no longer than three pages, double-spaced, to Gardner Brown, Workshop Chair, at the address below. **Abstracts are due December 15, 2004.** Expenses of paper presenters will be covered up to a maximum of $1,000, including airfare, ground transportation, hotel, meals, and incidental workshop-related expenses. All expenses must be documented with original receipts. The registration fee for paper presenters will also be waived. All conference presenters and attendees must be AERE members. Nonmembers may join at the time of registration. Authors will be notified of the status of their submissions by February 5, 2005. Accepted papers are due May 1, 2005 and must not be published before the time of the workshop.

Further information, including registration forms and travel and lodging information, will be mailed to AERE members in early 2005, and posted on the AERE website: www.aere.org.

The Association of Environmental and Resource Economists (AERE) gratefully acknowledges the funding provided for this workshop by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce; the Fish and Wildlife Service, U.S. Department of the Interior; and the U.S. Environmental Protection Agency.

Send abstracts to Gardner Brown:
By U.S. Mail or Overnight Service:
Department of Economics
Box 353330
University of Washington
Seattle, WA 98195-3330

By E-mail: gbrown@u.washington.edu. NO SUBMISSIONS BY FAX, PLEASE.

AERE NEWSLETTER

The AERE Newsletter is soliciting essays about natural resource and environmental economics issues of general interest to the membership. These essays can be relatively short (6-10 double spaced pages) and address a topic that does not fit into the traditional journal outlet. There is currently no backlog, so your essay would likely be published in the following *AERE Newsletter*. Marilyn Voigt and I need your essay in February for the May issue and August for the November issue. If you wish to float an idea by me, feel free to contact me.

John Loomis
***AERE* Newsletter Co-Editor**
jloomis@lamar.colostate.edu
Telephone: 970-491-2485

AMERICAN AGRICULTURAL ECONOMICS ASSOCIATION (AAEA)

July 24-27, 2005
Providence, Rhode Island

The 2005 Summer meeting of the AAEA will be held in Providence, Rhode Island on July 24-27, 2005. J.R. DeShazo from the University of California at Los Angeles, School of Public Policy, is serving as chair of the AERE Program Committee. All submissions are to be sent electronically via email. Only .pdf files will be accepted as electronic format. No submissions will be accepted via facsimile or postal mail.

Authors wishing to have a paper considered for the AERE sessions should send a 2-3 page .pdf file by email to:

J.R. DeShazo at deshazo@ucla.edu
(Wth AERE AAEA in the subject line of the email)

The file should contain the following information:
(I) name and institutional affiliation of paper presenter and co-author(s);
(II) title of paper;
(III) address and e-mail address of paper presenter;
(IV) up to six key words;
(V) JEL codes;
(VI) long abstract of the paper (about 1,000 words).

Papers submitted without all the required information will not be considered. Electronic acknowledgements of submissions will be sent to all submitters. The deadline to submit is **January 15, 2005.**

Proposals for complete sessions are also encouraged. Organizers of proposed sessions should submit abstracts of papers following the above instructions. Papers may be accepted or rejected on an individual basis unless the organizer specifically requests the session be considered only in its entirety.

Prof. J.R. DeShazo
School of Public Policy
University of California, Los Angeles
Los Angeles, California

ALLIED SOCIAL SCIENCE ASSOCIATIONS (ASSA)

January 6-8, 2006
Boston, Massachusetts

The 2006 Winter meeting of the ASSA will be held in Boston, Massachusetts on January 6-8, 2006. J.R. DeShazo from the University of California at Los Angeles, School of Public Policy, is serving as chair of the AERE Program Committee. All submissions are to be sent electronically via e-mail. Only .pdf files will be accepted as electronic format. No submissions will be accepted via facsimile or postal mail.

Authors wishing to have a paper considered for the AERE sessions should send a 2-3 page .pdf file by email to:

J.R. DeShazo at deshazo@ucla.edu
(Wth AERE ASSA in the subject line of the email)

The file should contain the following information:
(I) name and institutional affiliation of paper presenter and co-author(s);
(II) title of paper;
(III) address and e-mail address of paper presenter;
(IV) up to six key words;
(V) JEL codes;
(VI) long abstract of the paper (about 1,000 words).

Papers submitted without all the required information will not be considered. Electronic acknowledgements of submissions will be sent to all submitters. The deadline to submit is **May 15, 2005**.

Proposals for complete sessions are also encouraged. Organizers of proposed sessions should submit abstracts of papers following the above instructions. Papers may be accepted or rejected on an individual basis unless the organizer specifically requests the session be considered only in its entirety.

Prof. J.R. DeShazo
School of Public Policy
University of California, Los Angeles
Los Angeles, California

EUROPEAN ASSOCIATION OF ENVIRONMENTAL AND RESOURCE ECONOMISTS (EAERE)

Fourteenth Annual Conference

June 23 – 26, 2004
Bremen, Germany

With the introduction of the European CO2 certificate trading scheme, the year 2005 marks the beginning of a new era in environmental policy. In the same way, the transition to a higher share of renewable energy poses a lot of new problems. In the 2005 conference we will give adequate room to these new developments.

Bremen has been named "city of science 2005" due to its many efforts in research and science. This is a good reason to hold our conference in this city. In addition, Bremen has a many other features that make it an interesting place to visit.

The conference will be held on the campus of the International University Bremen, a newly founded private institution. Its academic programs and cultural environment prepare graduates for international leadership and global citizenship. The campus, with its redbrick buildings, green meadows and parks will be ours for a few days and is an ideal place to concentrate on the exchange of ideas.

The submission of papers covering applied, evidence-based and policy-oriented environmental economics are encouraged. To this end, there will be five evidence-based parallel sessions devoted to different topics. Furthermore, papers that are focused only on theoretical aspects are also encouraged. There will also be country or region-specific sessions, where proposals to organize a session focused on a particular country or cluster of countries will be encouraged.

The deadline for submission is **February 1, 2005**. Submissions must be a single PDF file not more than 2MB in size. Notifications of acceptance will be sent by April 15, 2005 latest.

Accepted papers will be included in the program only if the presenting authors have registered by May 6, 2005. Please visit:

www.conferences.iu-bremen.de/EAERE2005

for registration and other conference information.

THE RUSSIAN SOCIETY FOR ECOLOGICAL ECONOMICS (RSEE)

7th International Conference of the RSEE

First Announcement and Call for Papers

Globalization, New Economy and the Environment (Business and Society Challenges for Sustainable Development)

June 23-25, 2005
Saint Petersburg State University
Saint Petersburg, Russia

Aims of the RSEE 2005

The Seventh International Conference of the Russian Society for Ecological Economics (ISEE Russian Chapter) in Saint Petersburg, Russia will offer an opportunity to discuss advances in ecological economic approaches to environmentally sustainable policy making. Interdisciplinary and international as well as intercultural dimensions of the conference will help to create a multitude of links among the scientists of the world across geographical as well as disciplinary boundaries. The conference will place particular emphasis on international and regional environmental problems, importance of the protection of the Baltic Region, application of the new methodological approaches of ecological economics, as well as the role of information sciences and modelling in environmental-economic management.

Scope

The Conference will focus mainly on the following topics:

1. Methodological Aspects of Ecological Economics
2. International Environmental Policy and Law
3. Global Environmental Problems
4. Environmental Psychology and Ethics
5. Natural Resources Management
6. Macroeconomics and the Environment
7. Governance and Institutional Aspects of Sustainability Reform
8. Ecological Economics for the Baltic Region
9. Business Computer Information Systems for the Environment
10. Biodiversity and Ecosystem Health
11. Transport, Energy, Industry and the Environment

12. New Environmental Policy Instruments, International and Russian Experience
13. Ecological-Economic Modelling and Complex Systems Science
14. Business and Sustainable Development: Opportunities and Limits

Submission Standards

Authors may submit proposals for plenary sessions, regular parallel sessions, or posters.

