From:
 Kondo, Wendy L

 To:
 Kaaa, Iwalani HR

Subject: CWRM Applicant - AKAGAWAVIVIANI
Date: Wednesday, March 5, 2025 10:30:38 AM

Attachments: image001.png

Wendy L. Kondo | Boards & Commissions

Office of the Governor | Ke Ke'ena O Ke Kia'āina

State of Hawai'i

Direct Line: (808)

Email:

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From: Boards and Commissions Application <noreply@ehawaii.gov>

Sent: Monday, March 3, 2025 10:45 PM

To: Gov.Boards.Commissions < Boards.Commissions@hawaii.gov>; Deptula, Cameron S

< Kondo, Wendy L < >

Subject: [EXTERNAL] Boards and Commissions Application [#13504]

Legal Name	Aurora K Kagawa-Viviani
Please check preferred title:	Dr.
U.S. Citizen	Yes
Residential Address	Honoiuiu, Hawaii 96822 United States
Mailing Address (if other than your residence)	United States
Island of Residence	O`ahu
Residency in Hawai'i (Years)	43
Have You Lived in Hawaii For the Past 12 Months?	Yes
Daytime Phone:	(808)
Primary Email Address	
Current Profession/Occupation	assistant professor
Name	
Email	

Phone	(808)
Name	
Email	
Phone	(808)
Name	
Email	
Phone	(808)
If so, please state the name of the body and the date when your term expires.	Commission on Water Resource Management; term expires June 30, 2025
Are you a member of a union?	Yes
If yes, please state the name of the union and union number	UHPA BU07
Have you been convicted of a felony or misdemeanor?	No
Have you ever been convicted of any act, attempt or conspiracy to overthrow the state or the federal government by force or violence?	No
Please attach Letter of Interest:	
Please attach Resume:	
First choice board name	Commission on Water Resource Management
	 If my choices are no longer available, I would still like to be contacted for another open position. (Please check the box if so.)
	 Check here if you are currently serving a state board, council, committee or commission and are reapplying to the same state board, council, committee for an additional term.

For Applications Completed With Assistance

Acknowledgement of the State **Ethics Commission Annual Disclosure of Financial Interests** Under the State Ethics Law, Hawaii Revised Statutes Ch. 84, members of state boards and commissions who are appointed to terms of more than one year and whose functions are not "solely advisory" must file a financial disclosure statement with the State Ethics Commission. Statements, other than those of members of boards that head a state department as well as 15 boards and commissions affected by Act 230, Session Laws of Hawaii 2014 (Board of Regents of the University of Hawaii, Board of Directors of the **Agribusiness Development** Corporation, Board of Agriculture, State Ethics Commission, Hawaii Community Development Authority, Hawaiian Homes Commission, Board of Directors of the Hawaii Housing **Finance and Development**

Corporation, Board of Land and **Natural Resources, Land Use Commission, Legacy Land Conservation Commission, Natural Area Reserves System Commission, Board of Directors of the Natural Energy Laboratory of Hawaii Authority, Board of Directors of the Hawaii Public Housing Authority, Public Utilities Commission and Commission on Water Resource** Management), will be maintained confidential and neither published nor disclosed by the Ethics Commission without the member's permission, during the member's term, and for six years thereafter whereupon they will all be destroyed. Questions as to whether the members of a particular board must file a disclosure statement, or whether statements filed by the members of a particular board are subject to disclosure should be posed directly to the State Ethics Commission.

- I have read and understand the above statement

Information To Whom It May Concern: In conjunction with the background check being conducted by the Office of the Governor for my possible appointment to a state board or commission, I hereby authorize the representative of the Office of the Governor, State of Hawaii, bearing this release, or copy thereof, to obtain information about me that you may have pertaining to my employment, military service, or education, including but not limited to academic, achievement, attendance, personal history, disciplinary actions, awards, and request of the bearer. This authorization to release is executed with my full knowledge and understanding that the information will be

used in connection with my application for possible appointment to a state board

or commission. Name

Authorization To Release/Disclose

Aurora K. Kagawa-Viviani

Signature (Type Your Name in Below)	Aurora Kagawa-Viviani
Date	Mar 03, 2025

Aurora Keʻalohilani Kagawa-Viviani

EDUCATION

- 2020 PhD, Geography and Environment, University of Hawai'i at Mānoa, Honolulu HI
- 2008 MS, Botany with Ecology, Evolution, and Conservation Biology specialization, University of Hawai'i at Mānoa, Honolulu HI
- 2003 SB, Environmental Engineering, Massachusetts Institute of Technology, Cambridge MA

