AERE NEWSLETTER

Association of Environmental and Resource Economists (AERE) *Vol. 29, No. 1* *May 2009*

FROM THE PRESIDENT…

As always, the AERE President's letter serves to review some highlights of our association's recent activities and also to inform members about current endeavors and future plans for the organization.

Much has changed since the last *AERE Newsletter* was published in November. Just within the U.S. we have (i) a new president for whom protection of the environment is a priority; (ii) a new administrator of the Environmental Protection Agency (EPA) who has recently publicly acknowledged the need for more social science research within the agency; (iii) environmental economists (and AERE members) taking key policy positions within the new administration; (iv) a proposed finding by the EPA that greenhouse gases endanger public health and the welfare of current and future generations, and so on. These are significant changes within the U.S. that parallel the increasing recognition throughout the world of the importance of integrating economic and environmental considerations. All of this bodes well for us and our profession. It is an exciting time to be an environmental and natural resource economist, and (we hope) a member of AERE.

AERE Board and Officers

This is my first newsletter column as AERE President, and I'd like to start it by thanking the past president, Trudy Cameron (University of Oregon). Those of you who know Trudy personally know how dedicated, conscientious, and hard-working she is. She has devoted countless hours to AERE over the past years. She cares immensely about the association and the profession and has given selflessly of her time and energy. We are very grateful to her.

This year we also celebrate AERE's 30th anniversary. The world is certainly a different place than it was back in 1979, when AERE was officially formed as a nonprofit organization, but its founders had a vision back then that is as important and relevant today. As we mark this milestone, we can only wonder what the world will be like 30 years from now and hope that the advice that comes from environmental and resource economists will play a significant role in shaping it.

TABLE OF CONTENTS

We've had some changes in other AERE officers as well. Ian Parry (RFF) stepped down from his position as AERE Treasurer after five years of service during which he was instrumental in steering us through a difficult financial period. Ian was replaced briefly by Joe Aldy, who had to resign when he took a new job in the White House. Juha Siikamäki (RFF) has generously agreed to take over as treasurer. In addition, Ann Wolverton (EPA) will soon be stepping down as secretary after three and a half years of maintaining accurate, detailed records and helping with arrangements for the annual meeting. She will be replaced by Sarah Stafford (College of William and Mary). We are very grateful to Ian, Joe, and Ann for their service to the association and I look forward to working with Juha and Sarah during the remainder of my term. I'd also like to thank outgoing Board members J.R. DeShazo (UCLA) and Gloria Helfand (University of Michigan), and welcome their replacements, M. Scott Taylor (University of Calgary) and Catherine Wolfram (Berkeley). We have a number of outgoing and incoming committee members as well. AERE would not be able to function without volunteers who willingly give of their time and energy for the public good. Our sincerest thanks to all of you.

New AERE Award for Best *JEEM* Paper

At the January 2009 AERE Board meeting, the Board approved a motion to institute a new award, the "AERE Award for Best *JEEM* Paper." We already have an award for the Publication of Enduring Quality (PEQ) but we currently have no way to recognize more recent outstanding research contributions in our field. Given that the *Journal of Environmental Economics and Management (JEEM)* is AERE's official journal, it seems appropriate to choose a paper recently published in *JEEM* for this recognition. The award will not only honor an outstanding research contribution but should also advance *JEEM* as a premiere publication outlet for work in environmental and natural resource economics. In addition, we are considering naming this award after someone who has made invaluable contributions to the field, to AERE, and/or to *JEEM*. We have some ideas for people we might honor in this way but no final decision has been made yet. If you have any thoughts on this, please share them with me.

As with the PEQ award, the award for best *JEEM* paper will be announced at the annual AERE Luncheon in January 2010 in Atlanta. The call for nominations for the first award appears on page 5 of this newsletter. Since the award will be given annually, we are asking for nominations for papers published in the last year, which means the July 2008 through May 2009 issues of *JEEM*. This will allow the selection committee to review the nominations and select and notify the winner(s) in time for the recipient(s) to plan to attend the luncheon to receive the award in person, if possible. There is no requirement, however, that the recipient be a current AERE member. If s/he is not, we will offer a one-year complimentary membership. Our hope, of course, is that, if the recipient isn't already a member, this "introduction" to AERE and its benefits (including the benefits of interaction with other AERE members at AERE events) will convince him or her to join once the complimentary membership expires.

The selection committee for this new award will be comprised of the current *JEEM* editor (Chuck Mason, University of Wyoming), a *JEEM* associate editor (to be named by the editor), and an AERE representative. Spencer Banzhaf (Georgia State) has agreed to serve as the AERE representative for this year's award. Thank you, Spencer!

New Editorship for *REEP*

Rob Stavins (Harvard) has announced that he will be stepping down as the editor of the *Review of Environmental Economics and Policy (REEP)*. The Board has adopted a policy under which, if possible, the new editor will be selected from among the current *REEP* co-editors and will serve a three-year renewable term. When the editor steps down, s/he will become a co-editor. In addition, the Board will appoint a new co-editor to replace the one who would step into the editor's position, also for a three-year renewable term. Thus, *REEP*'s editorial team will always be comprised of the editor, two co-editors, and the past editor. This process should provide for an orderly transition from one editorial team to the next.

I am pleased to announce that the Board has selected Charlie Kolstad (UC-Santa Barbara) to become the next editor of *REEP*. On behalf of the Board, I'd like to thank Charlie for taking this on. It is an invaluable service not only to the association but also to the broader community of people interested in economic analysis of environmental and natural resource issues.

I would also like to thank Rob for all of his efforts both in establishing *REEP* and then serving as the first editor. *REEP* is still a relatively new journal, but it is rapidly gaining ground, and its success to date is largely due to the efforts of Rob and his co-editors (Charlie Kolstad and Carlo Carraro, University of Venice). Four issues (two volumes) of *REEP* have been published so far, and several more are effectively "in press." We have also just learned from Oxford University Press that, after only two years, *REEP* has already begun to show a profit. We look forward to a continuation of this success under Charlie's new editorship. In an effort to further improve *REEP*, Oxford University Press will be conducting a survey of AERE members about their views and use of the journal. When you receive the survey, please take a moment to complete it. Your responses will be very helpful in ensuring that *REEP* is serving its readership and meeting market demands.

AERE Annual Meeting and Luncheon

Once again we held the annual AERE meeting and luncheon at the January ASSA meetings, which were held in San Francisco this year. In addition to the presentation of reports from the editors of *JEEM* (Chuck Mason) and *REEP* (Rob Stavins) and the Treasurer (Joe Aldy), the annual luncheon is the venue in which we present the association's honors and awards. This year the **Publication of Enduring Quality** award was given to Karl-Göran Mäler for his book *Environmental Economics: A Theoretical Inquiry*, published by Resources for the Future Press in 1974 (see details on page 8). Thanks to Jay Shogren (University of Wyoming) and his committee (Cathy Kling, Iowa State University, and Douglass Shaw, Texas A&M) for their work in making this selection. Nominations for the 2009 award should be sent to the new chair, Douglass Shaw (see announcement on page 8).

In addition, at the luncheon we honored three new AERE Fellows. This is a highlight of the luncheon. Initiated in 2005, the AERE Fellows program honors outstanding contributions to the field by members of the association. The **2008 AERE Fellows** were Thomas Crocker (University of Wyoming), A. Myrick Freeman III (Bowdoin College), and Alan Randall (Ohio State University). Please see the AERE webpage (http://www.aere.org/honors/) for the statements that were read at the luncheon honoring these recipients. We will soon begin the process of selecting the 2009 Fellows, and I urge all members to consider nominating deserving colleagues, mentors, etc. (Please see the call for nominations on page 5.)

AERE Sessions and Meetings

You should by now have received registration materials for the upcoming AERE Workshop on "Energy and the Environment," which will be held June 18-20, 2009, in Washington, DC. (see page 12). This is clearly a "hot" topic, even more so in light of the recent EPA proposed finding on greenhouse gases and public health. In addition to the Workshop, AERE-sponsored sessions will be held at the annual meetings of the Agricultural and Applied Economics Association (AAEA), the Southern Economic Association (SEA), and Western Economic Association International (WEAI). In total, the number of AERE sessions is greater than in the past, which means there are more opportunities for AERE members (including students) to present their work. The programs for most of these sessions are included in this newsletter and posted on the AERE website:
(http://www.aere.org/meetings/sponsored.php).
(The SEA program will appear in the fall.) Thanks to all those who devoted countless hours to reviewing submissions and putting together these programs: the AERE Workshop committee (co-chaired by Dan Hellerstein and Marca Weinberg, USDA/ERS), the Program committee (chaired by Dietrich Earnhart, University of Kansas), Trudy Cameron (for the WEAI meeting), and John Whitehead (Appalachian State) and Sarah Stafford (for the SEA meeting).

In addition, AERE sponsors sessions at the Allied Social Science Associations (ASSA) meetings, which will be held in Atlanta in January 2010. The Program committee is now working on the program for these sessions. As usual, we will also have one joint session with the AEA. This year the joint session will be "Combining Environmental and Development Goals: Strategies for Moving Forward." Presenters will include both AERE members and nonAERE members. One goal of the session is to foster greater interaction between environmental and development economists.

Plans are also well underway for the World Congress of Environmental and Resource Economists, to be held in 2010 in Montreal. The AERE representative, Gérard Gaudet (CIREQ), and his colleagues are in the process of securing sponsorships (not an easy task in this economic climate) and planning events. The call for submissions will go out in the fall. In the meantime, they have established a website (www.wcere2010.org) where information about the meeting will be posted.

Finally, the Board is still investigating the possibility of holding an all-AERE conference in 2012. Following the model of the European meetings, the intention would be to provide a venue for presentation of research on a broader set of topics than the AERE Workshop, which focuses each year on a single topic (see Trudy's discussion of this in the November 2008 *AERE Newsletter posted on the AERE web*). We need to assess the benefits and costs of holding such a conference. AERE's Vice President, Laura Taylor (North Carolina State University), is gathering information so that the Board can consider this and (we hope) make a decision during its mid-year Board meeting (held by conference call in June) about whether to move forward on this.

New AERE Website

Thanks to the generous support of Industrial Economics, Incorporated (IEc), the AERE website has now been overhauled to make it more useful, more modern, and more easily updated (so we can keep it current). Our vision is that the website should be a portal for information of importance to our members, or more broadly, to environmental and resource economists. We'd like it to be the "go to" place for information, links, and resources in our field. If you haven't already done so, please take a look and send us your feedback and suggestions for further improvements.

AERE Memberships and *JEEM* Subscriptions and Submissions

As you know, AERE membership is no longer combined with a subscription to *JEEM*. As a result, individual memberships now start at $62, with student memberships as low as $17. Given that many members have direct access to *JEEM* through other channels, we felt that decoupling the two would better serve the needs of our members and encourage others to join AERE. Nonetheless, members who do not have direct access or still want individual subscriptions can get them at discounted rates (see

http://www.aere.org/membership/documents/JEEMSubscriptionsforAEREMembers.pdf for details).

In addition, the structure of *JEEM* submission fees has been changed in a way that makes joining AERE nearly free for individuals who plan to submit a paper to *JEEM*. With these new benefits in mind, please encourage your colleagues and students to join or renew their AERE memberships.

Administrative/Management Issues

We continue, at least for 2009, to be managed by Executive Director, Inc. (EDI), which is the same management firm used by the AAEA, with help from our Executive Director, Marilyn M. Voigt. However, as Trudy discussed in the November 2008 newsletter, this is an expensive operation for us (given our limited budget) and it is not clear that it is sustainable in the long run. So a priority for the Board is to come to some resolution soon on the best management option. We are exploring various options, looking at what other comparable associations do. If anyone has experience with other associations that you think might be useful as we move forward, we'd appreciate hearing about it.

A Closing Thought

In this time of economic crisis and retrenchment, it seems even more important for us to advance the basic principles that underlie the field of environmental and natural resource economics, to ensure that scarce resources are used wisely in the advancement of our collective well-being. I am optimistic that the coming months and years will see an increased demand for our services and insights, as countries struggle to rebuild their economies while protecting the environment and preserving natural resources. If you have thoughts on how AERE can best support its members and the broader community in these efforts, please share those thoughts with me or any member of the AERE Board. Despite the current economic challenges, these are exciting times, and we should do what we can to make the most of them.

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AERE NEWS

AERE AT THE AAEA

Registration and information about the joint annual meeting of the Agricultural & Applied Economics Association (AAEA) and the American Council on Consumer Interests (ACCI) in Milwaukee, WI on July 26 - 29, 2009 is available on the AAEA home page at: www.aaea.org. **Tuesday, June 23, 2009**, is the deadline for early registration. See the AERE Sessions on page 14.

NEW AERE AWARD FOR BEST *JEEM* PAPER

CALL FOR NOMINATIONS

AERE is instituting a new award, the "AERE Award for Best *JEEM* Paper," to recognize an outstanding research paper published in the *Journal of Environmental Economics and Management* during the past year. The award will be given annually and announced at the annual AERE luncheon.

Criteria: Any article published in the July 2008 through May 2009 issues of *JEEM* is eligible for this award. There is no requirement that the author(s) be a member of AERE.

Nomination Process: Any member of AERE can nominate an article for this award. The nomination should be submitted in a letter that briefly describes why the nominator believes the paper is deserving of this award. Letters of nomination should be submitted by **September 1, 2009** to:

Professor Charles Mason
Department of Economics and Finance
University of Wyoming
Laramie, WY 82071
bambuzlr@uwyo.edu
Subject Line: Best JEEM Paper

Selection Process: The winner of the award will be selected by a three-person selection committee comprised of the editor of *JEEM*, one associate editor of *JEEM*, and one AERE representative. The winner(s) will be notified **by November 1, 2009**.

AERE FELLOWS PROGRAM

This program recognizes 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, 2009,** to:

Dr. Kathleen Segerson
Department of Economics
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Storrs, CT 06269-1063
kathleen.segerson@uconn.edu
Subject Line: AERE Fellow Nomination

The president will distribute copies to each of the Board members who will select newly appointed Fellows from the set of nominations. 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 for 2009

AERE Fellows 2008
Thomas Crocker
A. Myrick Freeman III
Alan Randall

AERE Fellows 2007
Daniel W. Bromley
Gardner M. Brown, Jr.
Charles W. (Chuck) Howe
Kenneth E. (Ted) McConnell
Kathleen Segerson
David Zilberman

AERE Fellows 2006
Richard C. Bishop
Nancy E. Bockstael
Ronald G. Cummings
Anthony (Tony) C. Fisher
Geoffrey M. Heal
Clifford S. (Cliff) Russell

Inaugural AERE Fellows 2005
Maureen L. Cropper
W. Michael Hanemann
Karl-Göran Mäler
Wallace E. Oates
V. Kerry Smith
Tom Tietenberg

AERE MEMBERSHIP STATUS IN 2009

Not sure if your dues have been paid and that your membership is current? Just check the AERE Home Page (http://www.aere.org) under "Membership" to see if your name appears. The list will be updated periodically. Since AERE membership runs on the calendar year...we are still accepting renewals and applications for this year—anyone joining now will receive the 2009 back issues of *REEP*.

