# **CURRICULUM VITAE** Kimberly M. Burnett

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## **EDUCATION**

University of Hawai'i, Ph.D., Economics, May 2007 University of Hawai'i, M.A., Economics, December 2004 Loyola University New Orleans, B.B.A, Economics, 1998

#### **PROFESSIONAL EXPERIENCE**

Associate Director July 2020-present

University of Hawai'i Economic Research Organization

Specialist July 2018 – present

University of Hawai'i Economic Research Organization

Social Science Research Institute

Associate Specialist July 2012 – June 2018

University of Hawai'i Economic Research Organization

Affiliate Researcher January 2010–July 2021

Water Resources Research Center University of Hawai'i at Manoa

Cooperating Graduate Faculty January 2009–present

**Department of Economics** 

Department of Natural Resources and Environmental Management

University of Hawai'i at Manoa

Assistant Specialist July 2008– June 2012

University of Hawai'i Economic Research Organization

Social Science Research Institute University of Hawai'i at Manoa

Assistant Professor July 2007– June 2008

Department of Economics University of Puget Sound

#### **TEACHING EXPERIENCE**

# **Kyoto University**

Distinguished Visiting Professor 2023, Ecological Resource Economics

## **Kobe University**

Visiting Professor 2023, Ecological Resource Economics

<u>University of Hawai'i at Manoa, Department of Economics</u> ECON 130 Principles of Microeconomics

**ECON 358 Environmental Economics** 

University of Puget Sound, Department of Economics

**ECON 170 Contemporary Economics** 

**ECON 225 Environmental Economics** 

#### PEER-REVIEWED PUBLICATIONS

**Burnett, K.M.,** S. Pongkijvorasin, C. A. Wada. 2024. Multidisciplinary and Intersectoral Collaborations in the Water-Energy-Food Nexus: Examples from Japan and Thailand. In: The Water, Energy, and Food Security Nexus in Asia and the Pacific, E. Lee, B. Böer, L. Surendra, J. A. Chun, and M. Taniguchi (Eds.), Chapter 10, Springer Press. <a href="https://link.springer.com/book/10.1007/978-3-031-12495-2">https://link.springer.com/book/10.1007/978-3-031-12495-2</a>

Engels, J., B.C. Bruno, E. Suzuki, K. Suzuki, H. Dulai, M. Manning, D. Viviani, K. Keliipuleole, B. Dela Cruz, K. Ho, K. Kila, T. Malterre, A. Thepsenavong, L. Bremer, C. Wada, S. Watson, A.S. Elshall, A.D. Arik, and **K. Burnett.** 2024. Co-production of knowledge at Sumida Farm trains a new generation of community-engaged scientists. Oceanography 37(1):38–39, <a href="https://doi.org/10.5670/oceanog.2024.212">https://doi.org/10.5670/oceanog.2024.212</a>.

Okuhata, B.K., J.M.S. Delevaux, A. Richards Donà, C.M. Smith, V. Gibson, H. Dulai, A.I. El-Kadi, K. Stamoulis, **K.M. Burnett**, C.A. Wada, L. L. Bremer. 2023. Effects of multiple drivers of environmental change on native and invasive macroalgae in nearshore groundwater dependent ecosystems. Water Resources Research, https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023WR034593.

Vave, R., **K.M. Burnett**, A.M. Friedlander. 2023. Balancing culture and survival: an urban-rural socioeconomic assessment of indigenous Fijian funerals in Fiji. World Development Sustainability, https://doi.org/10.1016/j.wds.2023.100063.

Wada, C.A., S. Pongkijvorasin, J.A. Roumasset, and **K. M. Burnett**. 2023. Solving Optimal Groundwater Problems with Excel. *Applied Economics Teaching Resources*, Vol 5, <a href="https://www.aetrjournal.org/UserFiles/file/Wada%20PDF.pdf">https://www.aetrjournal.org/UserFiles/file/Wada%20PDF.pdf</a>.

DeMaagd, N. P., Fuleky, **K.M. Burnett**, and C. A. Wada. 2022. Tourism Water Use During the COVID-19 Shutdown. *Annals of Tourism Research*, <a href="https://doi.org/10.1016/j.annals.2022.103475">https://doi.org/10.1016/j.annals.2022.103475</a>.

Gibson, V. L, L.L. Bremer, **K.M. Burnett**, N. Keaka Lui and C. M. Smith. 2022. Biocultural values of groundwater dependent ecosystems in Kona, Hawai'i. Ecology and Society 27 (3):18. https://www.ecologyandsociety.org/vol27/iss3/art18/

Okuhata, B.K., A.I. El-Kadi, H. Dulai, J. Lee, C.A. Wada, L.L. Bremer, **K.M. Burnett**, J.M.S. Delevaux, C.K. Shuler. 2021. A density-dependent multi-species model to assess groundwater flow and nutrient transport in the coastal Keauhou aquifer, Hawai'i, USA. *Hydrogeology Journal*, <a href="https://doi.org/10.1007/s10040-021-02407-y">https://doi.org/10.1007/s10040-021-02407-y</a>

