

ROBERT M. GRIFFIN

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Department of Fisheries Oceanography
University of Massachusetts Dartmouth
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PROFESSIONAL POSITIONS

University of Massachusetts Dartmouth, Department of Fisheries Oceanography

Research Assistant Professor, 2019–Present

Stanford University

Research associate, Natural Capital Project, Woods Institute for the Environment, 2017–Present

Postdoctoral researcher, 2012–2017

Alfred Wegener Institute, Visiting Scholar, 2010

Consulting (Orsted A/S, 2021–2022; World Bank, 2022; Minerals Management Service, 2009)

EDUCATION

Ph.D. Environmental and Natural Resource Economics, University of Rhode Island, 2012

Dissertation Title: “Auctions for Coastal Energy Resources”

M.S. Environmental and Natural Resource Economics, University of Rhode Island, 2007

Thesis Title: “Transferable Days-At-Sea Allowances in the Gulf of Maine Herring Fishery: An Experimental Analysis.”

B.A. Economics, University of Rhode Island, 2003

Saint Petersburg State Polytechnic University, Spring 2003

Minor in Russian Language Studies

PEER-REVIEWED JOURNAL ARTICLES

Stokesbury, K., Fay, G., Griffin, R. 2022. A framework for categorizing the interactions of offshore wind farms and fisheries. *ICES Journal of Marine Science*, fsac118.

Trifonova, N., Scott, B., Griffin, R., Pennock, S., Jeffrey, H. 2022. An ecosystem-based natural capital evaluation framework that combines environmental and socio-economic implications of offshore renewable energy developments. *Progress in Energy* 4, 032005.

Guerry, A.D., Silver, J. Beagle, J., Wyatt, K., Arkema, K., Lowe, J., Hamel, P., Griffin, R., Wolny, S., Plane, E., Griswold, M., Papendick, H., Sharma, J. 2022. Protection and restoration of coastal habitats yield multiple benefits for urban residents as sea levels rise. *npj Urban Sustainability* 2, 13.

Hummel, M., Griffin, R., Arkema, K., Guerry, A. 2021. Economic evaluation of sea-level rise adaptation strongly influenced by hydrodynamic feedbacks. *Proceedings of the National Academy of Sciences* 118, e2025961118.

Griffin, R., Vogl, A., Wolny, S., Covino, S., Monroy, E., Ricci, H., Schmidt, C., Sharp, R., Uchida, E. 2020. Including additional pollutants into an integrated assessment model for estimating non-market benefits from water quality. *Land Economics* 96, 457–477.

Silver, J., Arkema, K., Griffin, R., Lashley, B., Lemay, M., Maldonado, S., Moultrie, S., Ruckelshaus, M., Schill, S., Thomas, A., Wyatt, K., Verutes, G. 2019. Advancing coastal risk reduction science and implementation by accounting for climate, ecosystems and people. *Frontiers in Marine Science* 6, 556.

Rogers, L., Griffin, R., Pinsky, M., St. Martin, K., Young, T., Fuller, E. 2019. Vulnerability of fish and fishing communities to climate change. *Nature Climate Change* 9, 512–516.

Conte, M. and Griffin, R. 2019. Private benefits of conservation and procurement auction performance. *Environmental and Resource Economics* 73, 759–790.