PROFESSIONAL APPOINTMENTS (SELECTED)

- Aug 2022- **Assistant Professor,** UH Mānoa Water Resources Research Center and UH Mānoa Department of Geography and Environment, Honolulu, HI
- 2021-2022 **Postdoctoral Researcher,** Hawai'i forest restoration and ecohydrology, Hawai'i Cooperative Studies Unit UH Mānoa Water Resources Research Center USGS Pacific Island Ecosystems Research Center, Hilo, HI. (PI: S Ziegler-Chong, TW Giambelluca, G Tribble)
- 2011- 2013 **Educational Specialist**, Kapi'olani Community College, Honolulu HI (PI: L Pagotto) Indigenous Knowledge in Engineering/NSF Pre-Engineering Education Collaborative
- 2011 Environmental Specialist, SWCA Corporation, Honolulu HI (Principal: J Ford)
- 2008-2010, Field Research Technician and Education/Outreach Coordinator
- 2011- 2012 Hawai'i Biocomplexity Project, Stanford University, Kohala HI (PI: P Vitousek)

COMPETITIVE GRANTS & FELLOWSHIPS (SELECTED)

- DoD SERDP (2025-2027) Harnessing the power of soil surface sensing to increase conservation success in Hawai'i. PI Phillips, CoIs Kagawa-Viviani + 5 others.
- NSF RAPID (2023-2024) *Identifying Drinking Water Contamination and Social Vulnerability Impacts from Urban Fires.* PI Shuler, CoIs: Kagawa-Viviani + 3 others.
- USGS WRRIP (2023-2024) FY 2023 Annual Application under Section 104 of the Water Resources Research Act of 1984 of the State Water Resources Research Institute Program. PI Giambelluca, Co-Is: A. Kagawa-Viviani + 12 others.
- Hawai'i Community Foundation (2023-2027) *Improving Linkages Between State of Hawai'i Water Management Needs and Educational and Career Pathways at the University of Hawaii.* PI Bremer and Co-I Kagawa-Viviani.
- NOAA CIROH (2023-2026) *Supporting Equitable Nature-Based Solutions for Flood Mitigation*. PI Bremer, CoIs: Kagawa-Viviani + 4 others.
- USGS PI-CASC (2023-2026) Climate Smart Restoration: Establishing Baselines and Developing Adaptive Management Approaches. PI Phillips, CoIs: Kagawa-Viviani and Yanger.
- UHM Social Science Research Institute Research Support Award (2023-2024) Community Water Science: Urban pūnāwai as incubators of participatory research and innovation. PI Kagawa-Viviani.
- Office of Naval Research (2023-2025) Laying the Groundwork for Water Security Preparedness and Resilience in Hawaii and the USAPI Through Strong Partnerships, Robust Scientific Information, and Increased Analytical Capacity. PI Giambelluca, Co-Is: A Kagawa-Viviani +12 others.
- USDN The Funders Network: Partners for Places mini-grant (2020-2021) *Community Driven and Tech-Supported Water Planning for Hawaiian Homesteads*. PIs A Kagawa-Viviani and K Purdy-Avelino. Ford Foundation Predoctoral Fellowship (2014- 2017), Ford Foundation Dissertation Fellowship (2018- 2019)

PUBLICATIONS (SELECTED, *peer reviewed)

- 1. Farrant DN, P Trauernicht, **A Kagawa-Viviani**, TW Giambelluca, CA D'Antonio. 2024. On the anniversary of the Maui fires, a call for Indigenous land care to mitigate future disasters. Proceedings of the National Academy of Sciences, 121(39), e2401045121. https://doi.org/10.1073/pnas.2401045121
- 2. *Brennis, T, N Lautze, R Whittier, A **Kagawa-Viviani**, H Tseng, G Torri, D Thomas. (2024). Understanding the Source and Evolution of Precipitation Stable Isotope Composition across Oʻahu, Hawaiʻi. *Journal of Hydrometeorology*, 1283–1302. https://doi.org/10.1175/JHM-D-23-0193.1

