CURRICULUM VITAE

Michelle Eva Portman

1. EDUCATION

 2007 Ph.D., Public Policy (Environmental Policy track) University of Massachusetts Dissertation: From Land to Sea: the application of land protection tools to the marine environment Committee Chair: Professor David Terkla, Department of Economics
1991 M.Sc. , Urban and Regional Planning Technion - Israel Institute of Technology, Israel Thesis: Scenic Resource Evaluation in Environmental Impact Statements
1984 B.Sc., Political Economy of Natural Resources College of Natural Resources

2. APPOINTMENTS

2.1 Academic

- March 2012- Assistant Professor, Faculty of Architecture, Technion, Israel Institute of Technology, Haifa, Israel.
- 2009-2011 Postdoctoral Researcher, Department of Geography, Faculty of Social Sciences, Hebrew University of Jerusalem, Israel.

University of California at Berkeley

2007-2009 Postdoctoral Researcher, Marine Policy Center, Woods Hole Oceanographic Institution, Falmouth, Massachusetts.

2.2 Professional

- 2000-2008 Regional Planner IV, Waterways Regulation Program, Bureau of Resource Protection, Massachusetts Department of Environmental Protection, Boston, Massachusetts
- 1998-2000 Regional Planner IV, Waste Planning Division, Bureau of Waste Prevention, Massachusetts Department of Environmental Protection, Boston, Massachusetts
- 1995-1998 Senior Planning, Boston Redevelopment Authority, City of Boston, Massachusetts
- 1994-1995 Planning Staff Head, Central District Planning Commission, Israel Ministry of the Interior, Ramle, Israel
- 1991-1994 Planner, Conservation Department, Society for the Protection of Nature in Israel, Tel Aviv, Israel

1989-1991 Planner, Planning Authority, Israel Ministry of the Interior, Jerusalem, Israel

2.3 Editorial

1999-2001 International Journal of Waste Management Member of the Editorial Board

2.4 Honorary

- 2010-2014 Marie Curie Fellow, European Union, Framework Program 7
- 2009-2010 Lady Davis Fellow, Hebrew University of Jerusalem, Israel
- 2007-2009 Marine Policy Center Fellow, Woods Hole Oceanographic Institution
- 2008 Environmental Policy McCloy Fellow, American Council on Germany

3. TEACHING

3.1 Courses taught (last 3 years)

Fall 2013	GIS for Planners Technion, Israel Institute of Technology, graduate, 38 students
Fall 2013	Introduction to Environmental Planning, graduate, 35 students Technion, Israel Institute of Technology
Spring 2013	GIS Applications for Conservation and Environmental Decision-making Technion, Israel Institute of Technology, graduate, 5 students
Fall 2012	GIS for Planners Technion, Israel Institute of Technology, graduate, 22 students
Fall 2012	Introduction to Environmental Planning, graduate, 30 students Technion, Israel Institute of Technology
Spring 2012	Coastal and Marine Planning and Management, graduate, 5 students Technion, Israel Institute of Technology
Spring 2012	Environmental Planning and Management, undergraduate, 35 students Tel Chai Academic College, Israel
Fall 2011:	Advanced Planning Methods, graduate, 20 students Technion, Israel Institute of Technology
Spring 2011:	Environmental Planning and Management, undergraduate, 45 students Tel Chai Academic College, Israel

3.2 Graduate students:

3.2.1 In progress

- Since 2013 Ateret Shabtai, PhD student, "Marine spatial planning along the Israeli Mediterranean coast ", with Prof. Y. Carmel, Technion
- Since 2013 Sharon Hanan-Selkinder, MSc student, "The integration of small scale archaeological sites in the modern-urban fabric", with Asst. Prof. P. Plaut.
- Since 2013 Yarden Elhanan, MSc student "Assessment of sustainable preparedness of vulnerable coastal city's to natural hazardous", with Asst. Prof. Yosef Jabareen.
- Since 2013 Efrat Bar, MSc student, with Prof. R. Sela-Sheffy, University of Tel Aviv.
- Since 2013 Emri Brickner, MSc student, "Ecosystem-based Management in Marine Spatial Planning", with Asst. Prof. Dani Ben-Shahar

