



## CURRICULUM VITAE

### PORTER HOAGLAND

Public Policy  
Senior Research Specialist  
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**Date of Birth:** October 9, 1955  
**Place of Birth:** Red Bank, New Jersey  
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### **EDUCATION:**

Ph.D., Marine Policy, University of Delaware, January 2000  
M.P.A., Public Administration, Harvard University, May 1993  
M.M.P., Marine Policy, University of Delaware, June 1982  
B.S., Biology, Hobart College, June 1977

### **RESEARCH INTERESTS:**

Economics and public policy of marine resources and the ocean environment; optimal management of ocean and coastal resources and their uses; distribution and allocation of property rights in ocean and coastal resources; economic impacts of marine natural hazards; technology transfer and intellectual property problems; marine science and technology policy; underwater archaeological resource management.

### **PROFESSIONAL EXPERIENCE:**

Senior Research Specialist, Woods Hole Oceanographic Institution, 2008 to present  
Research Specialist, Woods Hole Oceanographic Institution, 2000-08  
Research Associate, Woods Hole Oceanographic Institution, 1985-2000  
Research Assistant, Woods Hole Oceanographic Institution, 1983-84  
Conservation Intern, National Wildlife Federation, 1982  
Research Intern, Environmental Law Institute, 1981  
Research Assistant, College of Marine Studies, University of Delaware, 1981-82  
Administrative Legal Assistant, Howrey and Simon, 1979-80  
Paralegal, Howrey and Simon, 1977-79

### **AWARDS:**

Cooperative Institute for North Atlantic Research (CINAR) Fellowship, 2013-15  
Frances Severance Award for Dissertation in Public Policy, University of Delaware, 2000  
Marine Policy Program Fellow, College of Marine Studies, University of Delaware, 1993-94  
Crump Fellow, Center for Business and Government, Harvard University, 1992  
E. Sam Fitz Professional Development Award, University of Delaware, 1983  
Academic Council Award for Master's Thesis in Marine Policy, University of Delaware, 1982

**PROFESSIONAL ACTIVITIES:**

Editorial Advisory Board, *Encyclopedia of Ocean Sciences*, Academic Press, 2001 to present  
Advisor, Institute Advisory Committee, WHOI Coastal Ocean Institute, 2001 to present  
Advisor, WHOI Office for Applied Oceanography, 2009 to present  
Member, National Harmful Algal Bloom Committee, 2006- 13  
Adjunct Professor, Intercampus Graduate School of Marine Sciences and Technology, University of Massachusetts, 2000 to present  
Adjunct Professor, The Union Institute, Cincinnati, Ohio, 2001 to present  
Lecturer, Department of Marine Affairs, University of Rhode Island, 2012 to present  
Research Associate, Center for Maritime & Underwater Resource Management, East Lansing, Michigan, 1995 to present  
Advisor, Stellwagen Bank National Marine Sanctuary Advisory Committee, 2007-2010 (Alternate Advisor 2001-2007)  
Member, Steering Committee, National Scientific Research, Development, Demonstration, and Technology Transfer Plan on Reducing Impacts from Harmful Algal Blooms, 2006-2007  
Director, Board of Directors, Council on Ocean Law, 1995-2005  
Chairman, Marine Resources Division, Marine Technology Society, 1996 to 2004  
Chairman, Ecosystem Alteration Working Group, Stellwagen Bank National Marine Sanctuary, 2004  
Chairman, Site Characterization Working Group, Stellwagen Bank National Marine Sanctuary, 2003-2004  
Member, Panel on Peer Review, Committee to Assess the US Army Corps of Engineers Methods of Analysis and Peer Review for Water Resources Project Planning, National Research Council, 2001-2002  
Member, International Institute of Fisheries Economics and Trade, 2007 to present  
Member, International Association of Aquaculture Economics and Management, 2005 to present  
Member, Marine Technology Society, 1996 to present  
Member, Working Group on the Economic Aspects of Marine Mammal-Fisheries Interactions, North Atlantic Marine Mammal Commission, 2000  
Member, Steering Committee, Massachusetts Ocean Resources Roundtable, Massachusetts Office of Coastal Zone Management, 1997-98  
Member, Massachusetts Governor's Task Force on Aquaculture Development and Marketing, 1995  
Advisor, Plymouth Beaches Advisory Committee (Vice-Chairman 1992-93), Town of Plymouth, Massachusetts, 1990-93