- 3. *Whelton, AJ, PD Coelho, C Shuler, **A Kagawa-Viviani**, KDP Cole, S Surdyka, S Heffner. (2024). Two weeks after the 2023 Maui wildfires: Drinking water experiences and needs. *Environmental Science:* Water Research & Technology. https://doi.org/10.1039/D4EW00216D
- 4. *Macpherson, E, RI Cuppari, **A Kagawa-Viviani**, H Brause, WA Brewer, WE Grant, N Herman-Mercer, B Livneh, KR Neupane, T Petach, CN Peters, HH Wang, C Pahl-Wostl, H Wheater. 2024. Setting a pluralist agenda for water governance: Why power and scale matter. *WIREs Water*, e1734. https://doi.org/10.1002/wat2.1734
- 5. *Kodama, KM, E Kourkchi, RJ Longman, MP Lucas, SM Bateni, YF Huang, **A Kagawa-Viviani**, J Mclean, SB Cleveland, TW Giambelluca. 2024. Mapping daily air temperature over the Hawaiian Islands from 1990 to 2021 via an optimized piecewise linear regression technique. Earth and Space Science, 11, e2023EA002851. https://doi.org/10.1029/2023EA002851
- 6. **Kagawa-Viviani AK**. 2023 October 23. Good water governance is a critical trust. Honolulu Star Advertiser. https://www.staradvertiser.com/2023/10/22/editorial/island-voices/column-good-water-governance-is-a-critical-trust/
- 7. **Kagawa-Viviani AK**, M Buck, P Meyer. March 2022. Status Update and Recommendations from the Red Hill Permitted Interaction Group on the Scope of Work Approved at the January 7, 2022 Meeting. Submittal for the Hawai'i Commission on Water Resource Management, Honolulu, Hawai'i. https://files.hawaii.gov/dlnr/cwrm/submittal/2022/sb20220517D1.pdf
- 8. *Winnicki, E, **AK Kagawa-Viviani**, K Perez, T Radovich, MB Kantar. 2021. Characterizing the diversity of Hawai'i sweet potatoes (*Ipomoea batatas* L.). *Journal of Economic Botany*. 75(1), 48-62. DOI: 10.1007/s12231-020-09511-2
- 9. **Kagawa-Viviani**, **AK**. 2020. Ecohydrology of change: Dynamics of climatological, hydrological, and ecological change across Hawai'i's landscapes (Doctoral dissertation, University of Hawai'i at Manoa). http://hdl.handle.net/10125/70326
- 10. *Kagawa-Viviani, AK and TW Giambelluca. 2020. Spatial patterns and trends in surface air temperatures and implied changes in atmospheric moisture across the Hawaiian Islands, 1905-2017. *Journal of Geophysical Research: Atmospheres.* 125(2): e2019JD031571. DOI: 10.1029/2019JD031571
- 11. **Kagawa-Viviani AK,** Y Miyazawa, M Nullet, TW Giambelluca. April 2020. Transpiration in native and non-native forest in upper Mākaha valley, Oʻahu. Final report for Honolulu Board of Water Supply, Honolulu, Hawaiʻi.
- 12. Vaughan, MB, W Kinney, JK Fu, A Kagawa-Viviani, F Koethe, C Geslani, LML Charlie, NK Farrant, E Cadiz, and J Muratsuchi. 2019. "Kahale'ala, Halele'a: Fragrant, Joyful Home, a Visit to Anini, Kaua'i." In HK Aikau and VV Gonzalez (Eds.), *Detours: A Decolonial Guide to Hawai'i*, 96-106. Durham; London: Duke University Press. DOI:10.2307/j.ctv11smvvj.18
- 13. *Westerband, AC, **AK Kagawa-Viviani**, KK Bogner, DW Beilman, TM Knight, and KE Barton. 2019. Seedling drought tolerance and functional traits vary in response to the timing of water availability in a keystone Hawaiian tree species. *Plant Ecology*. 220: 321–344. DOI: 10.1007/s11258-019-00917-0
- *Longman, RJ, AG Frazier, AJ Newman, TW Giambelluca, D Schanzenbach, A Kagawa-Viviani, H Needham, J Arnold, MP Clark. 2019. High-resolution gridded daily rainfall and temperature for the Hawaiian Islands (1990-2014). *Journal of Hydrometeorology*. 20(3): 489-508. DOI: 10.1175/jhm-d-18-0112.1
- 15. *Kagawa-Viviani, A, P Levin, E Johnston, J Ooka, J Baker, M Kantar, NK Lincoln. 2018. I ke ēwe 'āina o ke kupuna: Hawaiian ancestral crops in perspective. *Sustainability* 10(12): 4607. DOI: 10.3390/su10124607
- 16. *Kagawa-Viviani, AK, NK Lincoln, S Quintus, MP Lucas, TW Giambelluca. 2018. Spatial patterns of seasonal crop production suggest coordination within and across dryland agricultural systems of Hawai'i Island. *Ecology and Society* 23(3): 20. DOI: 10.5751/ES-10369-230320
- 17. *Wright, C, **A Kagawa-Viviani**, C Gerlein-Safdi, GM Mosquera, M Poca, H Tseng, KP Chun. 2018. Advancing ecohydrology in the changing tropics: perspectives from early career scientists. *Ecohydrology* 11(3): e1918. DOI: 10.1002/eco.1918