Abstracts (max 300 words) should be written in *English*, *Russian* **or** *both English and Russian* (in this case 300 words each) using Times New Roman font, 10 point. Submitting authors must also provide full contact information (name, organization, mailing address, telephone, fax, e-mail) to receive confirmation and all future official correspondence. Please use the registration form at **www.rsee.org** for submitting abstracts. Complete the form, save it changing the filename to "your name.doc" and send it as an attachment to: **s.shmelev@open.ac.uk**.

Early submission of abstracts and registration: **December 15, 2004**

Notification of acceptance: January 15, 2005

Late submission of abstracts and registration: February 15, 2004

Notification of acceptance: March 15, 2005

Submission of full papers: April 1, 2005

Selected papers will be considered for publication in a book of proceedings. A limited number of demonstration stands will be available for business and scientific presentations at the Display Areas.

Language

The working languages of the Conference will be English and Russian. English translation from and into Russian will be provided.

Conference Fee

The full conference fee offers a comprehensive package and includes admission to all sessions, conference proceedings, meals, travel planning assistance, conference dinner, evening White Nights boat trip on St. Petersburg rivers and canals.

Please, register before **December 15, 2004** at these rates:

Non-ISEE Member: 600 euro
ISEE Member: 500 euro
Student/Ph.D. Student (proof required): 300 euro
Accompanying person: 200 euro

There will be an additional fee of 50 euro for registration between December 16 and April 15, 2005.

To become an ISEE member, please visit:

http://www.ecologicaleconomics.org

WATER SA

Water SA is a multidisciplinary journal funded and published by the Water Research Commission (WRC) of South Africa. The journal publishes refereed, original work in all branches of water science, technology and engineering. *Water SA* is introducing a series of special editions on various interdisciplinary themes on water resource management in Africa. The first of these editions is planned in collaboration with the Centre for Environmental Economics and Policy Analysis in Africa (CEEPA), to publish original research work on the contribution of irrigated and rain-fed agriculture to poverty reduction in sub-Saharan and North Africa.

Contributions are invited for this special issue from all branches of scientific water research and policy on approaches to measurement and evaluation of experiences in technological, institutional and policy innovations for *managing water resources* in support of irrigation and rain-fed agricultural production systems for poverty reduction. Please note that the particular emphasis of this special issue is on the role of various aspects of water resource management, and not the contributions of other forces of agricultural change to poverty reduction such as breeding and improved crop management innovations in isolation of associated water management problems and challenges. The special issue will be peer-reviewed by a panel of renowned international experts in the relevant disciplines from Africa and the rest of the world. The final date for submission of manuscripts for this special issue, which will be printed in 2005, is **December 31, 2004**. Submission of work solely authored by or co-authored with Africans is especially encouraged.

Please send manuscripts to:

Rashid M. Hassan, Guest Editor
Special Issue of Water SA 2005
Room 2-6, Agricultural Annex
CEEPA, University of Pretoria,
Pretoria 0002, RSA
duplessisd@postino.up.ac.za
Fax: (27-12) 4204958

MEETINGS AND CONFERENCES

ALLIED SOCIAL SCIENCE ASSOCIATIONS (ASSA)

January 7-9, 2005
Philadelphia, Pennsylvania

Spatial Dynamics of the Urban/Rural Fringe

Presiding: **J.R. DeShazo, University of California, Los Angeles (UCLA)**

Date/Time: **Friday, January 7, 8:00 a.m.**
Place: **Marriott, Room 406**

Papers:

Determinants of Sprawl in the U.S, Marcy Burchfield, Neptis Foundation; Henry Overman, the London School of Economics and Political Science (LSE); and Diego Puga and Matthew A. Turner, University of Toronto.

Housing Density and TDRs: An Empirical Investigation, Virginia McConnell, Elizabeth Kopits and Margaret Walls, Resources for the Future (RFF).

Curbing Excess Sprawl With Congestion Tolls Versus Growth Boundaries: A General Equilibrium Analysis, Alex Anas, State University of New York (SUNY), Buffalo and Hyok-Joo Rhee, Seoul National University.

Estimating Spatial Interactions: Complementarities in Deforestation and Forest Patterns in Coast Rica, Juan Andres Robalino and Alexander Pfaff, Columbia University.

Discussants: Alex Anas, SUNY Buffalo
Randall Walsh, University of Colorado
Antonio Bento, University of Maryland, College Park
Christopher Timmins, Duke University

Environmentally Induced Migration and Community Composition

Presiding: Randall P. Walsh, University of Colorado
Date/Time: Friday, January 7, 10:15 a.m.
Place: Marriott, Room 406

Papers:

A Comparative Evaluation of Market and Non-market Responses to Natural Hazards: The Case of Hurricane Andrew, V. Kerry Smith, Jared C. Carbone, Dan Hallstrom, and Jaren Pope, North Carolina State University.

Mobility Constraints and the Distributional Consequences of Particulate Matter, Chris Timmons, Duke University; Patrick Bayer and Nat Keohane, Yale University.

Evidence of Environmental Migration: Systematic Differences Over Time in Household Mobility, Owner-Occupancy, and Economic Status in the Vicinity of Superfund Sites Versus the Wider Local Area, Trudy Cameron and Ian McConnaha, University of Oregon.

Testing for Environmental Gentrification: Migratory Responses to Changes in Environmental Quality, H. Spencer Banzhaf, RFF, and Randall Walsh, University of Colorado.

Discussants: Kathleen Bell, University of Maine
Ray Palmquist, North Carolina State University
Jay Hamilton, Duke University
Michael Greenstone, Massachusetts Institute of Technology (MIT)

Amenities/Disamenities in the Urban Spatial Environment

Presiding: Trudy Cameron, University of Oregon
Date/Time: Friday, January 7, 2:30 p.m.
Place: Marriott, Room 406

Papers:

Using Property Value and Recreation Models to Value Water Quality in an Urban Watershed, Daniel Phaneuf, Raymond Palmquist, and V. Kerry Smith, North Carolina State University.

Does Hazardous Waste Matter? Evidence From the Housing Market and the Superfund Program, Michael Greenstone and Justin Gallagher, MIT.

The Effects of Endogenous Devolution Policies on the Spatial Distribution of Environmental Quality, W. Bowman Cutter, UC Riverside and J.R. DeShazo, UCLA.

Information, Behavior, and Biology: Using Responses To Smog Alerts To Understand the Relationship Between Ozone and Health, Matthew Neidell, Columbia University.

Discussants: Anna Alberini, University of Maryland (U of MD), College Park
Maureen Cropper, U of MD, College Park
Nathaniel Keohane, Yale University
Patrick Bayer, Yale University

General Equilibrium Effects of Environmental Policies

Presiding: Dallas Burtraw, RFF
Date/Time: Saturday, January 8, 8:00 a.m.
Place: Marriott/Room 406

Papers:

Trade, Politics, and the Environment: Tailpipe vs. Smokestack, Carol McAusland, University of California, Santa Barbara.

General Equilibrium Incidence of Environmental Mandates, Don Fullerton and Garth Heutel, University of Texas at Austin.

What Is the Second-Best Optimal Environmental Tax Rate? Reconciling Results From Representative Agent and Multiple Agent Models, Roberton C. Williams III, University of Texas.

Nonmarket Tax Interactions and the Implications of Average Substitution, Jared C. Carbone and V. Kerry Smith, North Carolina State University.

Discussants: Per Fredriksson, Southern Methodist University
Larry Goulder, Stanford University
Sarah West, Macalester College
Gilbert Metcalf, Tufts University

Issues in Environmental and Resource Economics

Presiding: Catherine Kling, Iowa State University
Date/Time: Saturday, January 8, 10:15 a.m.
Place: Marriott, Room 406

Papers:

The Impact of Policies to Control Motor Vehicle Use in Mumbai, India, Maureen L. Cropper and Akie Takeuchi, University of Maryland, College Park, and Judy L. Baker, Rakhi Basu, and Somik Lall, The World Bank.

