

Andrea Kealoha
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Professional Preparation

University of Hawai‘i at Mānoa	Honolulu, HI	Global Environmental Science	B.S., 2010
Hawai‘i Pacific University	Honolulu, HI	Marine Science	M.S., 2014
Texas A&M University	College Station, TX	Oceanography	Ph.D., 2019

Appointments

2023-current	Assistant Professor, Oceanography, SOEST, UH Mānoa
2019-2023	Water Quality Lab Director, University of Hawai‘i Maui College
2015-2016	Oceanography Lecturer, Texas A&M University
2014-2015	Oceanography TA, Texas A&M University
2013-2014	Pac. Islands Marine Debris Asst. Coordinator, IMSG/NOAA

Publications

Kealoha AK, Shamberger KEF, DiMarco S, Thyng K, Hetland R, Manzello DP, Slowey N, Enochs I. (2020) Surface water CO₂ variability in the Gulf of Mexico (1996-2017). *Scientific Reports*. 10(12279): doi.org/10.1038/s41598-020-68924-0

Doo SS, **Kealoha AK**, Andersson A, Cohen A, Hicks TL, Johnson ZI, Long MH, McElhany P, Mollica N, Shamberger KEF, Silbiger N, Takeshita Y, Busch DS. (2020) The challenges of detecting and attributing ocean acidification impacts on marine ecosystems. *Frontiers in Marine Science*. <https://doi.org/10.1093/icesjms/fsaa094>

Kealoha AK, Doyle SM, Shamberger KEF, Sylvan JB, Hetland RD, DiMarco SF (2019) Localized hypoxia may have caused coral reef mortality at the Flower Garden Banks. *Coral Reefs*. 39(1):119-132

Kealoha AK, Shamberger KEF, Reid EC, Davis KA, Lentz SJ, Brainard RE, Oliver TA, Rappe MS, Roark EB, Rii YM (2019) Heterotrophy of oceanic particulate organic matter elevates net ecosystem calcification. *Geophysical Research Letters*. 46(16): doi.org/10.1029/2019GL083726

Kealoha AK, Mackenzie FT, Kosaki RK, Alin SR, Winn CD (2017) Carbon system dynamics of a pristine coral reef ecosystem: French Frigate Shoals. *Aquatic Geochemistry*. 23:75-88

Kealoha AK, Kahng SE, Mackenzie FT, Alin SR, Kosaki RK, Brainard RE, Winn CD (2015) Latitudinal trends and drivers in the CO₂-carbonic acid system of Papahānaumokuākea Marine National Monument. *Aquatic Geochemistry*. 21:535-553

Grants Received

Project Title: *‘Ike Kūpuna: Integrating Traditional Knowledge Into Natural Resource Sciences*

Funding Organization: NIFA USDA

Award Amount: \$475,000

Project Period: 08/01/22-7/31/25

Project Title: *Water Quality Assessment and Management in a Coral Reef Ecosystem, Kahekili, West*

Maui, Hawaii

Funding Organization: Coral Reef Conservation Fund, NFWF

Award Amount: \$199,997

Project Period: 12/01/22 - 08/31/24

Project Title: *Mitigating impacts from environmental stressors: early response to the Chondria outbreak at Pearl and Hermes Atoll, and Hurricane Walaka impacts at French Frigate Shoals.*

Funding Organization: Papahānaumokuākea Research and Conservation Fund, NFWF

Amount Awarded: \$299,890

Period of Grant: 08/01/20-02/28/22

Project Title: *Building Environmental Resiliency Leaders*

Funding Organization: Environmental Literacy Program, NOAA

Amount Awarded: \$499,993

Period of Grant: 10/01/20-09/30/23

Project Title: *Mauka to Makai*

Funding Organization: National Institute of Food and Agriculture, USDA

Amount Awarded: \$489,234

Period of Grant: 07/01/20-06/30/22

Project Title: *Chondria Management and Reef Assessment in Papahānaumokuākea Marine National Monument*

Funding Organization: Papahānaumokuākea Research and Conservation Fund, NFWF

Award Amount: \$343,436

Project Period: 06/01/22-12/31/23

Selected Presentations

Kealoha AK (2021) Coral Reefs: Climate Change and Environmental Stressors. Department of Oceanography, UH Manoa. *Special seminar for Affiliate Faculty*

Kealoha AK (2021) Building capacity for water quality research and monitoring on Maui. Sierra Club, Maui. *Invited talk*

Kealoha AK (2021) Building capacity for water quality research and monitoring on Maui. Water Resources Research Center and 'Ike Wai, UH Manoa. *Invited seminar*

Kealoha AK, et al. (2018) Heterotrophy of oceanic organic matter elevates net ecosystem calcification. NOAA, Honolulu, HI. *Invited seminar*

Kealoha AK, Shamberger KEF, DiMarco S, Hetland R, Doyle S, Sylvan J (2018) Chemical seawater anomalies following the 2016 EFGB localized mortality event. Oral presentation at the Flower Garden Banks Mortality Event Symposium, Galveston, TX

Kealoha AK, et al. (2018) Net Ecosystem Calcification and Oceanic Particulate Organic Matter Uptake at Kāne'ōhe Bay Barrier Reef. Oral presentation at the Ocean Sciences Conference, Portland, OR.

Kealoha AK, Shamberger KEF (2016) Spatiotemporal trends in surface seawater CO₂ in the Gulf of Mexico. Poster presentation at the American Geophysical Union Conference, San Francisco, CA.

Kealoha AK, Kahng SE, Mackenzie FT, Alin SR, Kosaki RK, Winn CD (2014) Carbon system dynamics in the Papahānaumokuākea Marine National Monument. Oral presentation at the Ocean Sciences Conference, Honolulu, HI

Selected Awards

Sea Grant Knauss Fellowship (declined)	2018
Chapman Research Award, TAMU	2018
NOAA Nancy Foster Scholarship	2016-2019
Wormuth Teaching Award, TAMU	2016
Texas Sea Grant Graduate Research Grant	2016
Ford Foundation Fellowship (alternate)	2016

Media

Ka Pili Kai: Rethinking Wastewater (2023), How Clean is Clean?

USDA NIFA: Asian American, Native Hawaiian and Pacific Islander Heritage Month Profile:

Dr. Andrea Kealoha (2022)

Maui News: Papahānaumokuākea voyage yields information on newly ID'd nuisance that's smothering corals and algae (2021)

UH News: Maui water quality research gets boost from \$40K gift (2021)

UH News: \$1.5M to help Native Hawaiian students in agriculture and sustainability (2020)

TAMU Today: Explanation Found For Die-Off Of Coral Reefs In Gulf Of Mexico (2020)

TAMU Today: Study Says Carbon Dioxide Levels Rising In Gulf Of Mexico (2020)

UH News: Water quality testing certificate program offered at UH Maui College (2019)

TAMU Today: Texas A&M Team Finds New Ways For Coral Reef Ecosystems To Grow (2019)

NOAA National Marine Sanctuaries News: Coral CSI: Foster Scholar Andrea Kealoha analyzes water chemistry for clues about invertebrate mortality events (2018)