

Kanae Tokunaga

Gulf of Maine Research Institute

350 Commercial Street, Portland, Maine 04101, USA

(207) 228-1696 | ktokunaga@gmri.org | [Google Scholar](#) | [ResearchGate](#)

A. Professional Preparation

Washington College	Economics	B.A. 2008
University of Hawai'i at Mānoa	Economics	M.A. 2010
University of Hawai'i at Mānoa	Graduate Ocean Policy Certificate Program	Certificate 2015
University of Hawai'i at Mānoa	Economics	Ph.D. 2015

B. Appointments

2022 – present.	Senior Scientist, Gulf of Maine Research Institute
2019 – 2021	Associate Research Scientist, Gulf of Maine Research Institute
2018	Consultant, Environmental Defense Fund
2018	Associate Researcher, National Research Institute of Fisheries Science, Japan Fisheries Research and Education Agency
2017 – 2018	Visiting Lecturer, Musashi University
2015 – 2018	Project Researcher, Ocean Alliance, The University of Tokyo
2012 – 2015	Research Assistant, Department of Natural Resources and Environmental Management, University of Hawai'i at Mānoa
2010 – 2012	Graduate Research Fellow, University of Hawai'i Economic Research Organization
2010 & 2011	Lecturer, Department of Economics, University of Hawai'i at Mānoa
2008 – 2009	Teaching Assistant, Department of Economics, University of Hawai'i at Mānoa

C. Select publications

- Frantzeskaki, N., Lambertucci, S., Carr, E., Dempsey, J., Karamidehkordi, E., Sengupta, A., Rojas-Marchini, F., Vogel, C., Andriamahefazafy, M., Boonstra, W., Espinoza-Cisneros, E., Garcia, K., Morita, K., Nelson, V., Ojeda, D., Plieninger, T., Stirling, A., Tokunaga, K., Chen, R., Guibal, C., (2024). IPBES Transformative Change Assessment: Chapter 4. Overcoming the challenges of achieving transformative change towards a sustainable world. <https://doi.org/10.5281/zenodo.11382247>
- Okada, T., Mito, Y., Tokunaga, K., Sugino, H., Kubo, T., Akiyama, Y. B., & Kuwae, T. (2024). A method for evaluating ecosystem services that can be used for the management of nature-based solution projects: A case study of Shiosai-Nagisa in Tokyo Bay. *Regional Studies in Marine Science*, 78, 103737. <https://doi.org/10.1016/j.rsma.2024.103737>
- Tokunaga, K., Angione, P., Zoellick, B., Bowness, G., Brown, S., Enterline, C., Kirn, S., Long, A., Sun, S., & Whitman, A. (2023). Community Science's Contributions to Fostering Relational Values to Overcome Coastal Ecosystems Challenges. *Maine Policy Review*, 32(2). <https://doi.org/10.53558/XIQV3905>
- Dayton, A. M., & Tokunaga, K. (2023). Economic Diversity of Maine's American Lobster Fishery. *Canadian Journal of Fisheries and Aquatic Sciences*, cjfas-2022-0096. <https://doi.org/10.1139/cjfas-2022-0096>
- Tokunaga, K., Kerr, L. A., & Pershing, A. J. (2023). Implications of fisheries allocation policy on anticipated climate change impacts. *Marine Policy*, 148, 12. <https://doi.org/10.1016/j.marpol.2022.105402>
- Eurich, J. G., Friedman, W. R., Kleisner, K. M., Zhao, L. Z., Free, C. M., Fletcher, M., Mason, J. G., Tokunaga, K., Aguion, A., Dell'Apa, A., Dickey, M., Fujita, R., Golden, C. D., Hollowed, A. B., Ishimura, G., Karr, K. A., Kasperski, S., Kisara, Y., Lau, J. D., ... Mills, K. E. (2023). Diverse pathways for climate resilience in marine fishery systems. *Fish and Fisheries*. <https://doi.org/10.1111/faf.12790>
- Mills, K. E., Armitage, D., Eurich, J. G., Kleisner, K. M., Pecl, G. T., & Tokunaga, K. (2022). Co-production of knowledge and strategies to support climate resilient fisheries. *ICES Journal of Marine Science*, fsac110. <https://doi.org/10.1093/icesjms/fsac110>