Measuring the Preemption of Regulatory Takings in the U.S. Endangered Species Act: Evidence From a Natural Experiment, Michael Margolis, Oberlin College; Daniel Osgood, University of Arizona; John List, University of Maryland, College Park.

The Theory of Exhaustible Resources: What are Econometric Methods Testing? Janie M. Chermak, University of New Mexico, and Robert Patrick, Rutgers University.

The Integer Programming Approach To a Generalized Corner Solution Model: An Application to Recreation Demand, Koichi Kuriyama, Waseda University, and Michael Hanemann, University of California, Berkeley.

Discussants: Alex Pfaff, Columbia University
Amy Ando, University of Illinois
Wolfram Schlenker, UCSD
Roger von Haefen, University of Arizona

Environmental and Natural Resource Economics in Federal Agencies: A Panel of Economist Managers

Presiding: Scott Farrow, U.S. General Accounting Office (GAO)
Date/Time: Saturday, January 8, 2:30 p.m.
Place: Marriott, Room 406

Panel:

Al McGartland, Director, National Center for Environmental Economics (NCEE), U.S. Environmental Protection Agency (EPA)

Howard Gruenspecht, Deputy Administrator, Energy Information Administration, U.S. Department of Energy

Abe Haspel, Assistant Deputy Secretary, U.S. Department of the Interior

Carol Jones, Associate Director for Research, Economic Research Service, U.S. Department of Agriculture

Rebecca Lent, Deputy Assistant Administrator for Regulatory Programs, National Oceanic and Atmospheric Administration (NOAA) Fisheries/NMFS, U.S. Department of Commerce

Randall Lutter, Chief Economist, U.S. Food and Drug Administration (FDA)

Martin Brown, Branch Chief, Health Services and Economics, National Cancer Institute

Discussant: None

Issues in Fisheries Economics

Presiding: James E. Wilen, UC, Davis

Date/Time: Sunday, January 9, 8:00 a.m.
Place: Marriott, Grand Ballroom—Salon K

Papers:

Asset Pricing in Created Markets for Fishing Quotas, Kerry L. Papps, Cornell University; Richard Newell and James Sanchirico, RFF.

Search and Learning With Correlated Information: Theory and Evidence From Professional Fishermen, Philippe Marcoul and Quinn Weninger, Iowa State University.

Effects of Marine Protected Areas on Fishing Productivity and Behavior in the Gulf of Mexico, Martin D. Smith and Junjie Zhang, Duke University; Felicia C. Coleman, Florida State University.

Meetings with Costly Participation: An Empirical Analysis, Matthew A. Turner, University of Toronto, and Quinn Weninger, Iowa State University.

Discussants: Andrew Plantinga, Oregon State University
Chris Anderson, University of Rhode Island
James Sanchirico, RFF
Kurt Schnier, Univ. of Rhode Island

Managing Fisheries and Enhancing Marine Biodiversity

Presiding: Richard Carson, UC, San Diego

Date/Time: Sunday, January 9, 10:15 a.m.
Place: Marriott, Grand Ballroom—Salon K

Papers:

Are Current Fisheries Management Models Wrong? An Error Correction Approach to Reconciling the Historical Records on Fish Stocks, Richard Carson and Clive Granger, UC San Diego; Jeremy Jackson, Scripps Institution of Oceanography; and Wolfram Schlenker, UC San Diego.

Marine Reserves: the Importance of Economic and Biological Spatial Processes, James Wilen and Louis Botsford, UC Davis; James Sanchirico, RFF; and Martin Smith, Duke University.

Design of an Implementable and Effective International Plan to Reduce Overfishing, Scott Barrett, The Johns Hopkins University; Theodore Groves, UC San Diego; Jim Joseph, Interamerican Tropical Tuna Commission; and Dale Squires, National Marine Fisheries Service.

Discussant: Geoffrey Heal, Columbia University

AUBURN UNIVERSITY CENTER FOR FOREST SUSTAINABILITY

Emerging Issues Along Urban/Rural Interfaces: Linking Science and Society

March 13-16, 2005
Atlanta, Georgia

Auburn University's Center for Forest Sustainability, in cooperation with the U.S. Forest Service and National Science Foundation, is organizing an international conference: "Emerging Issues Along Urban/Rural Interfaces: Linking Science and Society" to be held March 13-16, 2005 at the downtown Hilton, in Atlanta, Georgia. This conference will explore the challenges and opportunities created by urban/rural interfaces of various sorts: ecological, political, economic, etc. We believe that this conference will be of interest/relevance to a broad spectrum of individuals, especially those charged with urban planning, managing urban sprawl, and dealing with aspects of urban sprawl.

Purpose

Urbanization is driven by a combination of economic and social factors. The pace and structure of urbanization is affected additionally by political considerations. In turn, urbanization has numerous direct and indirect impacts on environmental ecology. Closing the loop, ecological considerations (e.g., water quality, changing wildlife populations, availability of green space, timber supply) come back and affect urban dwellers. This necessarily means that tackling problems that are thought to be essentially ecological cannot be divorced from economic/social/political considerations. Moreover, the extent to which solutions to a whole host of urban/rural interface issues protect or compromise landowners' private property rights affects landowner incentives, with extraordinarily significant consequences.

To move forward productively and as harmoniously as possible between interest groups with different perspectives, there must be informed discussion of issues, concerns, and (too frequently missing from the discussion) opportunities created along urban/rural interfaces. Informed discussion requires the ecologists to be talking with the human dimensions people. Historically (and now), this simply has not happened in any significant measure. If we have pressing ecological problems, then proposed solutions had better be economically viable/sustainable or they are politically dead on arrival everywhere around the world. By the same token, pressing ecological problems may offer significant economic opportunities that heretofore have not been appreciated, in part because the two sides have not been talking with each other.

So the overarching theme of our conference is linking human dimensions aspects of urban/rural interfaces with ecological aspects of urban/rural interfaces. We believe that such linkages offer the promise of new, powerful insights for understanding the forces that shape, and are shaped by, urbanization and offer more compelling understanding of the causes and consequences of urbanization-related policies.

We take a broad view of urban/rural interfaces, not just the physical interface between cities and agricultural, timber, or wild land. Policies enacted by urban dwellers touch the lives of rural landowners, as well as those whose economic or private well-being depends, in part, on how that land is used. This means that there are a lot of people, from diverse backgrounds, who have meaningful contributions to make to our conference and/or who might benefit from what conference participants bring to the discussions. We'd like to attract the interest and participation of both groups.

Speakers

Joseph Chamie, Director, United Nations Population Division
Clifford S. Duke, Director of Science Programs, Ecological Society of America
Peter Groffman, Institute of Ecosystem Studies
Jianquo (Jack) Liu, Michigan State University
David N. Wear, Project Leader, Southern Research Station, USDA Forest Service

Cost

We hope to bring people together and encourage them to interact with each other. Thus, the conference registration fee ($375 regular; $125 student) covers all meals except dinners. We have an exceptionally favorable room rate of $99 per night at the downtown Atlanta Hilton, which is located just a few blocks from Olympic Park. Consequently, we hope that such a good rate will encourage conference attendees to stay at the Hilton, helping us meet our room commitment.

Post-Conference Publication

There will be a Conference Proceedings volume published and we are in discussions about the possibility of developing a (shorter) book of reviewed papers.

Registration

The conference registration form is available on our website; it must be completed and mailed or faxed to us for processing.

http://www.sfws.auburn.edu/urbanruralinterfaces/

Hotel registration is available through the website, which has a link to the Hilton website.

For more information, please visit our website or contact:

Lisa Ditchkoff, Conference Planner
Telephone: 334-329-8288
E-mail: Interface@pepsnow.com

or

Dr. David N. Laband, Conference Coordinator
Telephone: 334-844-1074
E-mail: labandn@auburn.edu

SOUTHERN ECONOMIC ASSOCIATION (SEA)

2004 Annual Meeting

November 21-23, 2004
New Orleans, LA

AERE Sessions

Environmental Risk and Choice

Chair: Brett Baden, Tufts University
Date/Time: Sunday, November 21, 8:00 a.m.

