



NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism



DRAFT

BOARD OF DIRECTORS

MEETING MINUTES

October 17, 2023

1:00 p.m.

An Interactive Conference Technology Meeting was held at
NELHA OceanView Conference Room
Hale Iako Building
73-970 Makako Bay Drive
Kailua-Kona, HI 96740
and via Zoom Video Conferencing Software.

Members/Designees in Attendance

Cyd Miyashiro (Gov. Appointee/Chair)
Noelani Kalipi (Gov. Appointee/Vice-Chair)
Gordon Bruce (Gov. Appointee)
Riley Saito (County of Hawaii)
Alan Hilton (RAC Chair)
Russell Tsuji (DLNR)
Dick Jones (Tenant Representative)
Dane Wicker (DBEDT)
Dr. Vassilis Syrmos (University of Hawaii)

Guests/Staff Present

Greg Barbour (NELHA)
Laurence Sombardier (NELHA)
Alex Leonard (NELHA)
Keith Olson (NELHA)
Faustine Edge (NELHA)
John Cole (AG)
Celia Viljoen, (Big Island Abalone/Kowa)
Jen Johansen, (Cyanotech)
Hiroshi Arai (Kona Butterfish Co.)
Sean Wilton (Kona Butterfish Co.)
Don MacQuarrie (Kona Butterfish Co.)
Alexia Akbay (Symbrosia)
Avery Kramer (Symbrosia)
Inga Gibson (Pono Advocacy)
Rachell Matthews (Harvard Law School)
Kelley McGill (Harvard Law School)
Mike Nakachi (Member of the Public)
Mark Ladao (Hawaii Public Radio)
Sandra Gibson (Kona Sea Salt)
Jeff Zimpfer (National Park Service)

Board Members Not Attending and Excused

Neil Sims (Tenant Representative)
Dr. Phil Bossert (RAC Secretary)
Gregory Kim (HTDC)

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- **Item 1. Call to Order.**

The meeting was called to order by Chair Cyd Miyashiro at 1:02 p.m. Chair Miyashiro asked Executive Director (ED) Barbour for a roll call of Board members and NELHA staff. Reference to Act 220. Eight members present, 4 members excused.

- **Item 2. Approval July 18, 2023, NELHA Board of Directors' Meeting Minutes.**

Chair Miyashiro entertained a motion to approve the July 18, 2023, minutes. The motion was made by Director Bruce and seconded by Director Kalipi. There were no objections, and the minutes were approved as circulated (8-0).

- **Item 3. Approval July 18, 2023, NELHA Board of Directors' Executive Session Meeting.**

Chair Miyashiro entertained a motion to approve the July 18, 2023, Executive Session Meeting Minutes distributed by AG John Cole prior to the meeting. The motion was made by Director Hilton and seconded by Director Bruce. There were no objections, and the minutes were approved as circulated (8-0).

Director Syrmos joined the meeting at 1:09 p.m.

- **Item 4. Public Testimony by Pono Advocacy regarding Kanaloa Octopus Farm.**

Chair Miyashiro introduced Item 4 and notified due to full agenda; we will adhere to the three-minute limit for oral testimony. Ms. Inga Gibson summarized her written testimony (see Attachment A). Mike Nakachi, Member of the General Public, supported Ms. Gibson's comments and expressed his disapproval of the use of "Kanaloa" which is a deity in Hawaiian traditions. Ms. Rachel Mathews from Harvard Law School provided testimony and summarized the contents of her letter from July 11, 2023, which was submitted later in the afternoon (see Attachment B). Chair Miyashiro thanked those who provided testimony. Chair Miyashiro asked if there were any questions from the board or public. There were no questions or comments.

- **Item 5a. Discussion and Decision-Making regarding Extension of Approval in Concept for Kona Sablefish Company Ltd. – A Commercial Finfish Project. ***

Chair Miyashiro asked Deputy Director (DD) Laurence Sombardier to present this item. Kona Sablefish Company Ltd. (doing business as Kona Butterfish Company) is seeking an extension on the timeline to present a final business plan for final approval from the NELHA Board to develop a 500 metric ton sablefish production facility at HOST Park.

The NELHA Board provided an approval in concept for this project on September 20, 2022. The information presented at the September 2022 Board meeting including company submittals, staff summary/recommendations and RAC review. The project scope and goals have not significantly changed since September 2022.