3.3 Post-doctoral fellows supervised

2013- Dr. Yael Teff-Seker (postdoctoral fellow)

3.4 Mentorees

- 2013- Semion Polinov, Research Assistant
- 2010-13 Daniel Nathan, Research Assistant
- 2014- Asaf Zanzuri, Research Assistant

4. RESEARCH

Research Interests

- Spatial analysis of marine protected areas in the Mediterranean Sea; planning processes for the Mediterranean context; application of decision support tools for the zoning of marine reserves, visualization of marine and coastal environments.
- The use of green infrastructure in coastal watersheds to improve the marine environment; impacts of urban infrastructure on the flow of marine-based land pollution; water sensitive urban development.
- Policy tools for coastal zone management; environmental justice and erosion; spatial analysis of the effects of shoreline change.

4.1 Sponsored

2014-17 Marine Spatial Policy Plan for the EEZ with Prof. Shamay Assif Yad HaNadiv, NIS 5,440,000

This research focuses on identifying stakeholder positions and conflict mechanisms for resolution for the Israel Marine Plan process currently taking place. It will also research mechanisms suitable for ensuring an ecosystem-based management planning approach for marine spatial planning.

2013-15 Ecosystem services assessment from the mountain to the sea: A multidisciplinary method for defining ecosystem service indicators across landscape units, Ministry of the Environment, NIS 150,000 with Asst. Prof. Daniel Orenstein.

This research will develop a methodology for considering ecosystem service (ES) values in the statutory planning process including the creation of a spatially-explicit, policy relevant method for mapping high-priority areas of ES provision and strengthening the role of stakeholders.

2010-15 Design and Management of Marine Reserve Networks (DEMARN). €100,000 funded by the Marie Curie Program of European Union, FP7. Principal Investigator at Hebrew University of Jerusalem and at the Technion — Israel Institute of Technology. (Note: Re-evaluation of the grant occurred March 2011-March 2013).

> This research analyzes institutional constraints related to the establishment of marine protected areas (MPAs). The project's main goal is to identify institutional and societal constructs that are frequently left out of decisionmaking for MPA design and management. Conclusions will be based on comparisons of spatial outcomes arrived at through the use of digital decision support tools.

- 2008 Legal framework for Siting Wind Farms off the coasts of the US and German. \$8000, funded by the American Council on Germany. Principal Investigator.
- 2009-10 Golda Meir/Lady Davis Postdoctoral Fellowship, Hebrew University of Jerusalem \$50,000
- 2008-9 The Sounds Conservancy Grant, Quebec Labrador Foundation \$3000
- 2008-09 WHOI/NOAA Cooperative Institute on Climate and Ocean Research (CICOR) Grant \$120,000
- 1999 Pollution Prevention Incentive for States Grant Program; \$50,000
- 1997 Intermodal Surface Transportation Enhancement Act (ISTEA) Grant for Construction of the East Boston Greenway \$860,000

4.2 Pending

Use of GIS for Mapping Marine Infrastructure to Enhance Conservation Goals, The Professional Association of Diving Instructors Foundation, \$5800.

Multipurpose Coastal and Shoreline Infrastructure Enhancement, Submitted to Israel Ministry of Science and Technology with Asst. Prof. Yasha Grobman, NIS 3.829 million.