- Ishihara, H., Tokunaga, K., & Uchida, H. (2021). Achieving multiple socio-ecological institutional fits: The case of spiny lobster co-management in Wagu, Japan. *Ecological Economics*, 181, 106911. <https://doi.org/10.1016/j.ecolecon.2020.106911>
- Mason, J. G., Eurich, J. G., Lau, J. D., Battista, W., Free, C. M., Mills, K. E., Tokunaga, K., Zhao, L. Z., Dickey-Collas, M., Valle, M., Pecl, G. T., Cinner, J. E., McClanahan, T. R., Allison, E. H., Friedman, W. R., Silva, C., Yáñez, E., Barbieri, M. Á., & Kleisner, K. M. (2021). Attributes of climate resilience in fisheries: From theory to practice. *Fish and Fisheries*, 23(3). <https://doi.org/10.1111/faf.12630>
- Kaiser, B. A., Kourantidou, M., Ahsan, D., Bakanev, S., Burmeister, A., Eckert, G., Fernandez, L. M., Hong, H. P., Monsalve, A. A., Mullaney, D., Nøstvold, B. H., Park, H., Poulsen, E., Ravn-Jensen, L., Siddon, C., Sundet, J. H., Tokunaga, K., & Yamamoto, M. (2021). Global ecological and economic connections in Arctic and sub-Arctic crab markets. *Marine Policy*, 127, 104442. <https://doi.org/10.1016/j.marpol.2021.104442>
- Tokunaga, K., Sugino, H., Nomura, H., & Michida, Y. (2020). Norms and the willingness to pay for coastal ecosystem restoration: A case of the Tokyo Bay intertidal flats. *Ecological Economics*, 169(March), 106423. <https://doi.org/10.1016/j.ecolecon.2019.106423>
- Tokunaga, K., Miyata, T., & Wakamatsu, H. (2019). Evolution of a co-management arrangement in Japanese offshore fisheries: Current policy and legal framework and a case study of the tiger puffer fishery in Ise–Mikawa Bay. *ICES Journal of Marine Science*, 76(6), 1567–1580. <https://doi.org/10.1093/icesjms/fsz047>
- Okada, T., Mito, Y., Iseri, E., Takahashi, T., Sugano, T., Akiyama, Y. B., Watanabe, K., Tanaya, T., Sugino, H., Tokunaga, K., Kubo, T., & Kuwae, T. (2019). Method for the quantitative evaluation of ecosystem services in coastal regions. *PeerJ*, 6, e6234. <https://doi.org/10.7717/peerj.6234>
- Blasiak, R., Spijkers, J., Tokunaga, K., Pittman, J., Yagi, N., & Österblom, H. (2017). Climate change and marine fisheries: Least developed countries top global index of vulnerability. *PLoS ONE*, 12(6), e0179632. <https://doi.org/10.1371/journal.pone.0179632>
- Tokunaga, K., Tamaru, C., Ako, H., & Leung, P. (2015). Economics of Small-scale Commercial Aquaponics in Hawai'i. *Journal of the World Aquaculture Society*, 46(1), 20–32. <https://doi.org/10.1111/jwas.12173>

D. Synergistic Activities

- Maine Offshore Wind Research Consortium Advisory Board member, 2024 – present.
- Maine Climate Council Science and Technical Subcommittee member, 2023 – present.
- Lead Author: IPBES Transformative Change Assessment, 2022 – 2024.
- Coordination Group Member, UN Ocean Decade Program Fisheries Strategies for Changing Oceans and Resilient Ecosystems by 2030 (FishSCORE2030), 2021-present.
- Editorial board member: *ICES Journal of Marine Science*, 2021 – present.