Papers:

The Economic and Health Risk Trade Offs of Swim Closures At a Lake Michigan Beach, Don Coursey, University of Chicago.

Policy Decisions under Uncertainty: Models of 'Snow Day' School Closures, Doug Noonan, Georgia Institute of Technology (Georgia Tech)

Hurricane Relief, Social Capital, and Group Behavior, Marco Castillo, Georgia State University.

Water Risk and Firms' Responses to Regulation, Jay Shimshack, Tufts University.

Discussants: Brett Baden, Tufts University
Gary Hoover, University of Alabama
Mohan Turaga, Georgia Tech

International Environmental Economics

Chair: Michele Villinski, DePaul University
Date/Time: Sunday, November 21, 10:00 a.m.

Papers:

People, Economic Improvement and Participation—the Critical Dimensions in Community Protected Areas Relations: El Castillo / Volcan Arenal National Park, a 21st Century Real Life Case in Costa Rica, Juan Aguirre, Center for Sustainable Development.

Integration and Environmental Policy in the EU: Has the EU Engaged in the Development of Pollution Havens? Lisa Cave and Glenn C. Blomquist, University of Kentucky.

Environmental Performance in Swedish Manufacturing 1913-1990, Runar Brannlund, Umeå University; B. M. Balk, Erasmus University; R. Färe and S. Grosskopf, Oregon State University; and M. Lindmark, Umeå University.

Shadow Prices for Undesirables in Swedish Industry - Are There Environmental Kuznets Curves? Mattias Ankarhem, Umeå University.

Discussants: David Martin, Davidson College
Michele Villinski, DePaul University
Christian Langpap, Tulane University
Glenn C. Blomquist, Univ. of Kentucky

Environmental Economics in Urban Settings

Chair: Don Coursey, University of Chicago
Date/Time: Sunday, November 21, 1:15 p.m.

Papers:

Spatial Decay of Urban Disamenities and Environmental Justice, Brett Baden, Tufts University.

National Parks Downtown: Allocation of Urban Cultural Park, Doug Noonan, Georgia Tech.

Indoor Air Quality Regulation, Gary Hoover, University of Alabama.

Solid Waste Services, Pricing, and Regulation, Glenn Cassidy, Georgia Tech.

Discussants: Don Coursey, University of Chicago
Marco Castillo, Georgia State University
Mohan Turaga, Georgia Tech

Environmental Policy

Chair: John C. Whitehead, Appalachian State University
Date/Time: Monday, November 22, 8:00 a.m.

Papers:

Pollution Abatement with Limited Enforcement Power and Citizen Suits, Christian Langpap, Tulane University.

Explaining State Adoption of Environmental Audit Legislation, Sarah L. Stafford, College of William and Mary.

Cross Media Pollution, Common Agency and Mechanism Design—Can We Avoid Future MTBE's? Linda Fernandez, University of California (UC), Riverside and Christopher F. Dumas, University of North Carolina (UNC) at Wilmington.

Self-Reporting and Private Enforcement in Environmental Regulation, Christian Langpap, Tulane.

Discussants: Bowman Cutter, UC, Riverside
Mattias Ankarhem, Umeå University
Juan Aguirre, Center for Sustainable Development
Robert Dawson, Washington College

Land Use

Chair: David Martin, Davidson College
Date/Time: Monday, November 22, 10:00 a.m.

Papers:

Measuring Home Owners' Preferences of Land Use Policy, Environmental Amenities, and Public Services, Seong-Hoon Cho and David H. Newman, University of Georgia.

What is the Value of a Conservation Easement? Evidence from Baltimore County, Maryland, Jeffrey Michael, Towson University.

A Comparison of Efficiency of Alternative Methods to Analyze the Ranked Order Data, Krishna P. Paudel Michael A. Dunn, Doleswar Bhandari, Richard P. Vlosky, and Kurt Guidry, Louisiana State University.

A Market Simulation Approach for Improving Understanding of Wetland Restoration Choice Behavior of Landowners, Jonathan I. Eisen-Hecht, Randall A. Kramer, and Joel Huber, Duke University.

Discussants: Runar Brannlund, Umeå University
David Martin, Davidson College
Jonathan Eisen-Hecht, Duke
Craig E. Landry, East Carolina University

Valuation

Chair: Glenn C. Blomquist (U. of Kentucky)
Date/Time: Monday, November 22, 2:15 p.m.

Papers:

Explaining the Discrepancies Between Real and Hypothetical Willingness to Pay Values: Information Effect on a Threshold Good, Krishna P. Paudel, Michael A. Dunn, Doleswar Bhandari, Richard P. Vlosky, and Kurt Guidry, LSU.

Hypothetical Bias and Scope, Todd L. Cherry and John C. Whitehead, Appalachian State.

The On-site Cost Model Revisited: Combining Stated and Revealed Preference Travel Cost Data in the Valuation of Changes in Beach Quality, Craig E. Landry, East Carolina University and Kenneth E. McConnell, University of Maryland, College Park.

Discussants: Seong-Hoon Cho, Univ. of Georgia
Krishna P. Paudel, LSU
David W. Carter, National Oceanic and Atmospheric Administration (NOAA)

Fisheries

Chair: Christopher F. Dumas, UNC Wilmington
Date/Time: Tuesday, November 23, 8:00 a.m.

Papers:

Vertical Integration in the Post-IFQ Halibut Fishery, Robert Dawson, Washington College.

Effort Response, Harvest, and Climate in the Gulf of Mexico Recreational Fishery: A Vector-Autoregression Analysis, David W. Carter, NOAA, and David Letson University of Miami.

Measuring the Welfare Effects of Resource Management Policies on Multi-Product Firms: An Application to the Black Sea Bass Fishery, Juan J. Agar, NOAA Fisheries

Discussants: Sarah L. Stafford, College of William and Mary
John C. Whitehead, Appalachian State
Christopher F. Dumas, UNC Wilmington

Natural Resources

Chair: Michael A. Dunn, LSU
Date/Time: Tuesday, November 23, 10:00 a.m.

Papers:

Where to Allocate New Forest Reserves? An Analysis of the Consequences of Alternative Allocation Rules, Runar Brannlund, Umeå University, and Peichen Gong, Swedish University of Agricultural Sciences.

Pricing Groundwater Recharge, Bowman Cutter, UC, Riverside.

The Value of Option Contracts for Water: Colorado and Texas Compared, Michele Villinski, DePauw University.

Discussants: Jeffrey Michael, Towson University
Michael A. Dunn, LSU
John C. Whitehead, Appalachian State

THIRD WORLD CONGRESS OF ENVIRONMENTAL AND RESOURCE ECONOMISTS

July 3-7, 2006

Kyoto International Conference Hall
Kyoto, Japan

The third World Congress of Environmental and Resource Economists will be held at the Kyoto International Conference Hall on July 3-7, 2006. The facility where the Congress will be held is most famously the site of the 3rd Session of the Conference of the Parties (COP3) United Nations Framework Convention on Climate Change that produced the Kyoto Protocol. The Congress is organized by the Japanese Association of Environmental Economists (called the Society of Environmental Economics and Policy Studies: SEEPS), the Association of Environmental and Resource Economists (AERE), and the European Association of Environmental and Resource Economists (EAERE), in cooperation with the Latin American and Caribbean Association of Environmental and Resource Economists (ALEAR). About 1000 people attended the second World Congress in Monterey, California in 2002 and we are hoping for similar attendance at Kyoto.