UNIVERSITY AND INSTITUTIONAL MEMBERSHIP PROGRAM

The AERE Officers and Board of Directors invite colleges, universities, and university research centers to become University Members of AERE and research institutions, nonprofit organizations, government agencies, and corporations to become Institutional Members of AERE.

Intellectual entrepreneurship is a distinguishing characteristic of AERE. Equally important, AERE research activities also display a remarkable degree of involvement with other disciplines because the issues require it. But the dues of its individual members are not sufficient to support the growing needs of the organization. AERE needs the help of organizations involved in the same fields of interest to help with its programs and outreach to students and young professionals in both the U.S. and overseas. In addition, financial support will help with the increasing costs of managing membership services including the membership database, journal subscriptions, and workshop and annual meeting registrations among other association costs.

To become a **University Member** of AERE, a contribution of $350 is required. With this contribution, colleges and universities:

- may designate one person to receive a 2009 individual membership in AERE (which includes an electronic subscription to *REEP*, the bi-annual *AERE Newsletter*, and a reduced fee for submitting an article to *JEEM*);
- are entitled to a sponsorship listing on the AERE Web page (www.AERE.org) and in the *AERE Newsletter* and *JEEM*;
- will receive one free advertisement on the AERE Web page and in the *AERE Newsletter* for the calendar year (a savings of $250).

To become an **Institutional Member** of AERE, a contribution of $1,000 is required. With this contribution, institutions receive the above benefits plus:

- two nontransferable tickets for institution staff to the annual AERE luncheon and business meeting in Atlanta, Georgia on January 4, 2010;
- one nontransferable registration for the annual AERE Workshop in June 2009;
- receive recognition at the annual AERE luncheon and business meeting.

2009 INSTITUTIONAL AND UNIVERSITY MEMBERS OF AERE

Institutional Members

Industrial Economics, Inc.

Resources for the Future

RTI International

Stratus Consulting, Inc.

W.H. Desvousges & Associates, Inc.

University Members

Appalachian State University
Department of Economics

Carnegie Mellon University*
Tepper School of Business

Centre Interuniversitaire de Recherché en Économie Quantitative (CIREQ)
(of the Université de Montréal, McGill University and Concordia University)

Clark University*(Pending)
Department of Economics

Colorado State University
Department of Agricultural and Resource Economics

Duke University (Pending)
Nicholas School of the Environment and Earth Sciences

The Harvard Environmental Economics Program (HEEP)

Massachusetts Institute of Technology
Department of Economics

Montana State University*
Department of Agricultural Economics & Economics

Oregon State University*
Department of Agriculture & Resource Economics

University of Calgary*
Department of Economics

University of California, Berkeley
Department of Agriculture & Resource Economics

University of California, Los Angeles
Lewis Center for Regional Policy Studies

University of Central Florida
Department of Economics

University of Connecticut
Department of Agricultural & Resource Economics

University of Delaware
College of Marine Studies

University of Illinois at Urbana-Champaign*
Department of Agricultural and Consumer Economics

University of Maine*
Department of Economics

University of Maryland, College Park (Pending)
Department of Agricultural and Resource Economics

University of Michigan
Erb Institute for Global Sustainable Enterprise

University of Minnesota
Department of Applied Economics

University of Nevada, Reno
Department of Resource Economics

University of Oregon
Department of Economics

University of Tennessee
Department of Economics

University of Washington
Department of Economics

Virginia Tech
Department of Agricultural and Applied Economics

Yale University School of Forestry and Environmental Studies

New Member in 2009

NOMINATIONS FOR AERE OFFICERS AND BOARD MEMBERS

This year, AERE members will vote for a President (whose two-year term will begin in January 2011 but who will serve on the Board as President-Elect for 2010), a Vice President (whose two-year term will begin in January 2010), and two new members of the Board of Directors who will serve for three years beginning in January 2010. The nominations are being handled by a committee chaired by AERE Vice President Laura Taylor (North Carolina State University) and elections will occur in the fall of 2009.

Nominations may also be made by the membership through petitions, each of which contains signatures of 5% of the association's members who are then in good standing. Such petitions should be sent to arrive at the AERE Secretary's address no later than **August 1, 2009**.

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2008 AERE PUBLICATION OF ENDURING QUALITY AWARD

The selection committee for the Publication of Enduring Quality Award for this year was chaired by Jay Shogren, with help from Douglass Shaw and Cathy Kling. After much careful deliberation, the committee selected the winning paper for 2008. The **2008 AERE Publication of Enduring Quality Award** was given to:

Karl-Goran Mäler, *Environmental Economics: A Theoretical Inquiry* (Resources for the Future Press, 1974).

Environmental Economics: A Theoretical Inquiry helped lay the foundation for the next three decades of theoretical and applied work in environmental economics. The range of topics he covered is astonishing given the nascent stage of environmental economics. His book developed a consistent analytical framework to integrate the environment into core economic thinking: materials balance, growth theory, general equilibrium theory, national income accounting, welfare theory and valuation, game theory, and incentive design. As a former physicist, the book is unapologetically rigorous and concise, which helped the next generations of environmental economists focus on maintaining the high level of intellectual inquiry expected by the mainstream economics profession. This helped guarantee that environmental economics would be viewed as a serious field of economics. At the same time, Mäler's book explored practical issues of implementation and evaluation of the ideas laid out in the book, e.g., bribes and charges are equivalent in theory, but differ in administration and enforcement. *Environmental Economics* is both a classic reference and required reading.

It should be noted that Karl-Goran is also an inaugural AERE fellow.

2009 AERE PUBLICATION OF ENDURING QUALITY AWARD

The AERE Board of Directors will present the annual award (to co-authors if appropriate) for a publication of enduring quality that appeared at least five years prior to the year of the award. The 2009 award will be announced at the annual AERE luncheon meeting in January 2010 in Atlanta, Georgia. Nominated works are to be evaluated on their seminal nature and enduring value. Place and type of publication are unrestricted but posthumous awards will not be given. Nominees may include individuals who are not members of AERE.

Evaluation of nominated works and final selection for the 2009 award will be undertaken by a committee chaired by Douglass Shaw.

Nomination packages should consist of four copies each of a cover letter, a document supporting the nomination, and the publication itself. The supporting document (not to exceed three pages) should include quantitative as well as qualitative information (e.g., number of citations or copies printed). Nominations should be sent to arrive no later than **September 1, 2009.** This is an important award for AERE and for the recipients. Please give serious consideration to nominating a publication and to observing the submission requirements.

W. Douglass Shaw, Professor
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CALLS FOR PAPERS

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**
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Telephone: 970-491-2485

11th ANNUAL BIOECON CONFERENCE (BIOdiversity and Economics for CONservation)

Economic Instruments to Enhance the Conservation and Sustainable Use of Biodiversity

Centro Culturale Don Orione Artigianelli – Venice, Italy
September 21-22, 2009

hosted by
Fondazione Eni Enrico Mattei (FEEM)
in association with Conservation International, DEFRA, Department of Land Economy of Cambridge University and European Investment Bank

The Fondazione Eni Enrico Mattei, in association with Conservation International, DEFRA, Department of Land Economy of Cambridge University and European Investment Bank, announces the Eleventh International BIOECON Conference on "Economic Instruments to Enhance the Conservation and Sustainable Use of Biodiversity". The Conference will be held at the Centro Culturale Don Orione Artigianelli, in Venice, Italy, on September 21-22, 2009.

The Conference is targeted to researchers, environmental professionals, international organizations and policy makers who are interested in working in the management and conservation of biodiversity. The conference is focused on identifying the most effective and efficient instruments for biodiversity conservation, such as auctions of biodiversity conservation contracts, payment-for-services contracts, taxes, tradable permits, voluntary mechanisms and straightforward command and control. Special emphasis will be given to policy reforms aimed at increasing the commercial rewards for conserving biodiversity, increasing the penalties for biodiversity loss and circulating information on the biodiversity performance requirements of firms. An increasing number of businesses, which were responsible for biodiversity loss in the past, are now supporters of biodiversity conservation. Markets for organic agriculture and sustainably-harvested timber are developing at double-digit rates, while rapid growth is observed in the demand for climate mitigation services, such as the protection of forests and wetlands to absorb carbon dioxide. Bio-prospecting, the search for new compounds, genes and organisms in the wild, is another biodiversity business on the rise.

Papers are specifically invited on the themes of:

- Assessment of the effectiveness and efficiency of biodiversity conservation instruments, taking into account spatial and governmental considerations;
- Development of new, incentive-compatible instruments to conserve biodiversity;
- Evaluation of the costs of conservation policies versus the costs of 'business-as-usual' within an existing policy framework (e.g. agriculture, fisheries, infrastructure, climate change, etc) that causes ongoing losses of ecosystems and biodiversity.
- Determination of the factors - including the choice of policy instruments - that increase or decrease a farmer's or public body's motivation to conserve biodiversity on their land;
- Application to strategies and projects of the ecosystem services approach for assessing and valuing environmental impacts;
- Benefit transfer methodologies to assess the socio-economic and monetary value of ecosystems services;
- Applications of economic instruments to enhance the conservation and sustainable use of biodiversity, with particular emphasis on case studies in biodiversity hotspots.

We are particularly interested in papers documenting practical applications and experiences on the above themes. Theoretical contributions are welcome (e.g., using computer artificial intelligence approaches), but also more applied work (e.g. how public bodies - managing for example flood risks - can innovatively deliver wider ecosystem benefits, or how private landowners can be encouraged to conserve biodiversity on their land). We are also interested in multi-disciplinary papers that combine scientific and economic assessments. However, we will also accept papers on a range of other issues related to renewable resources and biodiversity management.

The Conference will cover two days. Leading international environmental economists will present their latest research in two plenary sessions. The keynote speakers are: Professor Anil Markandya (University of Bath, UK and BC3, Spain) and Professor Edward Barbier (University of Wyoming, USA). Two special panel discussions are also scheduled. These are characterized by a round table and shall be focused on climate change, biodiversity management issues. One shall be co-organized with the European Investment Bank and the second by Conservation International, giving to the audience an interesting perspective that is the link between theory and practice.

Full/draft papers may be submitted for presentation and will be considered by the program committee. Electronic copies (in WORD or PDF format) should be sent to Ughetta Molin Fop (ughetta.molin@feem.it) no later than **May 20, 2009.** Notification of acceptance of papers will be sent by email in June 2009.

The Conference will open with an evening reception at the Centro Culturale Don Orione Artigianelli on September 20th. Conference sessions will commence in the morning of September 21st and end in the afternoon of September 22nd. A Conference dinner will be organized on the evening of September 21st. Lunches and refreshments will also be provided. All the participants will be offered lunches and refreshments, the opening reception, the social dinner and the Conference package (program brochure with the book of abstracts, five hours of Internet connection, folder, bag, pen, badge, logistical information, Venice map). There is no registration fee. Travel and accommodation expenses remain the responsibility of all the participants.

In order to register for the Conference and to make your accommodation booking, participants are invited to fill in the downloadable form at the BIOECON website and send it to the Conference Secretariat (Ughetta Molin Fop, e-mail ughetta.molin@feem.it,
fax +39.041.2711461) by **July 15, 2009**.

Further information about the Conference will be posted in the BIOECON website at :
http://www.bioecon.ucl.ac.uk/.

FOURTH INTERNATIONAL SCIENTIFIC CONFERENCE

BALWOIS 2010

Ohrid, Republic of Macedonia
May 25-29, 2010

Conference on Water Observation and Information System for Decision Support

- Scientific presentations
- Forum exchange
- Workshops
- Exhibition
- Social program

Main topics:

- Climate and Hydrology
- Environment and Human Activities
- Water Related Risks
- Integrated Water Resouces Management
- Ecohydrology
- Computing and Technologie

Contact: secretariat@balwois.com
Conference website: www.balwois.com/2010
Project website: www.balwois.com

Deadlines:

Submission of Abstract: **November 15, 2009**
Author Notification of Abstract Acceptance: December 15, 2009
Submission of Full Paper: February 15, 2010
Author Notification of Full Paper Acceptance: March 15, 2010

Supported by:

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STRATEGIC BEHAVIOR AND THE ENVIRONMENT

The newly established journal *Strategic Behavior and the Environment*

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provides a platform for various disciplines that jointly contribute to our understanding of strategic behavior in design and implementation of environmental policy. Scholars in economics (including experimental economics, political economy, and game theory), political science, international relations, negotiation, and other relevant disciplines, are invited to submit manuscripts for publication consideration, following a peer-review process. Submit a manuscript (following instructions on the journal website) for publication consideration to:

Prof. Ariel Dinar
Water Science and Policy Center
University of California, Riverside
Riverside, CA, USA
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CONFERENCES, MEETINGS AND WORKSHOPS

2009 AERE WORKSHOP

The next AERE Workshop will be held June 18–20, 2009 at the Resources for the Future (RFF) conference center in Washington, DC. This year, the Workshop will focus on economic research related to the broad topic of energy and the environment. The papers and posters will employ a variety of theoretical, experimental, econometric, and numerical methods to address a diverse range of policy topics, including work on biofuels, CAFE standards and fuel efficiency, wind energy, climate change, carbon sequestration, and R&D. The workshop is designed to encourage extended, in-depth discussion on a relatively limited number of papers. The Washington, DC location is ideal for providing an exchange of ideas between policymakers and researchers on this timely policy issue.

RFF's conference center is located at 1400 16th Street NW in the historic Dupont Circle neighborhood and is minutes from the White House, Smithsonian, and other DC landmarks. The closest Metro stop is Dupont Circle on the Red line.

The Workshop will start with a reception Thursday evening (5:00-7:00 pm), June 18th, in RFF's rooftop conference room and deck and will conclude around 3:00 pm Saturday afternoon, June 20th. The registration fee is $200 ($150 for students). This includes copies of all Workshop papers, the reception on Thursday evening, continental breakfast and lunch on both Workshop days, and dinner on Friday evening, June 19th, at the Sequoia restaurant on the Georgetown waterfront.

See the AERE Web www.aere.org for complete information including the registration form. **Register early,** since space is limited. The registration fee goes up **after May 15, 2009**. In particular, the discounted student registration will be capped at about ten, so don't delay.

We are extremely grateful for the support provided by:

USDA Economic Research Service
National Oceanic Atmospheric Administration
U.S. Environmental Protection Agency
U.S. Department of the Interior, Fish and Wildlife Service.