- Wyatt, K., Griffin, R., Guerry, A., Ruckelshaus, M., Fogarty, M., Arkema, K. 2017. Habitat risk assessment in the U.S. Northeast and Mid-Atlantic. *PLOS One* 12, e0188776.
- Arkema, K., Griffin, R., Maldonado-Villanueva, S., Silver, J., Suckale, J., and Guerry, A. 2017. Linking social and ecological approaches to advance the science and practice of nature-based strategies for coastal protection. *Annals of the New York Academy of Sciences* 61, 1437–1477.
- Conte, M. and Griffin, R. 2017. Quality information and procurement auction outcomes: Evidence from a payment for ecosystem services laboratory experiment. *American Journal of Agricultural Economics* 99, 571–591.
- Ruckelshaus, M., Guannel, G., Arkema, K., Verutes, G., Griffin, R., Guerry, A., Silver, J., Faries, J., Brenner, J., and Rosenthal, A. 2016. Evaluating the benefits of green infrastructure for coastal areas: Location, location, location. *Coastal Management* 4, 504–516.
- Reddy, S., Guannel, G., Griffin, R., Faries, J., Boucher, T., Thompson, M., Brenner, J., Bernhardt, J., Verutes, G., Wood, S., Silver, J., Toft, J., Rogers, A., Maas, A., Guerry, A., Molnar, J., and DiMuro, J. 2016. Evaluating the role of coastal habitats and sea-level rise in hurricane risk mitigation: An ecological economic assessment method and application to a business decision. *Integrated Environmental Assessment and Management* 12, 328–344. *Awarded paper of the year in IEAM for 2016.*
- Griffin, R. and Anderson, C. 2015. Simultaneous ascending auctions for common value goods. *Strategic Behavior and the Environment* 5, 215–253.
- Griffin, R., Chaumont, N., Denu, D., Guerry, A., Kim, C., and Ruckelshaus, M. 2015 Incorporating the visibility of coastal energy infrastructure into multi-criteria siting decisions. *Marine Policy* 62, 218–223.
- Arkema, K., Verutes, G., Wood, S., Clarke, C., Rosado, S., Canto, M., Rosenthal, A., Ruckelshaus, M., Guannel, G., Toft, J., Faries, J., Silver, J., Griffin, R., and Guerry, A. 2015. Embedding ecosystem services in coastal planning leads to better outcomes for people and nature. *Proceedings of the National Academy of Sciences* 112, 7390–7395.
- Guerry, A., Polasky, S., Lubchenco, J., Chaplin-Kramer, R., Daily, G., Griffin, R., Ruckelshaus, M., and 16 others. 2015. Natural capital and ecosystem services informing decisions: From promise to practice. *Proceedings of the National Academy of Sciences* 112, 7348–7355.
- Griffin, R., Buck, B., and Krause, G. 2015. Private incentives for the emergence of co-production of offshore wind energy and mussel aquaculture. *Aquaculture* 346, 80–89.
- Tallis, H., Lubchenco, J., Griffin, R., and 237 others. 2014. A call for inclusive conservation. *Nature* 515, 27.
- Griffin, R. 2013. Auction designs for allocating wind energy leases on the U.S. outer continental shelf. *Energy Policy* 56, 603–611.

REPORTS

- Chris Nootenboom, Eric Lonsdorf, Roy Remme, Rob Griffin, Baolong Han, Tong Wu, and Anne Guerry. 2021. *Assessment of key ecosystem services provided by the Haizhu National Wetland Park in Guangzhou, Guangdong, China*. World Bank report.
- Adapting to Rising Tides. 2020. *Adapting to Rising Tides Bay Area: Regional Sea Level Rise Vulnerability and Adaptation Study*. Bay Conservation and Development Commission (BCDC) and Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG), San Francisco CA.
- Arkema K., Fisher, D., Griffin, R., Rogers, L., Ruckelshaus, M., Silver, J., Verutes, G., Wood, S., Wyatt, K., Albury-Smith, S., Knowles, J., Schill, S. 2017. *BH-T1040: Ecosystem-Based Development for Andros Island*. Inter-American Development Bank.
- Rosenthal, A., Arkema, A., Verutes, G., Bood, N., Cantor, D., Fish, M., Griffin, R., and M. Panuncio. 2015. *Identification and Valuation of Adaptation Options in Coastal-Marine Ecosystems: Test Case from Placencia, Belize*. Inter-American Development Bank.
- Guannel, G., Guerry, A., Brenner, J., Faries, J., Thompson, M., Silver, J., Griffin, R., Proft, J., Carey, M., Toft, J., Verutes, G. 2014. *Changes in the Delivery of Ecosystem Services in Galveston Bay, TX, Under a Sea-Level Rise Scenario*. Natural Capital Project.
- Mandle, L., Goldstein, J., and Griffin, R. 2014. *Natural Capital and Roads: Managing Dependencies and Impacts on Ecosystem Services for Sustainable Road Investments*. Inter-American Development Bank.
- Griffin, R. 2014. *Ecosystem Service Valuation for Road Projects*. Inter-American Development Bank.

BOOKS AND BOOK CHAPTERS

- van Zanten, B., K. Arkema, T. Swannack, R. Griffin, S. Narayan, K. Penn, B. G. Reguero, G. Samonte, S. Scyphers, E. Codner-Smith, S. Iff, M. Kress, and M. Lemay. 2021. Chapter 6: Benefits and Costs of NNBF. In *International Guidelines on Natural and Nature-Based Features for Flood Risk Management*. Edited by T. S. Bridges, J. K. King, J. Simm, M. W. Beck, G. Collins, Q. Lodder, and R. K. Mohan. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Sharp, R., Tallis, H.T., Ricketts, T., Guerry, A.D., Wood, S.A., Nelson, E., Ennaanay, D., Wolny, S., Olwero, N., Vigerstol, K., Pennington, D., Mendoza, G., Aukema, J., Foster, J., Forrest, J., Cameron, D., Arkema, K., Lonsdorf, E., Kennedy, C., Verutes, G., Kim, C.K., Guannel, G., Papenfus, M., Toft, J., Marsik, M., Bernhardt, J., and Griffin, R. 2016. *InVEST 3.x User's Guide*. The Natural Capital Project, Stanford.