Wada C.A., **K.M. Burnett**, B.K. Okuhata, J.M.S. Delevaux, H. Dulai, A.I. El-Kadi, V. Gibson, C. Smith, L. L. Bremer. 2021. Identifying wastewater management tradeoffs: Costs, nearshore water quality, and implications for marine coastal ecosystems in Kona, Hawai'i. PLoS ONE 16(9): e0257125. https://doi.org/10.1371/journal.pone.0257125

Lewis, D., C.A. Wada, **K.M. Burnett**, J. Leary, B. Mahnken. 2021. Evaluating Protection Strategies for an Invasive Plant Species: *Miconia calvescens*. In: Invasive Alien Species, eds: T.Pullaiah and M.Ielmini, Wiley-Blackwell, 1472 Pages.

Bremer, L.L., A. Elshall, C.A. Wada, L. Brewington, J. Delevaux, A. El-Kadi, C. Voss, and **K.M. Burnett.** 2021. Effects of land cover and watershed protection futures on sustainable groundwater management in a heavily-utilized aquifer in Hawai'i. *Hydrogeology Journal*, <a href="https://doi.org/10.1007/s10040-021-02310-6">https://doi.org/10.1007/s10040-021-02310-6</a>.

Bremer, L.L., N. DeMaagd, C.A. Wada, **K.M. Burnett**. 2021. Identifying priority watershed management areas for groundwater recharge for drinking water on Hawai'i Island. *Journal of Environmental Management* https://doi.org/10.1016/j.jenvman.2020.111622.

Elshall, A.S., A.D. Arik, A.I. El-Kadi, S. Pierce, M. Ye, **K.M. Burnett**, C.A. Wada, L.L. Bremer, and G. Chun. 2020. Groundwater Sustainability: A Review of the Interactions between Science and Policy. *Environmental Research Letters* 15, https://iopscience.iop.org/article/10.1088/1748-9326/ab8e8c.

Engels J.L., S. Watson, H. Dulai, **K.M. Burnett**, C.A. Wada, A. Aga, N. DeMaagd, J. McHugh, B. Sumida, L.L. Bremer. 2020. Collaborative research to support urban agriculture in the face of change: The case of the Sumida watercress farm on O'ahu. PLOS ONE 15(7): e0235661. https://doi.org/10.1371/journal.pone.0235661

**Burnett, K.M.,** A. S. Elshall, C.A. Wada, A. Arik, A. El-Kadi, C. I. Voss, J. Delevaux, and L. L. Bremer. 2020. Incorporating Historical Spring Discharge Protection into Sustainable Groundwater Management: A Case Study from Pearl Harbor Aquifer, Hawai'i. *Frontiers in Water*, <a href="https://doi.org/10.3389/frwa.2020.00014">https://doi.org/10.3389/frwa.2020.00014</a>.

Pongkijvorasin, S., C.A., Wada, and **K.M. Burnett**. 2020. Optimal multi-instrument management of interrelated resources and a groundwater dependent ecosystem. *Journal of Environmental Management*, 269, <a href="https://doi.org/10.1016/j.jenvman.2020.110723">https://doi.org/10.1016/j.jenvman.2020.110723</a>.

Wada, C. A., Pongkijvorasin, S. and **K.M. Burnett**. 2020. Mountain-to-Sea Ecological-Resource Management: Forested Watersheds, Coastal Aquifers, and Groundwater Dependent Ecosystems. *Resource and Energy Economics*. https://doi.org/10.1016/j.reseneeco.2019.101146

Taniguchi, M., Dulai H, **Burnett, K.M.**, Santos I.R., Sugimoto R., Stieglitz T., Kim G., Moosdorf N. and Burnett W.C. 2019. Submarine Groundwater Discharge: Updates on Its Measurement Techniques, Geophysical Drivers, Magnitudes, and Effects. *Front. Environ. Sci.* 7:141. <a href="https://doi.org/10.3389/fenvs.2019.00028">https://doi.org/10.3389/fenvs.2019.00028</a>.

**Burnett, K.M.,** Ticktin, T., Bremer, L. Quazi, S. Geslani, C. Wada, C. Kurashima, N. Mandle, L. Pascua, P., Depraetere T., Wolkis, D., Edmonds, M., Giambelluca, T., Falinski, K., and Winter K. 2019. Restoring to the Future: Environmental, Cultural, and Management Tradeoffs in Historical versus Hybrid Restoration of a Highly Modified Ecosystem. *Conservation Letters*, e12606. https://doi.org/10.1111/conl.12606

Bremer, L.L., C.A. Wada, S. Medoff, J. Page, K. Falinski, and **K.M. Burnett**. 2019. Contributions of Native Forest Protection to Local Water Supplies in East Maui. *Science for the Total Environment*, 688, 1422-1432, https://doi.org/10.1016/j.scitotenv.2019.06.220.