2009 AERE Workshop Committee

Marca Weinberg and Daniel Hellerstein (Co-Chairs), USDA Economic Research Service

John Charbonneau, U.S. Department of the Interior, Fish and Wildlife Service

Norman Meade, U.S. Department of Commerce, National Oceanic Atmospheric Administration (NOAA)

Ann Wolverton, U.S. Environmental Protection Agency

Maximillian Aufhammer, University of California, Berkeley

Keynote Speakers

- **Joseph E. Aldy**, Special Assistant to the President for Energy and the Environment
- **Kjell Olav Kristiansen**, Director of Advisory Services, Point Carbon North America
- **Dale Jorgenson,** Samuel W. Morris University Professor at Harvard University

Presented Papers (presenting author listed first)

- Anderson, Soren T. and James M. Sallee, "**Using Loopholes to Reveal the Marginal Cost of Regulation: The Case of Fuel-Economy Standards**"

- Beach, Robert H., Adam Daigneault, Bruce McCarl, and Steven Rose, **"Modeling Alternative Policies for Forestry and Agricultural Bioenergy Production and GHG Mitigation**"

- Bento, Antonio M. and Joel R. Landry, "**Efficiency Effects of Increased U.S. Biofuels Mandates**"

- Fowlie, Meredith and Duncan Callaway, "**Greenhouse Gas Emissions Reductions from Wind Energy: Location, Location, Location?**"

- Goeschl, Timo and Grischa Perino, "**Combining Taxes and Moral Suasion for Resolving the Energy-Climate Nexus: Experimental Evidence of a Conflict**"

- Jacobsen, Mark R., Arthur A. van Benthem,, Lawrence H. Goulder, "**Impacts of State-Level Limits on Greenhouse Gases per Mile In the Presence of National CAFÉ Standards**"

- Newell, Richard G. and David Popp, "**Will Increased Energy R&D Crowd Out Other Innovation? Evidence from the Science and Engineering Labor Market**"

- Partridge, Ian A. and Shama Gamkhar, "**Kyoto-Clean Development Mechanism: The Case of Low Carbon Electricity Generating Projects in China and India**"

- Shawhan, Daniel L., Douglas C. Mitarotonda, and Ray D. Zimmerman, "**An Advanced Economic Model of Incentive-Based Carbon Dioxide Emission Reduction Policies in the Power Sector**"

- Vollebergh, Herman R.J. Rob F.T. Aalbers, and Henri L.F. de Groot, "**Rents from Tagged Energy Technology Subsidies"**

- Walls, Margaret A., Dallas Burtraw, and Richard Sweeney, "**The Comprehensive Incidence of U.S. Climate Policy"**

Posters (presenting author listed first)

- Almirall, Catherine, "**Sugarcane and Soybean Acreage Response in Brazil**"

- Feng, Hong Li and Bruce Babcock, "**Impacts of Ethanol Expansion on Land Use in Market Equilibrium**"

- Hidrue, Michael and George Parsons, "**Measuring Consumers' Preferences for V2G Electric Vehicles?**"

- Golub, Alexander and Jon Anda, "**Real Option Analysis of Climate Policy Under Uncertainty**"

- Jaeger, William K. and Thorsten Egelkraut, "**The Cost-Effectiveness of Biofuel Policies: Multiple Objectives, Indirect Effects, and Uncertainty**"

- Kurkalova, Lyubov A., Silvia Secchi, and Philip W. Gassman, "**Harvesting Corn Stover and Crop Residue Management: The Impact of Conflicting Economic Incentives**"

- Norman, Catherine, Lin Fan, and Benjamin F. Hobbs, "**Risk Aversion and CO2 Regulatory Uncertainty in Power Generation Investment: Policy and Modeling Implications**"

- Parry, Ian W. H., Jon Strand, and Luis Cifuentes, "**Are Fuel Taxes in Chile Too Low?**"

- Su, Hui and Jerald Fletcher, "**A Dynamic Programming Model of Carbon Sequestration and Its Significance for Carbon Management–A Case Study of Shenhua's Direct Coal Liquefaction Plant**"

- Toman, Michael A., Carolyn Kousky, Olga Rostapshova, and Richard Zeckhauser, "**Climate Change and Mega-Catastrophes**"

- Wolfram, Catherine and James Bushnell, "**Did Emissions Trading Lower CO2 Emissions in Europe?**"

AMERICAN AGRICULTURAL ECONOMICS ASSOCIATION (AAEA) and the AMERICAN COUNCIL ON CONSUMER INTERESTS (ACCI)

ANNUAL MEETING
July 26-28, 2009
Milwaukee, Wisconsin

AERE SESSIONS*

Session 1: Pollution Control

Session Chair: Hayri Önal (University of Illinois)

Session Description: The three papers in this session examine pollution control in the United States and India regarding both point and nonpoint pollution sources using theoretical, empirical, and experimental analysis. The first paper employs theoretical and experimental investigations to explore a variety of ambient-based tax mechanisms in a framework with both point and nonpoint sources. The second paper considers compliance with performance-based effluent limits imposed on US point sources; it highlights the importance of recidivism in environmental compliance, the regulatory response to repeat offenses, and firms' reactions to enforcement activities directed toward recidivists. The third paper tests two assumptions implicitly invoked by previous empirical studies of pollution control: (1) output, pollution, and abatement are separable, and (2) different pollutants can be abated separately.

1.a. **Luke Jones** (University of Tennessee). "Comparing Ambient Taxes in a Point-Nonpoint Pollution Framework"
Discussant: Kathleen Segerson (University of Connecticut)

1.b. **Jay Shimshack** (Tulane University) and Michael Ward (Australian National University). "Recidivism, Enforcement, and Environmental Compliance"
Discussant: Sumeet Gulati (University of British Columbia)

1.c. **Surender Kumar** (TERI University) and Shunsuke Managi (Yokohama National University). "Non-Separability and Substitutability among Water Pollutants: Evidence from India"
Discussant: Scott R. Templeton (Clemson University)

Session 2: Renewable Resources

Session Chair: Peter Berck (University of California – Berkeley)

Session Description: The three papers in this session examine renewable resource extraction under different ownership structures with applications to ground water, fisheries, and forests. The first paper explores the common-pool characteristics of ground water and contrasts ground water pumping from collectively owned wells with pumping from privately owned wells. The second paper explores the incentives to join voluntary fishing cooperatives and the potential gains from sharing information about a highly uncertain common-pool resource. The third paper models the option value of harvesting a stand of timber under sole ownership and derives implications for the price of lumber derivatives and long-run investment decisions in forestry.

2.a. **Quiqiong Huang** (University of Minnesota), Yang Liu (University of Minnesota), Stephen Polasky (University of Minnesota), Scott Rozelle (Stanford University), and Jinxia Wang (Chinese Academy of Sciences). "Impacts of Well Ownership and Nature of Aquifers on Water Resources"
Discussant: Jay Shimshack (Tulane University)

2.b. **Keith S. Evans** (Iowa State University) and Quinn Weninger (Iowa State University). "Cooperation or Conflict: Voluntary Membership in a Fishing Cooperative"
Discussant: Michael Springborn (University of California – Davis)

2.c. **Shan Chen** (University of Waterloo), Margaret Insley (University of Waterloo), and Tony Wirjanto (University of Waterloo). "The Impact of Stochastic Convenience Yield on Long-Term Forestry Investment Decisions"
Discussant: Jerome Dumortier (Iowa State University)

* Presenters indicated in bold font.

Session 3: Open Space, Urban Sprawl, and the Patterns of Land Use Change

Session Chair: Antonio Bento (Cornell University)

Session Description: This session incorporates four state-of-the-art papers on issues relating to open space conservation, urban sprawl, and the effects of alternative policies on the patterns of land use changes. The two theoretical studies use locational equilibrium models (1) to evaluate how open space conservation affects the socioeconomic characteristics of urban and suburban communities in a metropolitan area and (2) to measure the costs of alternative anti-sprawl policies in a second best setting. The two empirical studies use discrete choice and matching estimation methods (1) to predict land conversion into various land uses [single-family residential, multi-family residential, retail, industrial, open space] and (2) to examine the examine the effect of local zoning policies on land use changes.

3.a. **JunJie Wu** (Oregon State University), Wenchao Xu (Oregon State University), and Ralph Alig (Oregon State University). "Open Space Conservation and Urban Socioeconomic Landscapes"
Discussant: Nicolai Kuminof (Virginia Tech University)

3.b. **Antonio Bento** (Cornell University) and Daniel Kaffine (Colorado School of Mines). "The Choice of Anti-Sprawl Instruments in a Second Best Setting"
Discussant: Luke Jones (University of Tennessee)

3.c. Nikhil Kaza (University of Maryland), **Charles Towe** (University of Maryland), and Xin Ye (University of Maryland). "An Economic Model of Land Conversion Incorporating Multiple End Uses"
Discussant: David Newburn (Texas A&M)

3.d. **Van Butsic** (University of Wisconsin – Madison), Lindsay Ludwig (Industrial Economics Inc.), David J. Lewis (University of Wisconsin – Madison). "A Parcel-Level Econometric Analysis of Land-Use Change with Endogenous Zoning"
Discussant: Dana Marie Bauer (Boston University)

Session 4: Land Use – Data, Conservation, and Climate Change

Session Chair: JunJie Wu (Oregon State University)

Session Description: This session addresses issues in land conversion and agriculture. The first paper addresses land use changes (both urban and rural) in a sparse data environment. While some areas in the US have detailed mirco-level data sets (parcel level), others have much coarser observations. The paper examines whether results from the former can be applied to the latter and establishes best practices. The second paper addresses agricultural land use changes in response to biofuel mandates and extends the carbon accounting from earlier models by not only incorporating land use change but also agricultural production such as livestock and fertilizer. What are the net effects of biofuel mandates on CO2 emissions? The third paper includes climate variables (temperature and precipitation) in a factor productivity model of the US economy 1970-1999. Climate change is found to have a dampening effect on research investment returns. The fourth paper evaluates the potential for land use change in exurban communities, while simultaneously maintaining a sustainable level of ecosystem health; towards this goal, the study develops a spatially realistic model that integrates economic and ecological principles to determine a socially desirable allocation of land between development and preservation.

4.a. **Kathleen Bell** (University of Maine). "Economic Modeling of Land-Use Change in a Sparse Data Environment"
Discussant: Charles Towe (University of Maryland)

4.b. **Jerome Dumortier** (Iowa State University) and Dermot Hayes (Iowa State University). "Towards an Integrated Global Agricultural Greenhouse Gas Model"
Discussant: B.A. McCarl (Texas A&M University)

4.c. **B.A. McCarl** (Texas A&M University), X. Villavicencio (Texas A&M University), and W.M. Wu (Texas A&M University). "Estimating the Effect of Climate Change over Agricultural Factor Productivity"
Discussant: Wallace Huffman (Iowa State University)

4.d. **Dana Marie Bauer** (Boston University). "Where, When, and How Much? A Spatially-Realistic, Dynamic Model of Species Conservation Applied to Exurban Communities"
Discussant: Sahan Dissanayake (University of Illinois) [invited]

Session 5: Advances in Recreation Demand Models

Session Chair: Joseph Herriges (Iowa State University)

Session Description: This session presents three empirical studies of revealed preference for recreation using micro-econometric methods. The first paper focuses on preference heterogeneity over different recreational sites and the effects of ignoring heterogeneity on welfare estimates. It uses a latent class model to characterize different groups of outdoor recreationists. The second paper examines the importance the error term in a corner solution model of recreational site choice. With an unusual panel data set, the authors can explore how different sources of error affect welfare estimates. The third paper combines a sorting model with a Bayesian estimation framework to explore recreational choices when there is a large choice set with unobserved site characteristics.

5.a. **Kenneth A. Baerenklau** (University of California – Riverside). "A Latent Class Approach to Modeling Endogenous Spatial Sorting in Zonal Recreation Demand Models"
Discussant: Babatunde O. Abidoye (Iowa State University)

5.b. **Subhra Bhattacharjee** (Iowa State University) and Catherine L. Kling (Iowa State University). "Effect of the Error term in Welfare Estimation – A Kuhn-Tucker Model of Recreation Demand with Panel Data"
Discussant: Kenneth A. Baerenklau (University of California – Riverside)

5.c. **Babatunde O. Abidoye** (Iowa State University) and Joseph A. Herriges (Iowa State University). "A Unified Approach to Modeling Unobserved and Observed Site Characteristics in Random Utility Maximization Models"
Discussant: Subhra Bhattacharjee (Iowa State University)

Session 6: Conservation and Ecosystem Restoration

Session Chair: Jinhua Zhao (Michigan State University)

Session Description: The four papers in this session explore conservation and ecosystem restoration including the selection of conservation reserve sites. The first paper empirically analyzes the effects of the recent federal listing of endangered salmonid species on individual landowner behavior in coastal California watersheds regarding the landowners' use of surface water. Primarily, the paper tests the hypothesis that increased appropriate water right permitting costs cause landowners to be more likely either to construct reservoirs illegally or to shift from surface water to groundwater pumping. The second paper discusses current methods for conservation reserve site selection, constructs a multiple land use theoretical model that includes spatial and ecological criteria, and exploits large-scale data on land characteristics near Fort Benning in Georgia as a demonstration of selecting optimally conservation reserve areas and military areas. The third paper describes the development, testing, and application of a novel variant of stated preference valuation: bioindicator-based stated preference valuation. This approach allows the use of easily understandable indicators within survey scenarios, yet provides unambiguous linkages among these indicators and the assessment endpoints that determine values. The fourth paper examines North Carolina's Ecosystem Enhancement Program, which manages stream mitigation projects on the behalf of land developers whose actions disrupt aquatic ecosytems. This paper seeks to account for all Program expenses of projects and to analyze the determinants of contractual expenses associated with project management.

6.a. **David Newburn** (Texas A&M University) and Nicholas Brozovic (University of Illinois – Urbana-Champaign). "Environmental Compliance, Endangered Species, and Instream Flows"
Discussant: Qiuqiong Huang (University of Minnesota)

6.b. **Sahan Dissanayake** (University of Illinois), Hayri Önal (University of Illinois), and James D. Westervelt (ERDC-CERL). "Optimal Selection of Conservation Reserves: Extensions to Multiple Land Use and A Mechanism Design Approach"
Discussant: Keith S. Evans (Iowa State University)

6.c. **Robert J. Johnston** (Clark University), Eric T. Schultz (University of Connecticut), and Kathleen Segerson (University of Connecticut). "Improving the Ecological Validity of Non-Market Valuation: Development and Application of Bioindicator-Based Stated Preference Valuation for Aquatic Restoration"
Discussant: Bill Provencher (University of Wisconsin – Madison)

6.d. **Scott R. Templeton** (Clemson University), Chris Dumas (University of North Carolina at Wilmington), William T. Sessions III (Washington State University), and Melanie Victoria (Clemson University). "Estimation and Analysis of Expenses of In-Lieu-Fee Projects that Mitigate Damage to Streams from Land Disturbance in North Carolina"
Discussant: Surender Kumar (TERI University)

Session 7: Invasive Species

Session Chair: Jason Shogren (University of Wyoming)

Session Description: Invasive weed species are costly to agriculture. This session examines management strategies for invasive weeds. The first paper explores the public goods dimension of controlling invasives by modeling adjacent ranchers playing a differential game in which invasive weeds diffuse over space. The second paper empirically studies New Mexico rancher preferences for controlling invasive weeds using a choice experiment and a RUM estimation framework. Results suggest that ranchers are more willing to treat a particular weed when other ranchers treat it as well. The third paper reconciles the need to estimate risks empirically with the asymmetric management consequences of false negatives and false positives from detecting invasives in trade flows. In contrast to the conventional approach, using a Bayesian framework the authors integrate risk estimation and decision making under uncertainty into a single step with an application to the Australian import screening program for weeds.