Projects are required to seek final approval and enter a sublease within one year of the approval in concept or lose the approval in concept designation.

Kona Sablefish Company (KSC) has provided an update on their project in the form of a business plan. KSC has also been working on securing funding since September 2022 and although they have made progress, there is still additional work that needs to be done in this area.

Given the continued progress as well as the fact that this project fits extremely well with NELHA's mission, NELHA's current emphasis on developing sustainable aquaculture in Hawaii, including the project's aim to replace fish imports with Hawaii grown fish, KSC principals are requesting that the Board consider an extension to the timeline normally allocated to execute a sublease after approval in concept is provided.

Although the Business plan provides some updates and addresses some of the concerns listed in the September 2022 staff for action summary, there are still some remaining questions and issues to be addressed. As in 2022, staff does not consider any of the issues unsurmountable. Staff is in support of providing KSC with additional time.

Meanwhile, KSC plans to start some initial work at Pacific Planktonics (PP), another HOST Park client and partner to this project. The PP facility is currently permitted by the State Department of Agriculture to receive sablefish and has a short-term lease agreement in place. This would allow KSC to follow the progressive expansion model many others have utilized successfully at HOST park.

Staff recommends that the NELHA Board provide an additional six months to KSC to make progress and submit their business plan for final approval by the Board. KSC should continue working with NELHA staff to address the concerns and information gaps.

DD Sombardier presented Mr. Hiroshi Arai, co-founder of Kona Butterfish, who thanked the Board for their consideration.

Director Gordon asked for more details on the process of securing investors for the project. Mr. Arai responded that they are speaking with several Hawaii and Japan investors but have not yet reached the due diligence stage. Mr. Sean Wilton of Kona Butterfish added that while no investors have signed on at this time, the interest is high enough for KSC to continue to pursue and meet with potential investors.

Chair Miyashiro asked whether the current yen to US Dollar exchange rate has had a negative impact in seeking investors. Mr. Wilton responded that they have seen an impact but are still seeing interest which speaks to the strengths of their business plan.

Chair Miyashiro asked the board and public for any other comments or questions. Director Gordon made a motion to extend the Approval in Concept for Kona Sablefish Company. Director Russell seconded the motion, and the motion was approved (9-0).

- **Item 5b. Discussion and Decision-Making regarding Final Approval of Symbrosia Inc. 15.7-acre Long-term Sublease for Commercial Macroalgae Facility. ***

Chair Miyashiro asked DD Sombardier to present this item.

Symbrosia Inc. seeks final approval for a commercial macroalgae production facility on a 15.7-acre site at HOST Park.

Symbrosia received approval in concept for a 10-to-15-acre commercial macroalgae production facility at the November 15, 2022, Board meeting. The information presented at the November 2022 Board meeting including company submittals, staff summary/recommendations and RAC review. The staff for action from Nov 2022 includes a project summary which is not repeated here as the project scope and goals have not significantly changed.

Symbrosia has made significant progress on their project since the Approval in concept was provided. This includes the following:

- Extensive progress on their pilot facility located at the Sea Salts of Hawaii facility. They have expanded their footprint, installed new processing equipment, and built out new growth systems.
- Increased their staff to 25 people, many of which were hired locally.
- Continued to develop their business plan and acquired new customers. Produced and delivered product.
- Made progress in raising the funds necessary for the expansion.

Symbrosia is ready to proceed with their expansion and has provided a final business plan for NELHA's consideration. This well written plan provides a wealth of details on the target market and customers. Symbrosia has clearly spent a lot of time developing their path to commercialization.

Symbrosia aims to cultivate *Asparagopsis taxiformis*. This seaweed is known in Hawaii as limu kohu and has been used traditionally as flavoring for poke, lomi and stewed beef. While Symbrosia aims to help solve the world's climate issues with this seaweed, they are also mindful of the importance of the seaweed to Hawaiian indigenous communities and have been actively reaching out to these communities and promoting cultural revitalization of

traditional limu knowledge including donating to KUA (<https://kuahawaii.org/>), a community based initiative that aims to restore, protect and care for Hawaii's native species, ecosystem and way of life.