**REFEREE:**

*Biodiv. Conserv.; Coastal Manag.; Conserv. Bio.; Ecol. Econ.; Ecol. Food Nutr.; Environ. Dev. Econ.; Environ. Conserv.; Environ. Manag.; Environ. Mod. Softw.; Fish.; Fish. Res.; Harm. Alg.; ICES J. Mar. Sci.; Int'l Inst. Fish. Econ. Tr.; J. Coast. Res.; J. Environ. Dev.; J. Environ. Econ. Manag.; J. Environ. Manag.; J. Oc. Univ. China; Mar. Pol'y; Mar. Poll. Bull.; Mar. Res. Econ.; Mar. Tech. Soc. J.; Nat. Resour. Res.; Oc. Coast. Manag.; Oc. Dev. Int'l L.; Oc. Yearbook; Resour. Pol'y; ScienceNOW; Sustainability.*

#### **PAPERS IN REFEREED JOURNALS:**

- Hoagland, P.**, H.L. Kite-Powell, D. Jin, and A.R. Solow. 2013. Supply-side approaches to the economic valuation of coastal and marine habitat in the Red Sea. *J. King Saud Univ.-Sci.* 25:217-228. <http://dx.doi.org/10.1016/j.jksus.2013.02.006>.
- Jin, D., A. Ashton and **P. Hoagland**. 2013. Optimal responses to shoreline changes: an integrated economic and geological model with application to curved coasts. *Nat. Res. Model* 26:572-604. <http://onlinelibrary.wiley.com/doi/10.1111/nrm.12014/abstract>.
- Jin, D., **P. Hoagland** and B. Wikgren. 2013. An empirical analysis of the economic value of ocean space associated with commercial fishing. *Mar Pol'y* 42:74-84.
- Hoagland, P.**, D. Jin and H.L. Kite-Powell. 2012. The costs of beach replenishment along the US Atlantic coast. *J. Coast. Res.* 28:199-204. <http://dx.doi.org/10.2112/JCOASTRES-D-11-00066.1>.
- Jin, D., **P. Hoagland**, T.M. Dalton and E.M. Thunberg. 2012. Development of an integrated economic and ecological framework for ecosystem-based fisheries management in New England. *Prog. Oceanog.* 102:93-101. <http://dx.doi.org/10.1016/j.pocean.2012.03.007>.
- Jin, D., H.L. Kite-Powell, **P. Hoagland** and A.R. Solow. 2012. A bioeconomic analysis of traditional fisheries in the Red Sea off the coast of the Kingdom of Saudi Arabia. *Mar. Res. Econ.* 27:127-138. <http://dx.doi.org/10.5950/0738-1360-27.2.137>.
- Fleming, L.E., B. Kirkpatrick, L.C. Backer, C.J. Walsh, K. Nierenberg, J. Clark, A. Reich, J. Hollenbeck, J. Benson, Y.S. Cheng, J. Naar, R. Pierce, A.J. Bourdelais, W.M. Abraham, G. Kirkpatrick, Julia Zaias, A. Wanner, E. Mendes, S. Shalat, **P. Hoagland**, W. Stephan, J. Bean, S. Watkins, T. Clarke, M. Byrne and D.G. Baden. 2010. Literature review of Florida red tide: implications for human health effects. *Harm. Alg.* 3:99-115. <http://dx.doi.org/10.1016/j.hal.2010.08.006>.
- Hoagland, P.** 2010. A (social) scientific look at ecosystem-based management. *Oc. Coast. L. J.* 15:167-175. <http://mainelaw.maine.edu/academics/oclj/vol-15-no-1.html>.
- Hoagland, P.**, S. Beaulieu, M.A. Tivey, R.G. Eggert, C. German, L. Glowka and J. Lin. 2010. Deep-sea mining of seafloor massive sulfides. *Mar. Pol'y* 34:728-732. <http://dx.doi.org/10.1016/j.marpol.2009.12.001>.
- Nierenberg, K., K. Kirner, **P. Hoagland**, S. Ullmann, W.G. LeBlanc, G. Kirkpatrick, L.E. Fleming and B. Kirkpatrick. 2010. Changes in work habits of lifeguards in relation to Florida red tide. *Harm. Alg.* 9:419-425. <http://dx.doi.org/10.1016/j.hal.2010.02.005>. [Corrigendum: *Harm. Alg.* 9:647. <http://dx.doi.org/10.1016/j.hal.2010.05.003>.]
- Bauer, M., **P. Hoagland**, T.M. Leschine, B.G. Blount, C.M. Pomeroy, L.L. Lampl, C.W. Scherer, D.L. Ayres, P.A. Tester, M.R. Sengco, K.G. Sellner, and J. Shumacker. 2009. The importance of human dimensions research in managing harmful algal blooms. *Front. Ecol. Environ.* doi:10.1890/070181. <http://www.esajournals.org/doi/pdf/10.1890/070181>.
- Hoagland, P.**, D. Jin, L.Y. Polansky, B. Kirkpatrick, G. Kirkpatrick, L.E. Fleming, A. Reich, S.M. Watkins, S.G. Ullmann and L.C. Backer. 2009. The costs of respiratory illnesses arising from

