

## LISA A. WAINGER

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### Professional Preparation

- Ph.D.** 1997 Marine Estuarine Environmental Sciences, University of Maryland, College Park.  
**B.S.** 1986 (with honors, Phi Beta Kappa), Earth Science, University of California, Santa Cruz.

### Appointments

- 2006-present *Research Associate Professor*, Univ. of Maryland, Ctr for Environmental Science  
2004–2006 *Associate Research Scientist*, Univ. of Maryland, Ctr for Environmental Science  
1998–2004 *Assistant Research Scientist*, University of Maryland, Ctr for Environmental Science  
1995–1998 *Assistant Research Scientist/Project Manager*, University of Maryland, Institute for Ecological Economics, Center for Environmental Science  
1990–1995 *Graduate Research Assistant*, University of Maryland, Ctr for Environmental Science

### Relevant Publications Last Three Years

- Mehaffey, M., L. Wainger, T. Wade, D. Yankee, E. Smith, V. Bott, R. Yarborough. 2008. Assessing vulnerabilities from alternative development patterns. *Landscape and Urban Planning* 87:84–95.
- Wainger, L. A. and J. Boyd, (May 2009). Economics in Ecosystem-Based Management. Chapter 7 In: *Ecosystem-Based Management for the Oceans: Applying Resilience Thinking* (K. McLeod, and H. Leslie, eds.). Island Press
- Lookingbill, T., R. Gardner, L. Wainger and C. Tague. 2008. Landscape Modelling. In: *Encyclopedia of Ecology* (Sven Erik Jorgensen, editor). Elsevier.
- Wainger, Lisa A., Dennis M. King, Richard N. Mack, Elizabeth W. Price and Thomas Maslin, 2007. *Prioritizing Invasive Species Management by Optimizing Production of Ecosystem Service Benefits*. <http://www.ers.usda.gov/Publications/CCR44/>.
- Wainger, Lisa A. and Dennis M. King, 2007. *Establishing Trading Ratios for Point – Non-Point Source Water Quality Trades: Can we Capture Environmental Variability without Breaking the Bank?* UMCES Technical Report No. TS-523-07 [http://www.cbl.umces.edu/cms108/images/stories/user\\_content/ScoringWatQualityTrades\\_TechRpt.pdf](http://www.cbl.umces.edu/cms108/images/stories/user_content/ScoringWatQualityTrades_TechRpt.pdf).
- Chornesky, E.A. & 15 coauthors, 2005. Science priorities to reduce the threat of invasive species to sustainable forestry. *BioScience* 55(4): 335-349.

### Five Other Relevant Publications

- Wainger, Lisa A., Dennis M. King, Sandra L. Bird and Joyce A. Cantrell, 2004. Indicators for Assessing Economic Vulnerabilities to Changes in Ecosystem Services: Case Study of Counties in Maryland, USA. *Environmental Management* 34(5):730-747.
- Wainger, Lisa A. and Elizabeth W. Price, 2004. Evaluating Quality of Life, Economic Vulnerabilities and Drivers of Ecosystem Change. *Environmental Monitoring and Assessment*. 94:69-84.
- Boyd, J. and L.A. Wainger, 2002. Landscape Indicators of Ecosystem Service Benefits. *American Journal of Agricultural Economics* 84(5):1371-1378.
- Wainger, L. A., D. M. King, J. Salzman and J. Boyd, 2001. Wetland Value Indicators for Scoring Mitigation Trades. *Stanford Environmental Law Journal* 20(2):413-478.

Shabman, L., L. Zepp, L. Wainger and D. King, 2002. Incentives for reforestation of agricultural land: What will a market for carbon sequestration credits contribute? *Journal of Sustainable Agriculture* (17(2): 116-124).

### Synergistic Activities – Service and Applied Research

**Ecosystem Services Research Program (EPA Office of Research and Development).** 2007-present. Helping develop economic research agenda related to ecosystem services.(Rick Linthurst, Director); Investigator on case study examining impacts of land use change on ecosystem services in Midwest agro-eco landscapes.

**Scientific and Technical Advisory Committee (EPA Chesapeake Bay Program).** 2007-present. Social science member of committee that guides management of the Chesapeake Bay Program including providing reviews and synthesis of current scientific understanding.

**National Fish and Wildlife Foundation – Improved Targeting of Restoration.** 2008-present. Multi-investigator project to assess restoration success and target restoration cost-effectively to promote ecological goals and social benefits.

**National Park Service Economic Decision Support Tool.** 2008-present. Produce software tool for evaluating invasive species restoration options and tradeoffs. Involves quantifying ecosystem services and summarizing social benefits of decisions.

**Risk Analysis of Multiple Stressors on Estuarine Systems (NOAA Coastal Oceans Program).** 2003-2005. Collaborator on “Risk-Based Decision Support System for Managing Coastal Systems Exposed to Multiple Stressors.” Goals are to use previous modeling results in decision support tool to evaluate nutrient trading and other management options. Lead investigator: Denise Breitburg + 7 main investigators.

**Prioritizing Invasive Species Management (USDA Economic Research Service).** 2004-2007. Co-Principal Investigator, developed spatial decision tools for federal agencies managing plant invasives. Resulted in optimization system to compare cost, risk and benefit tradeoffs using ecosystem services and restoration benefit functions.

**Prioritizing Wetland Restoration.** 2003. Led team effort to incorporate results of NSF STAR grant (Opaluch and others at University of Rhode Island) into a prototype decision-support web tool for state resource managers.

**Sustainable Forestry and Invasive Species.** Invited participant in National Center for Ecological Analysis and Synthesis workshop and subsequent workshops led by Ann Bartuska (US Forest Service) to examine economic contributions to sustainability research.

### Recent Collaborators

Aplet, G. H.	Eskow, J.	Opaluch, James
Bartuska, Ann	Gardner, Robert	Price, Elizabeth W.
Bird, Sandra L.	Gordon, D. R.	Salzman, James
Boumans, Roelof	Gottschalk, K.W.	Shabman, Leonard
Bott, Vicki	Haack, R.A.	Shannon, M.A.
Boyd, James	Hansen, A. J.	Smith, Betsy
Britton, K.O.	King, Dennis M.	Tague, C.
Bruins, Randy	Kuch, Peter	Villa, Ferdinando
Chornesky, Liz.	Leslie, Heather	Voinov, Alexey
Costanza, Robert (advisor)	Lookingbill, Todd	Voinov, Helena
Cummings-Carlson, J.	Mack, Richard	Wade, Timothy
Davis, F. W.	McCloud, K.	Wigley, T. B.
	Mehaffey, Megan	Yankee, D.