Symbrosia adequately addressed the areas of concerns identified in November 2022. These include:

- 1) Financial projections. Proforma P&L, cash flow and balance sheet projections were provided for 5 years. The projections are characteristically optimistic as with most startups. However, Symbrosia's executive team seems well aware of the key financial divers as well as the risks specific to their business and how to mitigate the potential financial impact.
- 2) Implementation schedule and Budget. While the preliminary proposal presented an aggressive and overly optimistic schedule, the business plan now presents a build out over 5 years. It is our impression that many details on the build out have yet to be determined but the overall budget for construction (\$25M to \$30M) seems reasonable for the area and the type of improvements under consideration based on staff's experience. This total budget number should have room for contingencies.
- 3) Building and processing details. Some construction details such as the type of materials and structures were provided in the business plan. It is expected that the algae growth systems will consist of tanks, similar to other systems used at HOST Park. While the business plan is generally light on construction specifics including expected costs for site development, building construction, and equipment, Symbrosia has since provided NELHA with additional details with respect to the amount of algae expected to be produced as well as detailed construction costs for the new facility. Marine return seawater is expected to be disposed in approved trenches onsite. Very little freshwater will be utilized, and the small amount used will be handled by onsite septic systems. Symbrosia has worked with staff consistently over the last few years and we know that they are cognizant of the need to continue providing construction specifics to NELHA as the design and planning evolves to obtain approval after sublease is signed.
- 4) Utility needs. Symbrosia has revised their utility needs generally downwards. In particular, deep seawater use after 5 years has dropped by a factor of 2.5. This will greatly assist NELHA's ability to meet the sea water needs using its existing sea water distribution infrastructure. Other utility needs have also dropped as Symbrosia has refined their facility planning and implemented technological improvements.
- 5) Project emissions. The RAC asked about the possibility of emissions of bioactive compounds from the algae during processing. While the business plan does not specifically address this concern, Symbrosia has provided NELHA with additional details, particularly regarding this concern during the drying process. Once their processing systems are fully developed and implemented, there may be a requirement for monitoring and mitigation in the future.

Symbrosia is agreeable to NELHA's boiler plate lease terms. The rate will

be \$357.17/acre/month as per the NELHA leasing policy.

NELHA's master lease terminates in 2066. A 30-year sublease would terminate in 2053, well within the master lease term. But staff does note that it would be prudent for NELHA to start the effort to extend its master lease with DLNR.

Symbrosia is pursuing a \$30M loan guarantee with USDA. A lease is required in order to qualify for the loan. At the same time, should this loan guarantee not materialize it could delay the project. Some language has been included in the lease to ensure that should funding not materialize, the lease can be terminated.

Based on Symbrosia's track record for raising funds, and the technical/operational progress achieved thus far, staff feels confident that Symbrosia can deliver on its business plan. As noted in November 2022, the project is very much in line with NELHA's mission and is exactly what was hoped for when establishing the aquaculture accelerator (HATCH) at NELHA to produce a pipeline of startups focusing on technologies with global impact and possible expansion into the HOST Park.

Staff recommends that the NELHA Board grant "final approval" to Symbrosia's request for a 15.7-acre commercial project and that NELHA staff and AG continue to work with Symbrosia to finalize lease details and execute the lease agreement.

DD Director Sombardier then introduced Ms. Alexia Akbay, Symbrosia's CEO who presented a slide deck summarizing the business.

The RAC also provided a summary. Director Hilton, RAC Chair, expressed that RAC reviewers found that the final plan is well aligned with the NELHA mission and appropriate use categories, leveraging Symbrosia's successes to date to promote advancement in the increasingly competitive market for new companies pursuing the commercial production of limu kohu products in particular. There were many positive comments supporting the staff recommendation to provide a final approval for this project. The RAC agrees with including language in the lease to terminate the sublease if funding does not materialize and suggests this language be included in all subleases. The RAC provided some follow up questions for staff to investigate such as whether this project would be affected by ongoing sea water quality issues, whether synthetic methane inhibitor products provide competitive risk, and whether Symbrosia plans to fill the CSO position which was vacated after only 9 months.

Director Kalipi asked about Symbrosia's partnerships with Native Hawaiian groups and the relationship with KUA. Ms. Akbay responded that Symbrosia has two staff that work part time on restorative methodologies and providing seed/spores to native Hawaiian groups. Symbrosia is also working on a grant with KUA that includes 20 loko i'a groups to assist in this work.

Chair Miyashiro asked for clarification on the table in their Business Plan on page 45. specifically with respect to the start year. Ms. Akbay confirmed that the first-year projection was for 2024.