Kyoto was the capital of Japan for over 1000 years and remains the center of Japanese culture and history, an amazing blend of modern convenience with ancient tradition. A myriad of temples, shrines, natural beauty, old architecture, and traditional arts and crafts can be found in Kyoto. The historical monuments of ancient Kyoto have been recognized by UNESCO as World Cultural Heritage sites. The Kyoto International Conference Hall is located in the north of Kyoto city. The journey from Kansai International Airport to Kyoto Station by the Kansai Airport Express train "Haruka" takes around 75 minutes. From Kyoto Station, Kyoto International Conference Hall is merely a 20-minute ride on the Subway Karasuma Line. Kyoto has a wide variety of accommodations, from Western-style hotels to traditional Japanese-style inns. The city has more than 20,000 guest rooms and accommodations can be found to suit all tastes and budgets.

The web site for the Congress has been opened at which information can be obtained and registration will be able to be completed. Please visit:

http://www.worldcongress3.org

for further information. In addition to the usual array of conference sessions, symposia and invited keynote speeches, the Congress organizers are considering adding some special events such as short courses covering particular areas of interest or perhaps mini-conferences on more specialized topics. These would be held just before or after the Congress. Suggestions for special activities that could enrich the intellectual fare at the Congress are welcome.

Takamitsu SAWA
Chair of Organizing Committee
Kyoto University
Institute of Economic Research

WASTE—THE SOCIAL CONTEXT

May 11-14, 2005
Edmonton, Alberta, Canada

The history of waste in the last 100 years is a vivid reflection of the industrialized world's move toward mass consumption and the rise of a throwaway ethic. While the solutions to our waste problems are often focused on technology, the environmental and social aspects have been widely neglected. *Waste—the Social Context* provides a forum for discussion on the broader implications of waste. By bringing together researchers and practitioners from a wide variety of disciplines, the conference will provide a holistic perspective of waste management—its challenges and solutions.

Conference keynote speaker, William Rees, will discuss the 'ecological footprint analysis', one of the major areas of his internationally acclaimed research. His research reveals the fundamental incompatibility between continued material economic growth and ecological security. William Rees is currently a professor at the School of Community & Regional Planning at the University of British Columbia, in Vancouver, Canada.

Registration

The Registration Form for this conference will be available on our website at:

www.ewmce.com

Registration Fees:
Early bird (before April 1, 2005): $350
After April 1, 2005: $400
Students: $100

Accommodation

Accommodation for conference participants will be available at the conference venue, The Sutton PlaceHotel Edmonton. Detailed information will soon be posted on our website at:

www.ewmce.com.

The Conference Venue

The conference will take place at The Sutton Place Hotel Edmonton in the city's downtown area, one of Edmonton's premier business hotels. The hotel is located in the heart of Edmonton's arts, theatre, shopping and dining district.

Alberta's capital city, Edmonton, is renowned for its festivals and cultural events, West Edmonton Mall and professional sports. Edmonton's lush river valley is the largest stretch of urban parkland in North America. Only a three-hour drive from the Canadian Rockies, Edmonton is the gateway to some of Canada's most spectacular scenery. We invite you to experience western hospitality at its best.

Contact

Dr. Jerry Leonard
Edmonton Waste Management
Centre of Excellence
13111 Meridian Street
Edmonton, Alberta Canada T6S 1G9
Telephone: (780) 496-6872
Fax: (780) 496-5668
Email: jerry.leonard@edmonton.ca

ESSAYS

Future Directions for Environmental Economics Research Support: EPA's Environment Economics Research Strategy

Matthew Clark*
U.S. EPA Office of Research and Development

Introduction

Most environmental economists are well aware that the U.S. Environmental Protection Agency (EPA) and other environmental management agencies need high-quality environmental economics research on which to base and evaluate policies and practices. They are also generally aware that increasing the cost-effectiveness of environmental policies and regulations by using economic tools and analyses can generate significant cost savings annually. This can only occur if agencies can get the right economic information into the hands of policymakers.

Over the past 2 1/2 years, a team of EPA economists has been developing a strategy to identify the environmental economics research investments that are most useful to achieve EPA's mission. The resulting document, the Environmental Economics Research Strategy (EERS) (see at: http://www.epa.gov/ord/htm/researchstrategies.htm) will guide EPA's future environmental economics research investments, both internal and through grants to research institutions, for the next five to ten years. The objectives of the EERS were to identify research priorities important to EPA, the states and others over the long term, to evaluate where EPA economic research can make a significant contribution to both science and policymaking, and to communicate EPA's priorities to researchers and other stakeholders.

Why Did EPA Need an Environmental Economics Research Strategy?

For the first time, this research strategy coordinated EPA economic research efforts with identified needs, identified the comparative advantages of the tools available to EPA to fill research gaps, and laid out an approach to meet the highest priority needs. Most importantly, it gave EPA researchers, analysts and managers an opportunity to step back from day-to-day needs and look at long-term program and Agency directions, and decide what kind of economic information or tools would be most useful for the future. The result is a document that describes not only the top-most priority areas for research but a host of other research topics suggested by EPA economists and peer reviewers, and the tools EPA can use to address these topics.

Research activities in EPA's Office of Research and Development (ORD) are always based on peer-reviewed research strategies. For any given research area, the act of developing a strategy forces both EPA and grant-supported researchers to coordinate projects, become familiar with the current state of the science, identify objectives consistent with EPA's mission, and demonstrate how the research will lead to improved environmental outcomes.

By developing and implementing the EERS, EPA is recognizing that environmental economics and behavioral research is an essential component of a first-class environmental research program. EPA managers and science administrators alike recognize that the causes of and remedies for environmental problems are behavioral, and that economics research can provide reliable indicators about how people and firms will respond to different behavior-changing interventions. The adoption of the EERS signifies a sustained EPA commitment to using high-quality economics and decision sciences research to determine the best and most cost-effective ways to achieve environmental quality.

How Was the EERS Developed?

The EERS was developed by a team of economists from the National Center for Environmental Research (NCER), EPA's grant-making arm located in ORD, and the National Center for Environmental Economics (NCEE), EPA's economic research and support office. The team designed a customer-based survey intended to provide direction to the Agency's economic research priorities and therefore support the development of the most useful research products. The research strategy team worked with economists and other consumers of economic analyses in EPA's "program" offices (e.g., air, water, hazardous waste), EPA's regional offices and

* Acknowledgements: I would like to thank members of the Environmental Economics Research Strategy Team: Alan Carlin, Chris Dockins, Brian Heniger, Julie Hewitt, Will Wheeler, Lanelle Wiggins and Ann Wolverton for their team effort on this. However, the author is solely responsible for the content.

ORD researchers from other disciplines to identify and rank research needs. The team interviewed over 70 EPA economists and managers, aggregated the results across organizational units (see Table 1 for criteria), and came up with a short list of broadly defined priority research areas.

Table 1. General Research Priorities

Research Topics	Rank Based on Long Term	Rank Based on Short Term	Rank based on Number of Offices	Number of Offices
Valuation of Reduced Morbidity Benefits	1	3	2	5
Environmental (Compliance) Behavior & Decision-Making	2	2	2	5
Valuation of Ecological Benefits	3	5	2	5
Benefits of Environmental Information Disclosure	4	4	10	2
Valuation of Mortality Benefits	5	1	7	3
Market Mechanisms & Incentives, Other than Trading	5	7	1	7
Green Accounting/International Trade/Finance	7	9	6	4
Market Mechanisms and Incentives, Trading	8	6	2	5
Discounting/Intergenerational Equity	9	8	7	3
Risk & Uncertainty: Techniques, Integration with Valuation, etc	9	10	7	3

The EERS team focused on the highest priorities among these research areas, reviewed existing literature in each area, and identified major gaps where new high-quality research would be both feasible and relevant to EPA's mission.

The EERS team then evaluated the tools available to EPA (e.g., internal research, grants, contracts and cooperative agreements) and made initial determinations of which could be used to address the research needs over the short and long term. Each tool varies in its ability to generate research results in the short versus long term, in the degree of EPA's participation in and influence on research outcomes, in the expected quality and transferability of research results, and in its ability to supply basic versus applied research. These characteristics have to be matched to the type and timing of research results required by EPA for each strategic research objective.