5. PUBLICATIONS

5.1 Refereed publications (journals)

- 2014 **Portman, M.E.** Regulatory capture by default: Offshore exploratory drilling for oil and gas, *Energy Policy* 65: 37-47
- 2013 **Portman, M. E.** Ecosystem Services in Practice: Challenges to real world implementation of ecosystem services across multiple landscapes A critical review, *Applied Geography* 45: 185-192.
- 2013 **Portman, M.E.**, Notarbartolo-di-Sciara, G., Agardy, T., Katsanevakis, S., Possingham, H.P., di-Carlo, G. He Who Hesitates is Lost: Why Conservation of the Mediterranean Sea is Necessary and Possible Now, *Marine Policy* 42: 270-279.
- 2012 Giakoumi, S. Mazor, T., Franchetti, S., Kark, S., **Portman, M. E.**, Coll, M., Steenbek, J. Possingham, H. Advancing marine conservation planning in the Mediterranean Sea, *Reviews in Fish Biology and Fisheries*. 22(4): 943-949. [Accepted June 2012]
- 2012 **Portman, M. E.**, Nathan, D., Levin, N. From the Levant to Gibraltar: A Regional Perspective for Marine Conservation in the Mediterranean Sea, *Ambio Journal of the Human Environment.* 41(7): 670-681. [Accepted May 2012]
- 2012 Portman, M.E., Esteves, L.E., Le, X. Q., Khan, A. Z. Improving Integration for Integrated Coastal Zone Management: An eight country study, *Science of the Total Environment*. 439: pp. 194-201. [Accepted September 2012]
- 2012 **Portman, M. E**. Losing Ground: Mediterranean Shoreline Change from an Environmental Justice Perspective, *Coastal Management* 40(4): pp. 421–441. [Accepted April 2012]
- 2011 **Portman, M. E.** Marine Spatial Planning: Achieving and Evaluating Integration, *ICES Journal of Marine Science*, 68(10), pp. 2191-2200.
- 2011 Portman, M. E., Jin, D., Thunberg, E. The Connection between Fisheries Resources and Spatial Land Use Change: The Case of Two New England Fish Ports, *Land Use Policy*, 28(3), pp. 523-533.

- 2010 **Portman, M.E.** Offshore Renewable Energy Stakeholder Perceptions and Public Participation in the New Frontier, *Modern Energy Review*, Vol. 2(2), pp. 114-117.
- 2010 Sas, E., Fishhendler, I., **Portman, M.E.** The demarcation of arbitrary boundaries for coastal zone management: the Israeli case, *Journal of Environmental Management*, Vol. 91(11), pp. 2358-2369.
- 2010 **Portman, M. E.** Marine Renewable Energy Policy: Some U.S. and International Perspectives Compared, *Oceanography*, Vol. 23(2), pp. 70-77.
- 2009 **Portman, M.E.**, Duff, J. A., Köppel, J., Reisert J., and Higgins, M. E. Offshore Wind Energy Development in the Exclusive Economic Zone: Legal and Policy Supports and Impediments in Germany and the U.S. *Energy Policy*, Vol. 37(9), pp. 3596-3607.
- 2009 **Portman, M. E.**, Jin, D., Thunberg, E. "Waterfront Land Use Change and Marine Resource Conditions: The Case of New Bedford/Fairhaven Harbor", *Ecological Economics*, Vol. 68 (8-9), pp. 2354-2362.
- 2009 **Portman, M. E.** From Land to Sea: The Role of Land Trusts in Marine Protection, *Society and Natural Resources*, Vol. 22(1), pp. 12-26.
- 2009 **Portman, M. E.** Involving the Public in Impact Assessment for Offshore Renewable Energy Facilities, *Marine Policy*, Vol. 33(2), pp. 332-338.
- 2007 **Portman, M. E.** Coastal Protected Area Management and Multi-tiered Governance: The Cape Cod Model, *Journal of Coastal Conservation*, Vol. 11(2), pp. 121-131.
- 2007 **Portman, M. E.** Zoning Design for Cross-border Marine Protected Areas: The Red Sea Marine Peace Park Case Study, *Ocean and Coastal Management Journal*, Vol. 50(7), pp. 499-522.
- 2006 **Portman, M.E.** Tidelands Management: Implementation of the Massachusetts Public Waterfront Act, *Journal of Environmental Policy and Planning*, Vol. 8(4), pp. 293-308.

5.2 Refereed publications (conference proceedings)

2013 "Marine spatial planning: achieving and evaluating integration", <u>Proceedings of the ICES</u> <u>Annual Science Conference '13</u>, Reykjavik, Iceland.

