

**EDWARD B. BARBIER**  
**CURRICULUM VITAE**

***CV SECTION 1: Employment History/Awards***

**NAME**

Edward B. Barbier

**ADDRESS**

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Colorado State University  
Fort Collins, CO 80523-1771  
USA

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+1 970 491 6324

**EDUCATION**

- |      |  |
|------|--|
| 1986 | Ph.D. Economics, Birkbeck College, University of London, London, England                                       |
| 1980 | M.Sc. Economics, London School of Economics and Political Science, London, England                             |
| 1979 | B.A. Economics and Political Science, <i>cum laude</i> , Yale College, Yale University, New Haven, Connecticut |

**ACADEMIC POSITIONS**

- |           |   |
|-----------|---|
| 2019-     | University Distinguished Professor, Department of Economics, Colorado State University  |
| 2017 -    | Senior Scholar, School of Global Environmental Sustainability, Colorado State University  |
| 2017-2019 | Professor, Department of Economics, Colorado State University   |
| 2016-2017 | Chair, Department of Economics, University of Wyoming   |
| 2000-2017 | John S. Bugas Professor of Economics, Department of Economics, University of Wyoming  |
| 1995-2000 | Reader, Environment Department, University of York, United Kingdom  |
| 1993-1995 | Senior Lecturer, Department of Environmental Economics and Environmental Management, University of York, United Kingdom                                     |
| 1990-1993 | Director, London Environmental Economics Centre (LEEC) of the International Institute for Environment and Development (IIED) and University College, London |
| 1988-1990 | Associate Director, London Environmental Economics Centre, London   |

1986-1988	Economist, International Institute for Environment and Development, London
1982-1986	Economics Lecturer, part-time, M.E.I.S. Department, Polytechnic of the Southbank, London
1984-1985	Visiting Economics Lecturer, Webster University, Geneva
1981-1984	Economics Lecturer, part-time, School of Social Sciences & Business Studies, Polytechnic of Central London, London

### **CURRENT JOB DESCRIPTION**

30% Teaching 60% Research 10% Service, Outreach and Engagement

### **HONORS AND AWARDS**

[Google Scholar](#) nearly 70,000 citations (#1 environmental and resource economics, #1 development economics, #7 ecosystem services).

[ScholarGPS](#) Highly Ranked Scholar – Lifetime (#1 natural resource economics, #3 economic development, #7 sustainable development)

[AD Scientific Index 2024](#) Third-ranked scientist at CSU and among the top 3% scientists in the world.

2024 Top Downloaded Article (during its first 12 months of publication, Jan – Dec. 2023), *Review of Development Economics*

2023 Visiting Fellow, Martin College, University of Oxford (for the Spring 2025 semester).

2023 (with J. Burgess) President's Sustainability Commission Annual Milestones and Recognition Award, Colorado State University

2023 Research.com Economics and Finance in United States Leader Award

<https://research.com/u/edward-b-barbier>

2023 (with J. Burgess and T. Iverson) Sustainability and Curriculum Innovation Award, School of Global Environmental Sustainability (SoGES) and President's Sustainability Commission, Colorado State University (CSU).

2023 38<sup>th</sup> Cornelson Distinguished Lecture, Department of Economics, Davidson College

<https://www.davidson.edu/academic-departments/economics/cornelson-lecture>

2022 *Economics for a Fragile Planet*, Winner, 2022 Choice Outstanding Academic Titles

2021-2022 Full Member, Sigma Xi, The Scientific Research Honor Society

2021 Career Impact Award Nomination, Colorado State University

2020-21 Global Fellow, Smart Prosperity Institute, Ottawa, Canada.

2019 University Distinguished Professor, Colorado State University

2018 Scholarship Impact Award, Colorado State University

2017 Senior Scholar, School of Global Environmental Sustainability, Colorado State University

2017 STEPI Fellowship, Science and Technology Policy Institute, Seoul, Republic of Korea.

2017 EAERE Award for Outstanding Publication in the journal *Environmental and Resource Economics*. Barbier, E.B., R.E. López and J.P. Hochard. 2016. "Debt, Poverty and Resource Management in a Rural Smallholder Economy." *Environmental and Resource Economics* 63:411-427.

2016 Commendation for Outstanding Publication in the journal *Environmental and Resource Economics* (Kennedy, C.J. and E.B. Barbier. 2015. "Renewable resource harvesting under correlated biological and economic uncertainties: implications for optimal and second-best management." *Environmental and Resource Economics* 60:371-393, Awarded June 25, 2016).

2015 Association of Environmental and Resource Economists (AERE) Fellow (Awarded June 11, 2016)

2015 13<sup>th</sup> Annual Patrick Lecture Series Award, Graduate School and Coastal Studies Institute, Louisiana State University, Baton Rouge, Louisiana

2015 STEPI Fellowship, Science and Technology Policy Institute, Seoul, Republic of Korea.

2013-14 Outstanding Senior Research Award, College of Business, University of Wyoming.

2013 Three peer-reviewed journal articles with Professor Barbier as the lead author were selected in an international survey of marine scientists as the top five most influential articles of all time on marine ecosystem services. The articles were first, fourth and fifth respectively on the list. The survey was conducted by the Marine Ecosystem Services Partnership of Duke University, USA. See <http://openchannels.org/literature-library/top-mes>.

2013 Faculty Senate Speaker Award Recipient, University of Wyoming (Fall 2013).

2012-2013 College of Business Advisory Board (COBAB) Faculty Award, University of Wyoming.

2010-11 Outstanding Senior Research Award, College of Business, University of Wyoming,.

2010 STEPI Fellowship, Science and Technology Policy Institute, Seoul, Republic of Korea.

*Blueprint for a Green Economy* listed as No. 14 in Wayne Visser. 2009. *The Top 50 Sustainability Books*. Greenleaf Publishing, Sheffield, UK, a publication of University of Cambridge's Programme for Sustainability Leadership.

2008-9 As part of the 800th anniversary celebrations of the University of Cambridge and the 20th anniversary of the Cambridge Programme for Industry (CPI), selected as one of the top 50 most influential thinkers on sustainability in the world, with particular reference to *Blueprint for a Green Economy*.

2008 Presidential Award, University of Wyoming.

2007-8 Outstanding Senior Research Award, College of Business, University of Wyoming,.

2006-7 Flittie Sabbatical Augmentation Award, University of Wyoming.

2006-7 American Heritage Center Research Fellowship, University of Wyoming.

2005 Aldo Leopold Leadership Program Fellow.

2003-4 Outstanding Senior Research, College of Business, University of Wyoming.

Listed in Marc Blaug and Howard R. Vane, eds. *Who's Who in Economics* 4<sup>th</sup> ed., Edward Elgar, London, 2003, pp. 50-1.

2003 Benjamin H. Hibbard Memorial Lecture, Department of Agricultural & Applied Economics, University of Wisconsin, Madison, Wisconsin, April 4, 2003.

2002 Joseph Fisher Lecture in Economics, Adelaide University, Australia, September 30, 2002.

1998 Annual Lecture on Natural Resource Conservation and Management in Africa, United Nations University and the Institute for Natural Resources in Africa, Accra, Ghana, November 1998.

1992 Blue Planet Prize, awarded to International Institute for Environment and Development (from 1990 to 1993 Barbier served as Director of IIED's London Environmental Economics Centre).

1991 Gambrinus Giuseppe Mazzotti Literary Prize, Special Jury's Prize, for *Blueprint for a Green Economy* (shared with Anil Markandya and David Pearce).

1991-1994. Honorary Research Fellow, Economics Department, University College London.

## ***CV SECTION 2: Publications/Scholarly Record***

### **PUBLISHED WORKS**

#### **Books:**

1. Barbier, E.B. 2022. *Economics for a Fragile Planet*. Cambridge University Press, Cambridge and New York. <https://www.cambridge.org/us/academic/subjects/economics/natural-resource-and-environmental-economics/economics-fragile-planet-rethinking-markets-institutions-and-governance?format=PB>
2. Barbier, E.B. and J.C. Burgess. 2021. *Economics of the SDGs: Putting the Sustainable Development Goals into Practice*. Palgrave Macmillan, London and New York. <https://www.palgrave.com/us/book/9783030786977>
3. Barbier, E.B. 2019. *Natural Resources and Economic Development*, Cambridge University Press, Cambridge and New York, 2<sup>nd</sup> edition. <https://www.cambridge.org/us/academic/subjects/economics/economic-development-and-growth/natural-resources-and-economic-development-2nd-edition?format=HB&isbn=9781107179264>
4. Barbier, E.B. 2019. *The Water Paradox: Overcoming the Global Crisis in Water Management*. Yale University Press, New Haven and London, 270 pp, <https://yalebooks.yale.edu/book/9780300224436/water-paradox>

5. Barbier, E.B. 2015. *Nature and Wealth: Overcoming Environmental Scarcity and Inequality*. Palgrave Macmillan, London, 262 pp.  
<https://www.palgrave.com/us/book/9781137403384#otherversion=9781137403377>
6. Barbier, E.B. and A. Markandya. 2012. *A New Blueprint for a Green Economy*. Routledge/Taylor & Francis, London, 200 pp. <https://www.routledge.com/A-New-Blueprint-for-a-Green-Economy/Barbier-Markandya/p/book/9781849713535>
7. Barbier, E.B. 2011. *Capitalizing on Nature: Ecosystems as Natural Assets*. Cambridge University Press, Cambridge and New York, 321 pp.  
<https://www.cambridge.org/us/academic/subjects/economics/natural-resource-and-environmental-economics/capitalizing-nature-ecosystems-natural-assets>
8. Barbier, E.B. 2011. *Scarcity and Frontiers: How Economies Have Developed Through Natural Resource Exploitation*. Cambridge University Press, Cambridge and New York, 748 pp.  
<https://www.cambridge.org/ve/academic/subjects/economics/economic-development-and-growth/scarcity-and-frontiers-how-economies-have-developed-through-natural-resource-exploitation>
9. Barbier, E.B. 2010. *A Global Green New Deal: Rethinking the Economic Recovery*. Cambridge University Press, Cambridge and New York, 308 pp.  
<https://www.cambridge.org/us/academic/subjects/economics/natural-resource-and-environmental-economics/global-green-new-deal-rethinking-economic-recovery?format=PB&isbn=9780521132022>
10. Hanley, N. and Barbier, E.B. 2009. *Pricing Nature: Cost-Benefit Analysis and Environmental Policy-Making*. Edward Elgar, London, 360 pp.  
<https://www.e-elgar.com/shop/us/pricing-nature-9781845427894.html>
11. Barbier, E.B. 2005. *Natural Resources and Economic Development*, Cambridge University Press, Cambridge and New York, 410 pp.
12. National Research Council (Authors: Heal, G.M., Barbier, E.B., Boyle, K.J., Covich, A.P., Gloss, S.P., Hershner, C.H., Hoehn, J.P., Pringle, C.M., Polasky, S., Segerson, K. and Shrader-Frechette, K). 2005. *Valuing Ecosystem Services: Toward Better Environmental Decision-Making*, The National Academies Press, Washington, D.C, 277 pp.
13. Barbier, E.B. and S. Sathirathai (ed.). 2004. *Shrimp Farming and Mangrove Loss in Thailand*. Edward Elgar Publishing, London, 278 pp.
14. Pearce, D.W. and Barbier, E.B. 2000. *Blueprint for a Sustainable Economy*. Earthscan, London, 272 pp.
15. Barbier, E.B. 1999, *The Economics of Land Degradation and Rural Poverty Linkages in Africa*. UNU/INRA Annual Lectures on Natural Resource Conservation and Management in Africa, November 1998. United Nations University Press, Tokyo, 132 pp.
16. Barbier, E.B., 1998, *The Economics of Environment and Development: Selected Essays*. Edward Elgar, London, 540 pp.
17. Barbier, E.B., Acreman, M. and Knowler, D., 1997, *Economic Valuation of Wetlands: A Guide for Policymakers*. Ramsar Convention Bureau, Geneva, 127 pp.