Taniguchi, M. **K.M. Burnett,** J. Shimada, T. Hosono, C.A. Wada, and K. Ide. 2019. Recovery of Lost Nexus Synergy via Payment for Environmental Services in Kumamoto, Japan. *Frontiers in Environmental Science*, 7, <a href="https://doi.org/10.3389/fenvs.2019.00028">https://doi.org/10.3389/fenvs.2019.00028</a>.

Delevaux, J.M.S., K. A. Stamoulis, R. Whittier, S. D. Jupiter, L.L. Bremer, A. Friedlander, N. Kurashima, J. Giddens, K. B. Winter, M. Blaich-Vaughan, **K.M Burnett**, C. Geslani, and T. Ticktin. 2019. Place-based Management can Reduce Human Impacts on Coral Reefs in a Changing Climate. *Ecological Applications*, 29(4). http://dx.doi.org/10.1002/eap.1891.

**Burnett, K.M.,** C.A. Wada, M. Taniguchi, R. Sugimoto, and D. Tahara. 2018. Evaluating the Tradeoffs between Groundwater Pumping for Snow-Melting and Nearshore Fishery Productivity in Obama City, Japan. *Water*, 10, https://doi.org/10.3390/w10111556.

**Burnett, K.M.** and C.A. Wada. 2018. Accounting for Externalities in the Water Energy Food Nexus. In: Endo, A., Oh, T. (Eds.), *The Water-Energy-Food Nexus: Human-Environmental Security in the Asia-Pacific Ring of Fire*, Chapter 18, Springer, pp.261-272.

Pongkijvorasin, S. **K.M. Burnett**, and C.A. Wada. 2018. Joint Management of an Interconnected Coastal Aquifer and Invasive Tree, *Ecological Economics*, 146, 125-135, https://doi.org/10.1016/j.ecolecon.2017.10.011.

Bremer, L.L., L. Mandle, C. Trauernicht, P. Pascua, H.L. McMillen, **K.M. Burnett**, C. A. Wada, N. Kurashima, S.A. Quazi, T. Giambelluca, P. Chock and T. Ticktin. 2018. Bringing Multiple Values to the Table: Assessing Future Land-use and Climate Change in North Kona, Hawai'i. Ecology and Society 23 (1):33. https://doi.org/10.5751/ES-09936-230133.

Leary J, B. Mahnken, C.A. Wada and **K.M. Burnett.** 2018. Interpreting life-history traits of miconia (Miconia calvescens) through management over space and time in the East Maui Watershed, Hawai'i (USA). Invasive Plant Science and Management 11:191–200. doi: 10.1017/inp.2018.26.

Bremer, L.L. K. Falinski, C. Ching, C.A. Wada, **K.M. Burnett**, K. Kukea-Shultz, N. Reppun, G. Chun, K.L. Oleson, and T. Ticktin. 2018. Biocultural Restoration of Traditional Agriculture: Cultural, Environmental, and Economic Outcomes of Lo'i Kalo Restoration in He'eia, O'ahu. *Sustainability*, 10, 4502. https://doi.org/10.3390/su10124502.

Delevaux, J.M.S., K. Winter, M. Vaughan, S. Jupiter, K. A. Stamoulis, L. L. Bremer, **K.M. Burnett**, P. Garrod, J. L. Troller, and T. Ticktin. 2018. Linking land and sea through collaborative research to inform contemporary applications of Traditional Resource Management in Hawai'i. *Sustainability*, 10(9): 3147. https://doi.org/10.3390/su10093147.

Delevaux, J.M.S., R. Whittier, K.A. Stamoulis, L. Bremer, S. Jupiter, A. Friedlander, M. Poti, G. Guannel, N. Kurashima, K. Winter, R. Toonen, E. Conklin, C. Wiggins, A. Knudby, W. Goodell, **K.M. Burnett**, S. Yee, Hla Htun, K. Oleson, and T. Wiegner, T., Ticktin. 2018. A Linked Land-Sea Modeling Framework to Inform Ridge-

to-Reef Management in High Oceanic Islands, *PLoS ONE*, 13(3): e0193230. https://doi.org/10.1371/journal.pone.0193230.

**Burnett, K.M.,** C.A. Wada, A. Balderston. 2017. Benefit-Cost Analysis of Watershed Conservation on Hawai'i Island. *Ecological Economics* 131, 262-274.

Wada, C.A., L. Bremer, **K.M. Burnett,** C. Trauernicht, T. Giambelluca, L. Mandle, E. Parsons, C. Weil, N. Kurashima, T. Ticktin. 2017. Estimating the Cost-Effectiveness of Hawaiian Dry Forest Restoration Using Spatial Changes in Water Yield and Landscape Flammability under Climate Change. *Pacific Science* 71(4), 401-424.

Kim, K., **K.M. Burnett** and J. Ghimire. 2017. Integrating Fast Feedback and GIS to Plan for Important Agricultural Land Designations in Kaua'i County, Hawai'i. *Journal of Land Use Science*, 12(5): 375-390.