7.a. **Kristine M. Grimsrud** (University of New Mexico), Janie Chermak (University of New Mexico), Kate Krause (University of New Mexico), and Jennifer Thacher (University of New Mexico). "A Game Theoretic Model of Rancher Responses to Diffusing Weed Infections"

Discussant: Sathya Gopalakrishnan (Duke University)

7.b. **Jennifer Thacher** (University of New Mexico), Janie Chermak (University of New Mexico), Kristine M. Grimsrud (University of New Mexico), and Kate Krause (University of New Mexico). "The Decision to Manage Invasive Weeds: Which Factors Matter?"

Discussant: Kent Kovacs (University of Nevada – Reno)

7.c. Robert P. Lieli (University of Texas – Austin) and **Michael Springborn** (University of California – Davis). "Closing the Gap between Risk Estimation and Decision Making: Efficient Management of Trade-Related Invasive Species Risk"

Discussant: Linda Fernandez (University of California, Riverside)

Session 8: Trade, Health, and Environment

Session Chair: Nicholas Brozovic (University of Illinois)

Session Description: This session examines issues in trade, health and the environment. The first paper uses a panel data set of province-level Canadian car sales to address two questions: First, rebates for hybrid vehicles that are currently offered by foreign car makers primarily crowd out non-hybrid foreign cars and hence have no effect on the trade balance. Second, higher gasoline prices shift the vehicle fleet towards more fuel efficient foreign cars. The second paper examines optimal invasive species policies under asymmetric information. The paper examines the case where an exporting country has better information about the risks than the importing country, and the exporter can engage in effort to abate this risk that is unobservable to the importer. The third paper presents a theoretical growth model that incorporates linkages between pollution and growth through the channel of health.

8.a. **Sumeet Gulati** (University of British Columbia). "The Trade Bias of Environmental Policies in the Automotive Sector"

Discussant: Sabina Shaikh (University of Chicago)

8.b. **Min Wang** (Iowa State University), Joydeep Bhattacharya (Iowa State University), and Jinhua Zhao (Michigan State University). "Pollution, Health and Economic Growth"

Discussant: Shan Chen (University of Waterloo)

8.c. **Linda Fernandez** (University of California, Riverside) and Glenn Sheriff (Columbia University). "Optimal Invasive Species Policy under Asymmetric Information"

Discussant: Jennifer Thacher (University of New Mexico)

Session 9: Valuing Environmental Amenities

Session Chair: Amy Ando (University of Illinois)

Session Description: The four papers in this session explore various methods for valuing environmental amenities. The first paper empirically investigates the factors that influence people's willingness to support the provision of public open space by using a unique dataset collected from a survey that asked respondents to rate the importance of several different types of open space and state their willingness to support certain open space preservation policy options. The second paper explores identification of two temporal paths of environmental quality within the context of amenity valuation studies: one path when the intervention occurs and the counterfactual path. In particular, the paper explains an approach for addressing temporal paths in contingent valuation analyses. The third paper explores the influence of beach width on the value of coastal property; it contributes to the literature by incorporating the endogeneity of beach width in a first-stage hedonic property value model. The fourth paper employs a difference-in-difference hedonic property price model to examine the property value damage from sudden oak death, which is caused by the pathogen P. Ramorum, in Marin County, California.

9.a. **Chunhua Wang** (University of North Carolina at Charlotte). "Who Wants More Open Space?"
Discussant: Van Butsic (University of Wisconsin, Madison)

9.b. **Bill Provencher** (University of Wisconsin, Madison), David Lewis (University of Wisconsin, Madison), Michael Papenfus (University of Wisconsin, Madison). "Disentangling Expectations and Preferences in Welfare Analysis using Contingent Valuation
Discussant: Robert J. Johnston (Clark University)

9.c. **Kent Kovacs** (University of Nevada, Reno), Thomas Holmes (USDA Forest Service, Southern Research Station), and Jeffrey Englin (University of Nevada, Reno). "Response of Housing Values to the Advance of an Invasive Species: Sudden Oak Death in Marin County, CA"
Discussant: Kristine M. Grimsrud (University of New Mexico)

9.d. **Sathya Gopalakrishnan** (Duke University), Jordan Slott (Sun Microsystems Inc.), and Martin Smith (Duke University). "The Value of Disappearing Beaches in North Carolina"
Discussant: Kathleen Bell (University of Maine)

ASSOCIATION FOR PUBLIC POLICY ANALYSIS AND MANAGEMENT (APPAM)

Evidenced Based Policymaking in the Post-Bush/Clinton Era

November 5 – 7, 2009
Washington, DC

APPAM's Annual Fall Research Conference is a gathering of leaders within the policy analysis and management field. It has become the preeminent venue for the presentation and discussion of applied public policy and management research, attracting more than 1000 participants for over 150 sessions across three days of meetings each year. The Program Committee will organize an agenda that spans the interests and background of APPAM members across all issues areas and methodologies. This year the conference will be held in Washington, DC and looks to capitalize on the momentum of recent conferences where APPAM has experienced a record number of attendees and participation on the 150+ sessions. Noteworthy highlights of the 2009 conference will include the Spencer Foundation Lecture in Education Policy and Management, the Public Management Executive Roundtable, the concurrent plenaries, the Presidential Address, the Poster Session Luncheon, and the many special receptions.

APPAM especially is seeking increased conference participation from among policymakers at all levels of government and other practitioners who are directly involved in the areas of emphasis within the Fall Research Conference. APPAM is committed to including a diversity of perspectives on all sessions.

For all 2009 Fall Research Conference information including the schedule of events, registration, hotel reservations and travel planning, please go to: **http://www.appam.org**

BEHAVIORAL ECONOMICS: WHAT CAN IT CONTRIBUTE TO ENVIRONMENTAL AND RESOURCE ECONOMICS?

June 4 - 6, 2009
Hotel Bellwether
Bellingham, Washington

One of the newest kids on the economics block is behavioral economics. How has, and how might this new kid contribute to research in environmental and natural resource economics? That is the question we will be examining during this workshop.

We have assembled nine perspectives on this topic, ranging from pessimistic to enthusiastic, with both general and specific views. We are also fortunate to have Vernon Smith, a Nobel laureate, contributing his perspective.

Some of the questions that will be addressed at the conference include the following:

- What should the discount rate be for long lived investments in the environment when there is uncertainty about the levels of risk?
- How should we design smart policies when people are "humans" and not "econs"?
- What if many people consider fairness to be important? How does that affect the allocation of natural resources?

Conference Website:
http://www.acadweb.wwu.edu/eesp/cbe/index.shtml

Conference Sponsors: Wilder Construction and the College of Business and Economics

Conference Organizers:

Gardner Brown gbrown@u.washington.edu
Dan Hagen dan.hagen@wwu.edu

EUROPEAN ASSOCIATION OF ENVIRONMENTAL AND RESOURCE ECONOMISTS (EAERE)

17th Annual Conference
June 24-27, 2009
Amsterdam, The Netherlands

EAERE 2009 will be organized by the Department of Spatial Economics of the Faculty of Economics and Business Administration, in cooperation with the Institute for Environmental Studies, both of the Vrije Universiteit (VU University Amsterdam). This university was established in 1880. VU University Amsterdam is located close to Schiphol, Amsterdam's international airport. Amsterdam's excellent public transportation system enables participants to reach the famous historical city centre of Amsterdam in 15-20 minutes.

Amsterdam is one of the greatest small cities in the world. It's a youthful, cultural city that provides stimulus for creativity, but it is seldom very formal. Amsterdam is home to some of the best art in the world, has more canals than Venice, more bridges than Paris and around 7000 national monuments in the city center. Amsterdam is also a city of tolerance and diversity. It has all the advantages of a big city: culture, nightlife, international restaurants, good transport—but is quiet, and largely thanks to its canals, has little road traffic.

The program of the conference will cover all areas of environmental and natural resource economics and we expect around 600 participants from all over the world, international researchers, scholars, economists and students. It is an invaluable opportunity for meeting, exchanging, and debating current topics in environmental and resource economics.

Focus: The conference is a general conference and all topics are welcome. However, some special sessions will be organized; for instance, a special session on Food, Feed, Fuel and Fibres, sponsored by SOW - Centre for World Food Studies, and a special session organized by the research program. Vulnerability, Mitigation and Adaption from the Netherlands Organization for Scientific Research. Traditionally, a special policy session will be included in the program. Furthermore, a special session on Discounting will be organized and there will be special attention for Water Economics through a preconference held on the first day.

Form: We will have a few plenary sessions, in which our keynote speakers will be given the floor. The parallel sessions will offer the opportunity to participants to present their papers and, in addition to these plenaries and regular sessions, a poster session will be organized. These posters can be conveniently displayed around the coffee and lunch area.

Keynote Speakers: Kirk Hamilton, Billy Pizer (to be confirmed), Rick van der Ploeg, M. Scott Taylor

Social Activities: We believe that a conference should also be a social occasion that makes it easy for people from different countries, generations and subdisciplines to meet and have fun. We will have some social activity every evening. The conference will end on Saturday afternoon after which we will give participants the opportunity to discover Amsterdam on their own. Amsterdam is an international tourist attraction and its lifestyle is widely emulated everywhere. The Dutch are multilingual and so, not surprisingly, visitors to Amsterdam feel very welcome and almost immediately at home. Amsterdam possesses the largest historical inner city in Europe. It is especially famous for its sparkling crescent of canals where wealthy merchants built elegant homes and sturdy warehouses during Holland's Golden Age, the 17th century, when Amsterdam was the richest city in the world. The best introduction to these waterways is via a canal cruise, aboard one of the comfortable glass-topped boats. Among the favorite tourist attractions are Amsterdam's 40 museums. At least three of them are world-renowned.

Local Organizing Committee

Harmen Verbruggen, Chair of the Local Organizing Committee of EAERE 2009 and Dean of the Faculty of Economics and Business Administration

Frans Berkhout, Director of the Institute for Environmental Studies

Marjan Hofkes, Professor of Environmental Economics (IVM)

Cees Withagen, Professor of Environmental Economics (FEWEB)

Hadewijch van Delft, Conference Coordinator

Scientific Program Committee

Co-chairs:

Cees Withagen (Professor of Environmental Economics, VU University Amsterdam)

Geir Asheim (Professor of Economics, University of Oslo)

Further information is available at the conference website: www.eaere2009.org

FOURTH WORLD CONGRESS OF ENVIRONMENTAL AND RESOURCE ECONOMISTS

June 28-July 2, 2010
Montreal, Canada

The Fourth World Congress of Environmental and Resource Economists, a joint initiative of EAERE and AERE, will be held in Montreal, June 28 to July 2, 2010, on the campus of the Université du Québec à Montréal (UQAM). The hosts will be ESG UQAM and CIREQ. ESG UQAM is the business school of UQAM and CIREQ (Centre Interuniversitaire de Recherche en Economie Quantitative) is an economics research center supported by the Université de Montréal, McGill University and Concordia University.

Montréal is the major economic center of Québec. With its four universities and twelve junior colleges, the city has the second highest number of post-secondary students in North America. Its rich history, distinct heritage, culture and language provide visitors with a unique French experience, in a truly cosmopolitan atmosphere. The second largest Canadian city after Toronto, Montreal has an outstanding line-up of tourist attractions, including museums, cultural centers and historic landmarks. It is easily accessible by air from many major European and American cities.

The French speaking Université du Québec à Montréal is located downtown, close to all main business, cultural, and leisure activities. It has direct access to the city's underground metro and sits within walking distance of several major hotels.

You are invited to bookmark the Congress website, www.wcere2010.org, where you will find in due time the detailed information concerning submission, registration, accommodation, etc. The official call for papers is planned for early fall 2009. The co-chairs of the program committee will be Gérard Gaudet, Pierre Lasserre and Sjak Smulders.

The co-chairs of the local organizing committee are:

Gérard Gaudet, Department of Economics and CIREQ, Université de Montréal

Pierre Lasserre, Department of Economics, ESG, Université du Québec à Montréal and CIREQ

INTERNATIONAL ENERGY WORKSHOP

June 17-19, 2009
Venice, Italy

The 2009 International Energy Workshop is organized in cooperation with the International Center for Climate Governance—a joint initiative of the Fondazione Eni Enrico Mattei (FEEM), e Fondazione Giorgio Cini (FGC), and the Euro-Mediterranean Center on Climate Change (CMCC). The conference, which will gather the main world experts in energy and climate change economics, will be held in Venice, in the magnificent setting of the Island of San Giorgio Maggiore, on June 17th-19th, 2009.

The workshop is structured with one plenary session per day, each one hosting two keynote speeches of international experts. Then, five parallel sessions will be held at each time slot with three or four presentations each. The aim is to select about 150 papers out of the applications. Furthermore, a welcome cocktail reception and a social dinner will be organized respectively on June 17th and June 18th. Coffee breaks and lunches will be provided within the workshop.

For complete information, see the website at: http://www.iccgov.org

FIRST INTERNATIONAL CONFERENCE ON LANDSCAPE ECONOMICS

July 2-4, 2009
Vienna, Austria

The goal of this conference is to give an overview on current economic research on landscape and to sketch the profile of landscape economics as a new scientific discipline. The conference will examine and explain landscape dynamics, the possibilities to govern landscape development and related economic opportunities in rural and urban areas. The economic research on landscape covers a broad field of innovative empirical and theoretical studies, such as valuation, economic landscape models, cost-benefit analyses of landscape services, landscape governance, externalities, income and labor market effects, and many others.

This conference is organized by the European Consortium for Landscape Economics, the European Consortium on Landscape Economics (CEEP) and funded by the French Ministry of Environment and Sustainable Development (MEDD). The organization committee invites all scholars working in the broad field of landscape economics:

- Landscape Economics – the Formation of a New Discipline
- Landscape and Public Decisionmaking
- Policy Instruments for Coordination and Landscape Governance
- Landscape Maintenance as an Economic Sector
- Demand for and Supply of Landscape
- Economic Activities as Driving Forces for Landscape Development
- Landscape as a Basis of Economic Development

Deadline to Register: **May 29, 2009**

MICRO-ECONOMETRICS IN ENVIRONMENTAL ECONOMICS TRAINING WORKSHOP

May 28-29, 2009
DoubleTree Hotel
Washington, DC

Micro-Econometrics In and Out of Markets: A Second Training Workshop on Micro-Econometrics in Environmental Economics

Presented by:
The Center for Environmental and Resource Economic Policy (CEnREP)
and
The U.S. Environmental Protection Agency

Event Organizer: Dr. Daniel Phaneuf
NC State University

Featured Speakers:
Prof. Joseph Herriges, Iowa State University
Prof. Daniel Phaneuf, NC State University
Prof. Marty Smith, Duke University
Prof. Christopher Timmins, Duke University
Prof. Kenneth Train, UC-Berkeley
Prof. Roger von Haefen, NC State University

Why a Training Workshop?
Modern approaches for measuring consumers' preferences for the environment require a detailed understanding of micro-econometrics. The research frontier in this area has outpaced standard course curricula and packaged software. This workshop provides participants a jumpstart into these skills, taught

by experts who are developing tomorrow's methods today.