18. Barbier, E.B., Burgess, J.C. and Folke, C. 1994. *Paradise Lost? The Ecological Economics of Biodiversity*. Earthscan Publications, London, 267 pp.
19. Barbier, E.B., Burgess, J.C., Bishop, J.T. and Aylward, B.A. 1994. *The Economics of the Tropical Timber Trade*. Earthscan Publications, London, 179 pp.
20. Barbier, E.B. (ed.). 1993. *Economics and Ecology: New Frontiers and Sustainable Development*. Chapman and Hall, London, 205 pp.
21. Swanson, T.M. and Barbier, E.B. (eds.). 1992. *Economics for the Wilds: Wildlife, Wildlands, Diversity and Development*. Earthscan Publications, London, 226 pp.
22. Barbier, E.B., Burgess, J.C., Swanson, T.M. and Pearce, D.W. 1990. *Elephants, Economics*
23. *and Ivory*. Earthscan Publications, London, 154 pp.
24. Conway, G.R. and Barbier, E.B. 1990. *After the Green Revolution: Sustainable Agriculture for Development*. Earthscan Publications, London, 205 pp.
25. Pearce, D.W., Barbier, E.B. and Markandya, A. 1990. *Sustainable Development: Environmental Economics in the Third World*. Edward Elgar, London, 217 pp.
26. Pearce, D.W., Markandya, A. and Barbier, E.B. 1989. *Blueprint for a Green Economy*. Earthscan Publications, London, 192 pp.
27. Barbier, E.B. 1989. *Economics, Natural Resource Scarcity and Development: Conventional and Alternative Views*. Earthscan Publications, London, 223 pp.

#### Refereed Journal Articles:

1. Barbier, E.B. 2023. "Greening the G7 Economies." *Oxford Review of Economic Policy* 39:731-751. <https://doi.org/10.1093/oxrep/grad039>
2. Khojasteh, D., Haghani, M., Nicholls, R., Moftakhari, H., Sadat-Noori, M., Mach, K., Fagherazzi, S., Vafeidis, A., Barbier, E.B., Shamsipour, A. and Glamore, W. 2023. "The evolving landscape of sea-level rise science from 1990 to 2021" *Nature Communications Earth & Environment* 4(1):257. <https://www.nature.com/articles/s43247-023-00920-4>
3. Eskander, S.M. and E.B. Barbier. "Adaptation to Natural Disasters through the Agricultural Land Rental Market: Evidence from Bangladesh." *Land Economics* 99(1):141-160. <https://le.uwpress.org/content/99/1/141>
4. Barbier, E.B. 2023. "Overcoming Digital Poverty Traps in Rural Asia". *Review of Development Economics* 27:1403-1420. <http://doi.org/10.1111/rode.12962> **Top Downloaded Article (during its first 12 months of publication, Jan – Dec. 2023), *Review of Development Economics***
5. Barbier, E.B. 2023. "Three climate policies that the G7 must adopt — for itself and the wider world." *Nature* 617:459-461. <https://www.nature.com/articles/d41586-023-01586-w>
6. Barbier, E.B. 2023. "Reform economics of managing global water supplies." *Nature* 617:252. doi: <https://doi.org/10.1038/d41586-023-01563-3>

7. Barbier, E.B. 2023. "Greening the Ocean Economy." *Frontiers in Environmental Economics*. 2: 1096303. doi: 10.3389/frevc.2023.1096303  
<https://www.frontiersin.org/articles/10.3389/frevc.2023.1096303/full>
8. Barbier, E.B., A.C.E. Mensah and M. Wilson. 2023. "Valuing the Environment as Input, Ecosystem Services and Developing Countries." *Environmental and Resource Economics* 84:677-694. <https://doi.org/10.1007/s10640-021-00570-0>
9. Sterner, T., E.B. Barbier and A.-S. Crépin. 2023. "Spreading Environmental Economics Worldwide." *Environmental and Resource Economics* 84:649–657.  
<https://doi.org/10.1007/s10640-023-00757-7>
10. Barbier, E.B. and J.C. Burgess. 2023. "Natural Capital, Institutional Quality and SDG Progress in Emerging Market and Developing Economies." *Sustainability* 15(4): 3055  
<https://doi.org/10.3390/su15043055>
11. Barbier, E.B. 2022 "The Policy Implications of the Dasgupta Review: Land Use Change and Biodiversity." *Environmental and Resource Economics*. 83:911-935.  
<https://doi.org/10.1007/s10640-022-00658-1>
12. Barbier, E.B. 2022. "The Economics of Managing Water Crises." *Philosophical Transactions of the Royal Society A*. 380:20210295. DOI: 10.1098/rsta.2021.0295.  
<https://doi.org/10.1098/rsta.2021.0295>
13. Lovelock C.E., E.B. Barbier and C.M. Duarte. 2022. "Tackling the mangrove restoration challenge". *PLoS Biol* 20(10): e3001836. <https://doi.org/10.1371/journal.pbio.3001836>
14. Barbier, E.B. 2022. "The policy challenges of green rural transformation for Asia-Pacific emerging and developing economies in a post-COVID world." *Economic Analysis and Policy* 75:689-704. <https://www.sciencedirect.com/science/article/pii/S0313592622000947>
15. Eskander, S.M. and E.B. Barbier. 2022. "Long-Term Impacts of the 1970 Cyclone in Bangladesh." *World Development* 152:105793.  
<https://www.sciencedirect.com/science/article/abs/pii/S0305750X21004083>
16. Barbier, E.B. and J.C. Burgess. 2021. "Institutional Quality, Governance and Progress towards the SDGs." *Sustainability* 13:11798. <https://www.mdpi.com/2071-1050/13/21/11798/htm>
17. Hochard, J.P., E.B. Barbier and S.E. Hamilton. 2021. "Mangroves and coastal topography create economic 'safe havens' from tropical storms." *Scientific Reports* 11(1):1-8.  
<https://www.nature.com/articles/s41598-021-94207-3>
18. Barbier, E.B. and J.C. Burgess. 2021 "Sustainability, the systems approach and the sustainable development goals". Special issue "Economics and the environment since the 1950s", *Cahiers d'économie politique/Papers in political economy* 79(1):31-59. <https://www.cairn.info/revue-cahiers-d-economie-politique-2021-1-page-31.htm>
19. Iverson, T.W. and E.B. Barbier. 2021. National and Sub-National Social Distancing Responses to COVID-19." *Economies* 9:69. <https://www.mdpi.com/2227-7099/9/2/69>
20. Barbier, E.B. 2021. "The Evolution of Economic Views on Natural Resource Scarcity." *Review of Environmental Economics and Policy* 15(1):24-44.
21. <https://www.journals.uchicago.edu/doi/10.1086/712926>

22. Barbier, E.B. and S. Di Falco. 2021. "Rural Populations, Land Degradation, and Living Standards in Low and Middle Income Countries." *Review of Environmental Economics and Policy* 15(1):115-133. <https://www.journals.uchicago.edu/doi/10.1086/713152>
23. Barbier, E.B. 2021. "Habitat Loss and the Risk of Disease Outbreak." *Journal of Environmental Economics and Management* 108:102451  
<https://www.sciencedirect.com/science/article/pii/S0095069621000346?via%3Dihub>
24. Golden Kroner, R., E.B. Barbier, O. Chassot, S. Chaudhary, L. Cordova, A. Cruz-Trinidad, T. Cumming, J. Howard, C. Karibuhoye Said, Z. Kun, A. Ogena, F. Palla, R. Samayoa Valiente, S. Troëng, A. Valverde, R. Wijethunga and M. Wong. 2021. "COVID-Era Policies and Economic Recovery Plans: Are Governments Building Back Better for Protected and Conserved Areas?" *Parks* Vol 27 SI:121-134.
25. Barbier, E.B. 2021. "Land expansion and growth in low and middle-income countries." *Australian Journal of Agricultural and Resource Economics* 65(1):23-36.
26. Barbier, E.B and J.C. Burgess. 2021. "Sustainable Use of the Environment, Planetary Boundaries and Market Power." *Sustainability* 13:949. <https://doi.org/10.3390/su13020949>
27. Barbier, E.B. 2020. "Estuarine and Coastal Ecosystems as Defense Against Flood Damages: An Economic Perspective." *Frontiers in Climate* 2:594254  
<https://doi.org/10.3389/fclim.2020.594254>
28. Dahdouh-Guebas, F., G.N. Ajonina, A. Aldrie Amir, D.A. Andradi-Brown, I. Aziz, T. Balke, E.B. Barbier, S. Cannicci, S.M, Cragg, M. Cunha-Lignon, et al. 2020. "Public perceptions of mangrove forests matter for their conservation." *Frontiers in Marine Science* 7:603651.  
doi:10.3389/fmars.2020.603651
29. Barbier, E.B. and J.C. Burgess. 2020. "Sustainability and Development after COVID-19." *World Development* 135:105082.  
<https://www.sciencedirect.com/science/article/pii/S0305750X20302084>
30. Barbier, E.B. 2020. "Greening the post-pandemic recovery in the G20." *Environmental and Resource Economics* 76:685–703. <https://link.springer.com/article/10.1007/s10640-020-00437-w>
31. Iverson, T.W., J.C. Burgess and E.B. Barbier. 2020. "Are Sub-National Agreements for Carbon Abatement Effective?" *Energies* 13:3675. <https://doi.org/10.3390/en13143675>
32. Barbier, E.B. 2020 "Is Green Rural Transformation Possible in Developing Countries?" *World Development* 131:104955.  
<https://www.sciencedirect.com/science/article/pii/S0305750X20300814?via%3Dihub>
33. Duarte, C.M., S. Agusti, E.B. Barbier, G.L. Britten, J.C. Castilla, J.-P. Gattuso, R.W. Fulweiler, T.P. Hughes, N. Knowlton, C.E. Lovelock, H.K. Lotze, M. Predagovic, E. Poloczanska, C. Roberts and B. Worm. 2020. "Rebuilding marine life." *Nature* 580:39-51.  
<https://www.nature.com/articles/s41586-020-2146-7>
34. Barbier, E.B. 2020. "Long Run Agricultural Land Expansion, Booms and Busts." *Land Use Policy* 93:103808  
<https://www.sciencedirect.com/science/article/pii/S0264837718315229?via%3Dihub>
35. Barbier, E.B., R. Lozano, C.M. Rodríguez and S. Troëng. 2020. "Adopt a carbon tax to protect natural forests." *Nature* 578:213-216. <https://www.nature.com/articles/d41586-020-00324-w>