- 2009 "Offshore Wind Farm Siting in Germany and the U.S.: Legal and Policy Impediments and Supports", <u>Proceedings of the IEEE Oceans '09 Conference</u>, Bremen, Germany.
- 2008 "Waterfront Land Use Change and Marine Resource Regulation: The New Bedford Pilot Study", <u>Proceedings of the 21th International Conference of the Coastal Society</u>, Redondo Beach, California.
- 2005 "Fisheries Management and Marine Biodiversity: The Case of New England Groundfish", <u>Proceedings of the First International Conference on Coastal Conservation and</u> <u>Management in the Atlantic and Mediterranean</u>. Algarve, Portugal.
- 1998 "Local and State Perspectives on Brownfields in Massachusetts". <u>Proceedings of the</u> <u>1998 National Conference of the American Planning Association</u>. Boston, Massachusetts.
- 1995 "Implementation of GIS in Evaluation of Natural Landscape Resources for Land Use Planning in the Lachish Region, Israel" (with Y. Ginott, J. Koach, and U. Ramon). <u>Proceedings of the 9th Annual Symposium on Geographic Information Systems</u>. British Columbia, Canada.

5.3 Books

Signed contract with Springer-Verlag. *Environmental Planning for Oceans and Coasts: Methods, Tools, Technologies,* due December 2015.

5.4 Refereed book chapters

 2013 Portman, M.E. Developing Resource Management and Marine Policy for the Eastern Mediterranean Sea, In *The Mediterranean Sea: Its History and Present Challenges*. Goffredo, S., Baader, H. and Dubinsky, Z. Editors, Berlin: Springer.

5.5 Non-refereed book chapters

Portman, M. E. (invited), The Red Sea Marine Peace Park, In *Marine Peace Parks and Transboundary Conservation Initiatives*. Mackelworth, P, and Choucri, N. Editors, Cambridge, MIT Press.

5.6 Book reviews

- 2009 "Public Participation in Environmental Policy and Decision Making" *Environment and Planning C: Government and Policy*, Vol. 27 (5). pp. 940-949.
- 2008 "Gigantic Losses Harpoon: Into the Heart of Whaling" Science, Vol. 322 (5901). p. 531

2008 "Man and the Sea Revisited – The Unnatural History of the Sea" *Conservation Biology*, Vol. 22 (3). pp. 808-809.

5.7 Professional Reports

- 2012 *Progress in ICZM: A Handbook for Scholars and Practitioners.* (with Esteves, L.S.; Quynh, L.X., Mahsud, A.Z.K.) Hebrew University: Jerusalem, Israel.
- 2011 *Towards Integrated Coastal Zone Management: A Toolkit for Practitioners,* (with Fishhendler, I.). Hebrew University: Jerusalem, Israel.
- 2008 Public Participation and Environmental Impact Assessment for Offshore Renewable Energy Facilities in Germany. Report to the American Council on Germany. Woods Hole, Massachusetts.
- 2004 *Weir River Estuary Land Protection Plan* (with C. Lefebvre). Prepared for the Weir River Estuary Park Committee. Urban Harbors Institute, University of Massachusetts Boston.
- 2000 *Beyond 2000 Solid Waste Master Plan* (with G. Keith). Massachusetts Department of Environmental Protection, Boston Massachusetts.

5.8 Books

2015 *Environmental Planning and Management for Coasts and Oceans: Methods, Tools, Technologies.* Springer International Publishing AG. Expected publication: December 2015.

6. CONFERENCES

6.1 Plenary/invited talks

- 2013 Hebrew University of Jerusalem, Environmental Planning and Policy Program, Department of Geography, Symposium on Integrated Marine Management
- 2009 Institute for Coastal Sciences and Policy, East Carolina University
- 2009 School of Marine Affairs, University of Washington The Porter School of Environmental Studies, Tel Aviv University, Israel
- 2009 SEA Education Association, Semester at Sea Program, Woods Hole, MA

- 2008 Marine Affairs Institute, Roger Williams University School of Law
- 2008 Northeast Fisheries Science Center, National Marine Fisheries Service; Environmental, Earth and Ocean Sciences Dept., Univ. of Massachusetts
- 2005 Environmental Law Program, Boston College