- Florida Gulf Coast *Karenia brevis* blooms. *Environ. Health Persp.* 117:1239-1243.  
<http://ehp.niehs.nih.gov/docs/2009/0900645/abstract.html>.
- Kite-Powell, H.L., L.E. Fleming, L.C. Backer, E.M. Faustman, **P. Hoagland**, A. Tsuchiya, L.R. Younglove, B.A. Wilcox and R.J. Gast. 2008. Linking the oceans to public health: current efforts and future directions. *Environ. Health J.* 7(Supp. 2):S6. <<http://www.ehjournal.net/supplements/7/S2>.
- Jin, D. and **P. Hoagland**. 2008. The value of HAB predictions to the commercial shellfish fishery in the Gulf of Maine. *Harm. Alg.* 7:772-781. <http://dx.doi.org/10.1016/j.hal.2008.03.002>.
- Jin, D., E. Thunberg and **P. Hoagland**. 2008. Economic impact of the 2005 red tide event on commercial shellfish fisheries in New England. *Oc. Coast. Manag.* 51:420-429.  
<http://dx.doi.org/10.1016/j.ocecoaman.2008.01.004>.
- Hoagland, P.** and D. Jin. 2007. Accounting for marine economic activities in large marine ecosystems. *Oc. Coast. Manag.* 51:246-258. <http://www.sciencedirect.com/science/journal/09645691>.
- Jin, D., H.L. Kite-Powell and **P. Hoagland**. 2007. Anticipating the growth of an open-ocean aquaculture industry. *Aquacult. Econ. Manag.* 11:225-242.
- Hoagland, P.** and D. Jin. 2006. Science and economics in the management of an invasive species. *BioSci.* 56:931-935. <http://hdl.handle.net/1912/1363>.
- Herrera, G. and **P. Hoagland**. 2006. Commercial whaling, tourism, and boycotts: an economic perspective. *Mar. Pol'y* 30:261-269. <http://dx.doi.org/10.1016/j.marpol.2004.12.005>.
- Jin, D., **P. Hoagland** and A.R. Solow. 2006. The economic value of environmental research in understanding the relative contributions of sources of nutrients to coastal waters. *Nat. Res. Model.* 19:201-220. <http://dx.doi.org/10.1111/j.1939-7445.2006.tb00180.x>. [WHOI Contrib. No. 11,296.]
- Jin, D., **P. Hoagland** and E. Thunberg. 2006. An analysis of the relationship between the fish harvesting and processing sectors in New England. *Mar. Res. Econ.* 21:47-62.
- Hoagland, P.** and A.R. Solow. 2005. Regional ocean governance: a critique of two recent proposals. *Mar. Tech. Soc. J.* 38:61-67. [WHOI Contrib. No. 11,301.]
- Jin, D., H.L. Kite-Powell and **P. Hoagland**. 2005. Risk assessment in open-ocean aquaculture: a firm-level investment-production model. *Aquacult. Econ. Manag.* 9:369-387.  
<http://dx.doi.org/10.1080/13657300500242261>. [WHOI Contrib. No. 11,394.]
- Hoagland, P.**, D. Jin and H.L. Kite-Powell. 2003. The optimal allocation of ocean space: aquaculture and wild harvest fisheries. *Mar. Res. Econ.* 18:129-147. [WHOI Contrib. No. 10,932.]
- Jin, D., **P. Hoagland** and T.M. Dalton. 2003. Linking economic and ecological models for a marine ecosystem. *Ecol. Econ.* 46:367-385. <http://dx.doi.org/10.1016/j.ecolecon.2003.06.001>. [WHOI Contrib. No. 10,705.]
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<http://dx.doi.org/10.1016/j.fishres.2003.08.001>. [WHOI Contrib. No. 11,004.]