36. Barbier, E.B. and J.P. Hochard. 2019. "Poverty-Environment Traps." *Environmental and Resource Economics* 74(3):1239-1271. <https://link.springer.com/article/10.1007%2Fs10640-019-00366-3>
37. Jones, H.P., P.C. Jones, E.B. Barbier, R.C. Blackburn, J.M. Rey Benayas, K.D. Holl, M. McCrackin, P. Meli, D. Montoya, and D. Moreno Mateos. 2019. "We agree with Larkin et al. 2019: restoration is context specific." *Proceedings of the Royal Society B* 286(1907): 20191179.
38. Barbier, E.B. and J.C. Burgess. 2019. "Scarcity and Safe Operating Spaces: The Example of Natural Forests" *Environmental and Resource Economics* 74(3):1077-1099. <https://link.springer.com/article/10.1007/s10640-019-00360-9>
39. Barbier, E.B. 2019. "Overcoming Environmental Scarcity, Inequality and Structural Imbalance in the World Economy." *Review of Social Economy* 77(3):251-270 <https://doi.org/10.1080/00346764.2019.1602282>
40. Roberts, G., E.B. Barbier and K.T. van 't Veld. 2019. "Global emissions from crude oil: the effect of oil deposit heterogeneity." *Energy Policy* 132:654-664.
41. Barbier, E.B. and J.C. Burgess. 2019. "Sustainable Development Goal Indicators: Analyzing Trade-offs and Complementarities." *World Development* 122:295-305. <https://www.sciencedirect.com/science/article/abs/pii/S0305750X19301482>
42. Hochard, J.P., S. Hamilton and E.B. Barbier. 2019. "Mangroves shelter coastal economic activity from cyclones." *Proceedings of the National Academy of Sciences* 116(25):1232-1237. <https://doi.org/10.1073/pnas.1820067116>
43. Lee, S.Y., S. Hamilton, E.B. Barbier, J. Primavera and R.R. Lewis III. 2019. "Better restoration policies are needed to conserve mangrove ecosystems." *Nature Ecology & Evolution* 3:870-872 <https://www.nature.com/articles/s41559-019-0861-y>
44. Barbier, E.B. 2019. "Valuing Coastal Habitat-Fishery Linkages under Regulated Open Access." *Water* 11(4),847, <https://doi.org/10.3390/w11040847>.
45. Barbier, E.B. 2019. "Institutional Constraints and the Forest Transition in Tropical Developing Countries." *International Advances in Economic Research* 25(1):1-18 <https://doi.org/10.1007/s11294-019-09725-8>
46. Barbier, E.B. 2019. "The concept of natural capital." *Oxford Review of Economic Policy* 35(1):14-36. <https://academic.oup.com/oxrep/article/35/1/14/5267896>
47. Curnick, D.J., N. Pettorelli, A.A. Amir, T. Balke, E.B. Barbier, S. Crooks, F. Dahdouh-Guebas, C. Duncan, C. Endors, D.A. Friess, A. Quarto, M. Zimmer, S.Y. Lee. 2019. "The value of small mangrove patches." *Science* 363(6424):239. <http://science.sciencemag.org/content/363/6424/239>
48. Sterner, T., E.B. Barbier, I. Bateman, I. van den Bijgaart, A.-S. Crépin, O. Edenhofer, C. Fisher, W. Habla, J. Hassler, O. Johnansson-Stenman, A. Lange, S. Polasky, J. Rockström, H.G. Smith, W. Steffen, G. Wagner, J.E. Wilen, F. Alpizar, C. Azar, D. Carless, C. Chávez, J. Coria, G. Engström, S.C. Jagers, G. Köhlin, A. Löfgren, H. Pleijel and A. Robinson. 2019. "Policy design for the Anthropocene." *Nature Sustainability* 2(1):14-21. <https://www.nature.com/articles/s41893-018-0194-x>
49. Barbier, E.B. 2019. "How to make the next Green New Deal work." *Nature* 565:6.

<https://www.nature.com/articles/d41586-018-07845-5>

50. Barbier, E.B. 2018. "Natural Capital Depreciation in Sub-Saharan Africa: The Role of Sovereign Wealth Funds", Special Issue in Honor of Karl-Göran Mäler, *Ghanaian Journal of Economics* 6:5-20.
51. Barbier, E.B. and J.C. Burgess. 2018. "How Can Sovereign Wealth Funds Mitigate Natural Capital Depreciation in Developing Countries?" *World Economics* 19(4):1-22.
52. Barbier, E.B. and Jacob P. Hochard. 2018. "Land Degradation and Poverty." *Nature Sustainability* 1(11): 623–631. <https://www.nature.com/articles/s41893-018-0155-4>
53. Mason, C.F., V. Umanskaya and E.B. Barbier. 2018. "Trade, Transboundary Pollution, and Foreign Lobbying." *Environmental and Resource Economics* 70(1):223-248. <https://link.springer.com/article/10.1007/s10640-017-0118-7>
54. Barbier, E.B., J.C. Burgess and T.J. Dean. 2018. "Response – Conservation accord." *Science* 360 (6394): 1196-1197. DOI: 10.1126/science.aau1746
55. Hallegatte, S., M. Fay and E.B. Barbier. 2018. "Poverty and climate change: Introduction." *Environment and Development Economics* 23, Special Issue 3 (Poverty and Climate Change):217-233. <https://doi.org/10.1017/S1355770X18000141>. ***Most read article (#1) in Environment and Development Economics.***
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56. Hanley, N., Angelopoulos, K., Tinch, D., Davies, A., Watson, F. and Barbier, E.B. "What Drives Long-Term Biodiversity Change? Insights from Combining Economics, Paleo-Ecology, and History." *Resources for the Future Discussion Paper (RFF DP 07-23)*, Washington DC, April 2007. Paper presented at the *Frontiers in Environmental Economics Conference, Resources for the Future*, Washington, DC, 26-27 February 2007.
57. Barbier, E.B., 1998, "Environmental Project Evaluation in Developing Countries: Valuing the Environment as Input." Paper prepared for the Resource Policy Consortium Panel, *Environmental Outcomes Assessment I: Conceptual Issues*, World Congress of Environmental and Resource Economists, Venice, 25-27 June 1998
58. Barbier, E.B., 1998, "The Value of Water and Watersheds: Reconciling Ecological and Economic Externalities." Conference on "Managing Human-dominated Ecosystems," Missouri Botanical Garden, St Louis, Missouri, 26-28 March 1998, Missouri Botanical Press, USA, pp. 117-140.
59. Burgess J.C. and Barbier E.B., 1998, "Tenure Security, Trade Induced Price Changes and Tropical Forest Conversion." *Proceedings of the Environmental Policy and Society Workshop on Trade Impacts on Forest Communities*, Stallet, Sweden, January 1998 (in press).
60. Barbier, E.B., 1998, "Comments on Environment, Poverty and Economic Growth", in B. Pleskovic and J. Stiglitz (eds.). *Annual Bank Conference on Development Economics 1997*, World Bank, Washington DC, 1998, pp. 271-276.
61. Barbier, E.B., 1997, "Valuing the Environment as Input: Applications to Mangrove-Fishery Linkages." *Proceedings of the 4th Workshop of the Global Wetlands Economics Network (GWEN), Wetlands: Landscape and Institutional Perspectives*, Beijer International Institute for Ecological Economics, Royal Swedish Academy of Sciences, Stockholm, 16-17 November, 1997 (in press).
62. Barbier, E.B. and Homer-Dixon, T., 1997, "Environmental Change, Social Conflict and Limits to Adaptation in Developing Countries", in *Proceedings of the NATO Advanced Research Workshop on Environmental Change, Adaptation and Security*, Budapest, Hungary, 16-18 October, 1997, Kluwer, The Netherlands. pp. 335-350.
63. Barbier, E.B., 1997, "Ecological Economics, Uncertainty and Implications for Policy Setting Priorities for Biodiversity Conservation," in OECD, *Investing in Biological Diversity: The Cairns Conference*, OECD, Paris, 1997, pp. 115-140.
64. Barbier, E.B., 1996, *Impact of the Uruguay Round on International Trade in Forest Products*. FAO, Rome, April 1996, 51 pp.
65. Barbier, E.B. and Burgess, J.C., 1992, *Malawi - Land Degradation in Agriculture*, The World Bank, Environment Department, Divisional Working Paper No. 1992-37, Washington DC, August 1992.
66. Barbier, E.B. and Burgess, J.C., 1992, "Agricultural Pricing and Environmental Degradation", *Policy Research Working Papers, World Development Report*, World Bank, Washington DC, 1992.

67. Barbier, E.B., 1988, "The Economics of Farm Level Adoption of Soil Conservation Measures", *Environment Department Working Paper No. 11*, World Bank, Washington DC, October 1988.

**Other:**

1. Editor (with T. Sterner and A.-S. Crépin), *Special Issue in Honour of Karl-Göran Mäler, Environmental and Resource Economics*, 84(3), March 2023. <https://link.springer.com/journal/10640/volumes-and-issues/84-3>
2. Editor (with S. Hallegatte and M. Fay), *Special Issue on Climate Change and Poverty, Environment and Development Economics*, 23, Special Issue 3 (Climate Change and Poverty), June 2018. <https://www.cambridge.org/core/journals/environment-and-development-economics/issue/0074BAB27854BDAC0F4485A8369E7C23>
3. Editor, *Special Issue on Economics of Aquatic Ecosystems, Water Economics and Policy*, 3(2), April 2017. <http://www.worldscientific.com/toc/wep/03/02>
4. Editor (with I. Bateman and S. Barrett), *Special Issue in Honour of David W. Pearce: Environmental Economics and Policy, Environmental and Resource Economics* 37, June 2007.
5. Editor (with E. Bulte), *Symposium on Trade, Renewable Resources and Biodiversity, Journal of Environmental Economics and Management*, 48(2), September 2004.
6. Editor (with C. Barrett and T. Reardon), *Special Issue on the Links between Agroindustrialization and the Environment in Developing Countries, Environment and Development Economics*, 6, 2001.
7. Editor (with J.C. Burgess), *Special Issue on the Economics of Tropical Deforestation and Land Use, Land Economics*, 77(2), May 2001.
8. Editor, *Special Issue on Environmental Kuznets Curves, Environment and Development Economics*, 2(4), October 1997.

**Manuscripts Accepted for Publication (in press) or Revise and Resubmit:**

**CONTRACTS AND GRANTS (Since 2000)**

**Externally Funded Projects as PI:**

Barbier, Burgess. Policies for a Fragile Planet: What Can the US Do? (project 15-N23). Development Grant. GAIA Earth-Balance Foundation, 15 August 2023 to 15 November 2023. Total budget: \$9,000.

Barbier, "Land to Sea: Integrated modelling of consequences of terrestrial activities and climate change for freshwater and coastal marine biodiversity and ecosystem services." Research Grant, Belmont Foundation and National Science Foundation, 1 March 2019 to 28 February 2022. Total budget: \$179,997.