**Burnett, K.M.,** C.A. Wada, A. Endo, and M. Taniguchi. 2017. The Economic Value of Groundwater in Obama. *Journal of Hydrology: Regional Studies*, 11: 44-52. doi:10.1016/j.ejrh.2015.10.002

Endo, A., I. Tsurita, **K.M. Burnett**, P. Orencio. 2017. A Review of the Current State of Research on the Water, Energy, and Food Nexus. *Journal of Hydrology: Regional Studies*, 11:20-30, https://doi.org/10.1016/j.ejrh.2015.11.010

**Burnett, K.M.,** C.A. Wada, A. Endo, and M. Taniguchi. 2016. Cost-Benefit Analysis of Disaster Mitigation Infrastructure: The Case of Seawalls in Otsuchi, Japan. *Journal of Finance and Economics*, *4*(3), 1-11.

Wada, C.A., **K.M. Burnett**, and J. Gurdak. 2016. Sustainable Agriculture Irrigation Management: The Water-Energy-Food Nexus in Pajaro Valley, California, *Sustainable Agriculture Research*, 5(3), 76-83, http://dx.doi.org/10.5539/sar.v5n3p76

Taniguchi, M. N. Masuhara, and **K.M. Burnett**. 2016. Water, Energy, and Food Security in the Asia Pacific Region. *Journal of Hydrology: Regional Studies*, 11: 9-19. https://doi.org/10.1016/j.ejrh.2015.11.005

Kim, K., **K.M. Burnett** and J. Ghimire. 2015. Assessing the Potential for Food and Energy Self-sufficiency on the Island of Kaua'i, Hawai'i. *Food Policy*, 54, 44-51. https://uhero.hawaii.edu/RePEc/hae/wpaper/WP 2015-11.pdf

**Burnett, K.M.,** S. Pongkijvorasin, J. Roumasset, C.A. Wada. 2015. Integrated Management of Water Resources: Watersheds, Wetlands, Groundwater Stocks, and Coastal Ecology. In: Handbook of Water Economics, A. Dinar and K. Schwabe (Eds.), Chapter 9, Edward Elgar.

Endo, A., **K.M. Burnett**, P. Orencio, T. Kumazawa, C.A. Wada, A. Ishii, I. Tsurita, and M. Taniguchi. 2015. Methods of the Water-Energy-Food nexus. *Water* 7, 5806-5830. <a href="https://doi.org/10.3390/w7105806">https://doi.org/10.3390/w7105806</a>

Henly-Shepard, S. C. Anderson, **K.M. Burnett**, L. Cox, J. N. Kittinger, and M. Ka'aumoana. 2015. Quantifying Household Social Resilience: A Place-based Approach in a Rapidly Transforming Community. *Natural Hazards* 75(1), 343-363.

**Burnett, K.M.,** J. Roumasset, and C.A. Wada. 2015. Optimal Joint Management of Interdependent Resources: Groundwater Versus Kiawe (*Prosopis pallida*). In A. Balisacan, U. Chakravorty and M. Ravago

(Eds.), *Sustainable Economic Development: Resources, Environment and Institutions*, Chapter 6, Academic Press. doi:10.1016/B978-0-12-800347-3.00006-6

**Burnett**, **K.M.**, R. Howitt, J. Roumasset and C.A. Wada, eds. 2014. Handbook of Water Economics and Institutions, Routledge.

**Burnett, K.M.**, J. Roumasset, and C.A. Wada. 2014. The Good, Bad, and Ugly of Watershed Management, in *Handbook of Water Economics and Institutions* K. Burnett, R. Howitt, J. Roumasset and C. Wada, eds; Routledge, 100-110.

**Burnett, K.M.,** and C.A. Wada. 2014. Optimal Groundwater Management when Recharge is Declining: A Method for Valuing the Recharge Benefits of Watershed Conservation, *Environmental Economics and Policy Studies*, 16 (3), 263-278. doi:10.1007/s10018-014-0077-y

**Burnett, K.M.,** L. Endress, M-L. Ravago, J. Roumasset, C.A. Wada. 2014. Islands of Sustainability in Time and Space. *International Journal of Sustainable Society* 6(1/2), 9-27.

**Burnett, K.M.**, J. Roumasset, and C.A. Wada. 2012. Multi-instrument Pollution Abatement from Multiple Sources: The Case of Nitrogen Pollution in Groundwater. *Journal of Sustainable Watershed Science and Management*, 1(3): 76–83. doi:10.5147/jswsm.2012.0088

**Burnett, K.M.**, S. D'Evelyn, L. Loope, and C.A. Wada. 2012. An Economic Approach to Assessing Import Policies Designed to Prevent the Arrival of Invasive Species: The Case of *Puccinia psidii* in Hawai'i. *Environmental Science & Policy* 19-20: 158-168. <a href="https://doi.org/10.1016/j.envsci.2012.03.006">https://doi.org/10.1016/j.envsci.2012.03.006</a>

**Burnett, K.M.**, S. Pongkijvorasin, and J. Roumasset. 2012. Species Invasion as Catastrophe: The Case of the Brown Tree Snake. *Environmental and Resource Economics* 51(2): 241-254.