Krause, G., Griffin, R., and Buck, B. 2011. Perceived concerns and organizational structures of ownership supporting offshore wind farm – mariculture integration. In: *From Turbines to Wind Farms – Technical Requirements and Spin-off Products*, 203–218. InTech Publishing, Vienna, Austria.

SCIENTIFIC SOFTWARE

InVEST 3.x Ecosystem Service Modeling Platform

GRANTS AND SPONSORED PROJECTS

2022 - 2024 NOAA Saltonstall-Kennedy Program (\$112,538; \$299,999 total). Whale-safe alternatives to closures of black sea bass pot gear in the Southeast US.

2022 National Fish and Wildlife Foundation (\$80,114; \$170,860 total). On-call fishing gear scoping project extension: Socioeconomic modeling of management scenarios in Massachusetts and adjacent federal waters.

2022 Stone Living Lab (\$10,000). Leveraging geotagged data for measuring demographic information of shoreline visitors.

2021 - 2022 National Science Foundation Convergence Accelerator - Networked Blue Economy (\$73,474; \$750,000 total). Regional climate change projections to enable equitable ocean planning for the blue economy.

2020 UT Austin (\$30,458). Impact of channel deepening and desalination plants on ecosystem services in Corpus Christi, TX.

2018 Commonwealth of Northern Mariana Islands (\$10,000). Marine resource economic valuation study.

2018 Packard Foundation (\$35,500). Habitat conservation and marine ecosystem-based planning on Chiloe Island, Chile.

2016 EPA Southeast New England Program (\$120,000; \$560,636 total). Integrating ecosystem services functions and values into land-use decision making in the Narragansett Bay watershed.

2012 Fordham University (\$6,500). Information effects in a conservation procurement auction.

HONORS & AWARDS

2012 Greg J. Lessne award for excellence in the study of natural resource markets and economics, Department of Environmental and Natural Resource Economics, University of Rhode Island

2008–2011 National Science Foundation Integrative Graduate Education and Research Training fellowship

PROFESSIONAL AND PUBLIC SERVICE

Advisory groups

EPA Southeastern New England Program ecosystem services subcommittee, Narragansett Bay Estuary Program Social Science Working Group, Expert witness for Massachusetts Attorney General's Office

Refereeing

Advances in Engineering Software, Applied Ecology, Applied Energy, Coastal Futures, Coastal Management, Conservation Letters, Ecological Economics, Ecological Management and Restoration, Environmental Conservation, Fisheries, Fisheries Research, ICES Journal of Marine Science, International Journal of Disaster Risk Reduction, Journal of Water Resources Planning and Management, Land Economics, Nature Sustainability, Ocean and Coastal Management, Plos One, Proceedings of the National Academy of Sciences, Reviews in Aquaculture, Review of Environmental Economics and Policy, Science of the Total Environment, Sustainability, Water, North Carolina Sea Grant, NOAA Coastal and Ocean Climate Applications Program, U.S. Coastal Research Program, NOAA Sea Grant Marine Resource Economics Fellowship, EPA Office of Research and Development report,

INVITED TALKS

2022 University of Rhode Island Coastal Institute Nixon Lecture, UMass Boston Stone Living Lab

2021 Marine Spatial Ecology Division, National Centers for Coastal Ocean Science, SPUR Urban Center

2019 Consortium for Ocean Leadership Industry Forum, NOAA Northeast Fisheries Science Center, Cornell University
2018 Harvard Forest RCN Workshop, UMass Dartmouth
2017 Loyola University Chicago, University of Florida
2015 Society for Conservation Biology, UMass Dartmouth
2014 Stevens Institute of Technology
2013 United Nations Statistics Division, University of Rhode Island
2012 Hopkins Marine Station (Stanford University), University of New Mexico, Federal Communications Commission
2010 Alfred Wegener Institute (Visiting Scholar)

ADVISING

Amanda Hart, PhD committee member, UMass Dartmouth
Kim Sawicki, PhD committee member, UMass Dartmouth
Will Bolduc, Professional masters degree committee member, University of New England

TEACHING

University of Massachusetts Dartmouth

Natural Resource Economics (Graduate): Spring 2021 Autumn 2019,
Fisheries Oceanography Seminar (Graduate), Spring 2020

University of Rhode Island

Teaching assistant for Introduction to Environmental and Resource Economics (Undergraduate), Autumn 2006
Volunteer tutor for Department of Modern and Classical Languages, 2003–2005

Guest Lecturing

Northeastern University, Environmental Science and Policy Seminar 2 (Graduate), Spring 2022
East Carolina University, Survey of Coastal and Marine Resources (Undergraduate), Spring 2021
Stanford University, Marine Resource Economics and Conservation (Undergraduate), Spring 2013
Stanford University, Human Society and Environmental Change (Undergraduate), Autumn 2012