Barbier, "Development Pressures on Mangroves and the Vulnerability of Coastal Populations." Research Grant, College of Business, University of Wyoming, 1 January 2015 to 15 June 2015. Total budget: \$5,000.

Barbier, “Explaining Forest Transitions: The Role of Governance”. Research Grant, College of Business, University of Wyoming, 1 January 2014 to 31 May 2014. Total budget: \$10,000.

Barbier, “Land Degradation, Less Favored Lands and the Rural Poor: A Spatial and Economic Analysis.” Economics of Land Degradation Initiative and GIZ, 1 August 2013 to 31 May 2014. Total budget: \$106,088.

Barbier, Faculty-Led Research Project on Sustainable Business Practices. "Institutions for sustainable development: introducing climate change into the competing land use framework." College of Business, University of Wyoming, 1 June 2013 to 31 May 2014. Total budget: \$6,000.

Barbier, Cardinale. “Linking biodiversity and ecosystem services: From expert opinion to prediction and application.” Theme 2012T-3: Assessment and Modeling of Ecosystem Services, National Socio-Environmental Synthesis Center (SESYNC), Annapolis, Maryland, November 2012 to April 2014. Total budget: \$180,000.

Barbier, Teesfaw. “Overcoming Tenurial Constraints to Carbon Forestry Projects in Africa”, IFRI/CCAS Project on Emissions, Livelihoods and the Forest Farm Interface, University of Michigan, 2011 to 2012. Total budget: \$5,000.

Barbier, Reed and Georgiou. "Quantifying Ecosystem Services in Coastal Louisiana: A Pilot Study of the Economic Benefits of Wave and Surge Attenuation", 2010 to 2011. Total budget: \$109,933.

Barbier, Granek, Koch, Stoms and Aswani-Canela, “Measuring Ecological, Economic and Social Values of Coastal Habitats to Inform Ecosystem-based Management of Land-Sea Interfaces”, Ecosystem-Based Management Workshop Series, National Center for Ecological Analysis and Synthesis, 2007 to 2008. Total budget: \$190,400.

Barbier, Knowler and Reichard, The Economics and Ecology of the Risk of Invasive Plant Establishment from the Horticultural Trade in North America, Program of Research on the Economics of Invasive Species Management (PREISM), Economic Research Service, US Department of Agriculture, 2006 to 2007. Total budget: US\$207,000.

Barbier, Knowler and Reichard, The Ecology and Economics of Commercialization when Plants Carry a Risk of becoming Invasive, Seed Money Grant, The Center for Invasive Plant Management, Montana State University, 2004 to 2005. Total budget: US\$4,950.

Barbier, Water Scarcity and Economic Growth in Wyoming, 2003 to 2005. US Geological Survey/Wyoming Water Development Council. Total budget: US\$60,128.

Barbier, Follow-up Research on Shrimp Farming and Mangrove Loss in Thailand, University of York, Department of Environment, 2002. Total Budget US\$2,870.

Barbier, Economic Analysis of Upstream-Downstream Water Allocation in Developing Countries, Department of Economics, Stanford University, 2002 to 2004. Total budget: US\$94,377.

Barbier (Centre for Environment and Development Economics, Environment Dept) and Sathirithai (Institute for Social and Economic Policy, Thailand), Demographic and Economic Factors Determining Coastal Land Conversion into Commercial Shrimp Farms, Thailand, MacArthur Foundation, 1999 to 2002. Total budget: US\$200,000.

Barbier, Environmental Economics Input, Guidelines for Artificial Flood Releases from Reservoirs to Maintain Downstream Wetlands, Institute of Hydrology, UK Department for International Development, World Commission on Dams and World Bank, 1998 to 2001, UK£10,000.

**PAPERS PRESENTED /SYMPOSIUMS/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS**

**(Selected Presentations since 2000)**

Barbier, E.B. “Greenness and Democracy.” Invited Session Speaker, 5<sup>th</sup> International Symposium, Colorado State University, Fort Collins, Colorado 3 April 2024.

Barbier, E.B. “Green Net Domestic Product.” Invited Speaker, Workshop on Natural Capital Measurement and Modelling, European Commission, Brussels, 30 November-1 December 2023.

Barbier, E.B. “Economics for a Fragile Planet: What Can Governments, Businesses and Consumers Do?” Invited Keynote, Balanced Economy Forum: “Elephant in the Room”. NEXPO, Tallinn, Estonia 17 November 2023.

Barbier, E.B. “Climate Change and Migration.” Panel Speaker, ISAAC of Northern Colorado, Fort Collins, CO 12 November 2023.

Barbier, E.B. “Policies for Climate-Smart Agriculture for Sustainable Rural Development.” Keynote Speech, Conference on “Climate-Smart Agriculture: Adoption, Impacts, and Implications for Sustainable Development”, Asian Development Bank Institute, Tokyo, Japan, 10-11 October 2023

Barbier, E.B. “Economics and Planetary Boundaries.” Opening Talk, International Workshop on Integrating Planetary Boundaries in Economic and Social Science Analysis. University of Copenhagen, 15-16 September 2023.

Barbier, E.B. “Economics for a Fragile Planet.” Opening Keynote, Global Environmental Markets and Finance Summit, Denver, CO, 19-21 July 2023

Barbier, E.B. “Environmental Health Risks, Welfare and GDP.” Paper presented at the 28<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists, Cyprus University of Technology, Limassol, Cyprus , June 27-30, 2023.

Barbier, E.B. “Greening the G7 Through a More Inclusive Climate Club.” Keynote Presentation, Think7 Japan Summit, Tokyo Japan, 27-28 April 2023.

Barbier, E.B. “Economics for a Fragile Planet: The Biodiversity Challenge.” 36<sup>th</sup> Annual Cornelson Lecture, Department of Economics, Davidson College, Davidson, NC, 17 April 2023.

Barbier, E.B. “Economics, Natural Resource Scarcity and Biodiversity: Where Do We Go From Here?” Environmental Economics Seminar, Oxford University, Oxford, UK 6 March 2023

Barbier, E.B. “Environmental Health Risks, Welfare and GDP.” Seminar, Yale School of the Environment, Yale University, New Haven, CT. 2 November 2022.

Barbier, E.B. “Green Transformation in Emerging Market and Developing Countries.” Plenary Address, Bank Indonesia International Seminar 2022 “Green Development Strategy for the New Kalimantan”, Kalimantan, Indonesia, 19 August 2022.

Barbier, E.B. “Overcoming Digital Poverty Traps in Rural Asia.” Keynote Address. Asian Development Bank Institute (ADBI) Conference on Rural and Agricultural Development in the Digital Age, ADBI, Tokyo, Japan, 8, 9, 10 and 12 August 2022.

Barbier, E.B. “Economic Valuation of NbS for Improved Policies and Investments.” Panel Presentation. NbS Conference 2022. Oxford University, Oxford, UK, 5-7 July 5-7 2022.

Barbier, E.B. “The Economics and Financing of Nature-Based Solutions: Challenges and Opportunities.” Keynote Address. NbS Conference 2022. Oxford University, Oxford, UK, July 5-7, 2022.

Barbier, E.B. “Reflections on Resources and Their Substitutes from the Perspective of Scarcity and Frontiers throughout World History.” Invited Address. Harvard University, Cambridge, MA, June 8-9, 2022.

Barbier, E.B. “Carbon Pricing and the Climate Transition.” Panel Presentation. Climate Transition Dialogue. Colorado State University, Fort Collins, Colorado, USA, 6-7 June 2022.

Barbier, E.B. “Economics for a Fragile Planet: The Climate Challenge.” Joint IMF-World Bank Seminar Series on Climate Macroeconomics. International Monetary Fund and World Bank, Washington, DC, 8 April 2022.

Barbier, E.B. “On the Road to Stockholm +50: Shifting to Circular Economies with Forests.” Panel Presentation. Global Forest Summit 2022, Brussels, Belgium, 24 March 2022.

Barbier, E.B. “Economics for a Fragile Planet.” Public Talk. Department of Economics and School of Global Environmental Sustainability, Colorado State University, Fort Collins, Colorado, USA. 10 March 2022.

Barbier, E.B. “Economic Views on Natural Resource Scarcity: Where Do We Go From Here?” Invited AERE Fellows Talk, Association of Environmental and Resource Economists’ Winter Meeting, 10 January 2022.

Barbier, E.B. “The Policy Challenges of Green Rural Transformation for Asia-Pacific Emerging and Developing Economies in a Post-COVID World.” Keynote Address, Asian Development Bank Institute (ADB) Conference on Economic Transformation: Pathways to Inclusive and Sustainable Prosperity in Post-COVID Asia. ADBI, Tokyo, Japan, 17-18 November 2021.

Barbier, E.B. “Economics of Peatlands Conservation, Restoration and Sustainable Management.” Public Presentation. Peatlands Economics: The Case for Urgent Action. Peatland Pavilion, UNFCCC COP26, Glasgow, Scotland, UK, 4 November 2021.

Barbier, E.B. “The Economics of Managing Water Crises.” Plenary Presentation. Scientific Meeting: Drought Risk in the Anthropocene. Royal Society, London, UK, 19-20 October 2021.

<https://royalsociety.org/science-events-and-lectures/2021/10/drought-anthropocene/>

Barbier, E.B. “Positioning Bangladesh on the Global Map - A Round Table Discussion.” Panel Presentation. International Webinar Conference on Bangladesh at 50, University of Queensland, Brisbane, Australia. 7-8 October 2021. <https://economics.uq.edu.au/event/session/8653>

Barbier, E.B. “Building a Greener Recovery: Implications for Emerging and Developing Countries.” Invited Address, ECA Talks, Europe and Central Asia, The World Bank, Washington, DC, 1 July 2021. <https://www.worldbank.org/en/events/2021/07/01/building-a-greener-recovery-implications-for-emerging-and-developing-economies>

Barbier, E.B. “Habitat Loss and the Risk of Disease Outbreak.” Paper presented at the 2021 Association of Environmental and Resource Economists Virtual Conference, 2-4 June 2021.

Barbier, E.B. “Addressing COVID-19 for the Environment: Financing Green Recovery.” Panel Presentation. UN Environment Management Group Nexus Dialogues. 4 May 2021. <https://unemg.org/addressing-covid-19-for-the-environment/>

Barbier, E.B. “Quantifying the Impacts of Recovery Packages on Economic Activity.” Panel Presentation. Technical Expert Workshop on Modelling the Impact on Circular Economy and Low Carbon Transitions of the COVID-19 Recovery Packages, Organization for Economic Cooperation and Development (OECD) and European Commission, 13-14 April 2021

Barbier, E.B. “The Water Paradox: Overcoming the Global Crisis in Water Management.” Webinar, Koc Üniversitesi Law School and UNESCO, Istanbul, Turkey, 7 January 2021

Barbier, E.B. “The Evolution of Economic Views on Natural Resource Scarcity.” Invited Seminar, Department of Economics, Université du Québec à Montréal (UQAM), Montreal, Canada, 6 November 2020.

Barbier, E.B. “How to Make a Post-COVID Green New Deal Work.” Online Symposium Fall 2020: Global-Cultural Environmental Justice—Transdisciplinary and Transcultural Perspectives. University of Florida, Gainesville, Florida, 27 October 2020.