**Burnett, K.M.**, S. D'Evelyn, L. Loope, and C.A. Wada. 2012. Economic Analysis of the Proposed Rule to Prevent Arrival of New Genetic Strains of the Rust Fungus *Puccinia psidii* in Hawai'i. Technical Report No. 177. The Hawai'i-Pacific Islands Cooperative Ecosystem Studies Unit & Pacific Cooperative Studies Unit, University of Hawai'i, Honolulu, Hawai'i. 50 pp.

Duarte, T. K., S. Pongkijvorasin, J. Roumasset, D. Amato, and **K.M. Burnett.** 2010, Optimal Management of a Hawaiian Coastal Aquifer with Nearshore Marine Ecological Interactions, *Water Resources Research* 46, W11545, doi:10.1029/2010WR009094.

Kaiser, B. and **K.M. Burnett**. 2010. Spatial Economic Analysis of Early Detection and Rapid Response Strategies for an Invasive Species. *Resource and Energy Economics*, 32(4): 566-585.

Pongkijvorasin, S., J. Roumasset, T. Duarte, and **K.M. Burnett**. 2010. Renewable Resource Management with Stock Externalities: Coastal Aquifers and Submarine Groundwater Discharge. *Resource and Energy Economics* 32(3): 277-291.

Roumasset J., **K.M. Burnett**, and A.M. Balisacan (eds.) 2010. Sustainability Science for Watershed Landscapes. Singapore: Institute of Southeast Asian Studies; Los Banos, Philippines: Southeast Asian Regional Center for Graduate Study and Research in Agriculture.

D'Evelyn, S, N. Tarui, K.M. Burnett, and J. Roumasset. 2008. Uncertain Populations and

the Value of Information. Journal of Environmental Management 89(4): 284-292.

**Burnett, K.M**, S. D'Evelyn, B. Kaiser, P. Nantamanasikarn and J. Roumasset. 2008. Beyond the Lamppost: Optimal Prevention and Control of the Brown Tree Snake in Hawai'i, *Ecological Economics* 67: 66-74.

Roumasset, J., **K.M. Burnett**, and H. Wang. 2008. Environmental Resources and Economic Growth, in *China's Economic Transition: Origins, Mechanism, and Consequences* Brandt, L and T Rawski, eds. New York, NY: Cambridge University Press.

Kasier, B., B. Pitafi, J. Roumasset, and **K.M. Burnett**. 2008. The Economic Value of Watershed Conservation, in *Land Management Impacts on Coastal Watershed Hydrology* A. Fares and A. El-Kadi, eds. Southampton, U.K: WIT Press.

**Burnett, K.M.**, B. Kaiser and J. Roumasset. 2007. Economic Lessons from Control Efforts for an Invasive Species: *Miconia calvescens* in Hawai'i, *Journal of Forest Economics* 13 (2-3): 151-167.

**Burnett, K.M.**, B. Kaiser and J. Roumasset. 2007. Invasive Species Control over Space and Time: *Miconia calvescens* on Oʻahu, Hawaiʻi. *Journal of Agricultural and Applied Economics* 39: 125-132.

**Burnett, K.M.** 2006. Introduction of Invasive Species: Failure of the Weaker Link. *Agricultural Resource Economics Review* 35(1): 21-28.

**Burnett, K.M.**, B. Kaiser, B. Pitafi, and J. Roumasset. 2006. Prevention, Eradication, and Containment of Invasive Species: Illustrations from Hawai'i. *Agricultural and Resource Economics Review* 35(1): 63-77.

Kaiser, B. and **K.M. Burnett**. 2006. Economic Impacts of E. Coqui Frogs in Hawai'i. *Interdisciplinary Environmental Review* 8(2) 1-11.

Kaiser, B., **K.M. Burnett**, and J. Roumasset. 2006. Control of Invasive Species: Lessons from Miconia in Hawai'i. 15th Australian Weeds Conference: Papers and Proceedings, Adelaide, South Australia. Council of Australian Weeds societies, C. Preston, J.H. Watts, and ND Crossman, eds. pp 663-667.

Levin, P., R. Cowie, C. Ferguson, J. Taylor, K. Hayes, **K.M. Burnett**, and C. Tran. 2006. Apple Snail Invasions and the Slow Road to Control: Ecological, Economic, Agricultural and Cultural Perspectives in Hawai'i, in *Global Advances in Ecology and Management of Golden Apple Snails* (ed. R.C. Joshi). Philippine Rice Research Institute, Muñoz, Nueva Ecija.