- *Marshall, K, C Koseff, AL Roberts, A Lindsey, AK Kagawa-Viviani, NK Lincoln and PM Vitousek. 2017. Restoring people and productivity to Puanui: challenges and opportunities in the restoration of an intensive rain-fed Hawaiian field system. *Ecology and Society* 22(2): 23. DOI: 10.5751/ES-09170-220223
- 19. **Kagawa-Viviani AK**. Dec 2017. Analysis of climate controls to native plant growth. Draft report submitted to Lucas Fortini, Pacific Islands Climate Change Cooperative, Honolulu, Hawai'i.
- 20. **Kagawa-Viviani AK**, T Kawamata Ryan. 2016. Moving beyond cultural sensitivity: Developing culturally responsive programs for and with Native engineers. In S Burckhard and J Kant (Eds.), *The PEEC experiment: Native Hawaiian and Native American engineering education*. Brookings, SD: South Dakota State University Jerome J. Lohr College of Engineering. http://openprairie.sdstate.edu/cvlee_book/1/
- 21. **Kagawa-Viviani**, **AK**. August 2016. Untangling 'uala: toward re-diversifying and re-placing sweet potato in the Hawaiian landscape. Final report submitted to E Kūpaku Ka 'Āina, Hawai'i. DOI: 10.13140/RG.2.2.26819.86565/1
- 22. *Kagawa AK and P Vitousek. 2012. The ahupua'a of Puanui: a resource for understanding Hawaiian rain-fed agriculture. *Pacific Science* 66(2): 161-172. DOI: 10.2984/66.2.6
- 23. *Kagawa AK, L Sack, TK Duarte, and SA James. 2009. Native forest conserves water relative to timber plantation: species and stand-level traits influence Hawaiian forest water use. *Ecological Applications* 19: 1429-1443. DOI: 10.1890/08-1704.1

CURRICULUM

Kagawa-Viviani, A. 2024 Sept 16. How well do you know your water? SERC Teach the Earth. https://serc.carleton.edu/teachearth/activities/284896.html

PRESENTATIONS (SELECT, *oral)

Professional Meetings

- *Kagawa-Viviani AK and AM Gomez. Imperative and opportunities for community-engaged research in ecohydrology. AGU-CUAHSI Water Science Conference 2024, St. Paul, MN (06/26/2024)
- 2022 **Kagawa-Viviani AK,** M Comeros, L Bremer, K Manuel, J Kimura, TW Giambelluca. The Red Hill Water Crisis: Lessons at the Intersection of Science and Policy. AGU Chapman Conference on Solving Water Availability Challenges through an Interdisciplinary Framework, Golden, CO (09/13/2022)
- *Kagawa-Viviani AK, M Kunz, CM Yanger, L Portner. Restoration Stories: Insights from the Hawai'i Forest Restoration Synthesis Project. Hawai'i Conservation Conference, online. (7/18/2022)
- 2022 Kunz M, **A Kagawa-Viviani**, J Grandinetti, C Yanger, L Portner, C Trauernicht. Making the University Work for You: Charting the Future of Extension for Conservation. Hawai'i Conservation Conference, online. (7/21/2022)
- Ho'olehua Water Scoping Team. Community-driven water planning for Hawaiian Homesteads: the Ho'olehua water scoping pilot project. International Tropical Islands Water Conference, online. (04/13/2021)
- *Kagawa-Viviani AK, Y Miyazawa, M Nullet, TW Giambelluca. Following water and carbon in a Mākaha guava stand. Hawai'i Ecosystems Meeting, Hilo, HI. (7/1/2019)
- 2019 **Kagawa-Viviani AK**, CM Litton, DR Sandquist, S Cordell. Diverging strategies enable persistence of lama and alahe'e under grass invasion and removal. Nāhelehele Dryland Forest Symposium, Hilo, HI. (3/27/2019)
- 2017 Lin Z, D Kim-Hak, BN Popp, N Wallsgrove, A Kagawa-Viviani and J Johnson. Development and evaluation of a spectral analysis method to eliminate organic interference with cavity ring-down measurements of water isotope ratios, American Geophysical Union Fall Meeting, New Orleans, LA (12/15/2017)