Barbier, E.B. “Building Back Better: Financing a Resilient Future.” Panel Presentation. Financing a Resilient Future, Global Roundtable, UN Environmental Programme Financial Initiative (UNEP-FI), 13-14 October 2020.

Barbier, E.B. “Potential Impacts of Pandemic Stimulus on the Price of Carbon.” Panel Presentation. Pricing Carbon Dialogue, Climate XChange, 28 July 2020.

Barbier, E.B. “Land Expansion and Growth in Low and Middle-Income Countries.” Paper presented at the Western Economic Association International Virtual 95<sup>th</sup> Annual Conference 26-30 June 2020.

Barbier, E.B. “Closing Plenary: Building the Future We Want – Green Recovery from COVID19”. Global Landscape Forum Bonn 2020 Digital Conference, 5 June 2020.

Barbier, E.B. “People and Planet: Towards Sustainable Human Development.” Panel Presentation Session 1: Conceptual Foundations. Virtual Consultation on the 2020 Human Development Report, United Nations Development Programme and United Nations Environment Programme, 1-4 June 2020.

Barbier, E.B., “Sustainability after COVID-19: Can the global Green New Deal movement survive the pandemic?” Panel Presentation. Green Growth Knowledge Partnership Webinar Series, Geneva, Switzerland, May 12, 2020. <https://greengrowthknowledge.org/learning/sustainability-after-covid-19-can-global-green-new-deal-movement-survive-pandemic>

Barbier, E.B. “From Limits to Growth to Planetary Boundaries: The Evolution of Economic Views on Natural Resource Scarcity.” Keith Campbell Address, 64<sup>th</sup> Annual Conference of the Australasian Agricultural & Resource Economics Society, University of Western Australia, Perth, Australia 11-14 February 2020.

Barbier, E.B. “The Fall and Rise of the Green New Deal.” Invited Colloquium, Center for Environmental Politics, University of Washington, Seattle, WA. 10 January 2020.

Barbier, E.B. “Using Carbon Tax Revenues to Fund the Green New Deal.” Panel Presentation. Pricing Carbon Dialogue, Brookings Institution, Washington, D.C. 2 October 2019.



Barbier, E.B. “Habitat-Fishery Linkages: An Economic Perspective.” Invited Seminar, Québec-Océan, Université Laval, Québec, Canada, 12 September 2019.

Barbier, E.B. “Sustainable Development Goal Indicators: Analyzing Trade-offs and Complementarities.” Paper presented at the Policy Session on the “Economics of the SGGs”. 24<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists, University of Manchester, United Kingdom, June 26-June 29, 2019.

Barbier, E.B. “The Water Paradox: Overcoming the Global Crisis in Water Management.” Invited Speaker, Aquarium of the Pacific, Long Beach, CA 30 May 2019.

Barbier, E.B. “From Limits to Growth to Planetary Boundaries: How the Concept of Natural Resource Scarcity Has Evolved.” Seminar, Payne Institute for Public Policy, Colorado School of Mines, Golden, CO 26 April 2019.

Barbier, E.B. “Economics for a Fragile Planet: Rethinking Markets, Institutions and Governance.” Public Address, Institute for Economics and the Environment, Portland State University, Portland, OR, 12 April 2019.

Barbier, E.B. “From Limits to Growth to Planetary Boundaries: How the Concept of Natural Resource Scarcity Has Evolved.” Keynote Lecture, International Workshop on Economics and the Environment Since the 1950s – History, Methodology and Philosophy. University of Reims Champagne-Ardenne, Reims, France, 21-22 March 2019.

Barbier, E.B. “From Limits to Growth to Planetary Boundaries: The Evolution of Economic Views on Natural Resource Scarcity.” Joint Seminar, Department of Economics and Department of Agricultural and Resource Economics, Colorado State University, Fort Collins, CO, 8 March 2019.

Barbier, E.B. “The Water Paradox: Overcoming the Global Crisis in Water Management.” Keynote Address, Poudre River Forum, Fort Collins, CO, 1 February 2019.

Barbier, E.B. “How to Pay for Saving Biodiversity: Can Private Sector Involvement in a Global Agreement Help to Conserve Global Biodiversity?” The Nature Conservancy Economics and Policy Team Webinar, 22 August 2018.

Barbier, E.B. “Coastal Ecosystems as a Defense against Flood Damages: An Economic Perspective.” Paper presented at the 2018 Ecological Society of America Annual Meeting, New Orleans, LA, 5-10 August 2018.

Barbier, E.B. “Economics for a Fragile Planet: Rethinking Markets, Institutions and Governance.” Keynote Address, Dynamics: Out of the Air, SummerFest 2018: Mission Earth Viewpoint Series, Fort Collins, CO, 10 July 2018.

Barbier, E.B. “Managing Safe Operating Spaces: The Economic and Policy Challenge.” Invited Presentation, Thematic Session: Perspectives on Policies for the Anthropocene, 6<sup>th</sup> World Congress of Environmental and Resource Economists, University of Gothenburg, Sweden, 25-29 June 2018.

Barbier, E.B. “How to Pay for Saving Biodiversity.” Invited Presentation, Policy Session: Sustaining the human well-being through addressing policy rebounds and failures for healthy natural capital - Strategies and way forward, 6<sup>th</sup> World Congress of Environmental and Resource Economists, University of Gothenburg, Sweden, 25-29 June 2018.

Barbier, E.B. “Scarcity and Safe Operating Spaces: The Example of Natural Forests.” Paper presented at the 6<sup>th</sup> World Congress of Environmental and Resource Economists, University of Gothenburg, Sweden, 25-29 June 2018.

Barbier, E.B. “The Aims and Objectives of Green Transformation in Developing Countries.” Keynote Address, Green Transformation and Competitive Advantage: Evidence from Developing Countries. Deutsches Institut für Entwicklungspolitik (DIE, German Development Institute), Bonn, Germany, 18-19 June 2018.

Barbier, E.B. “Nature and Wealth: Overcoming Environmental Scarcity and Inequality.” Plenary Address, 16<sup>th</sup> World Congress of Social Economics, Colorado State University, Fort Collins, CO, 11-13 June 2018.

Barbier, E.B. “Distribution and Trends of Impoverished Rural Populations Living on Arid and Semi-Arid Agricultural Lands.” UN Convention to Combat Desertification Scoping Meeting for the 2<sup>nd</sup> edition of the UNCCD’s Global Land Outlook (GLO2), New York, NY, 16-17 May 2018.

Barbier, E.B. “Land Degradation and Poverty.” UN-DESA Division for Sustainable Development Goals Expert Group Meeting on Sustainable Development Goal 15: Progress and Prospects, New York, NY, 14-15 May 2018.

Barbier, E.B. “Institutional Constraints and the Forest Transition in Tropical Developing Countries.” Paper presented at the 85<sup>th</sup> International Atlantic Economic Conference, London, United Kingdom, 14-17 March 2018.

Barbier, E.B. “Nature and Wealth: Overcoming Environmental Scarcity and Inequality.” Invited Presentation, Liberal Arts Development Council, College of Liberal Arts, Colorado State University, Fort Collins, CO, November 3, 2017.

Barbier, E.B. “Green Growth and Innovation” Invited Presentation, External Advisory Board Meeting, School of Global Environmental Sustainability, Colorado State University, Fort Collins, CO, October 25, 2017.

Barbier, E.B. “Preserving Biodiversity: Perspectives from Economics, Health, Food, Water, and Energy.” Panel, Global Biodiversity Summit, Global Biodiversity Center, Colorado State University, Fort Collins, CO, October 12, 2017.

Barbier, E.B. “Valuing the Environment as Input to Estimate Ecosystem Services: What Have We Learned?” Invited AAEA Session “Where are We Headed on Ecosystem Service Valuation.” 2017 American Agricultural Economics Association Meeting, Chicago, IL, July 30-August 1, 2017.

Barbier, E.B. “Economic Valuation of Coastal Wetlands and Carbon Storage.” Invited Presentation at the National Academies of Science, Engineering and Medicine Workshop on Blue Carbon, Woods Hole, MA, July 25, 2017.

Barbier, E.B. “The Dynamics of Poverty-Environment Traps.” Paper presented at the 23<sup>rd</sup> Annual Conference of the European Association of Environmental and Resource Economists, University of Athens, Greece, June 29-July 1, 2017.

Barbier, E.B. “Depletion of the Global Carbon Budget: A User Cost Approach.” Paper presented at the Association of Environmental and Resource Economists Annual Summer Conference, Pittsburgh, PA, May 31-June 2, 2017.

Barbier, E.B. “Progress and Advancement in Economic Valuation of Ecosystem Services.” Keynote Address, Expert Workshop on The Economics and Financing of Restoration Opportunities, World Resources Institute, Washington, D.C., March 31, 2017.

Barbier, E.B. “Natural Capital and Wealth in the 21<sup>st</sup> Century.” Seminar, Department of Economics, Arizona State University, Tempe, AZ, March 3, 2017.

Barbier, E.B. “Nature and Wealth: Overcoming Environmental Scarcity and Inequality.” Invited Public Address, Global Institute of Sustainability, Arizona State University, Tempe, AZ, March 2, 2017.

Barbier, E.B. “Natural Capital and Wealth in the 21<sup>st</sup> Century.” Seminar, Department of Economics, Colorado State University, Fort Collins, CO., February 16, 2017.

Barbier, E.B. “The Dynamics of Poverty-Environment Traps.” Applied Micro Seminar, Development Research Group, World Bank, Washington, D.C., December 14, 2016.

Barbier, E.B. “Advances and Frontiers at the Intersection of Environmental and Development Economics.” Plenary Address, Heartland Environmental and Resource Economics Workshop, University of Illinois, Champaign-Urbana, November 11-13, 2016.

Barbier, E.B. “Building the Green Economy: Making Sustainability Competitive through Policy and Innovation.” Keynote Address. Green Economy Konferenz 2016, Berlin, Germany 2 November 2016.

Barbier, E.B. “Exploiting Natural Wealth for Sustainable Economic Development: Rethinking the Role of Sovereign Wealth Funds.” Stroock Sovereign Wealth Forum, Jackson Hole, Wyoming, August 23-24, 2016.

Barbier, E.B. Comments on “Heterogeneous Wealth Dynamics: On the Roles of Risk and Ability” (Santos and Barrett) and “Agro-Ecosystem Productivity and the Dynamic Response to Shocks” (Chavas). National Bureau of Economic Research (NBER) Conference “The Economics of Asset Accumulation and Poverty Traps”, Washington, D.C., June 28-29, 2016

Barbier, E.B. “Sustainability and Development” Paper presented at the 22<sup>nd</sup> Annual Conference of the European Association of Environmental and Resource Economists, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland, June 22-25, 2016.

Barbier, E.B. “Is Green Growth Relevant for Developing Economies?” GGKP Policy Session on Inclusive Green Growth, The 22<sup>nd</sup> Annual Conference of the European Association of Environmental and Resource Economists, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland, June 22-25, 2016.

Barbier, E.B. “Nature and Wealth: Overcoming Environmental Scarcity and Inequality.” Grantham Research Institute for Climate Change and the Environment, The London School of Economics, London, UK, June 20, 2016.