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- Kite-Powell, H.L., **P. Hoagland** and D. Jin. 1998. Policy, law, and public opposition: the prospects for abyssal ocean waste disposal in the United States. *J. Mar. Sys.* 14:377-396. [http://dx.doi.org/10.1016/S0924-7963\(97\)00036-5](http://dx.doi.org/10.1016/S0924-7963(97)00036-5). [WHOI Contrib. No. 9053.]
- Hoagland, P.** 1997. Managing the underwater cultural resources of the China Seas: a comparison of public policies in Mainland China and Taiwan. *Int'l J. Mar. Coast. L.* 12:265-283. <http://dx.doi.org/10.1163/157180897X00095>. [WHOI Contrib. No. 9148.]
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- Hoagland, P.**, H.L. Kite-Powell and M.E. Schumacher. 1996. Regulating marine toxic pollution under the London Convention. *Int'l Iss.* 39:25-43. [WHOI Contrib. No. 9324.]
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- Hoagland, P.** and H.L. Kite-Powell. 1991. European advanced marine electronic instrumentation: A U.S. perspective. *Mar. Pol'y* 15:431-454. [http://dx.doi.org/10.1016/0308-597X\(91\)90052-D](http://dx.doi.org/10.1016/0308-597X(91)90052-D). [WHOI Contrib. No. 7785.]
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- Broadus, J.M. and **P. Hoagland.** 1984. Conflict resolution in the assignment of area entitlements for seabed mining. *San Diego L. Rev.* 21:541-576. [http://www.sandiego.edu/law/news/blogs\\_publications/publications/journals/law\\_review/archive/archive.php?focus=1635](http://www.sandiego.edu/law/news/blogs_publications/publications/journals/law_review/archive/archive.php?focus=1635).
- Hoagland, P.** 1983. Federal ocean resource management: interagency conflict and the need for a balanced approach to resource management. *Virginia J. Nat. Res. L.* 3(1):1-33.
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#### **CHAPTERS IN BOOKS:**

- Hoagland, P.** 2013. Coupled nature-human systems (CNH): generic aspects of human interactions with blooms of red tide (*Karenia brevis*) and implications for policy responses. In Rossini, G.P., ed., *Toxins and Biologically Active Compounds from Microalgae*. Vol. 2, Sec. V: Risk Management. Science Publishers, Enfield, New Hampshire (in press).
- Hoagland, P.**, ed. 2010. *Marine Policy and Economics*. New York: Academic Press, 618pp.
- MacLeod, M.S., M. Lynch and **P. Hoagland.** 2009. Ocean zoning. In J.H. Steele, S.A. Thorpe and K.K. Turekian, eds., *Encyclopedia of Ocean Sciences*. 2<sup>nd</sup> edition. Cambridge, UK: Elsevier. Online at: <http://www.sciencedirect.com/science/referenceworks/9780123744739>.
- Sherman, K., I. Belkin, S. Seitzinger, **P. Hoagland**, D. Jin, M-C. Aquarone and S. Adams. 2009. Indicators of changing states of large marine ecosystems. In K. Sherman, M-C. Aquarone and S. Adams, eds., *Sustaining the World's Large Marine Ecosystems*. Gland, Switz.: International Union for the Conservation of Nature and Natural Resources, pp. 13-49.
- Hoagland, P.** 2008. From jubilees to halos: clarifying the economic effects of harmful algal blooms on commercial fisheries. *Am. Fish. Soc. Symp.* 64:233-243.
- Hoagland, P.** and S. Scatasta. 2006. The economic effects of harmful algal blooms. In E. Granéli and J.T. Turner, eds., *Ecology of Harmful Algae*. Ecological Studies, Vol. 189. Berlin: Springer-Verlag, Chap. 30, pp. 391-402. [WHOI Contrib. No. 11,414.]
- Hoagland, P.**, D. Jin, E. Thunberg and S. Steinback. 2005. Economic activity associated with the northeast shelf large marine ecosystem: application of an input-output approach. In T.M. Hennessey and J.G. Sutinen, eds., *Sustaining Large Marine Ecosystems: The Human Dimension*. Large Marine Ecosystem Series Vol. 13. Oxford, U.K.: Elsevier Science B.V., pp. 157-179. [WHOI Contrib. No. 9,936.]