# **GRANTS**

2024 Hawai'i Invasive Species Committee: "Economic Benefits and Costs of Biocontrol in Hawaii," (Principal Investigator)

2024 The Nature Conservancy: "Economic Valuation of Kaua'i Watershed Alliance Protection," (co-PI)

2024 Department of Business Economic Development and Tourism: "Hawaii Generational Economy Report and Dashboard," (Principal Investigator)

2020 UH Vice President of Research and Innovation: "The Economic Impact of the University of Hawai'i System 2021 Update," (Principal Investigator)

2019 Maui Department of Water Supply: "Bioeconomic Models Prioritizing Mauka Catchment Basins of the East Maui Watershed for Protection Against Miconia Invasion," (Principal Investigator)

2019 Hawai'i Invasive Species Committee: "Building Research and Technology Capacity to Support Invasive Plant Species Management," (Principal Investigator)

2018 Hau'oli Mau Loa: "Natural Resource Management Report Update," (Principal Investigator)

2018 Research Institute for Humanity and Nature Research Fellowship, "Economic Analysis of the Water-Energy-Food Nexus" (Principal Investigator)

2017 Hawai'i Community Foundation "Spatial Analysis of Cost-Effective Watershed Restoration," (Principal Investigator)

2017 Ulupono Initiative "Organizational Study of Water Management Networks and Processes in Hawai'i," (co-Principal Investigator)

2017 The Nature Conservancy "Economic Valuation of The Nature Conservancy's Watershed Conservation in the East Maui Watershed," (Principal Investigator)

2016 National Science Foundation IKE-IMUA EPSCoR Track-1 "Ike Wai: Securing Hawai'i's Water Future," (Senior Personnel)

2016 Honolulu Board of Water Supply "Economic Analysis of Water Resource Impact of Red Hill Fuel Tanks," (Principal Investigator)

2016 Hawai'i Invasive Species Committee "Science and Technology Based Management of Incipient Miconia (*Miconia calvescens* DC) Utilizing Herbicide Ballistic Technology (HBT)" (co-Principal Investigator)

2015 National Science Foundation Food Energy Water Program, Supplement to: "Understanding the links between local ecological knowledge, ecosystem services, and resilience to climate change in Pacific Islands," (co-Principal Investigator)

2015 Research Institute for Humanity and Nature Research Fellowship, "Economic Analysis of the Water-Energy-Food Nexus" (Principal Investigator)

2015 The Nature Conservancy "Watershed Conservation Return on Investment Analysis," (Principal Investigator)

2015 Hawai'i Invasive Species Committee: "Assessing the Costs of Invasive Species in Hawai'i," (Principal Investigator)

2015 Water Resources Research Center: "Towards an Understanding of Residential Water Conservation Behaviors on O'ahu," (co-Investigator)

2015 SeaGrant "Predicting Hawai'i Water Demand under Climate Change" (co-Investigator)

2015 Hawai'i Strategic Development Corporation "Evolution of the HI Growth Initiative" (Principal Investigator)

2015 University of Hawai'i Student Services "An Assessment of Student Expenditures" (Principal Investigator)

2014 National Science Foundation Coastal SEES Program: "Understanding the links between local ecological knowledge, ecosystem services, and resilience to climate change in Pacific Islands," (co-Principal Investigator)

2014 Hawai'i Community Foundation: "Returns on Watershed Conservation," (Principal Investigator)

2014 Hawai'i Community Foundation: "Green Plumbing Code Benefit-Cost Analysis," (Principal Investigator)

2014 Hau'oli Mau Loa: "Natural Resource Management Report Update," (Principal Investigator)

2013 University of Hawai'i at Manoa College of Social Sciences Research Support Award: "Developing a Decision Support System for Land Use and Water Management under a Changing Climate," (Principal Investigator)

2013 Research Institute for Humanity and Nature: "Human-Environmental Security in Asia-Pacific Ring of Fire: Water-Energy-Food Nexus," (co-Investigator)

2012 State of Hawai'i Department of Business, Economic Development, and Tourism: "Scoping the Value of the Special Management Area Permit and Shoreline Setback Variance for the Coastal Zone Management (CZM) Program," (co-Principal Investigator)

2012 United States Geological Survey: "Satisfying Growing Water Demand Through Integrated Groundwater and Watershed Management," (Principal Investigator)

2011 Nature Conservancy and Hau'oli Mau Loa: "Hawai'i's Green Growth Initiative," (Principal Investigator)

2011 SeaGrant Hawai'i and Kyo-ya Co. Ltd.: "Indicators for Sustainable Coastal Tourism in Hawai'i," (Principal Investigator)

2010 United States Fish and Wildlife Service: "Estimating the Cost of Rodent Control in Hawai'i," (Principal Investigator)

2010 United States Geological Survey: "Evaluating Policy Options to Reduce the Risk of New Strains of Ohia Rust in Hawai'i," (Principal Investigator)

2009 Kamehameha Schools: "Assessing Affordable Housing Policies for Hawai'i" (Principal Investigator)

2009 County of Kaua'i: "Kaua'i Important Agricultural Lands Study," (Principal Investigator)

2009 National Science Foundation: "Ecosystem Function: Natural, Anthropogenic, and Invasive Species Contributions to Biogeochemical Evolution of Groundwaters and Coastal Environments of West Hawai'i," (Senior Personnel)

2009 Save the Waves Coalition: "Wave Valuation Study," (Co-Investigator)

2008 University of Hawai'i at Manoa: "Economic Impact of the University of Hawai'i at Manoa," (Principal Investigator)

2008 Department of Land and Natural Resource/Hawai'i Invasive Species Council Award: "Ecological, Hydrological, and Economic Impacts of Miconia in Hawai'i," (Co-Investigator).