Barbier, E.B. “Nature and Wealth: Overcoming Environmental Scarcity and Inequality.” Guest Lecture, Discovery Themes, Ohio State University, Columbus, Ohio, USA, November 6, 2015

Barbier, E.B. “The role of geographic poverty-environment traps” Policy Session: Climate Change and Poverty, The 21<sup>st</sup> Annual Conference of the European Association of Environmental and Resource Economists, University of Helsinki, Helsinki, Finland, 24-27 June 2015.

Barbier, E.B. “Is the income elasticity of the willingness to pay for pollution control constant?” Paper presented at the 21<sup>st</sup> Annual Conference of the European Association of Environmental and Resource Economists, University of Helsinki, Helsinki, Finland, 24-27 June 2015.

Barbier, E.B. “The Protective Value of Estuarine and Coastal Ecosystem Services in a Wealth Accounting Framework.” Nova School of Business and Economics, University of Lisbon, Lisbon, Portugal, April 24, 2015.

Barbier, E.B. “Valuing the Storm Protection Service of Estuarine and Coastal Wetlands.” 13<sup>th</sup> Annual Patrick Lecture Series, Louisiana State University, Baton Rouge, LA, April 14, 2015.

Barbier, E.B. “Living on the Edge: Protecting and Restoring Coastal Habitats.” 13<sup>th</sup> Annual Patrick Lecture Series, Louisiana State University, Baton Rouge, LA, April 13, 2015.

Barbier, E.B. “Quantifying and Valuing Ecosystem Services for Coastal Management.” Invited Address, Royal Swedish Academy of Sciences 275<sup>th</sup> Anniversary Symposium on Maritime Research, University of Gothenburg, Sweden. February 17-18, 2015.

Barbier, E.B. “Climate Change Impacts on Rural Poverty in Low-Elevation Coastal Zones.” Conference on Climate Change and Poverty. The World Bank, Washington, D.C., February 9-10, 2015.

Barbier, E.B. “Knowledge Generation for Green Growth.” Keynote Address. 2015 Green Growth Knowledge Platform Knowledge Partners Workshop. Ca’ Foscari University of Venice, Italy. January 28, 2015

Barbier, E.B. “Is green growth relevant for poor economies?” Keynote Address. 3<sup>rd</sup> International Conference on Environment and Natural Resource Management in Developing and Transition Economies. CERDI, University of Auvergne, Clermont-Ferrand, France. October 8-10, 2014.

Barbier, E.B. “Valuing ecosystem services for coastal protection and restoration: progress and challenges.” Keynote Address. Gulf Research Program of the National Academies. Opportunity Analysis Workshop on Environmental Monitoring. New Orleans, LA. September 3-4, 2014.

Barbier, E.B. “Quantifying and valuing coastal ecosystem services to assist policy decisions.” Symposium on Operationalizing the Concept of Ecosystem Services: Interdisciplinary Research and Synthesis. 99<sup>th</sup> Ecological Society of America Meeting, Sacramento, CA. August 10-15, 2014.

Barbier, E.B. “The Protective Value of Estuarine and Coastal Ecosystem Services in a Wealth Accounting Framework.” Paper presented at the Thematic Session “Valuation Research on Ecosystem Services for Improved National Accounting.” World Congress of Environmental and Resource Economists (WCERE), Istanbul, Turkey, June 28-July 2, 2014.

Barbier, E.B. “Explaining Forest Transitions: The Role of Governance.” Paper presented at the Thematic Session “The Economic Analysis of the Forest Transition.” World Congress of Environmental and Resource Economists (WCERE), Istanbul, Turkey, June 28-July 2, 2014.

Barbier, E.B. “Ecosystem Services and Tools for Wetland Management.” Keynote Address, 1st International Symposium on Natural Resource Management. “Understanding Wetlands: A Key Issue in the Transition to a Sustainable Economy.” Palma de Mallorca, Spain, June 19-21, 2014.

Barbier, E.B. “Building the Green Economy.” Keynote Address, Big Ideas for Sustainable Prosperity: Policy Innovation for Greening Growth. University of Ottawa, Ottawa, Canada, April 28-29, 2014.

Barbier, E.B. "Ecosystem Services and the Poor on Marginal Lands: Tradeoffs and Synergies." Keynote Address, ESPA Annual Science Conference 2013, London, UK, November 20-21, 2013.

Barbier, E.B. "Scarcity and Frontiers: How Economics Have Developed Through Natural Resource Depletion." Faculty Senate Speaker Series, Fall 2013 Award Lecture, University of Wyoming, Casper October 29 and Laramie November 11, 2013.

Barbier, E.B. "Valuing Ecosystem Services for Coastal Wetland Protection and Restoration: Progress and Challenges." Invited Seminar, Marine Science Center, Northeastern University, Nahant, MA, October 24, 2013.

Barbier, E.B. "Structural Change, Marginal Land and Economic Development in Latin America and the Caribbean" Keynote Address, Workshop on Environmental and Development Economics in Latin America, CIDE, Mexico City, Mexico, October 4-5, 2013.

Barbier, E.B. "Biodiversity, Environmental Economics and Economic Policy" Plenary Address, Ecology and Economy for a Sustainable Society, 7<sup>th</sup> Trondheim Conference on Biodiversity, Trondheim, Norway, 27-31 May 2013

Barbier, E.B. "Is Green Growth Relevant for Poor Economies?" Plenary Address, Seminar on "Green Growth: Possible and Desirable?" The World Bank, Washington, D.C., 16 May 2013.

Barbier, E.B. "Land Degradation and Rural Poverty: Economic and Social Aspects." Plenary Address, 2<sup>nd</sup> Scientific Conference, UN Convention to Combat Desertification (UNCCD), Bonn, Germany, 9-12 April 2013.

Barbier, E.B. "Progress and Challenges in Valuing Ecosystem Services for Coastal Wetland Protection and Restoration." Plenary Address, Challenges of Natural Resource Economics and Policy, 4<sup>th</sup> National Forum on Socioeconomic Research in Coastal Systems, New Orleans, LA, 24-26 March 2013.

Barbier, E.B. "A Spatial Model of Coastal Ecosystem Services." Seminar, National Socio-Environmental Synthesis Center (SESYNC), Annapolis, MD, January 11, 2013.

Barbier, E.B. "Structural Change, Dualism and Economic Development", Keynote Speech, Environment for Development Sixth Annual Meeting, Arenal, Costa Rica, October 25-29, 2012.

Barbier, E.B. "Land Degradation and the Rural Poor". Keynote Address, 2012 Research Symposium on Soil Security, University of Sydney, Sydney, Australia, July 16-17, 2012.

Barbier, E.B. "The Dualistic Frontier Economy in Developing Countries." Paper presented at the 19<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists, Charles University and the University of Economics, Prague, Czech Republic, June 27-30, 2012.

Barbier, E.B. "The Dualistic Frontier Economy in Developing Countries." Paper presented at the Oxford Centre for the Analysis of Resource Rich Economies (OxCarre), University of Oxford, June 20, 2012.

Barbier, E.B. "Environmental Sustainability and Poverty Eradication in Developing Countries." Plenary Presentation, the Dorothy R. and Norman E. McCulloch Center for Global Initiatives, Global Challenges Conference: Development in Crisis, Mount Holyoke College, MA, March 2-3, 2012.

Barbier, E.B. "Natural Capital, Ecological Scarcity and Rural Poverty." Paper presented at the inaugural conference of the World Bank's Green Growth Knowledge Platform (GGKP), "Green Growth: Addressing the Knowledge Gaps," Mexico City, Mexico, January 12-13, 2012.

Barbier, E.B. "Overcoming Tenurial Constraints to Carbon Forestry Projects in Africa." Paper presented at the Association of Environmental and Resource Economists Inaugural Summer Conference, Seattle, WA, June 9-10, 2011.

Barbier, E.B. "Coastal Wetland Restoration and the *Deepwater Horizon* Oil Spill." Paper presented at Rigs, Risk, and Responsibility: Conference on the BP Oil Spill. Vanderbilt University Law School, Nashville, TN, April 1, 2011.

Barbier, E.B. "Linking Green Stimulus, Energy Efficiency and Technological Innovation: The Need of Complementary Policies." Paper prepared for the European Commission DG 1 (External Relations) Project, "Transatlantic Opportunities for Meeting Global Challenges in Energy Efficiency and Low Carbon Technologies". Presented at the Transatlantic Energy Efficiency Workshop, UC Berkeley School of Law, Berkeley, CA, February 11-12, 2011.

Barbier, E.B. "Ecosystems as Natural Assets." Keynote Address, 11<sup>th</sup> Annual meeting of the Society for Environmental Economics and Policy Studies, Nagoya, Japan, September 12, 2010.

Barbier, E.B. "A Spatial Model of Ecosystem Services." Paper presented at the 4<sup>th</sup> World Congress of Environmental and Resource Economists, Université du Québec à Montréal (UQAM), Montreal, Canada, June 28-July 2, 2010.

Barbier, E.B. "Ecosystems as Natural Assets." Keynote Address, 11<sup>th</sup> Annual BioEcon Conference on "Economic Instruments to Enhance the Conservation and Sustainable Use of Biodiversity", Centro Culturale Don Orione Artignianelli, Venice, Italy, September 21-22, 2009.

Barbier, E.B. "A Monopolistic Competition Economic Model of the Horticultural Industry with a Risk of Harmful Plant Invasion." Paper presented at the 17<sup>th</sup> Annual Conference of European Association of Environmental and Resource Economists, Free University, Amsterdam, the Netherlands, June 24-27, 2009.

Barbier, E.B. "Financing Climate Mitigation and Adaptation at COP 15: Introductory Remarks." Invited presentation at the CC9 Climate Conference Green Technology and Finance: Striking a Fair Climate Change Agreement, Hafslund Manor, Sarpsborg, Norway, June 4-5, 2009.

Barbier, E.B. "A Global Green New Deal." Keynote Address, European Environment Bureau Conference Finding the New Path: A More Strategic Role for Sustainable Consumption and Production, Brussels, Belgium, May 27, 2009.

Barbier, E.B. "Assigning Valuation of Coastal Habitats with Non-Linear Ecological Functions: The Example of Mangroves." Invited presentation at the Symposium Valuable and Vulnerable: Managing Ecosystem Services at the Land-Sea Interface. International Marine Conservation Congress, George Mason University, Fairfax, VA, May 19-24, 2009.

Barbier, E.B. "Corruption, Poverty and Tropical Land Use". Keynote Address, International Society of Tropical Foresters Annual Conference Conflict and Cooperation: Tools for Governing Tropical Forests, Yale University, New Haven, CT, March 27-29, 2009.

Barbier, E.B. 2009. "A Global Green New Deal." Keynote Address. World Bank Environment Day. The World Bank, Washington DC, March 23, 2009.

Barbier, E.B. "Natural Resource Scarcity, Ecological Scarcity and Sustainable Development 20 Years On: What Have We Learned That Is Relevant to Developing Countries? Plenary presentation at the Pre-Conference on Environment and Development, University of Gothenburg, Sweden, June 25, 2008.