EPA's research centers, including the National Center for Environmental Economics (NCEE) and the Office of Research and Development (ORD), can also be substitutes for or complements to externally funded research. NCEE has a concentration of environmental economists who are well suited to conduct research and analysis on crosscutting issues in support of EPA program and regional offices. NCEE also provides research-based guidance, workshops and seminars that integrate internal and external research outcomes. ORD has a large number of toxicologists, epidemiologists, engineers and ecologists who work with economists on multi-disciplinary research projects. ORD also funds a large amount of economics research through NCER's STAR grants program. NCER also works very closely with NCEE on all aspects of grant RFAs.

A panel of academic economists and decision scientists, the Environmental Economics Advisory Committee (EEAC), provided a peer review of a draft of the EERS (see: http://www.epa.gov/sab/eeamem03.htm). The EEAC is a sub-committee of EPA's Science Advisory Board (SAB), a standing committee tasked with advising EPA on science issues.

The EEAC concluded that the EERS's strategic research objectives were appropriate and that EPA had accurately characterized gaps in the literature. The review panel made several important suggestions for improving the document, including recommendations that EPA: increase its emphasis on valuation methods; develop interdisciplinary approaches for both health and ecological valuation; expand its research focus on compliance behavior to all environmental behavior; evaluate the effects of regulations and other interventions on innovation; investigate risk-risk tradeoffs associated with interventions; and extend the outreach component of the strategy to more outlets and formats. The EERS team incorporated many of the EEAC's comments into the final EERS. This approach allowed the EERS to blend both practitioner and academic knowledge into a single, comprehensive set of research objectives.

What Research Areas Are Highlighted in the EERS and What Did the Peer Reviewers Say About Them?

EPA economists identified a number of somewhat generic research priorities (Table 1). The EERS team further categorized the most highly ranked priorities into four major research areas: (1) Valuation of Health Risk Reductions; (2) Valuation of Ecosystems; (3) Environmental Behavior and the Effectiveness of Government Interventions; and (4) Market Mechanisms and Incentives. EPA uses this categorization to focus resources rather than have them distributed across all behavioral science areas since a focused approach can create a "weight of evidence" in each of these areas. Each area appeals to different researchers and disciplines, and has different clients within EPA and for outside stakeholders. The EEAC peer review panel agreed that each of these four areas was a high priority for economics research.

Valuation of Human Health Benefits

The first major research area is valuation of human health benefits. A significant number of EPA economists thought that significant resources already had been invested in one subset of this research area–valuing the benefits of reduced mortality risks–and that there was comparatively little remaining uncertainty. By contrast, EPA economists thought that the value of reducing environmentally caused morbidity effects was characterized by more uncertainty and missing values. There are a large number of unpriced environmentally-related health problems, difficulties addressing chronic and acute conditions, and inherent theoretical problems plaguing potentially useful approaches to estimating morbidity reduction values, such as health status indices. EPA economists rather strongly recommended investing resources in approaches to comprehensively address reduced morbidity benefit estimation.

The EEAC agreed with EPA economists on the morbidity issue, but disagreed somewhat on the mortality issue. The panel thought that the issue of co-morbidity, i.e., linked mortality and morbidity should be a focus of EPA research. They also thought that emphasis should be placed on developing newer, more reliable estimates of the value of a statistical life (VSL), depending on results of current studies. Evaluating marginal versus non-marginal risk valuation or how marginal risk changes can be aggregated to provide estimates of average or cumulative risk changes was the third area the panel suggested. The EEAC further recommended research on the effect of income on the VSL and, more generally, the effects of household characteristics on willingness to pay (WTP) for both morbidity and mortality benefits. Finally, they recommended joint economic-epidemiological research, a practice EPA has already initiated with a wider array of health scientists. EPA will sort out the sequence for addressing and integrating these topics in a follow-up implementation plan (see below).

Ecosystem Valuation

The second research topic, ecosystem valuation, was a high priority to EPA economists for much the same reason as morbidity valuation. Despite numerous existing studies, there remains a lot of uncertainty about how to best value ecosystems. Ecosystems provide a range of services, some of which can be priced in markets while others are strictly non-market goods that require alternative valuation approaches. To value nonmarketed ecological services, people must be familiar with them, which can require complex valuation approaches that combine education and value elicitation to obtain reliable willingness-to-pay measures. Ecosystems differ markedly in the services they provide on local and regional scales and in the presence or absence of substitutes, making aggregating values over large areas or populations problematic.

Typically, EPA's difficulty estimating ecosystem services has led to qualitative descriptions of benefits and implicit zero values in benefit-cost calculations. EPA has been recently criticized by outside scientists for failing to include improvements to ecosystems in its benefit-cost analyses.

EEAC reviewers frankly questioned traditional approaches to eliciting ecological values and recommended that economists work more closely with ecologists to establish mutually agreed-upon descriptions of ecosystems, bundles of ecosystem services, and changes wrought by anthropogenic insults. EPA currently is developing an Ecological Benefits Strategic Plan involving both ecologists and economists to address these issues. (See the next AERE essay for a brief preview of the Ecological Benefits Strategic Plan). Panelists also thought benefits would be ecosystem-specific, making aggregation problematic. They recommended pursuing benefits-transfer approaches for ecological valuation despite their inherent challenge.

Valuation Methods

EPA specifically asked the EEAC to suggest priorities for methods development. In response, EEAC panelists recommended more methodological research for both ecological and health valuation, such as improved methods and tools for benefits transfer; improved methods for aggregating individual welfare estimates to the full population; further study of the divergence between willingness-to-pay and willingness-to-accept values and the conditions favoring the use of one or the other; increased understanding of the appropriate valuation of the opportunity cost of time in revealed preference studies; improved bid design methods for stated preference surveys; and improved methods for combination of stated and revealed preference data. Methods research was not a priority for EPA economists, who tend to prefer applied research.

Environmental Behavior and the Effectiveness of Government Interventions

The third research area, environmental behavior and the effectiveness of government interventions, covers everything from firm and industry responses to inspections, penalties and fines to the effectiveness of information disclosure, public-private partnerships, industry-led voluntary programs, green labeling and environmental management systems. Every EPA program was interested in compliance behavior; that is, what steps do firms and facilities take to comply with environmental policies and regulations? A closely related question is how firms perceive the costs associated with environmental compliance or non-compliance. For example, are decisions about adopting environmental improvements based solely on accounting notions of capital and operations and maintenance (O&M) costs or do company decision-makers consider the risk of penalties, damage to their reputations, loss of market share or increased transaction costs?

The EEAC thought the third research area was one of the most important priorities faced by EPA and recommended keeping this area broad enough to address a range of behaviors and interventions, rather than focus it primarily on “compliance.” They also recommended folding the previously separate topic of “Benefits of Environmental Information Disclosure” into this area of research. The panel also suggested investigating interactive models of “regulator-regulated” behavior, and evaluating public-sector as well as private-sector responses to regulations. Finally, panelists suggested using multiple approaches, including case studies, to better understand unobserved determinants of regulated entities’ behavior.

Because the environmental behavior area is so broad and multi-disciplinary, EPA will be addressing and funding research on individual topics separately, for example, the effectiveness of voluntary programs, impacts of environmental information disclosure, or compliance behavior. This focusing effort should generate enough research in each area to draw some policy-relevant conclusions.

Market Mechanisms and Incentives

The final research area, market mechanisms and incentives would have been EPA’s top economics research priority if all sub-elements of this research area had been combined. Consistent with EPA’s increased emphasis on using voluntary and market-based instruments for achieving environmental goals, EPA programs were interested both in studies of tradable emissions permit programs and incentives other than emissions trading, although the latter was largely unspecified. EPA economists were particularly interested in research on the performance of existing tradable permit markets, such as the Acid Rain (sulfur dioxide) trading program involving electric utilities. They also wanted analyses and recommendations for the design of new, untried markets–for example, to control stormwater management or agricultural runoff. The EEAC suggested specifically addressing financial mechanisms such as pollution taxes, user or congestion fees, deposit-refund systems, old-car scrappage schemes and the role of torts and liability. EPA will attempt to address these additional concerns as resources allow.