Why Attend?
Participants will hear lectures on classical and Bayesian simulation-based estimation of discrete choice models, equilibrium sorting models, discrete-continuous choice models, and generalized corner solution models. Applied exercises will introduce participants to purpose-written Matlab code for estimating these models. Upon completion, participants will have knowledge of several contemporary econometric methods and access to flexible software for their implementation.

Who Should Attend?
The workshop is designed for applied researchers in environmental economics with some experience in the practical aspects of discrete choice analysis. Advanced graduate students and young professionals in academia, government, and consulting are especially encouraged to attend.

Registration and Lodging Information:
http://www.ncsu.edu/cenrep/workshops/microeconometrics.php

Participants must have access to a laptop for use during the workshop.

The workshop is capped at 45 participants, and registration is on a first-come basis.

Contact for information and registration:

Jack Crawley: jack_crawley@ncsu.edu
Dan Phaneuf: dan_phaneuf@ncsu.edu
Laura Taylor: laura_taylor@ncsu.edu

NORTHEASTERN AGRICULTURAL AND RESOURCE ECONOMICS ASSOCIATION (NAREA)

Annual Meeting
June 7 – 9, 2009
Sheraton Hotel
Burlington, Vermont

NAREA is a professional association of agricultural and resource economists affiliated with the American Agricultural Economics Association. While many members live and work in the Northeast U.S. and Maritime Provinces of Canada, the Association membership now includes agricultural and resource economists from all over the world. The Association publishes the *Agricultural and Resource Economics Review*. The purpose of NAREA is to stimulate and promote education and research on economic and social problems related to the production, marketing and consumption of agricultural products; natural resource use; the environment, and rural economic development; and the interrelation of the agricultural and rural sectors with the rest of the economy.

Immediately following the annual meeting, a post-conference workshop on the use of experimental methods in environmental, natural resource, and agricultural economics will be held at the Sheraton Hotel. Travelers can fly into the Burlington International Airport–only about five miles from the conference hotel. A block of rooms has been reserved at $105 per night plus tax. The opening reception will be held on Sunday evening (June 7th), and is free for those registering for the conference. The conference registration fee is $160 for members, $185 for nonmembers and $90 for students (for early registration). The registration fee includes the Sunday evening reception and ticket to Monday's Awards Luncheon. The conference program will include further details once posted.

For registration information and deadlines, see the website at: http://www.narea.org/. The local arrangements committee members for the 2009 NAREA annual meeting include President-Elect Jacqueline Geoghegan, jgeoghegan@clarku.edu and Qingbin Wang, University of Vermont, qwang@uvm.edu. The planning committee members for the 2009 NAREA Workshop on the use of experimental methods include Kent Messer messer@udel.edu and Jim Murphy:
JMurphy@nero.scob.uaa.alaska.edu

SOUTHERN ECONOMIC ASSOCIATION (SEA)

79th Annual Meetings
November 21-23, 2009
Marriott San Antonio Rivercenter
San Antonio, Texas

The Call for Papers for AERE sessions at the Southern Economic Association annual meeting is now closed. AERE sessions will be posted on the AERE Web and in the November *AERE Newsletter*.

WESTERN ECONOMIC ASSOCIATION INTERNATIONAL (WEAI)

WEAI Annual Meeting
June 29 - July 3, 2009
Vancouver, British Columbia

SESSIONS for WEAI/AERE 2009
June 30 – July 1, 2009

Additional details, including abstracts, can be found on the AERE web page.

Session 1A: Cars: Hybrids, Fuel Economy, and Low Emission Zones

Chair: Hendrik Wolff, University of Washington
Tuesday, June 30th, 8:15 a.m. - 10:00 a.m.

1. **Evaluating Government Support for Hybrid Electric Vehicles in Japan**
Yu Arai, Sumeet GULATI, University of British Columbia
Discussant: Emma Hutchinson, University of Victoria

2. **CAFE Regulation: The Downside of Double Standards**
Emma HUTCHINSON, University of Victoria
Discussant: Maureen Cropper, University of Maryland, College Park and Resources for the Future (RFF)

3**. The Demand for Fuel Economy in the Indian Passenger Vehicle Market**
Randy Chugh, University of Maryland, College Park; Maureen CROPPER, University of Maryland and RFF; Urvashi Narain, The World Bank
Discussant: Hendrik Wolff, University of Washington

4. **Cars, Air Pollution and Low Emission Zones in Europe**
Lisa Perry, Hendrik WOLFF, University of Washington
Discussant: Sumeet Gulati, University of British Columbia

Session 1B: Natural Resource Institutions

Chair: Duncan Knowler, Simon Fraser University
Tuesday, June 30th, 8:15 a.m. - 10:00 a.m.

1. **Optimal Invasive Species Policies Under Asymmetric Information**
Linda FERNANDEZ, Glenn Sheriff; UC Riverside, Columbia University
Discussant: Jeffrey LaFrance, Washington State University

2. **Grazing Fees versus Stewardship on Federal Lands**
Myles Watts, Jay Shimshack, Jeffrey LAFRANCE; Washington State University
Discussant: Nori Tarui, University of Hawaii, Manoa

3. **Governing the Resource: Scarcity-Induced Institutional Change**
Nori TARUI, James Roumasset; University of Hawaii, Manoa
Discussant: Duncan Knowler, Simon Fraser University

4. **Local Communities and Nature Based Tourism: Valuing Gray Whales in Coastal Communities of Baja (Mexico) Using a Two-Phase Optimization Approach**
Duncan KNOWLER, Tobias Schwoerer; Simon Fraser University
Discussant: Linda Fernandez, UC Riverside

Session 2A: Climate: Flooding, Small Hydro, Migration, Energy-Efficiency

Chair: Paramita Sinha, RTI International
Tuesday, June 30th, 10:15 a.m. - 12:00 noon

1. **Natural Disasters and their Consequences on Labor Markets: Evidence from the 1998 Flood in Bangladesh**
Valerie MUELLER, Agnes Quisumbing, International Food Policy Research Institute (IFPRI)
Discussant: Lisa Skumatz, Skumatz Economic Research Associates

2. **Recycling vs. Energy Efficiency Programs - Which are More Cost-Effective for Reducing GHGs?**
Lisa SKUMATZ et al., Skumatz Economic Research Associates
Discussant: Lea Kosnik, University of Missouri, St. Louis

3. **Small Hydropower's Potential in the Fight Against Global Warming: A Benefit-Cost Analysis**
Lea KOSNIK, University of Missouri, St. Louis
Discussant: Paramita Sinha, RTI

4. **The Value of Climate Amenities: Evidence from U.S. Migration Decisions**
Paramita SINHA, RTI; Maureen Cropper, University of Maryland and Resources for the Future
Discussant: Valerie Mueller, Agnes Quisumbing, IFPRI

Session 2B: Natural Resources and Resource Policy

Chair: Bob Deacon, UC Santa Barbara
Tuesday, June 30th, 10:15 a.m. - 12:00 noon

1. **Optimal Domestic Processing of Exhaustible Resource Exports under Stock Uncertainty**
Ramesh KUMAR; University of Waterloo
Discussant: John Janmaat, UBC-Okanagan

2. **Water Markets, Licences, and Conservation: Some Implications**
John JANMAAT; UBC-Okanagan
Discussant: Shan Chen, University of Waterloo

3. **The Impact of Stochastic Convenience Yield on Long-term Forestry Investment Decisions**
Shan CHEN, Margaret Insley, and Tony Wirjanto; University of Waterloo
Discussant: Bob Deacon, UC Santa Barbara

4. **The Efficiency Gains from Coordinating Effort in a Fishery: Evidence from the Chignik Salmon Cooperative**
Bob DEACON, Dominic Parker, Chris Costello; UC Santa Barbara
Discussant: Ramesh Kumar, University of Waterloo

Session 3A: Ecolabeling, Audits, Disclosure

Chair: Sumeet Gulati, University of British Columbia
Tuesday, June 30th, 2:30 p.m. - 4:15 p.m.

1. **Eco-Labeling of Services: The Blue-Flag**
Toni SIPIC, University of Oregon
Discussant: Scott Gilpatric, University of Tennessee, Knoxville

2. **Environmental compliance through endogenous audit mechanisms**
Scott GILPATRIC, Michael McKee, Christian Vossler; U. Tenn., Knoxville; Appalachian State
Discussant: Josh Skov, University of Oregon

3. **The determinants of voluntary carbon disclosure**
Josh SKOV, University of Oregon
Discussant: Souvik Datta, University of British Columbia

4. **Are Purchase Rebates for Energy Star Appliances Cost-effective?**
Souvik DATTA, Sumeet Gulati; UBC
Discussant: Toni Sipic, University of Oregon

Session 3B: Recreational Demands

Chair: George Frisvold, University of Arizona
Tuesday, June 30th, 2:30 p.m. - 4:15 p.m.

1. **Temporal Stability of Recreational Choices**
George Parsons, Stela STEFANOVA; University of Delaware
Discussant: Richard Dunford, Environmental Economics Services, LLC

2. **Valuing the Recreation Outings of Children**
Richard DUNFORD, Randall Rosenberger; Environmental Economics Services, LLC; Oregon State University
Discussant: Luz Londoño-Diaz, University of Connecticut

3. **The Recreational Value of Coral Reefs: A Classical and a Bayesian Approach to Meta-analytic Benefit Transfer**
Luz LONDONO-DIAZ, Robert Johnston; University of Connecticut
Discussant: George Frisvold, University of Arizona

4. **Demand for Visits to Southwestern National Parks: Efficient Estimation with Time-Invariant and Rarely Changing Variables and Park-Specific Fixed Effects**
George FRISVOLD, Xudong Ma; University of Arizona
Discussant: Stela Stefanova, University of Delaware

AERE Reception: To be scheduled as soon as possible after the sessions that end at 4:15 p.m. Check the AERE Web for exact time and location. All AERE participants are encouraged to take this opportunity to interact in this more casual atmosphere. (Note: This will also be a good place for everyone to make sure they have dinner plans for later in the evening!)

Session 4A: Health and Environment

Chair: Trudy Ann Cameron, University of Oregon
Wednesday, July 1st, 8:15 a.m. - 10:00 a.m.

1. **Willingness to Pay for Small Reductions in Morbidity and Mortality Risks: Canada and the United States**
Peter STIFFLER, Trudy Ann Cameron, University of Oregon; J.R. DeShazo, UCLA
Discussant: Fei Yu, Colby College

2. **Willingness to Pay for Health Risk Reductions: Differences by Type of Illness**
Erica JOHNSON, Gonzaga University; Trudy Ann Cameron, University of Oregon; J.R. DeShazo, UCLA
Discussant: TBA

3. **Subjective Choice Difficulty as a Context Effect in Stated Preference Surveys**
Eric DUQUETTE, Trudy Ann Cameron, University of Oregon; J.R. DeShazo, UCLA
Discussant: TBA

4. **Measuring Health Benefits from Interventions to Reduce Indoor Air Pollution in Rural China**
Fei YU; Colby College
Discussant: Eric Duquette, University of Oregon

Session 4B: Methodology: WTP; Fisheries

Chair: David Layton, University of Washington
Wednesday, July 1st, 8:15 a.m. - 10:00 a.m.

1. **More Trouble with Turnbull: Calculating Confidence Intervals for WTP When Using Estimators with Monotonicity Constraints**
Craig MOHN, Barbara Kanninen; Cascade Econometrics
Discussant: Yoshifumi Konishi, Williams College

2. **A Framework for Estimating Willingness-To-Pay To Avoid Endogenous Environmental Risks**
Yoshifumi KONISHI, Williams College; and Kenju Adachi
Discussant: Craig Mohn, Cascade Econometrics

3. **Measuring the Dynamic Efficiency Costs of Common Property Resource Exploitation: A Dynamic Discrete Choice Model of the Fishery**
Ling HUANG, Duke University
Discussant: David Layton, University of Washington

4. **Specifying, Estimating, and Simulating, Multivariate Extreme Value (GEV) Discrete Choice Models in Fisheries**
David LAYTON, Alan Haynie, University of Washington
Discussant: Ling Huang, Duke University

Session 5A: Environmental Applications of Hedonic Methods

Chair: Noelwah Netusil, Reed College
Wednesday, July 1st, 10:15 a.m. - 12:00 noon

1. **The Value of Disappearing Beaches in North Carolina: A Hedonic Pricing model with Endogenous Beach Width**
Sathya GOPALAKRISHNAN, Jordan Slott, Martin Smith; Duke University
Discussant: Martin Heintzelman, Clarkson University

2. **The Value of Land Use Patterns and Preservation Policies**
Martin HEINTZELMAN, Clarkson University
Discussant: Bowman Cutter, Pomona College

3. **Dynamic Estimation of Open Space and Housing Values: A Novel Repeated Sales/Matching Approach**
Bowman CUTTER, Pomona College; Linda Fernandez, Ritu Sharma, UC Riverside
Discussant: Noelwah Netusil, Reed College

4. **Valuing Vegetation in an Urban Watershed**
Noelwah NETUSIL, Reed College; Jonathan Kadish, Pomona College
Discussant: Sathya Gopalakrishnan, Duke University

Session 5B: Trade and Environment

Chair: Amit Batabyal, Rochester Institute of Technology
Wednesday, July 1st, 10:15 a.m. - 12:00 noon

1. **Is bioenergy trade good for the environment?**
Jean-Marc Bourgeon, Helene OLLIVIER; EHESS - umr CIRED
Discussant: Lily Hsueh, University of Washington

2. **IS0 14001 and the Trade of Economic Bads**
Lily HSUEH; University of Washington
Discussant: Mike Springborn, UC Davis

3. **Closing the Gap between Risk Estimation and Decision-Making: Efficient Management of Trade-Related Invasive Species Risk**
Robert Lieli, University of Texas, Austin; Michael SPRINGBORN, UC Davis
Discussant: Amit Batabyal, Rochester Institute of Technology

4. **Trade, the Damage from Alien Species, and the Effects of Protectionism Under Alternate Market Structures**
Amit BATABYAL,Rochester Institute of Technology; Hamid Beladi, University of Texas, San Antonio
Discussant: Helene Ollivier, EHESS - umr CIRED

Session 6: Renewable Energy Resources

Chair: William Jaeger, Oregon State University
Wednesday, July 1st, 2:30 p.m. - 4:15 p.m

1. **Have Renewable Portfolio Standards Raised Electricity Rates? Evidence from Panel Data**
Constant TRA; University of Nevada, Las Vegas
Discussant: Bibhakar Shakya, Virginia Commonwealth University

2. **Role of Renewable Resources for Ohio's Environment and Sustainable Energy Future**
Bibhakar SHAKYA; Virginia Comonwealth University
Discussant: Jason Barton, University of British Columbia, University of Illinois

3. **American Importation of Brazilian Ethanol: The potential ecological impacts and their economic costs**
Jason BARTON; University of British Columbia, University of Illinois
Discussant: William Jaeger, Oregon State University

4. **The Cost-Effectiveness of Biofuel Policies: Multiple Objectives, Indirect Effects, and Uncertainty**
William K. JAEGER and Thorsten Egelkraut, Oregon State University
Discussant: Constant Tra, University of Nevada, Las Vegas

ESSAYS

Does Environmental Protection Hurt Low-Income Families?