Barbier, E.B. "Corruption, Trade and the Political Economy of Resource-Based Development: A Comparison of Africa and Asia." Paper presented at the 16<sup>th</sup> Annual Conference of European Association of Environmental and Resource Economists, University of Gothenburg, Sweden, June 25-28, 2008.

Barbier, E.B. "Ecological Scarcity: The Global Economic Challenge for the 21<sup>st</sup> Century." President Speaker Series, University of Wyoming, Casper April 8 and Laramie April 17, 2008.

Barbier, E.B. "Ecological Scarcity and Sustainability: Key Economic Challenges for the 21<sup>st</sup> Century." Invited Speaker, Ecology Seminar Series, Penn State University, State College, PA, April 11, 2008.

Barbier, E.B. "Do Mangroves Reduce Expected Storm Damages? Valuing the Storm Protection Service of Coastal Wetlands". Paper presented at the 15<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists, University of Thessaloniki, Greece, June 27-30, 2007.

Barbier, E.B. "To Replant or Not To Replant. Natural Barriers? Perhaps that is the Wrong Question." In Conference on Macromarketing and Development: Building Bridges and Forging Alliances. Washington, D.C., June 2-5, 2007.

Barbier, E.B. "Natural Capital, Resource Dependency and Poverty: Implications for India." Economic Development and Environmental Sustainability: A Dialogue on India. The Initiative for Policy Dialogue (IPD), International Food Policy Research Institute (IFPRI) and National Institute of Urban Affairs (NIUA), New Delhi, India, December 18-19, 2006.

Barbier, E.B. "In the Long Run We Are All Dead: Economics, History and Long-Run Ecological Change." Keynote Address to the Long Term Ecological Research Network 2006 All-Scientists Meeting, September 20-23, Estes Park, Colorado.

Barbier, E.B. "Valuing Ecosystem Services as Productive Inputs." Paper prepared for the 43rd Panel Meeting of *Economic Policy* in Vienna, Austria, 21-22 April 2006.

Barbier, E.B. "Water Scarcity and Markets." Presentation for "The Culture of Water. Watering the West: the Evolution of Ownership, Control and Conflict in the West." Buffalo Bill Historical Center, Cody, Wyoming, October 13-15, 2005.

Barbier, E.B. "Sustainable Resource-Based Development in Asia and the Pacific: Overcoming the Problem of 'Dualism within Dualism'". Paper for the Eminent Environmental Economists Symposium The Fifth Ministerial Conference on Environment and Development in Asia and the Pacific 2005 "Achieving Environmentally Sustainable Growth", Seoul, South Korea, March 26, 2005.

Barbier, E.B. "Mangrove Dependency and the Livelihoods of Coastal Communities in Thailand." Keynote paper presented at the International Conference on Effective Land-Water Interface Management for Solving Agriculture-Fishery-Aquaculture Conflicts in Coastal Zones, Bac Lieu, Vietnam, March 1-3, 2005.

Barbier, E.B. "Explaining Agricultural Land Expansion and Deforestation in Developing Countries." Paper presented at the American Agricultural Economics Association Annual Meeting, Denver, Colorado, August 1-4, 2004.

Barbier, E.B. "Frontier Expansion and Resource-Based Development with Spillovers." Paper presented at the NBER Summer Institute 2004 Workshop on Public Policy and the Environment, Cambridge, Massachusetts, August 2-3, 2004.

Barbier, E.B. and Chaudhry, A. "Water and Growth in an Agricultural Economy." Paper presented at the 13<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists, Budapest, Hungary, June 25-28, 2004.

Barbier, E.B. "Natural Capital, Resource Dependency and Poverty in Developing Countries: The Problem of 'Dualism within Dualism'". Paper presented at the IPD Task Force Meeting "Environmental Economics and Sustainable Development", Columbia University, New York, October 10-11, 2003.

Barbier, E.B. "Frontier Expansion and Economic Development." Paper presented at the Session on "Environmental Economics" at the 78<sup>th</sup> Western Economic Association International Annual Conference, Denver, CO, July 12, 2003.

Bulte, E. and Barbier, E.B. "Trade, Renewable Resources and Biodiversity." Plenary presentation (by E. Bulte) at the 12<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists. Bilbao, Spain, June 28-30, 2003.

Barbier, E.B. "Water and Economic Growth." Paper presented at the workshop on "Water and Poverty", InterAmerican Development Bank and CIES, University of Santiago, Santiago, Chile, May 22-23, 2003 and at the 12<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists. Bilbao, Spain, June 28-30, 2003.

Barbier, E.B. "Frontiers and Sustainable Economic Development," Benjamin H. Hibbard Memorial Lecture, Department of Agricultural & Applied Economics, University of Wisconsin, Madison, WI, April 4, 2003.

Barbier, E.B. "Does Water Scarcity Constrain Growth?", Keynote Address, Conference of Australian Economists, Glenelg, South Australia, October 1-3, 2002

Barbier, E.B. "The Role of Natural Resources in Economic Development", 2002 Joseph Fisher Lecture in Economics, Adelaide University, Adelaide, Australia, September 30, 2002.

Barbier, E.B. and Damania, R. "Lobbying, Trade and Resource Conversion" Paper presented at the 2<sup>nd</sup> World Congress of Environmental and Resource Economists, Monterey, CA, June 24-27 2002 and at the Workshop on "Trade, Biodiversity and Resources", University of Tilburg, the Netherlands, September 5-6, 2002.

Barbier, E.B. "Explaining Agricultural Expansion, Resource Booms and Growth in Latin America". Paper presented at the 5<sup>th</sup> Gosnell Lecture Series, Department of Economics, Rochester Institute of Technology, Rochester, NY, February 8, 2002.

Barbier, E.B. "Existing Agricultural Expansion, Resource Boons and Growth in Latin America". Paper presented at the Toronto Conference on National Capital, Poverty and Development, The Munck Center for International Studies, University of Toronto, Canada, September 5 - 8, 2001.

Barbier, E.B. "Habitat-Fishery Linkages and Mangrove Loss in Thailand". Paper presented at the Session on "Coastal Ecosystems, Western Economics" at the 76<sup>th</sup> Western Economics Association International Annual Conference, San Francisco, CA, July 7, 2001 and at the Colorado University Environmental and Resource Economics Workshop 2001, Breckenridge, Colorado, July 16-17, 2001.

Barbier, E.B. and Cox, M. "Does Economic Development Lead to Mangrove Loss?: A Cross-Country Analysis". Paper presented at the 11<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists, University of Southampton, June 28-30, 2001 and at the Session on Ecosystem, Conservation and the Environment, Western Economic Association International Meetings, San Francisco, July 7, 2001.



Barbier, E.B. "Agricultural Land Expansion, Resource Booms and Growth: Implications for Policy in Latin America". Paper presented at the Workshop on Growth and the Environment: Macro-Economic Perspectives. Inter-American Development Bank, Washington DC, May 29, 2001.

Barbier, E.B. "The Economics of Tropical Deforestation and Land Use. What Can We Learn from Cross-Country Analysis?" Plenary paper presented at the Second International Conference On Environment and Development, The Royal Swedish Academy Of Sciences, Stockholm, September 6th-8th 2000.

Barbier, E.B. "Institutional Constraints and Deforestation: An Application to Mexico". Paper presented at the 2000 Royal Economic Society/Scottish Economic Society Conference, St. Andrews, Scotland, July 10-13, 2000.

### ***CV SECTION 3: EVIDENCE OF TEACHING AND ADVISING EFFECTIVENESS***

#### **TEACHING (CSU)**

<u>Year</u>	<u>Semester</u>	<u>Course Number and Title</u>
2017	Fall	ECON 792E Seminar: Development
2018	Spring	ECON/AREC 741 Advanced Environmental Economics
2018	Fall	ECON/AREC 240 Issues in Environmental Economics
2019	Spring	ECON 492 Senior Seminar: Economics of Natural Resources & Development
2019	Fall	ECON 792E Seminar: Development
2020	Spring	ECON 492 Senior Seminar: Economics of Natural Resources & Development
2020	Fall	ECON 792A Seminar: Theory – Resource and Ecological Economics
2021	Spring	ECON 792E Seminar: Development
2021	Fall	ECON 492 Senior Seminar: Managing the Global Water Crisis
2022	Spring	ECON 492 Senior Seminar: Managing the Global Water Crisis
2022	Fall	ECON 792A Seminar: Theory – Resource and Ecological Economics
2023	Spring	ECON 792E Seminar: Development
2023	Fall	ECON 792A Seminar: Theory – Resource and Ecological Economics
2024	Spring	ECON 492 Senior Seminar: Managing the Global Water Crisis

#### **ADVISING:**

#### **STUDENT ADVISING/GRADUATE SUPERVISION:**

##### **Current Undergraduate Advising:**

**Honors option supervision:** Ethan Moore (ECON 492 Spring 2024)

##### **Current Graduate Committee Memberships (excluding those chaired):**

\_\_\_\_1 # MS/MA/MM

\_\_\_\_2 #PhD

##### **Current Graduate Research Supervision (chaired):**

##### **Past Graduate Research Supervision:**

Matt Elmer, Maame Hagan, Hwayoung Jeon, Tao Lu, Angela Mensah, Lackson Mudenda, Abdalla Muktd, Wisnu Nugroho, Adam Walke and Michelan Wilson

### **Past PhD Thesis Advisees:**

Gayatri Acharya, World Bank  
James Benhin, University of Plymouth  
Anik Bhaduri, Griffith University, Brisbane  
Rik Chakraborti, Christopher Newport University  
Anita Chaudhry, California State University, Chico  
Mark Cox, Price Waterhouse  
Shaikh Eskander, University of Reading & London School of Economics & Political Science  
Johnson Gwatipedza, University of Manchester  
Jacob P. Hochard, University of Wyoming  
Chris Kennedy, George Mason University  
Zafar Dad Khan, University of Virginia, Wise  
Duncan Knowler, Simon Fraser University  
Barudin Mahmud, Universiti Utara Malaysia  
Sakib Mahmud, University of Wisconsin, Superior  
Angela Mensah, Pepperdine University  
Unai Pascual, Basque Center for Climate Change  
Gavin Roberts, Weber State University  
Lynda Rodwell, University of Plymouth  
Sonja Teelucksingh, Global Environmental Facility  
Anteneh Tesfaw, Conservation International  
Natalia Ushakova, Occidental College  
Michelan Wilson, Colorado College

## ***CV SECTION 4: Evidence of Outreach/Service/Engagement***

### **COMMITTEES (COLORADO STATE UNIVERSITY)**

Chair, Subcommittee on UDP Website, University Distinguished Professors Committee, Colorado State University, 2023 -  
ECON-DARE Joint Environmental Economics Curriculum Committee, Department of Economics, 2021 – present  
Faculty Affiliate, Center for Environmental Justice, Colorado State University, 2020 – present.  
University Distinguished Professors Committee, Colorado State University, 2019 - present  
Graduate Program Committee, Department of Economics, 2017 - present  
Program of Research and Scholarly Excellence, Colorado State University, 2021-2022  
Sustainability Committee, Department of Economics, Fall 2021  
Advisory Committee, Department of Economics, 2018-2019

### **PROFESSIONAL AFFILIATIONS AND ACTIVITIES**

Editorial Advisory Panel, *Nature Sustainability*, November 2016 – present.