What Are the Next Steps?

EPA will be developing a multi-year plan to implement the research strategy. This plan will be much more specific and will lay out a timetable detailing individual research projects and elements of grant solicitations, and estimated budgets for each project and solicitation. It will also make explicit links between planned research efforts and expected results and EPA’s overall goals. Due to uncertainties surrounding both research and policy directions, this multi-year plan will be flexible and responsive to changing conditions, while still providing researchers and other stakeholders clear indications of EPA's intended research directions.

How Can Researchers and Others Make Use of the EERS?

Economic researchers in EPA, other federal agencies, academics, states, local governments and others can consult the EERS to understand the types of economic research EPA (in particular, NCEE and NCER) has planned and the results the Agency hopes to achieve. Academic researchers can use the EERS to plan their own research or analyses to supplement, complement, leverage or otherwise make the best use of EPA's efforts. Researchers are advised to keep apprised of progress in developing the multi-year implementation plan which will provide more predictability about both the scope and scale of EPA's research commitments.

How Will EPA Communicate Solicitation Announcements and Results?

There are two communication issues that will determine the effectiveness of the EERS: (1) How well EPA communicates its intentions to fund and conduct research for as wide a range of qualified academic researchers as possible; and (2) How well the EPA communicates research results to federal, state, local policymakers, as well as private industry, practitioners, and the research community.

In neither of the above areas is EPA starting from scratch. To communicate research opportunities to investigators, EPA will continue to post solicitations (called RFAs or Requests for Applications) on the NCER web site (http://es.epa.gov/ncer/rfa/) and staff research projects on the NCEE web site (http://yosemite1.epa.gov/EE/epa/staff.nsf/Research+Interest) and various EPA web pages. To better reach academic economists, the EEAC encouraged EPA to reach beyond these traditional outlets, and to schedule sessions at the annual Allied Social Science Associations (ASSA) and American Agricultural Economics Association (AAEA) meetings in order to communicate this research strategy and subsequent plans and research opportunities. Session proposals have been developed jointly by EPA economists and EEAC panelists for the 2005 AAEA meetings and other venues. This essay is an obvious first step in communicating to environmental economists, and provides useful links to relevant information sources.

The second communication issue, getting results into the hands of people who can use them, is more complex. There are many potential clients for results of this type of research, e.g., the legislative and executive branches of federal, state and local governments, international agencies, industry associations, nonprofits and, of course, other researchers. However, unless the research is demonstrably useful to these clients, it will be hard to justify continued allocation of scarce resources to this concern, despite the potential efficiency gains.

EPA will continue to communicate and disseminate research results through existing venues such as EPA workshops seminars, and document databases, and to develop new venues where appropriate. EPA's workshops are well-attended by both practitioners and researchers, and create an important link between the two. Additionally, EPA has developed summary capsules of research areas and uses these to communicate with stakeholders. Beyond that, researchers will have to help EPA identify potential users, create new avenues to introduce their research to potential users, and communicate research in ways that more general audiences can understand. There may even be a market for a more pragmatic environmental economics and decision-making journal. EPA will continue to expand its publication and outreach efforts on both ends of the research process, and be open to innovative suggestions from the research community.

How Academic Economists Can Improve Benefit Transfers at EPA

Sabrina Lovell, Steve Newbold,
Nicole Owens, TJ Wyatt
U.S. Environmental Protection Agency[1]

Economic analysis plays several important roles at the U.S. Environmental Protection Agengy (EPA), including evaluating existing or proposed policies, developing new policies, and communicating the overall impacts on society of environmental problems and potential remedies (Morgenstern 1997). In many cases, an economic analysis, usually in the form of a benefit-cost analysis, is required for proposed regulations.[2] Even in cases where it is not required, an economic analysis can provide a useful framework for integrating the expected public health, ecological, and other types of impacts of new or existing policies into a single overall measure and presenting those impacts in terms easily understood by decisionmakers and the public.

In carrying out economic analyses, EPA relies heavily on benefit transfer, which uses results from existing studies to estimate benefits for new policy cases. The advantage is that benefits can be estimated for many policy cases where resource and time constraints preclude original studies, which is common in regulatory settings, but the disadvantage is that the resulting benefit estimates may be substantially less accurate than those from original studies. The accuracy of benefit transfer depends on a number of factors, including: (1) the accuracy of the original study, (2) the similarities between the resources or commodities valued in the study cases and those in the policy case, and (3) the magnitude of the changes valued in the study cases relative to those expected from the policy.

Because of the high standards of quality maintained by economics journals, the first factor rarely is the limiting one. Rather, the second and third factors–which together can be thought of as "policy relevance"–are usually the keys to a successful benefit transfer. Thus, academic researchers could make their work more useful for economic analyses at EPA by focusing on resources that may be affected by EPA policies, and by valuing changes in those resources that plausibly could be brought about by such policies. This is not necessarily easy to do in practice, as it may require divining more about the upcoming regulatory agenda and the nature and scope of new policies being considered by EPA than is reasonable to expect. Thus, it is incumbent upon EPA to communicate its needs clearly and frequently to the academic research community.

Specific research needs are communicated through the Science To Achieve Results (STAR) and other similar grants programs, and through specialized workshops, invited presentations, and informal discussions with academics and other outside researchers. More general research needs are communicated through various Agency reports and planning documents. For example, EPA's *Guidelines for Preparing Economic Analyses* (US EPA 2000), while primarily intended to provide guidance to analysts within the Agency, also discusses some of the practical limitations of conducting economic analyses in a regulatory setting, including gaps in the existing literature. Also, EPA's recently released *Environmental Economics Research Strategy* (EERS) (U.S. EPA 2004) lays out the general research topics that EPA intends to investigate or support for the next few years, including market mechanisms and incentives, the valuation of human health, environmental compliance behavior, the valuation of ecological benefits, and environmental information disclosure. Both the EERS and EPA's most recent STAR grant solicitation in the area of economic valuation place a high priority on improved methods for benefit transfer.

The continuing need for improved communication between Agency economists and the rest of the environmental economics community about EPA research was the motivation for a recent Organized Symposium at the 2004 annual meetings of the American Agricultural Economics Association (AAEA). Three presentations by EPA economists opened the Symposium, the first on EPA's *Ecological Benefits Assessment Strategic Plan* (in preparation), and second and third on case studies that illustrated the need for more policy relevant research.

The first presentation discussed EPA's *Ecological Benefits Assessment Strategic Plan*, which lays out a roadmap for EPA to improve its ability to value the

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[1] Address all correspondence to Nicole Owens, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW (MC 1809T), Washington, DC 20460, owens.nicole@epa.gov. The authors thank John Loomis, Kathleen Segerson, and Steve Swallow for their participation in "Who Will Help the Social Planner?" an organized symposium at the AAEA's 2004 Annual Meeting. The views expressed are those of the authors and not necessarily those of the Environmental Protection Agency. No official Agency endorsement should be inferred.

[2] Executive Order 12866 requires analysis of benefits and costs for all significant regulatory actions, including those expected to have an annual economic impact of $100 million or more.

ecological impacts of its policies. This may involve some changes in internal institutional arrangements that affect the way ecological and economic analyses are carried out in the Agency, but the Plan also discusses many areas at the interface of ecological and economic analysis where more research is needed. For example, the Plan recommends developing a set of standardized measures of ecological conditions that are closely related to human well-being and will likely be affected by a variety of EPA policies. Analogues in the human health domain include the risk of mortality and the frequency of cancer cases. Examples in the ecological domain might include the abundances of particular species targeted for consumptive (e.g., recreational fishing) or nonconsumptive recreation (e.g., bird watching), water quality measures indicating the suitability of the nation's water bodies for recreational activities such as swimming and boating, and measures of the extent and functioning of wetlands and other natural ecosystems. Standardized measures of human health conditions are used regularly in economics research, but measures of ecological conditions have not been standardized or used as widely. There are nearly as many ways to measure "water quality" or "wetland functions" as there are studies that value them. Benefit transfer would be more viable if there were more consistency in the measures of ecological resource conditions used in valuation studies.