Community Presentations

- 2023/04/10 **Kagawa-Viviani AK**. Converting wicked water problems into water governance innovations: What tools does the academy offer? HK West Maui Series. (online, *invited*)
- 2022/05/13 Kagawa-Viviani AK. Red Hill: Lessons on the role of academics in crisis response. UH Mānoa

2021/07/10	Earth Sciences Alumni Days. (hybrid, invited)
2021/07/10	Kagawa-Viviani AK, E Winnicki, K Perez, T Radovich, M Kantar. Hawaiian 'uala varieties.
2010/12/21	Maui Nui Botanical Gardens workshop series (online, invited)
2019/12/21	Kagawa-Viviani AK. Indigenizing design thinking. Ka Maka 'Inana design and venture
2019/09/21	ideation workshops, Honolulu, HI. (<i>Invited</i>) Kagawa-Viviani AK . Purple Prize Kilo Hōkū keynote speech. 2019 Purple Prize Demo Day,
2019/09/21	Honolulu, HI. (Invited)
2018/04/06	Kagawa-Viviani AK . Guided by 'uala, powered by GIS: Using climate data to explore seasonal
2016/04/00	planting from Kohala to Ka'ū. Lāhui Hawai'i Research Conference, Honolulu, HI.
2017/08/04	Kagawa-Viviani AK. 'Uala: He 'uala ka 'ai ho'ōla koke i ka wī. Kōkua Kalihi Valley Roots
2017/00/01	Program, Kalihi, HI. (Invited)
2016/08/25	Kagawa-Viviani AK. 'Uala: He 'uala ka 'ai ho'ōla koke i ka wī. Indigenous Crop Biodiversity
	Festival, Kahului, HI. (Invited)
2012/06/13	Kagawa AK. 'Uala: 'Ike, mo'olelo, uses, propagation and a model plant for local ecoliteracy.
	Kū 'Āina Pā Summer Intensive, Waimea (Kamuela), HI. (Invited)
Invited Panel	Discussions
2022/06/24	AGU Frontiers in Hydrology Meeting 2022 Achieving Open and Equitable Collaboration in
	Global Ecohydrology (session ID#: 143037): "Who asks the questions? The role of locally-
	relevant research in global ecohydrology"
2019/07/09	Hawai'i Conservation Conference Opening Plenary Panel – "Kāne and Kanaloa Are Coming:
	How Will We Receive Them? A Kānaka Take on Climate Change and Indigenous Resilience"
2019/04/11	Hawai'i Museums Association Conference: "Hawaiian Perspectives on Science and Culture"
2018/10/20	UHM Sea Grant Community-Researcher Partnerships Workshop: "Methods to Methodology:
	Discussion of incorporating indigenous frameworks into graduate work"
2017/03/16	Sustainability Summit: "Meeting of Wisdoms"
2017/01/25	UHM Center for Teaching Excellence: "Connecting Science & Culture"
TEACHING AN	D MENTORING
	D MENTORING Natural Resource Management (GEO 752): Sp24 Urban Environments: Sp25 Water Governance
TEACHING AN Courses	Natural Resource Management (GEO 752): Sp24 Urban Environments; Sp25 Water Governance
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Courses	Natural Resource Management (GEO 752): Sp24 <i>Urban Environments;</i> Sp25 <i>Water Governance</i> Water and Society (GEO 305/SUST 315): Fa20, Sp23, Fa23, Fa24
Courses Guest Lecture	Natural Resource Management (GEO 752): Sp24 <i>Urban Environments;</i> Sp25 <i>Water Governance</i> Water and Society (GEO 305/SUST 315): Fa20, Sp23, Fa23, Fa24 es
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Courses Guest Lecture 2023/10/10 2023/08/07 2023/03/28	Natural Resource Management (GEO 752): Sp24 <i>Urban Environments;</i> Sp25 <i>Water Governance</i> Water and Society (GEO 305/SUST 315): Fa20, Sp23, Fa23, Fa24 es Micro- and Macro-economic Foundations for Managers (BUS 620): Water rights Kūlana Noi'i: Introduction to place-based research methodologies in Hawai'i (MBIO 600): Red Hill Collaboration Between Sectors (PLAN 661): CWRM- Red Hill Special Topics in Mechanical Engineering (ME 492): Working in water 'Āina Waiwai: Water, Sovereignty, and Ancestral Abundance (HWST 651): Wai in a shifting
Courses Guest Lecture 2023/10/10 2023/08/07 2023/03/28 2022/04/01 2022/02/07	Natural Resource Management (GEO 752): Sp24 <i>Urban Environments;</i> Sp25 <i>Water Governance</i> Water and Society (GEO 305/SUST 315): Fa20, Sp23, Fa23, Fa24 Ses Micro- and Macro-economic Foundations for Managers (BUS 620): Water rights Kūlana Noi'i: Introduction to place-based research methodologies in Hawai'i (MBIO 600): Red Hill Collaboration Between Sectors (PLAN 661): CWRM- Red Hill Special Topics in Mechanical Engineering (ME 492): Working in water 'Āina Waiwai: Water, Sovereignty, and Ancestral Abundance (HWST 651): Wai in a shifting climate
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SERVICE TO INSTITUTION:

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2024-	Hui 'Āina Pilipili	
2023-2024	Faculty search committees (WRRC, TPSS/CTAHR)	
2023-2024	AAG local organizing committee	
2022-2023	UHM Geography and Environment graduate committee	
2021-2023	WRRC colloquium co-coordinator	
2017-2019	UHM Graduate Student Organization Elections Chair (2017) and Committee (2018-19)	

PUBLIC EVENTS ORGANIZED/FACILITATED (SELECTED)

- 2024- Wai Community Matters workshop series, Leeward Community College
- 2022 Moderator for UH OVPRI Water Resilience Innovation Conference, Water Policy and Strategy panel (10/28/2022)
- Methods in Stable Isotope Ecohydrology workshop. Co-designed and organized a workshop focused on methods for extraction and analysis of environmental waters for isotopic analysis of δD and δ¹8O.
 Invited speakers: J Johnson (Carnegie) and B Popp (UH Mānoa). UH Mānoa campus, Honolulu, HI.
 Sponsored by CUAHSI/NSF as part of the IDTG program. (8/15-16, 2017)
- 2015 TMT kūkākūkā. Organized and facilitated invite-only discussion on Hawaiian student perspectives on Thirty Meter Telescope and Mauna Kea. UH Mānoa campus, Honolulu, HI. (4/16/2015)
- 2014 CBSFA: Community-Based Subsistence Fishing Areas and the Future of Hawai'i's Nearshore Fisheries. Led coordination of roundtable in collaboration with other grad students and student group KaPA'A, sponsored by COSEE-IE. UH Mānoa campus, Honolulu, HI. (4/16/2014)
- 2014 Traditional Marine Resource Management: An Open Forum. As a member of informal group Hawaiian Islands Science (HI Sci), led logistics planning of large public forum at ASLO Ocean Science Meeting, Honolulu, HI, sponsored by COSEE-IE. (2/27/2014)
- 2013 Maoli Engineering and Science in Education. Mentored colleague in coordinating high school student-oriented workshop at MA'O Farms, Wai'anae, HI. HI Sci event sponsored by COSEE-IE. (10/26/2013)
- Water Resources and Climate Change in Hawai'i. Led organization and facilitation of public "fishbowl" discussion, UH Mānoa campus, Honolulu, HI. HI Sci event sponsored by COSEE-IE. (3/21/2013)
- 2012 Ma Ka Hana Ka 'IKE: Assisted coordination of inaugural student symposium for Indigenous Knowledge in Engineering program. Windward Community College, Kāne'ohe, HI. Sponsored by NSF-PEEC, UHM College of Engineering, UH System (8/15/2012)

VIA ELECTRONIC SUBMITTAL

10 January 2024

Aloha mai kākou.