Don Fullerton and Daniel Karney
University of Illinois at Urbana-Champaign
Institute of Government and Public Affairs

Introduction

Policies for environmental protection impact the lives of all U.S. citizens by regulating pollution, imposing costs, and influencing economic decisions. Common examples range from municipal trash disposal to federally mandated Corporate Average Fuel Economy (CAFE) standards for automobile fuel efficiency. Other notable environmental policies include the Environmental Protection Agency's Acid Rain Program to reduce sulfur dioxide (SO_2) emissions from domestic power plants, and the much-discussed but not-yet-enacted idea of a program to reduce greenhouse gas (GHG) emissions. While the United States is not a member of the Kyoto Protocol to reduce global GHG totals, adopted by the United Nations Framework Convention on Climate Change (UNFCC) in December 1997, President Obama promised during the campaign to achieve substantial GHG reductions in the form of a cap-and-trade policy. The proposed policy has an ambitious reduction target, and if such a policy were to be passed by Congress it would have profound impacts on the entire country. Here, we look at various implications of a GHG regulatory regime for the U.S. and certain sub-national regions, including the possibility of different effects on each income group.

As pollution becomes an increasing concern at the municipal, state, national, and international level, policy makers continue to enact environmental policies to manage environmental problems. Policy makers have a large menu of choices at their disposal to control pollution levels. Below are three categories of policy types.[1]

Command-and-Control (CAC) policies can include either a "performance standard" that merely restricts pollution of each firm or a "technology mandate" that may require particular choices. For instance, an electric plant may be required to use a particular type of fuel or to install a scrubber. These requirements make goods more expensive, and may impact the returns to factors employed in those industries.

Pollution Taxes set a tax per unit of pollution. This tax may induce the firm to reduce pollution per unit of output, and it may raise the price of output in a way that induces consumers to buy less output. A problem is that taxes are usually collected on receipts from market transactions, while many emissions are not so easily measured.

Permit Trading Schemes are also known by the name cap-and-trade. Government creates a market for pollution by issuing a number of permits that matches the maximum target amount of pollution. A key policy choice in any permit trading scheme is the initial allocation of permits. In the case of a GHG cap-and-trade program, the U.S. Congressional Research Service (CRS) estimates that the total value of permits could be $100 billion per year by 2020 under proposed legislation.[2] If permits are given away (or grandfathered) to firms, then firms receive profits equal to the total value of the permits. Alternatively, the government could auction the permits and use the resulting revenue to reduce other taxes, to reduce the deficit, or for necessary spending.

Importantly, all three of those types of policy would be likely to raise product prices. Goods produced using the most pollution would tend to experience the largest increases in price on a percentage basis. Particularly hard hit would be items such as electricity and gasoline. However, consumers are not all identical, as some use more electricity or gasoline than others. In this regard, a key distinction is between absolute consumption levels and consumption as a percentage of each household's budget. To calculate the burden of such policies as a fraction of each household's budget, we need to know

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[1] For a further discussion of policy options, see Fullerton, Don, "A Framework to Compare Environmental Policies", <u>Southern Economic Journal</u> 68(2), 2001, 224-48.

[2] The proposed legislation cited is S. 2191 (Lieberman-Warner). The CRS states, "using the lower allowance prices in the EPA/ADAGE-TECH case, total auction revenues start in the tens of billions of dollars (2005$) and increase to over $100 billion before 2030. Using higher allowance prices, such as the MIT/EPPA case, total auction revenues exceed $100 billion before 2020" (page 40). See Parker, Larry and Brent D. Yacobucci, "Climate Change: Costs and Benefits of S. 2191/S. 3036", Washington DC, U.S. Congressional Research Service, May 15, 2008.

the household's expenditure on these goods as a fraction of total expenditures.

Government must balance various and often conflicting goals when selecting an environmental policy, including economic efficiency, administrative costs, distributional objectives, and political feasibility. This note focuses on distributional effects of environmental policy, or how to consider the impacts on different segments of society when formulating a policy. A particular concern is that low-income individuals might shoulder an undue burden from environmental policy.

Distribution of Burdens

Concerns regarding environmental policy impacts across the income distribution are an important part of policy making, and yet are not well studied or understood. A particular concern is that environmental policies might generally be regressive (defined as the case where burdens are a higher fraction of income for those with less income). We now discuss six pathways that might contribute to environmental policies being regressive, and how these pathways apply to some or all of the types of policies listed above.[3]

1. Increased Product Prices: Environmental policy is likely to raise the price of goods and services that are produced or used in a pollution intensive manner. Under the tradable permit requirements of the Acid Rain Program, for example, electricity producers incur additional costs to buy low-sulfur coal, to buy scrubbers, or to buy SO_2 pollution permits. These extra costs raise electricity prices. Similar effects on automobile prices arise from CAFE standards that raise fuel efficiency, or from pollution surcharges such as garbage collection fees. In the case of a GHG reduction program, the products most affected would be those produced using a lot of fossil-fuels, whether manufactured goods, electricity, gasoline, or heating fuel. However, expenditures on goods such as electricity and gasoline generally constitute a high fraction of budgets for low-income households.[4] As a result, low-income households may be disproportionately harmed by the resulting price increases.[5]

2. Decreased Real Net Wages: Pollution abatement technologies might be capital-intensive, and thus environmental policies can raise the capital-to-labor ratio used in production. If so, in equilibrium, the wage rate paid to labor may fall relative to the return on capital. This effect may also have a regressive impact if low-income households derive the majority of income from wages, while high-income households earn higher returns from the increased demand for capital. That is, in real terms, the budgets of low-income households shrink relative to the budgets of high-income households.

3. Scarcity Rents: As discussed above, the handout of initial permits can create profits for firms, and high-income households may have relatively high levels of wealth held in the form of corporate stocks. If so, then this environmental policy may create corporate profits that are received by rich shareholders.[6]

4. Differential Valuation: Low-income households may not derive the same benefits as high-income households from decreases in pollution. Low-income households do benefit from a decrease in pollution, but those benefits may be low if those households would rather spend the same resources on the basic necessities of adequate food, clothing, and shelter. In contrast, high-income households can better enjoy the luxury of environmental benefits if they already have all the required necessities. If environmental protection provides greater value to high-income households, then, in this way also, environmental policies can be regressive.

5. Capitalization Effects: When environmental policy cleans up the air in a particular area, property prices usually increase, because, all else equal, people are willing to pay more for a house in a cleaner area. Often the property is already owned by high-income households, while low-income households rent. Thus, the capitalization effect increases the wealth of landlords and the costs to renters. It thus constitutes an additional regressive pathway of environmental policy. If so, it may represent a redistribution of wealth from the poor to the rich.

6. Transitional Effects: Environmental policies to reduce pollution almost surely decrease production by affected firms and may cause layoffs. However, individuals with higher levels of education often have better outcomes in the labor market when looking for a job. To the extent that low-income individuals have

[3] For a complete discussion, see Fullerton, Don, "Distributional Effects of Environmental and Energy Policy: An Introduction", NBER Working Paper #14241, Cambridge, MA, 2008.

[4] Metcalf, Gilbert E., "A Distributional Analysis of Green Tax Reforms," National Tax Journal 52(4), December 1999, 655-81.

[5] West, Sarah, "Distributional Effects of Alternative Vehicle Pollution Control Policies," Journal of Public Economics 88(3-4), March 2004, 735-57.

[6] Parry, Ian, "Are Emissions Permits Regressive?", Journal of Environmental Economics and Management 47(2), March 2004, 364-87.

lower education levels, these individuals may bear a disproportionate cost from employment transition periods between jobs.

Despite these pathways that can make environmental policy regressive, an overall policy package can be designed to offset these effects. For example, if permits in a cap-and-trade policy are auctioned, then the resulting government revenue can be used to provide assistance to low-income families who must pay more for electricity and heating fuel. While the policy would encourage conservation of pollution-intensive goods by raising these product prices for everyone, the assistance to low-income families could help offset the effects of those price increases on their overall welfare.

Empirical Evidence

Next we turn to some numbers to illustrate the first regressive pathway; that is, the increased price of pollution-intensive goods. Again, any serious environmental policy must raise prices, impacting all consumers in some manner. As a candidate, President Obama promised a GHG emission reduction policy to be instituted at the federal level that results in at least an 80% decrease from 1990 GHG levels by 2050. Importantly, he supported the auctioning of initial permit allocations to industry instead of giving away the initial permits to industry. Under such a policy, does the first regressive pathway affect all regions of the country identically? In terms of regressive effects, would one region be harmed to a greater extent compared to other regions?

Data for this analysis are provided by the Consumer Expenditure Survey (CEX) administered annually by the Bureau of Labor Statistics (BLS). For a sample of about 119,000 households in the 2006 edition, the CEX provides information on their income, all expenditures, and their demographic characteristics. The survey provides reliable household representation at the regional level, and states are aggregated into four regions: East, West, South, and Midwest.[7] For example, the states in the Midwest have similar economies, and all make relatively high use of natural gas rather than other fossil fuels.

Additionally, the CEX reports aggregate data by region for the seven household income classes arrayed across the bottom of each figure below. For example, the fifth group has pre-tax reported income between $40,000 and $49,999. The 2006 edition of the CEX sampled 2,607 households in this group in the Midwest region, with an average household size of 2.4 people, an average annual consumption expenditure of $37,906, and average yearly expenditure on electricity of $1,006. We apply "equivalence factors" to household aggregate statistics to help account for differences in average household size and composition, and to allow for more accurate comparisons of welfare across household groups.[8]

Any one year's income may fluctuate and thus may not provide a meaningful measure of that family's long-run well being. Instead, we use total consumption expenditure as a measure of income that is relatively constant, since households make consumption choices based on past income and expected future earnings. In this way, consumption expenditure is a reliable measure of "permanent" income.[9]

Conveniently, the CEX tracks energy expenditures including purchases of electricity, natural gas, and heating oil. Expenditure proportions by income class on these three energy sources help demonstrate this regressive pathway, because the burning of carbon-based fossil fuel releases carbon dioxide (CO_2) emissions that constitute a vast majority of domestic GHG emissions. By calculating the household budget expenditure fractions on these three energy expenditure categories for different income groups, we show the possible regressive impact of environmental policy from the potential increase in prices.

Figure 1 compares the percentage of consumption expenditures on electricity for the Midwest and South regions by income class. The clear downward sloping trend for both regions demonstrates the first regressive pathway of environmental policy. That is, the percentage of consumption expenditures on electricity falls as income increases. Among all regions, Southern states have the highest fractions of budget expenditures on electricity, due to air-conditioning use. If the GHG emissions from electricity generation are similar in the

[7] In the CEX definition, the Midwest region includes: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

[8] Equivalence factors adjust for increasing or decreasing returns to scale for households of different size and composition. The equivalence factor formula applied to this study is from Citro, Constance F. and Robert T. Michael, Measuring Poverty: A New Approach, Washington DC, National Academy Press, 1995.

[9] After applying the equivalence factor formula and using total consumption as a proxy for income in the budget, electricity accounts for 2.65% of a standardized household budget with reported income between $40,000 and $49,999. We use total consumption for the denominator of these spending percentages, but the CEX still defines income categories by annual income. Ideally, the household aggregate groups would also be sorted by consumption.

Midwest and South, then the impact of a GHG reduction regime through electricity prices would be greater in the South. Thus, comparing environmental regulation only on electricity generation, states in the Midwest would have a smaller regressive distributional impact than states in the South.

Figure 2 compares the percentage of consumption expenditures on natural gas for the Midwest and West regions by income class. Here, the downward sloping trend is more pronounced for the Midwest region, but still applies to the West region. In the Midwest, natural gas is widely used for home heating, but most of the states in the West have mild weather and use less natural gas. However, natural gas has low carbon content per unit of energy, compared to other fossil fuels, which mitigates the effects of a GHG reduction regime on Midwestern consumers.

By contrast, Figure 3 compares the percentage of consumption expenditures on fuel oil for the Midwest and Northeast regions, by income class. In many ways, Figure 3 is the opposite of Figure 2. Many homes in the Northeast region are heated using fuel oil, while Figure 2 showed that the Midwest region uses more natural gas for home heating. Unfortunately, the carbon content per unit of energy for fuel oil is much higher than for natural gas. Thus a GHG reduction policy would tend to have a heavier welfare burden on the Northeastern states relative to a Midwestern state. However, the percentage of income spent on fuel oil is quite small, ranging from 1.5% to 0.8%. Thus, while a carbon tax on heating oil technically is regressive, it would represent a small enough fraction of income to mitigate some of the concerns over regressivity.

Conclusion

Environmental policies increasingly impact every aspect of society, and it seems inevitable that more stringent pollution control regulations are soon to be enacted. However, politicians and citizens need to be aware of the potentially regressive effects of environmental policy. Environmental policy is not necessarily regressive, however, if the distributional impacts are understood and taken into account. The data analysis provided here demonstrates one possible regressive pathway of environmental policy via increased product prices. It also therefore demonstrates the magnitude of assistance to low-income families that would be needed to offset the effect of higher energy prices. Revenue to provide the assistance could come from the auctioning of initial permits, a policy position supported by during the campaign by President Obama. Five other possible regressive pathways are also discussed. If these pathways are not considered carefully, well-meaning environmental policies can inadvertently hurt the poorest members of our communities. These adverse distributional concerns are often used as roadblocks to implementing economically efficient policies. Thus, proposals for efficient pollution control policies should concurrently propose plans to mitigate any significant adverse distributional concerns arising from the overall policy package.