2007 US FWS Agreement number 122004J001: "Economic Impacts of *Miconia Calvescens* in Hawai'i," (Co-Investigator).

#### **TECHNICAL REPORTS**

Bond-Smith, Steven, C. Bonham, **K. M. Burnett**, C.A. Wada, V. Rhinebolt. 2022. Economic Impact of Astronomy in Hawai'i: 2019 Update. <a href="https://uhero.hawaii.edu/wp-content/uploads/2022/04/EconomicImpactofAstronomyinHawaii2019Update.pdf">https://uhero.hawaii.edu/wp-content/uploads/2022/04/EconomicImpactofAstronomyinHawaii2019Update.pdf</a>

**Burnett, K.M**., C.A Wada, 2021. The Economic Impact of the University of Hawai'i System 2021 Update. <a href="https://uhero.hawaii.edu/wp-content/uploads/2021/05/UHSystemImpact2021.pdf">https://uhero.hawaii.edu/wp-content/uploads/2021/05/UHSystemImpact2021.pdf</a>

Wada, C.A., L.L. Bremer, N. DeMaagd, S. Medoff, S. Cloudwatcher, and **K.M. Burnett.** 2018. Identifying areas of cost-effective watershed management for groundwater recharge protection on Hawai'i Island. Project report prepared for the Hawai'i Community Foundation, <a href="https://uhero.hawaii.edu/assets/HCF2019">https://uhero.hawaii.edu/assets/HCF2019</a> WatershedManagement.pdf

Bremer, L.L., C.A. Wada, **K.M. Burnett,** S. Medoff, J. Page, S.B. Lee, K. Falinski, and S. Cloudwatcher. 2018. Economic Valuation of The Nature Conservancy's Watershed Conservation Activities in Waikamoi Preserve, Maui, project report prepared for the Hawai'i Community Foundation, <a href="https://uhero.hawaii.edu/assets/TNCWaikamoiPreserve.pdf">https://uhero.hawaii.edu/assets/TNCWaikamoiPreserve.pdf</a>

Chun, G., P. Adler, A. Arik, **K.M. Burnett,** N. Redding, and C. Wada. 2017. Organizational Study of Water Management Networks and Processes in Hawai'i, project report for Ulupono Initiative.

**Burnett, K.M.** and C. Wada. 2016. Assessing the Costs of Priority HISC Species in Hawai'i, project report for the Hawai'i Invasive Species Committee, <a href="http://uhero.hawaii.edu/products/view/546">http://uhero.hawaii.edu/products/view/546</a>

Bonham, C., **K.M. Burnett,** and S. Rosen. 2016. The Evolution of the HI Growth Initiative, project report for the Hawai'i Strategic Development Corporation, http://uhero.hawaii.edu/assets/Evolution HIGrowth Initiative.pdf

**Burnett, K.M.** and C. Wada. 2016. Recent Trends in Hawai'i's Green Economy: Agriculture, Energy and Natural Resource Management, project report for Hau'oli Mau Loa Foundation, http://uhero.hawaii.edu/assets/NRM1-20.2016.pdf

**Burnett, K.M.,** I. Cintina, and C. Wada. 2015. Economic Impact of the Natural Energy Laboratory Hawai'i Authority (NELHA) Tenants on the State of Hawai'i, project report for NELHA, <a href="http://uhero.hawaii.edu/assets/NELHAreport-final.pdf">http://uhero.hawaii.edu/assets/NELHAreport-final.pdf</a>

**Burnett, K.M.,** I. Cintina, and C. Wada. 2014. The Economic Impact of Astronomy in Hawai'i, project report for Mauna Kea Observatories, http://www.uhero.hawaii.edu/assets/UHERO Astronomy Final.pdf

**Burnett, K.M.** and C. Wada. 2014. Benefits and Costs of Implementing the IAPMO Green Plumbing and Mechanical Code Supplement in Hawai'i, project report for Hawai'i Community Foundation, <a href="http://uhero.hawaii.edu/assets/HCFGCOprojectenvironmentreport12">http://uhero.hawaii.edu/assets/HCFGCOprojectenvironmentreport12</a> 18.pdf

**Burnett, K.M.**, I. Cintina, and C. Wada. 2013. The Economic Impact of the University of Hawai'i System, project report for the University of Hawai'i, <a href="http://www.uhero.hawaii.edu/assets/UHSystemImpactReport-Public.pdf">http://www.uhero.hawaii.edu/assets/UHSystemImpactReport-Public.pdf</a>

Cintina, I., **K.M. Burnett,** and C. Bonham. The Contribution of the University of Hawai'i at Manoa to Hawai'i's Economy in 2012, <a href="http://www.uhero.hawaii.edu/assets/UHEROEconomicImpactofUHManoa.pdf">http://www.uhero.hawaii.edu/assets/UHEROEconomicImpactofUHManoa.pdf</a>

Bonham, C., **K.M. Burnett,** I. Cintina, and P. Bernstein. 2013. Economic Impact of the Natural Energy Laboratory Hawai'i Authority Tenants, project report for NELHA, http://uhero.hawaii.edu/assets/UHERONELHAimpactstudy-final.pdf