- Stone, G., L. Madin, K. Stocks, G. Hovermale, **P. Hoagland**, M. Schumacher, C. Steve-Sotka, H. Tausig, P. Etnoyer. 2004. Seamount biodiversity, exploitation and conservation. In L.K. Glover and S.A. Earle, eds., *Defying Ocean's End*. Washington: Island Press, pp. 43-70.
- Hoagland, P.**, K.M. Riaf, D. Jin and H.L. Kite-Powell. 2003. A comparison of access systems for natural resources: drawing lessons for ocean aquaculture in the US Exclusive Economic Zone. In Bridger, C.J. and B.A. Costa-Pierce, eds., *Open-Ocean Aquaculture: From Research to Commercial Reality*. Baton Rouge, LA: World Aquaculture Society, pp. 23-44.
- Kite-Powell, H.L., **P. Hoagland**, D. Jin and K. Murray. 2003a. Economics of open ocean growout of shellfish in New England: sea scallops and blue mussels. In Bridger, C.J. and B.A. Costa-Pierce, eds., *Open-Ocean Aquaculture: From Research to Commercial Reality*. Baton Rouge, LA: World Aquaculture Society, pp. 293-306.
- Kite-Powell, H.L., **P. Hoagland**, D. Jin and K. Murray. 2003b. Open ocean growout of finfish in New England: a bioeconomic model. In Bridger, C.J. and B.A. Costa-Pierce, eds., *Open-Ocean Aquaculture: From Research to Commercial Reality*. Baton Rouge, LA: World Aquaculture Society, pp. 319-324.
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**Hoagland, P.,** J. Yang, J.M. Broadus and D.K.Y. Chu. 1992. China Sea coastal and marine nonfuel minerals: investigation and development. In J.B. Marsh, ed., *Resources and Environment in Asia's Marine Sector*. Washington: Taylor & Francis, pp. 219-276.

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**TECHNICAL REPORTS AND MONOGRAPHS:**

**Hoagland, P.** and D. Jin. 2009. Report on the potential economic effects on commercial fishing from the Safe Harbor Energy Deepwater Port and Pipeline. New York: Atlantic Sea Island Group LLC (January).

**Hoagland, P.** and D. Jin. 2008. Report on the potential economic effects on commercial lobstering in Western Passamaquoddy Bay from transits of LNG carriers supplying the Downeast LNG liquefied natural gas facility. Robbinston, ME: Downeast LNG (November).

**Hoagland, P.,** D. Jin and H.L. Kite-Powell. 2008. Regional economic analysis of the Northwest Atlantic marine eco-region. Boston, Mass. The Nature Conservancy (9 September).

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Kite-Powell, H.L., **P. Hoagland** and D. Jin. 2007. US Gulf of Maine herring fisheries and markets, 1990-2006. Prospect Harbor, ME: Bumble Bee Foods LLC (April).

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Jin, D. and **P. Hoagland**. 2005. Report on the potential economic effects on commercial fishing from the Northeast Gateway Deepwater Port. The Woodlands, Tex.: Northeast Gateway Energy Bridge, L.L.C. (June).

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