Figure 1: Electricity Consumption

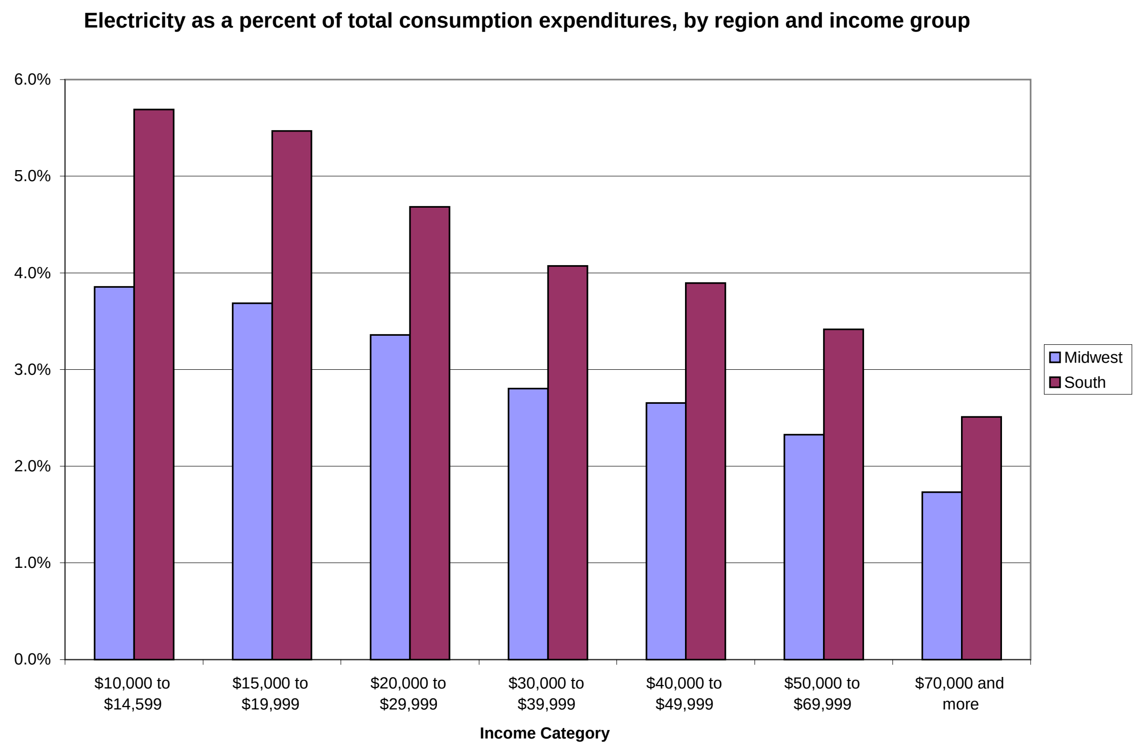


Figure 2: Natural Gas Consumption

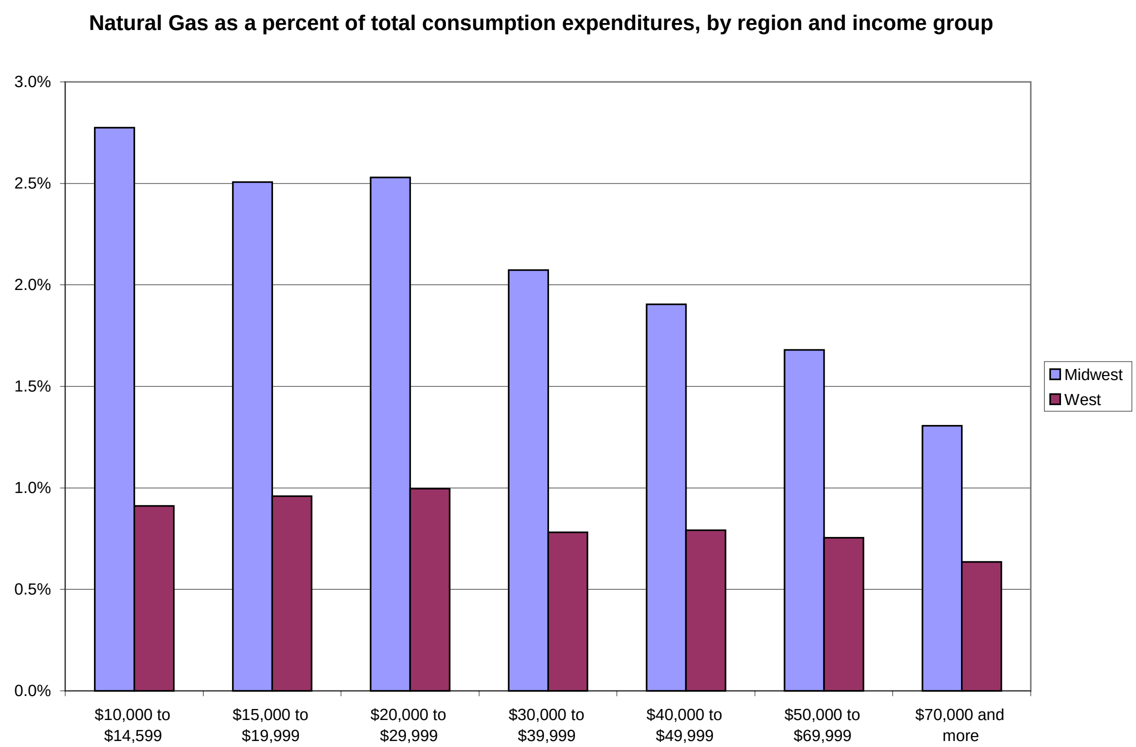
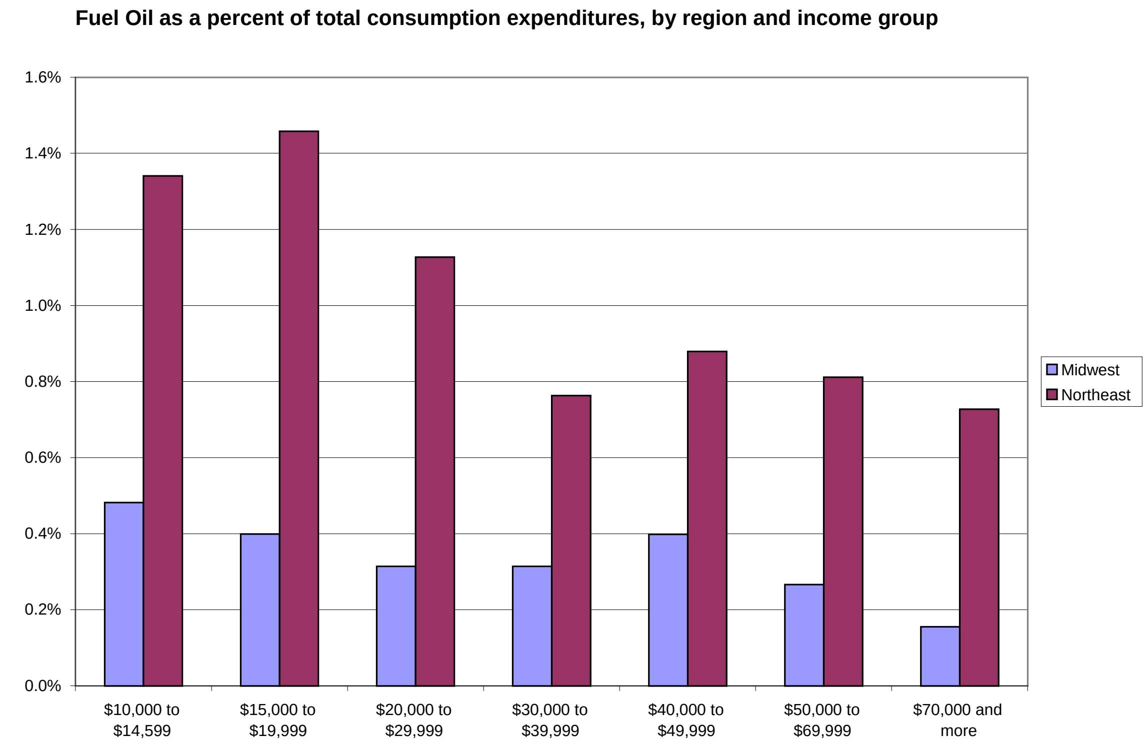


Figure 3: Fuel Oil Consumption



Evaluating the Environmental Valuation Reference Inventory (EVRI): Results from a Survey of Actual and Potential Users[10]

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Introduction

Benefit transfer uses research results from pre-existing primary valuation research to predict welfare estimates for other sites of policy significance for which primary valuation estimates are unavailable. Among the tools used by benefit transfer practitioners are non-market valuation databases that summarize results and details of included primary valuation studies (Morrison 2001). These databases often include search and other features that enable users to identify studies with particular characteristics (e.g., that address particular environmental resource types or regions) from the rapidly expanding valuation literature.

The Environmental Valuation Reference Inventory (EVRI) is a specialized internet database that contains summaries of empirical studies of the economic value of environmental costs and benefits and human health effects (http://www.evri.ca/). Although EVRI has many potential uses, the primary stated goal of the database is to assist policy analysts with benefit transfer. EVRI was originally developed by Environment Canada and the US Environmental Protection Agency in the late 1990s, with around 500 studies. It formed the basis for the EVRI Club, which is funded by member countries currently including Australia, Canada, France, New Zealand, the United Kingdom, and the United States. The database has become the largest international non-market valuation database in existence, with over 2,200 references.

At the 2006 Annual Meeting of EVRI Club Members it was decided that a comprehensive review of the database and website was necessary to ensure that EVRI continued to serve evolving user needs; this review was initiated in 2008. The review was meant to give greater emphasis to empirical analysis of survey and interview data. Primary elements required by the Club Members included: (1) a review of contemporary methods and issues in benefit transfer as related to valuation databases such as EVRI, (2) a survey and evaluation of data from EVRI users, (3) a survey and evaluation of data from EVRI potential users, (4) structured interviews with international experts in benefit transfer and non-market valuation, and (5) an evaluation of website design and functionality. Each of these elements is addressed in a final report that will be made available on the EVRI database (Thomassin et al. 2009). The purpose of this essay is to summarize some of the primary results of the EVRI review. We emphasize findings from expert interviews, the user survey, and the potential user survey, together with related recommendations for the database.

Interviews with Benefit Transfer Experts

The evaluation commenced with structured, qualitative telephone surveys of thirteen international experts[11] in non-market valuation and benefit transfer. Expert surveys were designed to reveal perceptions regarding future trends in methodological research in benefit transfer and data requirements necessary for associated advances. Participating individuals were also asked their opinions of the current EVRI database, potential changes that would enhance the utility of the database, and new data that should be incorporated. Interview structure and homogeneity was maintained by asking all respondents an identical list of ten written questions. Prior to survey implementation the list of questions was reviewed and approved by representatives from EVRI. Interview lengths averaged approximately 40-60 minutes, with responses transcribed in written form during each interview.

Expert interviews provided numerous observations regarding the frontiers in benefit transfer, the primary role of specialized databases such as EVRI, and the strengths of EVRI. EVRI was universally recognized as the most comprehensive database of its kind and an important source of information regarding non-market valuation and benefit transfer. All participants highlighted the important role of EVRI for policy analysis and academic research. Despite the broad coverage of EVRI, however, there was also agreement that valuation databases are best used as a "starting point" for research or policy analysis—that comprehensive analysis requires researchers to look

[10] The review of the EVRI database was commissioned by Environment Canada and the members of the EVRI Club. The views expressed and the recommendations are those of the authors and do not necessarily reflect those of the funding agency. Any remaining errors are the sole responsibility of the authors. Authors are listed alphabetically; no lead authorship is assigned.

[11] Participants included Randy Rosenberger, John Loomis, Ian Bateman, V. Kerry Smith, John Bergstrom, Klaus Moeltner, Jeff Bennett, Basil Sharp, Geoff Kerr, Aurelien Genty, Wiktor Adamowicz, Nancy Olewiler, Kees van Kooton.

beyond data included in EVRI (e.g., for studies that might not yet have been entered or data from included studies that was not included in the database). Participants also suggested that additional resources be devoted to the expansion of EVRI to include a larger number of studies, with particular emphasis on recent additions to the literature.

Expert surveys also identified many cross-cutting themes that were referenced in responses to different survey questions. These included, among others:

(1) the importance of meta-analysis and related research for valuation and benefit transfer together with the related challenges, e.g., selection biases (Rosenberger and Johnston 2009), study design and reporting (Loomis and Rosenberger 2006), the need for standardized architectures and definitions of non-market goods;

(2) the need for more systematic approaches to evaluation and validity testing for both non-market valuation and benefit transfer;

(3) the need for improved treatment and reporting of spatial patterns in non-market values and for related information to characterize the extent of the market (e.g., Bateman et al. 2006);

(4) the potential benefits of access to—and use of—original study data for comparative analysis and benefit transfer (e.g., Moeltner et al. 2009);

(5) the need to encourage policy applications of benefit transfer to make better use of methodological advances from the academic literature, along with a recognition that the constraints of the policy process often encourage more rudimentary (e.g., unit value) transfer methods;

(6) the utility of EVRI for both academics and analysts, but also the danger of misuse among analysts who might lack the expertise or time to properly interpret included data.

The EVRI database was lauded for its broad, comparative perspective on results across the valuation literature, data consistency, ease of access, and potential value for meta-analysis and benefit transfer. Experts also identified shortcomings related to sparse coverage of more recent valuation studies and studies that might not appear in traditional economics journals. Many of the experts commented that the EVRI database had an opportunity to address many of the challenges faced by benefit transfer policy analysts, and could help to improve broader valuation and benefit transfer practice by identifying consensus guiding principles.

The EVRI User Survey

The sampling frame for the current user survey was defined as those individuals who registered for the database or had a termination date between 2005 and 2008, inclusive, and had accessed EVRI at least once. Based on this frame, the number of current users in EVRI records was 1,280. The user survey was designed as a web-based questionnaire, with email solicitations (i.e., requests to complete the survey) sent to all current users. Multiple wave solicitations were used to encourage participation, following Dillman (2000). A total of 281 completed responses were received of the user survey, for a final response rate of 22%. The largest group of responses came from university researchers (42% of responses), members of the government sector (28%), and members of the private sector (21%).

The most common use of the database among current users was for a combination policy and research work (42% of responses), followed by research (36%) and policy analysis (19%). Respondents acknowledged the benefit of having the EVRI database and supported its continued existence and future development; 91% of respondents would recommend the EVRI website to others. To characterize user evaluations of specific database attributes, Table 1 summarizes responses addressing aspects of database coverage (i.e., which studies are included). Table 2, in contrast, summarizes responses addressing the data found in included study entries (what data are included for each captured study).

As shown by Table 1, the plurality of respondents viewed EVRI as meeting their needs in terms of the total number, policy relevance, diversity, geographical coverage and recentness of included studies. Particular satisfaction was noted in study diversity. However, a plurality of respondents also indicated that they were neutral or unsure concerning broader database comprehensiveness; whether EVRI provided sufficient coverage of all relevant studies, journals or the grey literature. Few respondents disagreed that EVRI met their requirements in any area of coverage.

Such user responses mirror a theme often noted during prior expert interviews—that EVRI provides extensive coverage of non-market valuation studies (the most extensive coverage available in any valuation database), but that this coverage could not be considered comprehensive in terms of studies or journals. That is, more comprehensive coverage of the valuation literature would further increase the utility of EVRI. Overall, user responses appear to indicate broad satisfaction with EVRI, but also a sense that the coverage of the database could be improved.