**Burnett, K.M.** and C. Wada. 2012. Foundations for Hawai'i's Green Economy: Economic Trends in Hawai'i Agriculture, Energy, and Natural Resource Management, project report for Hau'oli Mau Loa Foundation, http://uhero.hawaii.edu/assets/GreengrowthreportFINAL.pdf

**Burnett, K.M**., S. D'Evelyn, L. Loope, and C.A. Wada. 2012. Economic Analysis of the Proposed Rule to Prevent Arrival of New Genetic Strains of the Rust Fungus *Puccinia psidii* in Hawai'i. Technical Report No. 177. The Hawai'i-Pacific Islands Cooperative Ecosystem Studies Unit & Pacific Cooperative Studies Unit, University of Hawai'i, Honolulu, Hawai'i. 50 pp.

LaCroix, S. and **K.M. Burnett**. 2010. The Impact of Civil Unions on Hawai'i's Economy and Government, UHERO Working Paper, <a href="http://www.uhero.hawaii.edu/assets/WP">http://www.uhero.hawaii.edu/assets/WP</a> 2010-6.pdf

Bonham, C., **K.M. Burnett** and A. Kato. 2010. Inclusionary Zoning: Implications for O'ahu's Housing Market, UHERO Working Paper, <a href="http://www.uhero.hawaii.edu/assets/UHEROProjectReport2010-1.pdf">http://www.uhero.hawaii.edu/assets/UHEROProjectReport2010-1.pdf</a>

Bonham, C., B. Gangnes, **K.M. Burnett,** and A. Kato. 2010. Maui Construction Jobs Down 12% Since March, UHERO Working Paper, <a href="http://www.uhero.hawaii.edu/assets/08Q4">http://www.uhero.hawaii.edu/assets/08Q4</a> MauiUpdate.pdf

**Burnett, K.M.**, P. Leung, and J. Mak. 2009. The Contribution of University of Hawai'i at Manoa to Hawai'i's Economy in 2007, UHERO Working Paper, <a href="http://www.uhero.hawaii.edu/assets/UHMimpact2007.pdf">http://www.uhero.hawaii.edu/assets/UHMimpact2007.pdf</a>

**Burnett, K.M.** and S. LaCroix. 2009. Economic Education's Roller Coaster Ride In Hawai'i, 1965-2006, UHERO Working Paper, <a href="http://www.uhero.hawaii.edu/assets/UHERO">http://www.uhero.hawaii.edu/assets/UHERO</a> WP2009-02.pdf

## **STUDENTS**

- Ariel Thepsenavong (Global Environmental Science, 2023 thesis advisor)
- David Lewis (Natural Resources and Environmental Management M.S., 2023 Committee Member)
- Ryan Ringuette (Dept. of Urban and Regional Planning M.A., 2022, Committee Member)
- Diamond Tachera (Department of Earth Sciences Ph.D. 2022, Committee Member)
- Aida Arik (Dept. of Urban and Regional Planning Ph.D. 2021, Committee Member)
- Nathan DeMaagd (Economics Ph.D. 2020, Committee Member)

- Tanya Harrison (Natural Resources and Environmental Management M.S. 2020, Committee Member)
- Cory LePore (Economics M.A. 2020, Committee Member)
- John Woodill (Economics Ph.D. 2018, Committee Member)
- David Wade (Natural Resources and Environmental Management Undergraduate Intern Advisor, 2018)
- Cheryl Geslani Scarton (Natural Resources and Environmental Management Ph.D. 2017, Committee Chair)
- Natalie Kurashima (Botany Ph.D. 2016, Committee Member)
- Shane Rosen (Economics Undergraduate Intern Advisor, 2015)
- Sarah Henly-Shephard (Natural Resources and Environmental Management Ph.D. 2013, Committee Member)
- Veasna Kum (Natural Resources and Environmental Management Ph.D. 2011, Committee Member)
- Megan Chock (Economics Undergraduate Intern Advisor, 2012)

#### **SELECTED SERVICE**

- Pacific Fire Exchange, Steering Committee Member 2022—present
- Frequent (1-2 articles/month) referee for economics and interdisciplinary journals including Ecological Economics, Journal of Environmental Management, Land Use Policy, PLOS ONE, etc.
- Regularly attend international (World Congress of Environmental and Resource Economists) and domestic economics and interdisciplinary meetings (Western Economics Association, Hawai'i Conservation Conference) to present and discuss papers, and organize and chair sessions
- State of Hawai'i Endangered Species Recovery Committee, University of Hawai'i Representative, 2016-2019
- Hawai'i Economic Association Board Member, 2008-2012
- Hawai'i Council on Economic Education Board Member, 2008-2012
- Hawai'i Council on Economic Education, Official Judge at Annual Economics Challenge
- Hawai'i Dept. of Commerce and Consumer Affairs LifeSmarts Competition Judge
- University service includes serving on department personnel committees, hiring committees, guest lecturing across campus and across the University of Hawai'i System.