The Plan also discusses the importance of the magnitude of the change valued in the study case relative to that in the policy case. Estimating values for marginal changes in the quantity or quality of a resource is important for economic analyses at EPA because many regulatory actions mitigate or reduce stressors in the environment only incrementally. Many valuation studies, on the other hand, estimate the value of an arbitrarily large change in the resource for illustrative purposes without considering what the plausible range of changes might be for a real policy. If a complete valuation function can be estimated and reported, then there is no difficulty. If this is not possible, however, careful consideration should be given to the values reported, to ensure that they cover the plausible range of changes from realistic policies. For example, many recreational fishing valuation studies estimate values for a 50% increase in expected catch per trip (Freeman 1993). Insofar as this is common practice in the literature, it facilitates comparisons across studies, but it may be well outside the range of changes expected from a particular policy. Thus, EPA economists may often be in the position of transferring value estimates to policy changes that are much smaller than those commonly valued in the literature. (If an EPA policy designed to improve water quality is expected to lead to increases in average catch rates on the order of 1-5%, is the value of that change 2-10% of the value of a 50% increase?)

The second EPA presentation discussed the potential advantages of a structural modeling approach for valuing changes in water quality for recreational anglers. In a structural modeling approach all of the links between a pollution control policy and the attributes of the resource that are directly valued by individuals are specified explicitly. In the case of recreational fishing the linkages include the direct effects of water quality on the fish stock, the effects of water quality and fish abundance on the catch rate, the effect of the catch rate on trip demand, and the feedback effect of changes in the aggregate harvest level on the fish stock. In principle, a reduced form approach could be used to model trip demand as a function of water quality conditions alone, where intermediate linkages between water quality, fish abundance, and expected catch would be implicit. However, a structural approach may make transfers to other contexts easier because with all of the key linkages specified individual parameters or component functions can be modified as necessary based on measurable differences between the study cases and the policy case. With key variables only implicit, as in a reduced form model, such adjustments may not be possible.

The third EPA presentation highlighted the importance of including relevant ecological attributes in valuation studies. The example illustrated the difficulty in evaluating the benefits of pesticide regulations through their impact on bird species. There are about twenty studies in the formal and informal literature that provide some indication of the economic values of bird species or bird-related activities. However, the set of attributes used in valuation studies on bird-related activities generally do not include measures of bird abundance. This makes it difficult or impossible to apply the values estimated in these studies to new policy cases, where the impacts will often be measured in terms of changes in the mortality rates or population sizes of the affected species. Second, many of the existing studies focus on species that are not often impacted by pesticides. This means transferring the estimated values would involve not only the usual difficulties of transferring values across geographic settings, but also additional difficulties of transferring values across species. These limitations are characteristic of many existing economic studies that could be used to value changes in ecosystems.

The Organized Symposium also featured three academic researchers who presented their views on how EPA could promote policy relevant research and improve collaboration and communication between EPA and outside professionals, and an open discussion followed. These presentations and the discussion centered around five themes: communicating research priorities and needs, improving incentives, improving the interaction between agency and academic researchers, facilitating research, and leveraging scare resources.

Steven Swallow, John Loomis, and Kathleen Segerson each suggested ways EPA can provide incentives to obtain more directly relevant research. Swallow suggested funding more research in this area and discussed some alternative grant selection mechanisms that EPA could consider. Segerson discussed EPA's new Science Advisory Board (SAB) Committee on Valuing the Protection of Ecological Systems and Services. The SAB Committee's charge includes identifying research needs to improve how ecological resources are valued and to support decision making related to ecological protection. Loomis discussed that by continuing to sponsor workshops, the Agency has input into topic selection and participants, thereby increasing the potential for the results of the workshop to meet EPA needs. Loomis also suggested that EPA consider the Forest Service's approach where Agency employees are more active participants in the design and implementation of Agency sponsored research. Finally, Loomis also suggested that EPA develop web databases for survey instruments and raw data from previous studies and encouraged the Agency to continue to support Environment Canada's Environmental Valuation Reference Inventory (EVRI).

With regard to leveraging resources, audience members suggested that it would be ideal for the Agency to collaborate with the many organizations with goals and missions similar to those of EPA. Some such collaborations occur today, but the challenge for EPA is to create and take advantage of more of these opportunities in the future.

While some of the suggestions offered at the Organized Symposium may not be compatible with EPA competition policies, and some are beyond EPA's immediate control (e.g., Congress allocates funding for the STAR grant program), EPA is already pursuing or considering some of the others, including:

- Sponsoring an annual award for published research that has proven especially useful for policy evaluation at EPA.
- Supporting a professional peer-reviewed journal for applied environmental economics research. Such a journal could serve as an outlet for research that may otherwise remain un-peer reviewed and un-published, including applications of existing methods to real-world policy cases, literature surveys and meta-analyses of existing studies, and research that found "negative" or statistically insignificant results. AERE is currently surveying its members to determine the demand for a similar journal. Such a journal could be especially useful for economists at EPA who must perform benefit transfers regularly and often find few directly applicable results in the peer-reviewed literature.
- Supporting more workshops focused on important current and emerging policy issues. Many offices in EPA host specialized workshops on an ongoing basis. For example, EPA's Office of Research and Development and National Center for Environmental Economics co-sponsor an Environmental Policy and Economics workshop series. Under this series the offices have hosted approximately two specialized workshops per year and plan to continue doing so. The topic of the most recent workshop was ecological benefits valuation. EPA also plans to continue to support outside workshops designed to improve the quality of current and future research in environmental and resource economics.[3] In addition, EPA and Environment Canada are co-sponsoring a workshop on benefit transfer in general with specific emphasis on EVRI.[4]
- Involving practicing economists to write focused STAR grant solicitations in order to emphasize policy relevant research, rather than strictly theoretical contributions.
- Providing opportunities for outside researchers to work directly with EPA economists through internships, postdoctoral positions, sabbatical opportunities, and other temporary positions.[5]

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[3] As an example, EPA's National Center for Environmental Economics recently solicited proposals for academic and other institutions to hold dissertation workshops, methods development and training workshops, and workshops to explore important current issues in environmental economics.

[4] If you are interested in receiving more information on this workshop, please contact Rich Iovanna (iovanna.rich@epa.gov).

[5] Those interested in positions at EPA's National Center for Environmental Economics should contact Al McGartland (mcgartland.al@epa.gov) for more information or application instructions for these or similar positions, or to be placed on an email list for future job and internship announcements. Those interested in positions through the American Academy for the Advancement of Science fellowship program should visit their website: http://fellowships.aaas.org/.

- Facilitating closer cooperation between outside researchers and EPA economists by assigning an Agency staff member as a "technical expert" to research projects funded under the STAR grant program to serve as a resource to the principal investigators.
- Compiling an Internet database of stated preference survey instruments used in past environmental valuation studies. The database will be made available to all interested parties, as a means to facilitate information transfer between stated preference researchers and to aid policy analysts at EPA in the interpretation of results from previous studies when conducting benefit transfers.[6]

We hope that these and other suggestions will help create new lines of communication between EPA economists and the rest of the environmental economics community and increase the incentives for conducting more policy relevant research, and we look forward to continuing this dialogue at future meetings and elsewhere.

[6] If you have survey instruments from past studies you are willing to contribute to the database, please contact Steve Newbold (newbold.steve@epa.gov) for submission instructions.

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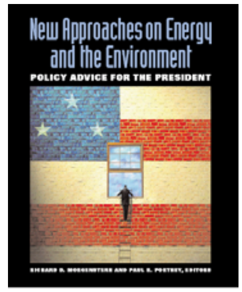

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