Table 2 suggests broad satisfaction with the data captured for each covered study. The majority of respondents either agree or strongly agree that EVRI provides adequate descriptions of the environmental good or service, the extent of the market, study methods applied, the information contained in each paper, socio-demographics, quantitative results and statistical analysis. Results show plurality agreement with all other aspects of study coverage (information on validity of results, study assumptions, and details of welfare measures). Interestingly, results in Table 2 seem to suggest some lack of consensus between valuation experts and broader EVRI users on the adequacy of EVRI data coverage. For example, experts pointed to study elements such as the "extent of the market" as areas in which EVRI—and the valuation literature in general—could provide more extensive coverage. In contrast, the majority of users found EVRI to be adequate in this area (table 2).

Users also felt that the EVRI database should continue to grow, including increases in the number of recent studies from both the published and grey literatures. Users also expressed a desire for additional types of data not currently found in EVRI. For example, users gave high priority to inclusion of original study data (75% of respondents) and survey instruments (59%) within EVRI. Fewer, however, indicated high priority for the inclusion of structural equations (35%), or author contact information (31%). A majority of user respondents indicated that "best practice examples of methods for non-market valuation" (74% of users), "best practice examples of survey design" (66%), and "reduced form equations or spreadsheet tools for direct use in benefit transfer" (53%) would be "very useful" additions to EVRI.

Taken together, user responses indicated satisfaction with EVRI, but also a recognition that certain targeted improvements could increase the utility and relevance of the database. User survey results are largely, although not universally, in accord with results from the valuation expert interviews. For example, EVRI users' majority support for the inclusion of benefit transfer spreadsheet tools in the database stands in contrast to warnings of many experts regarding the potential for misuse of such tools. This divergence may reflect a contrast between the average characteristics, needs and perceptions of common EVRI users—particularly those from government and the non-university private sector—and those of academic experts in non-market valuation.

The EVRI Potential Users Survey

Potential users of the EVRI database were defined as individuals who had registered for the database but had never logged into a user session. Out of 709 potential users identified in EVRI records, 88 potential users completed the survey, for a response rate of 12.4%. This reduced response rate relative to the user survey is not surprising, given that active users are expected to have a greater interest in the ongoing status of, and potential improvements to, the database.

Among potential users, the most common single reason for registering for the EVRI database was to conduct literature reviews (28% of respondents). Other reasons included learning how to undertake a non-market valuation (8%) or benefit cost analysis (16%). Three primary reasons given for <u>not</u> accessing the database after registering included the time required to gain access (28%), difficulty in accessing the database (24%), and a perception that the database was not sufficiently up-to-date (23%).

Potential users suggested that use of the database would be best facilitated if the instructions to access the database were improved (35%), that the registration and password requirement was removed (33%), and that the time to receive a password was decreased (15%). Potential user comments also suggested that increased communications from EVRI would make the database more useful. This could include such things as an e-mail identifying new additions to the database, instructions regarding database use. Potential user comments also suggested that increases in the visibility and acceptability of using EVRI for cost benefit analysis and benefit transfer would increase their likelihood of future use.

Summary and Recommendations

The EVRI database is recognized as being one of the best and most comprehensive economic valuation databases. Surveys of valuation experts and database users reveal broad satisfaction with the database and a recognition of its many potential uses. Responses suggest that the database provides an important service to many user groups, including academics and policy analysts. We believe that the importance of valuation databases such as EVRI will only grow as the body of non-market valuation research expands, and with increasing calls for research that coordinates results across primary studies (e.g., meta-analysis, preference calibration (Smith et al. 2002).

While highlighting the many positive aspects of the database, this review has also identified areas in which improvements could allow EVRI to better serve its various user groups. Improvements in the comprehensiveness of database coverage are primary among these. Results highlight a particular need for the inclusion of more recent studies. Review results also identify new areas in which EVRI might expand—for example providing access to original study data or survey instruments. Some of the primary recommendations from the EVRI review include:

1. Additional studies should be added to the EVRI database, with emphasis given to recent studies that use the latest techniques in non-market valuation (from both the published and grey literatures).
2. Additional keywords and search tools should be included to allow users to more easily identify relevant studies.
3. EVRI should explore options that might allow users to enter their own study data into the database, while also ensuring data quality.
4. Time required to gain access to the database (e.g., to obtain a password) should be shortened, and instructions for access and database use improved.
5. The "look and "feel" of the EVRI website should be up-dated and a revision of the website is required to increase its functionality.
6. EVRI could improve the communication with users. This could include an annual e-mail to users regarding recent updates to the database.
7. EVRI could be used as a vehicle to encourage the valid and appropriate use of benefit transfer through the posting of guidelines and best-practice examples.
8. Original survey data and survey instruments were identified as two priority items for potential expansion of the EVRI database. Researchers, however, may have concerns regarding the placement of original data on EVRI (e.g., related to confidentiality, ethical guidelines, and a desire to complete planned publications prior to releasing data).
9. EVRI could provide additional information to both researchers and policy analysts in terms of best practice methods for estimating environmental non-market values and for survey instrument design.

Specific action items associated with these recommendations are suppressed here for the sake of conciseness, but are included in the comprehensive report (Thomassin et al. 2009). These and other recommendations must be reviewed in light of the limited funds available for continued operation and expansion of EVRI. If the full potential of EVRI to assist academic, public and private sector analysis is to be realized, greater resources must be made available.

As a final note, we emphasize that even with greater resources and coverage, EVRI cannot ameliorate all of the potential challenges involved with benefit transfer. Environmental valuation is complex, intricate and always evolving. Accurate benefit transfers require careful and systematic attention to relationships between primary study attributes (including site, policy context and population attributes) and those of the intended policy target. As noted by Morrison (2001, p. 54), "analysts should not expect to be able to simply download value estimates for a cost-benefit analysis from these [valuation] databases, unless the cost-benefit analysis is particularly rudimentary and of little policy significance." Whether in benefit transfer or cost-benefit analysis, valuation databases cannot substitute for practitioner expertise. Along with potential improvements in EVRI should be broader recognition of the types of uses for which valuation databases are most appropriate.

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Table 1. Selected User Evaluations of EVRI Database Coverage (N=281)

The EVRI database meets my requirements in terms of:	Rating: Strongly Agree / Agree	Strongly Disagree / Disagree	Neutral, Unsure, Not Applicable
Total Number of Studies	48%	14%	38%
Policy Relevance of Studies	52%	5%	43%
Diversity of Studies	64%	11%	25%
Geographical Coverage of Studies	44%	19%	37%
Providing Current Studies	48%	15%	37%
Including All Relevant Studies	25%	21%	53%
Including Work from All Relevant Journals	31%	14%	55%
Including Work from the Grey Literature	24%	19%	57%

Table 2. Selected User Evaluations of EVRI Data Captures (N=281)

EVRI provides adequate descriptions of:	Rating: Strongly Agree / Agree	Strongly Disagree / Disagree	Neutral, Unsure, Not Applicable
Environmental Good or Service	69%	4%	28%
Extent of the Market	52%	8%	40%
Validity of Results	46%	9%	45%
Study Assumptions	48%	10%	42%
Study Methods Applied	69%	4%	27%
Information Contained in Each Paper	59%	5%	36%
Socio-Demographic Information	60%	5%	35%
Welfare Measures (units and calculation)	46%	8%	46%
Quantitative Results and Statistical Analysis	55%	4%	41%

BULLETIN BOARD

CAMP RESOURCES XVI

August 13-14, 2009
Asheville, North Carolina

We are pleased to announce that this year's Camp Resources will be held at a new venue—Asheville, North Carolina! Asheville is a lovely mountain town with a vibrant arts scene and within a few minutes' drive of the Blue Ridge Parkway and beautiful mountain areas. It's worth staying over the weekend! The hotel information is included below.

Camp Resources is a workshop designed for graduate students and young professionals to present their research in a relaxed but serious environment. We do not expect a paper. However, a clear, well-organized, 20-minute presentation describing a completed or emerging research project has been standard fare.

In addition to the regular sessions, this year's Camp will feature **Dr. Raj Chetty** of Harvard University as our tutorial speaker and **Dr. Al McGartland**, Director of the National Center for Environmental Economics of the U.S. Environmental Protection Agency (EPA), as our featured policy speaker. Dr. Chetty will present a new perspective on how to reconcile estimates from structural and reduced-form (quasi-experimental) models that focuses on the objectives of the analysis and assesses the conditions under which an economic "sufficient statistic" can be estimated. He proposes a six-step rubric for evaluating the likely effectiveness of quasi-experimental approaches in policy analysis that has direct relevance to environmental economics. Additionally, we will have short policy and research talks by two guest faculty mentors, **Dr. Roberton Williams** of the University of Texas-Austin and **Dr. Robert Mendelsohn** of Yale University.

For those interested in making presentations, please email a one-page abstract to Jack Crawley (jack_crawley@ncsu.edu) by **May 31, 2009**. Please email them in *.pdf or MS Word format. Be sure to put CAMP RESOURCES in the subject line. We will confirm, via email, receipt of all abstracts within one week.

Selection and notification of those who will present at Camp Resources XVI will be completed by June 13, 2009. Of course, everyone who wants to attend is welcome! With the generous support from a five-year EPA grant now in place, we will be able to cover travel expenses for each presenter. A modest registration fee will be charged to all attendees.

Hotel Information

Camp Resources XVI will be held at the Renaissance Ashville Hotel at One Thomas Wolfe Plaza in Ashville, North Carolina. A block of rooms has been set aside at the hotel. Our conference rate is $129.00 for a single or double room, plus taxes. For reservations call the hotel directly at 800-468-3571 and request a room in the NCSU Department of Agricultural and Resource Economics block to obtain our special rate. Group reservations must be received by the Renaissance reservations department prior to Monday, **July 13, 2009**, so make your reservations as early as practicable.

the Environmental Economics blog

www.env-econ.net

JOURNAL OF NATURAL RESOURCES POLICY RESEARCH (JNRPR)

The inaugural issue of the *Journal of Natural Resources Policy Research (JNRPR)* from Routledge, was published in January 2009. It features a symposium on Robert Solow with contributions from Peter Berck, Robert Halvorsen, John Hartwick, Alan Randall, David Simpson, and V. Kerry Smith. In addition it includes contributions from a number of resource economists on such topics as the impact of climate change on agriculture in developing nations, ecological conservation, and the potential of agent-based modeling for economic analysis of adaptive natural resource management.

JNRPR publishes original policy-oriented papers addressing a broad range of natural resource fields including water, minerals, energy, fisheries, and forestry in a synthesizing fashion, rather than as stand-alone specialty areas. It will also publish papers on the natural resource implications of climate change, natural disasters, and biodiversity loss, among others. This is a largely social-sciences-focused journal including such fields as economics, sociology, geography, political science, public administration, ethics, and other disciplines relevant to the crafting of efficient, equitable and sustainable natural resources policies.

The goal of the journal is to foster productive dialogue among the disparate sectors in the broad field of natural resources and among various social science perspectives leading to an improved understanding of institutional and economic dynamics and informed policy making.

The first issue of the journal can be viewed online at :www.tandf.co.uk/journals/JNRPR**.**

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www.rff.org/weeklycommentary

This website provides an easy way for students, policymakers, and academics to learn about economic and other aspects of environmental, energy, urban, and public health policies. Each week, an expert provides a short, non-technical commentary on a timely policy issue.

Recent commentaries have discussed, for example, issues in domestic climate legislation, oil spills, restoring the Great Lakes, the California solar initiative, green accounting, stabilizing climate with incomplete international cooperation, truck-only toll lanes, hazardous waste regulation, forest carbon sequestration, population growth, hydrogen cars, satellite solar power, competitiveness and climate policy, anti-sprawl policies, green corporate social responsibility, pay-as-you-drive car insurance, information disclosure and water quality, oil sands, reforming electricity markets, and telecommuting.

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FULBRIGHT ISRAEL POST-DOCTORAL FELLOWSHIPS FOR AMERICAN RESEARCHERS IN ALL ACADEMIC DISCIPLINES

The United States-Israel Educational Foundation (USIEF), the Fulbright commission for Israel, offers ten fellowships to American post-doctoral researchers in support of work to be carried out at Israeli universities during the course of the 2010/2011-2011/2012 academic years. The U.S. Post-Doctoral Fellowship Program is open to candidates in all academic disciplines.

Program grants total $40,000, $20,000 per academic year. Program fellows must be accepted as post-doctoral researchers by Israeli host institutions, which agree to provide them with a standard post-doctoral grant. The post-doctoral fellowships offered by Israeli universities fall in the $22,000-$35,000 range. Thus, researchers who are accepted as post-doctoral fellows by a university and also win a Fulbright award may expect to enjoy a total annual stipend in the range of $42,000-$55,000, in keeping with their qualifications, personal status, and host institution.

Applications for 2010/2011-2011/2012 Fulbright Post-Doctoral Fellowships must be submitted to the Council for International Exchange of Scholars **by August 1, 2009**. Further details on the program and on application procedures may be found at:

http://www.fulbright.org.il/index.php?id=1317;
http://www.cies.org/award_book/award2010/award/Pos0441.htm;
http://www.cies.org/us_scholars/us_awards/Application.htm.

Inquiries may be directed to Ms. Judy Stavsky, Deputy Director, USIEF, at jstavsky@fulbright.org.il or +972-3-517-2392.

JOB POSTINGS

See the AERE Web site (http://www.aere.org/jobs) for complete details on the following job opportunities.

Academic

- **University of Connecticut.** Assistant Professor in Residence, Environmental and Resource Economics [posted May 4, 2009]
- **Iowa State University**, Director, Leopold Center for Sustainable Agriculture [posted April 23, 2009]
- The Department of Economics, **Colgate University**, one-year visiting assistant professor/instructor [posted April 15, 2009]
- The Faculty of Agricultural, Life and Environmental Sciences, **University of Alberta**, **Canada** tenure-track faculty position, Bocock Chair in Agriculture and Environment [posted March 19, 2009]
- Assistant Professor in Agricultural Economics or Agricultural Business Management, **University of Alberta, Canada** [posted March 6, 2009]
- Economist, **NOAA, Pacific Islands Fisheries Science Center,** Honolulu, Hawaii [posted March 5, 2009]

Nonacademic

- **Argonne National Laboratory**, located near Chicago, Illinois, is seeking an Assistant Natural Resources Economist to complement its current multidisciplinary staff of scientists and engineers conducting environmental studies.
- **M. Systems Group** (IMSG) (www.imsg.com) is hiring an economist with knowledge and work experience in natural resource economics to support NOAA NMFS Office of Habitat Conservation (OHC). The economist will estimate the local, regional, and national economic impacts and value of the habitat protection and restoration activities that the OHC supports and undertakes, with the goal of providing information to help guide habitat conservation priorities and increase the awareness of the economic benefits of habitat conservation to the nation. In addition to national programs to protect and restore habitat, OHC is managing $170 million in funding from the American Recovery and Reinvestment Act (ARRA) of 2009 to conduct coastal habitat restoration projects that create and save jobs and restore valuable coastal and marine habitats. The initial assignments for the successful candidate for this position will be to support economic analyzes related to these ARRA projects [posted April 24, 2009]

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