Please find enclosed my application for the Commission on Water Resource Management. I have served on this water decision-making body since July 2021 with a personal mission to support forward-looking stewardship of Hawai'i's irreplaceable freshwater resources. While my first term has been marked by tumult- both the Red Hill and Lāhainā disasters- I think it is now apparent to all just how important it is to carefully steward our islands' precious freshwater resources. I am reapplying so that I may:

- 1) leverage my experience working on the technically and politically complex Red Hill and West Maui/Maui Komohana water matters to advance informed and effective decision-making that supports the wellbeing of wai and our Hawai'i communities now and for generations to come.
- continue to contribute my up-to-date understanding of climate change implications for water resources, ecosystems, and communities across islands that are also rapidly urbanizing and experiencing major shifts in demographics, economics, and land use.
- 3) ensure Deputy Kahahane and staff can benefit from water governance best practices, knowledge resources, and expert networks I can access and share as a university faculty and hydrologist. Well-supported, they will successfully navigate each island's unique and complex waterscapes to weave effective and pono solutions.

I take this kuleana seriously. My active engagement in water matters and my commitment to listen and collaborate is founded on my Native Hawaiian upbringing in these islands and 20 years of scientific research and work focused on ecosystems, climate, and peoples of Hawai'i. As a hydrologist, my focus is on wai; I track flows and observe the ways in which water connects us all. The arrows point to this: *the health of our aquifers is the health of our island communities*. Our drinking water comes minimally treated from our aquifers which are increasingly subject to chemical contamination; our cold streams and marine ecosystems are fed by groundwater flows from aquifers replenished by rain that takes years, even decades, to percolate through forested landscapes and volcanic basalt. Water stewardship today requires us to ensure alignment of societal values and climate realities shaping our Hawai'i water futures. To put it bluntly: housing and wise water management are only a zero-sum game if we fail to take seriously our urbanizing island water challenges. Thus, a second term for me would be a new commitment to holistic, creative, and wise water stewardship that ensures sustained, sufficient and high-quality water for our resident communities and landscapes for present and future generations.

Finding the right way to support equitable and affordable housing and economies and handling the waste streams that accompany them (wastewater and solid waste) without destroying our life-giving waters requires not only attentiveness and care, creativity and collaboration, but a commitment to understand and appropriately address complex water problems. The Water Commission of the next four years must broker equitable solutions for water security, housing security, and food security together. This means we must attend to the needs of ecosystems that support community health, well-being, and livelihoods, municipal demand and planned affordable housing, and the freshwater needs of food producing landscapes- all while we face unprecedented climate hazards.

Despite the bleak outlook, since 2021 I have been been able to learn from a diversity of people, landscapes, history, and institutions from spoken and written words as well as the messages that come from absences and silences. I hold great respect for the kalo farmer who knows their water by smell and

sound, the water utility engineer who knows the age, material, and vulnerabilities of each mile of pipe they manage, the health agency staff who 'auamo kuleana selflessly through multiple crises, the farmer who is just trying to break even while doing the honorable work of feeding people, and parents who expect their government will ensure their children have access to clean water and a healthy environment. I have learned also that effective water governance is as much- or more- about what happens outside of the board room, where parties might find alignments, complementarities, and mutual agreement. While historical power asymmetries and trauma challenge our ability to identify common ground and work across siloes and difference, there are numerous individuals who have great desire to craft equitable and solutions for the future if provided the space and support to do so.

In 2021, I pledged to uphold the Commission's motto, *Ke Kahuwai Pono*, through informed interpretation of the State Constitution and Water Code and adherence to the relevant administrative rules. Despite the CWRM tumult, I continue to see the commission as key to supporting innovative water governance across the pae 'āina as we grapple with urbanization, increasing economic disparities, and climate change. I would welcome the opportunity to continue my role in the Commission efforts to *kahuwai pono* and manage Hawai'i's water resources sustainably and equitably in these uncertain times in support of the wellbeing of communities across the pae 'āina. Mahalo for your time and consideration of my application.

Ola i ka wai,

Aurora Ke'alohilani Kagawa-Viviani, PhD

aurorak Kagawa Vivian