Chair Miyashiro asked if there were any other comments or questions from the board. Hearing none, Director Hilton moved to approve Symbrosia's 15.7-acre long-term sublease for a commercial Macroalgae Facility and NELHA staff and AG continue to work with Symbrosia to finalize lease details and execute the lease agreement. Director Bruce seconded the motion. The motion was approved (9-0).

- **Item 6. New Business. Discussion and Decision-Making regarding NELHA Capital Improvement Projects**

Last year, NELHA submitted the two CIP requests as listed below. They were not funded and NELHA would like to re-submit these requests again this year for inclusion in the Green Administration budget request to the 2025 Legislature.

Project 1: Exploratory Well for Potable Water – \$5,000,000 General Obligation (G.O.) Bonds.

This is a joint project with the Hawaii Housing and Finance Development Corporation (HHFDC). The water and development costs will be shared equally between NELHA and HHFDC. This request is only for NELHA's portion of the development costs.

We began this project several years ago and all of the design and environmental work has been completed. Unfortunately, due to excessive delays in obtaining a permit, the contract with the firm awarded, in 2018, to complete the exploratory well declined to extend the contract in October 2022 and the remaining funds to complete drilling have lapsed.

This \$5M in G.O. Bonds would be used to drill the exploratory well only upon receipt of a well drilling permit from the Commission on Water Resource Management (CWRM). CWRM recently issued a permit, however it contained unprecedented, unique, and extraordinary special conditions that would require NELHA and HHFDC to pay "in perpetuity" for watershed management and offshore water quality monitoring along the Kona coastline.

HHFDC filed a contested case hearing that could delay the new well for many years, stop the development of new affordable housing in West Hawaii until the end of this decade.

NELHA and HHFDC are in discussions with public and private stakeholders and hopefully can more clearly define the monitoring conditions suitable to all stakeholders.

Project 2: Road Construction – \$17,400,000 General Obligation (G.O.) Bonds.

The total scope of this project includes the construction of two roads at HOST Park: Kahilihili Street extension from Makako Bay Drive to our southern boundary and is 0.26 miles (\$7.12M) and Pao'o Street is 0.37 miles (\$10.3M). These two roads when completed will provide access to approximately 50 acres of available land in HOST Park.

Construction of new roads is a pre-requisite for future new land development at HOST Park. Over the past several years, we have recently experienced significant new activity at HOST Park - with 13 new projects over the last several years, covering 76 acres or almost 10 percent of the land at HOST Park, of which four are now under construction on 10.3 acres; four new leases on 27.6 acres; and five leases pending approval in concept by the Board of Directors.

As such, there is very little available land with road frontage and it is urgent that NELHA construct two new roads, one of which have already been designed and is shovel ready and one that needs to be designed. Total construction cost for these two roads which total approximately 0.63 miles is \$17.4 million and includes design, archaeological monitoring, construction engineering services, HELCO service fees, construction management and contingencies. This estimated cost is based on a 2016 preliminary engineering estimate prepared by the engineering firm that led the design effort. As the estimate was prepared 8 years ago, we have added an escalation of 50 percent to their estimate.

Director Miyashiro asked about the number of parcels that would "open-up" with the new roads? ED Barbour explained that it is difficult to identify the actual number of parcels, but this area is zoned for a minimum size of 3 acres. We normally review proposal and try to accommodate the interested parties. We normally adjust lot size based on prospective tenant requirements. We currently only have a few lots available along Makako Bay Drive.

Director Kalipi asked if the CIP fund request for the well project is a "re-do" since funds were previously lost? ED Barbour explained that the environmental and design work had been completed and these funds would only be required for drilling the exploratory well. We will continue to work with stakeholders and CWRM to come to a consensus on permit requirements.

Director Wicker asked what HHFDC was contributing to the well CIP project? ED Barbour explained that HHFDC and NELHA Board of Directors approved a MOU some time ago that would allocate water based on the "pro-rata" share that each agency provides for total construction costs. It is possible that HHFDC could fund their portion from one of their development revolving funds for example their Dwelling Unit Revolving Funds which can be used for all things necessary to carry out the purposes of the Housing Development Program, including administrative expenses. These expenditures would require HHFDC Board approval.

Director Tsuji asked whether NELHA or HHFDC have any reports to indicate that there is indeed water in the well area? ED Barbour explained that there are several wells in this area,

and we are very confident that there is adequate water in the vicinity.