6.2 Presentations (giving papers)

- 2014 "Israel Marine Spatial Policy Plan Reaching Out" *Future Oceans Spatial Planning Workshop*, GEOMAR, Kiel, Germany (March).
- 2014 "Ecosystem services assessment from the mountain to the sea", Annual Conference of the Israel Planning Association, Jerusalem, Israel (February).
- 2013 "Marine spatial planning: achieving and evaluating integration", *International Council on the Exploration of the Sea Annual Science Conference '13*, Reykjavik, Iceland (September).
- 2013 "He Who Hesitates is Lost....A Proposed Planning Process for Conservation in the Mediterranean Sea" *The 2nd International Workshop on Advancing Conservation Planning in the Mediterranean Sea with emphasis on EEZ conservation planning and the Eastern Basin,* Nachsholim, Israel (April).
- 2012 "Characteristics and Characteristic Drivers of Marine Protected Areas in the Mediterranean Sea" *The 3rd European Congress of Conservation Biology*, Glasgow, Scotland (August).
- 2012 "Designation and Management of Marine Reserve Networks (DEMARN Project)" Annual Conference of Israel Association of Aquatic Sciences, Israel (June).
- 2012 "From the Levant to Gibraltar and Back: A Regional Perspective for Marine Conservation in the Mediterranean" *First International Workshop on Conservation Planning in the Mediterranean Sea,* Santorini. Greece (April).
- 2012 "Instruments of Integration for Coastal Development" *The 26th Umbrella Symposium on Sustainable Urban Development*, Technion— Israel Institute of Technology, Haifa, Israel (March).
- 2011 "From the Shores of Israel to Gibraltar: Current Status of Marine Protected Areas of the Mediterranean Sea", Annual Conference of the Israel Society of Ecology and Environmental Sciences, Israel (June).

- 2011 "Losing Ground: Can coastal erosion be an environmental justice problem?" *Coastal Geotools Conference*, Myrtle Beach, South Carolina (March).
- 2010 "Communities and Changing Marine Resources: The case of two fishing ports in the northeastern U.S." *Annual Israel Association of Planners Conference* (in Hebrew) Israel (March).
- 2009 "Waterfront Land Use Change and Marine Resource Conditions: The Case of New Bedford/Fairhaven Harbor", *Coastal Zone '09*, Boston, Massachusetts (July).
- 2009 "Offshore Renewable Energy Siting in Germany and the United States: Legal and Policy Impediments and Supports", *Coastal Zone '09*, Boston, Massachusetts (July).
- 2008 "Waterfront Land Use Change, Marine Resource Conditions, and Regulation: The New Bedford Pilot Study", *PoCoast Seminar on Coastal Research*. Sponsored by the Faculdade de Engenharia da Universidade do Porto. Portugal (May).
- 2004 "Implementing the Massachusetts Waterways Regulation Program", Coastal Zone Canada, Newfoundland (June).
- 1999 "Source Reduction in Integrated Solid Waste Management Planning for Massachusetts". <u>The Fifth International Conference on Solid Waste Technology and Management</u>. Philadelphia, Pennsylvania. (November).

7. SERVICE

7.1 To the profession

Marine conservation forum, Yad Hanadiv, from Spring 2011

7.2 Review

2008-14 Reviewer for the following journals: Journal of Integrated Coastal Zone Management; Journal of Environmental Policy and Planning; Ecology and the Natural Environment; International Journal of Marine Sciences; Environmental Education Research; Conservation Biology; Marine Ecology Progress Series; Coastal Management Journal; Stanford Journal of Law, Science and Policy; Energy Policy; Journal of Environmental Assessment Policy and Management; Journal of Environmental Management

7.3 Scientific Committees

2014-15 Committee Member. *Conference on Wind energy and Wildlife impacts* (CWW 2015) Berlin, Germany, March 10-12, 2015. 2014 Committee Member. Annual Conference of the Israel Society of Ecology & Environmental Sciences (ISEES).

7.4 Editorial Positions

2014 Guest Editor, Special Issue: *The Use of Virtual Reality for Environmental Representations* Computers, Environment and Urban Systems journal.

8. HONORS AND AWARDS

- 2007 The Award for Excellence in Public Policy, University of Massachusetts, Boston
- 2002 M. Lenz Memorial Award for Graduate Student Research, UMass, Boston

9. MEMBERSHIPS (IN PROFESSIONAL ORGANIZATIONS)

Member, American Association for the Advancement of Science Member, Israel Regional Science Association Member, The Association for Environmental Planning (Israel) Member, The Coastal Society Member, Israel Geography Association