Editorial Advisory Board, *Open Economics*, November 2016 – present.

Editorial Board, *Latin American Economic Review*, March 2013 – present.

Editorial Council, *Environmental Economics and Policy Studies*, September 2010 - present

Scientific Advisory Board, *Environmental and Resource Economics*, September 2008 – present

Policy Board, *Environment and Development Economics* (Cambridge University Press), Jan 2003 - present.

Editorial Board, *Australian Economic Papers* (Blackwells), April 2004 - 2023.

Editorial Board, *Contemporary Economic Policy* (Western Economic Association International), July 2001 - 2021.

Associate Editor, *Resource & Energy Economics*, December 2011 – January 2013

Editorial Board, *Resource & Energy Economics*, December 2006 – August 2015

Editorial Board, *Land Economics*, October 2006 – October 2012.

Associate Editor, *Frontiers in Ecology and the Environment* (Ecology Society of America), November 2005 – November 2009.

Editorial Council, *Journal of Environmental Economics and Management* (Academic Press), 2001-2003.

Editorial Board, *Conservation Ecology* (Ecological Society of America), 1996 - 2002.

Associate Editor, *Environment and Development Economics* (Cambridge University Press), 1995-2003.

Editorial Board, *Biodiversity Letters* (Blackwell), 1993-6.

### **SERVICE WITH EXTERNAL PARTNERS AND COMMUNITIES**

Member, Sea the Value: Programme Steering Group, Plymouth Marine Lab, Plymouth, UK  
<https://www.pml.ac.uk/science/Projects/Sea-the-Value>, 2022 – present,

Member, Sustainable Futures Policy Lab <https://sfplab.org/>, 2020 – present.

Member, Global Future Council on the Biodiversity Action Agenda, World Economic Forum, Geneva, Switzerland, 2019 – present.

Member, Global Forest Experts Panel (GFEP) on Forests and Poverty, International Union of Forest Research Organizations (IUFRO), Vienna, Austria, 2019 – present.

Planning Committee, Living on the Edge: Enhancing the Sustainability of Coastal Environment Systems in the Gulf of Mexico Region, GoMRI Workshop, Gulf of Mexico Research Institute, Mobile, AL, 2019 – 2020.

Research Partner, Greening Growth Partnership, Smart Prosperity Institute, Canada, 2015 – present.

Advisory Committee, Partnership for Action on Green Economy, United Nations Environment Programme (UNEP), Geneva, Switzerland, 2013 – present.

Member, Mangrove Species Survival Commission, World Conservation Union (IUCN), Gland, Switzerland, 2013 – present.

Policy Technical Experts Committee (PTEC), Wealth Accounting and Valuation of Ecosystem Services (WAVES) Global Partnership, The World Bank, Washington, DC. 2012 – present.

Advisory Board, The Economics of Ecosystems and Biodiversity (TEEB), United Nations Environment Programme, 2008 – present.

Scientific Committee, European Association of Environmental and Resource Economists, 1998 - present.

Country Representative for the United States at the European Association of Environmental and Resource Economists (EAERE) Council, 2012 – 2020.

Advisory Panel, Guidelines of Coastal and Marine Ecosystem Accounting: Incorporating the Protective Service Values of Coral Reefs and Mangroves in National Wealth Accounts, Wealth Accounting and Valuation of Ecosystem Services (WAVES), The World Bank, Washington DC, 2014 – 2017.

Advisory Board, “Valuing the Resilience Dividend”, Resilience Dividend Project, RAND Corporation and the Rockefeller Foundation, Arlington, VA and New York, NY, 2016 – 2017.

Advisory Committee, Climate Change and Poverty Report, The World Bank, Washington DC, 2014 – 2016.

Gulf of Mexico Research Initiative (GoMRI), Public Health Working Group, 2013 – 2014.

Expert Panel of Diversion Planning and Implementation: Social Impact Assessment Methodology, The Water Institute of the Gulf, Baton Rouge, Louisiana, 2013-2014.

Master Plan Science and Engineering Board, "Louisiana's Comprehensive Master Plan for a Sustainable Coast", Louisiana Office of Coastal Protection and Restoration, October 1, 2010 – March 31, 2012.

Selection Jury, Aldo Leopold Leadership Fellowship Program, Woods Institute for the Environment, Stanford University, 2008 – 2012.

Advisory Board, UK National Ecosystem Assessment (NEA), United Nations Environment Programme (UNEP), World Conservation Monitoring Centre (WCMC), UK, 2009 – 2010.

Member, Environment Economics Task Force, Initiative for Policy Dialogue, Columbia University, 2003 – 2008.

Member, International Council of Science (ICSU) Ad-hoc Scoping Group on Natural and Human-Induced Environmental Hazards, 2005 – 2007.

Member, Scientific Committee, DIVERSITAS, 2004 – 2009.

Expert Reviewer, Comprehensive Assessment of Water Management in Agriculture, International Water Management Institute, August 2005 – 2007.

Peer Reviewer, Program of Research on the Economics of Invasive Species Management (PREISM), US Department of Agriculture, 2004.

Economics Assessor, International Review of Australian National University 1995-2003, May-June 2004.

Member, Governor’s Task Force on Enhanced Oil Recovery, Governor’s Office, Wyoming, November 2003 to March 2004.

National Research Council, Water Science and Technology Board, Committee on Assessing and Valuing the Services of Aquatic and Related Terrestrial Ecosystems, National Academy of Sciences, Spring 2002 – Fall, 2004.

Review Committee, Global Development Network Awards, The World Bank, 2000.

Visiting Fellow, Environmental Policy Initiative, Agricultural and Resource Economics Department, Ohio State University, October 11-13, 2000.

Visiting Professor, Department of Agricultural and Resource Economics, University of Maryland, Spring 2000

Member, UK Economic and Social Research Council and Natural Environmental Research Council Panel on Interdisciplinary Research Studentships Awards, 1999-2000. Responsible for reviewing and recommending MPhil/DPhil applications for research awards.

Member, UK Economic and Social Research Council's Politics, Economics and Geography Research College, 1999-2000. Advisor on research policy to the ESRC's Director of Research, Politics, Economics and Geography Team.

Member, UK Department for International Development Task Force on Genetic Use Restricted Technologies (GURTs), 1999. Responsible for contributing to report and recommendations on GURTs and their impact on the developing world.

Member, UK Economic and Social Research Council Panel for Evaluating the Centre for Social and Economic Research into the Global Environment, 1998-9. Responsible for recommending on funding and other support to the ESRC General Board.

Invited by the British Council and the Australian Museum Society to participate on a panel of international experts on biodiversity loss in the Earth Alive! Forum, Sydney, Australia, 4-5 September 1997.

Visiting Professor, Department of Agricultural and Resource Economics, University of Maryland, Autumn 1996.

Resource Person and Program Committee Member, Economy and Environment Program for S.E. Asia (EEPSEA), International Development Research Centre, Singapore, 1993-6. Responsible for overseeing a major research programme to fund environmental economics research by South East Asian scholars in the region.

### **OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH (Since 2000)**

2022-2023, “Greening the G7 Through an Inclusive Climate Club”, Asian Development Bank Institute, Tokyo, Japan.

2021-2023, “Report on Green Recovery Policies for Europe and Central Asian Economies”, Office of the Chief Economist, Europe and Central Asia, The World Bank, Washington, D.C.

2021, co-authored with Joanne C. Burgess, *Economics of Peatlands Conservation, Restoration, and Sustainable Management - A Policy Report for the Global Peatlands Initiative*. Global Peatlands Initiative and United Nations Environment Programme, Nairobi.

<https://www.unep.org/resources/report/economics-peatlands-conservation-restoration-and-sustainable-management>

2020. “Building a Greener Recovery: Lessons from the Great Recession.” A Report for the Economy Division, United Nations Environment Programme, Geneva, Switzerland.

2016-2017. “Reconciling Inclusive Wealth and Piketty: Natural Capital and Wealth in the 21<sup>st</sup> Century”, Chapter for *2017 Inclusive Wealth Report*, United Nations Environment Programme, Nairobi and the Urban Institute, Kyushu University, Fukuoka, Japan.

2014-2015. “Climate Change Impacts on Poverty in Coastal Ecosystems”. Background Paper, Climate Change and Poverty Report *Shock Waves: Managing the Impacts of Climate Change on Poverty*, The World Bank, Washington, D.C., 2016.

April-August 2014. “Challenges to Ecosystem Service Valuation for Wealth Accounting”, Chapter for *2014 Inclusive Wealth Report*, United Nations University International Human Dimensions Programme on Global Environmental Change (IHDP) and United Nations Environment Programme (UNEP), Bonn, Germany.

2013-2014, co-authored with Jacob P. Hochard, “Land Degradation, Less Favored Lands and the Rural Poor: A Spatial and Economic Analysis.” A Report for the Economics of Land Degradation Initiative, Bonn, Germany. Available at [www.eld-initiative.org](http://www.eld-initiative.org)

January-April 2013. “A Report on Water and Green Growth with a Focus on Biodiversity and Water Inter-Linkages”, Organization for Economic Cooperation and Development (OECD), Paris, France.

September 2012. "External Review of Chapter 3 of the African Development Report (ADR) 2012." African Development Bank, Tunis, Tunisia.

July-September 2012. Research and preparation of a paper, co-authored with A. Chaudhry, "Urban Growth and Water", for presentation at the technical workshop, "The Importance of Water to the U.S. Economy: Environmental Protection Agency Office of Water, Washington, D.C., September 19, 2012

2011-2012. "Natural Capital, Ecological Scarcity and Rural Poverty", paper for the Green Growth Knowledge Platform Inaugural Conference, Mexico City, Mexico, and for the Green Development Program, DECRG: Environment & Energy, The World Bank, Washington DC.

2011-2012. “Ecosystem Services and Wealth Accounting”, Chapter for *2012 Inclusive Wealth Report*, United Nations University International Human Dimensions Programme on Global Environmental Change (IHDP) and United Nations Environment Programme (UNEP), Bonn, Germany.

2011. Contributor, United Nations Environment Programme (UNEP). *Towards a Green Economy: Pathways to Sustainability and Poverty Eradication*, [www.unep.org/greeneconomy](http://www.unep.org/greeneconomy) on behalf of the Green Economy Initiative and the Division of Technology, Industry and Economics, UNEP, 2010-2011, Geneva, Switzerland.

2010-2011. "Linking green stimulus, energy efficiency and technological innovation: The need for complementary policies." Paper prepared for the European Commission DG 1 (External Relations) Project, "Transatlantic Opportunities for Meeting Global Challenges in Energy Efficiency and Low Carbon Technologies", Brussels, Belgium.

2008-2009. “A Global Green New Deal”, Report prepared for the Governing Council of the United Nations Environment Programme (UNEP) on behalf of the Green Economy Initiative and the Division of Technology, Industry and Economics, UNEP, Geneva, Switzerland.

2002-2003. Consultant, BioEcon Project, Environment Department, University of York, UK.

2001-2002. Peer Reviewer, Mexico Environmental Degradation and Poverty Study, The World Bank, Washington, D.C.

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