Director Syrmos asked whether Dr. Don Thomas was involved in the study? ED Barbour answered that we have been soliciting Dr. Thomas's guidance since the inception of the project and he has been very helpful.

Chair Miyashiro asked if there were any other comments or questions from the board. Hearing none, Director Bruce moved to approve NELHA's request for two new CIP projects as presented. Director Tsuji seconded the motion. The motion was approved (9-0).

- **Item 7. Financial Report: Approval and Decision Making.**

Chair Miyashiro asked ED Barbour to present this agenda item. ED Barbour presented an overview for July 2023 through September 2024.

Revenue:

Total Revenue was \$1.23M for the first three months of 2024 fiscal year and this represents a decrease of almost \$70,000 or 5 percent over the same period last year. Of notice for FY24 are the following:

- Overall seawater system revenue is down by \$80,000 or 20 percent. This is mainly due to a 20 percent drop (\$35,000) in surface seawater revenue combined with lower electricity rates decreasing the electrical surcharge by \$40,000 or 45 percent over the same period last year.
- Overall lease rent is up by \$20,000 (10 percent) for fiscal year 2023. More specifically, HOST Park lease base rent (property outside the Makai Research Campus is up 5 percent; Makai Research Campus office space is up 22 percent (\$65,000) and outside space in the Makai Research Campus increase by almost 35 percent or \$60,000.
- Overall lease rent is up by \$35,000 (6 percent) for fiscal year 2024. More specifically, this is due to an increase in Land Base Rent and Research Campus office rental revenue which are each up approximately \$15,000.
- Percent rent is down due to payment of arrears for the same period last year.
- Reimbursements for electric are down by \$55,000 or 35 percent and due to lower electrical costs, which peaked a year ago. Freshwater revenue includes a double payment and will even out in our report for November.

ED Barbour asked if there were any questions on revenue. Hearing none, he continued with expenditures.

Expenditures:

Total expenses for the first three months of fiscal year 2024 were approximately \$1M or down by over \$200,000 or 20 percent. This decrease is mainly due the cost of electricity

which peaked last summer, and insurance premium (\$100,000) not yet received. We continue to monitor expenditures very closely. Of note are the following:

- Seawater system expenditures were down by \$140,000 with lower electrical rate as well as the new microgrid coming online in July. This was offset somewhat by an increase in personnel costs (\$50,000) due to shifting of personnel to focus on upgrades.
- Tenant utilities are flat with a decrease in of \$30,000 due in electrical reimbursement offset by a like increase in freshwater reimbursements.
- NELHA utilities are up by 100% (\$10,000) with accounting change showing costs of PPA only which will align with power consumption after power meter is corrected.
- HOST Park security is up by \$40,000 (15%) mainly due to new annual security contract for HOST Park.
- Administrative expenses are down by \$125,000 (30%) due to shifting of personnel from building maintenance to seawater system maintenance and the annual insurance premium bill (\$100,000) not received in first quarter.

ED Barbour asked if there were any questions. Hearing none, he continued to Special Funds and Arrears.

Special Fund and Arrears:

Special fund balance is \$1,200,000 and up over \$200,000 in the past three months. As of September 30, 2023, the arrears are low and totaled approximately \$30,000 which is mainly overdue percentage rent from Ocean Rider.

Chair Miyashiro asked if there were any other comments or questions from the board. Hearing none, Director Kalipi moved to approve the financial report as presented. Director Bruce seconded the motion. The motion was approved (9-0).

- **Item 8. Executive Director's Informational Status Report on ongoing projects including: new leases; seawater system maintenance; offshore deep seawater pipe removal planning and design; regional seawater air conditioning planning and design; new potable water supply update; aquaculture accelerator and investment fund initiative; design of expansion of research campus and visitor center; renewable distributed energy resources initiative for microgrid; and, solar desalination.***

Chair Miyashiro asked ED Barbour to present this agenda item. ED Barbour summarized progress in the projects listed in the Attachment C. Highlights included:

- We are soliciting a contractor for the seawater analysis. The RFP was recently issued.
- The 55" microgrid is progressing well and we will continue to test the battery and PV for the next several months.
- We have received a first draft of the deep-sea pipeline removal project and it is under review.

- We have received US Corps of Engineer approval and working the DLNR on obtaining their approval. The offshore freshwater survey is scheduled for late spring after the winter swell and whale season.
 - We continue to have monthly meetings with the Cultural Hui Committee, and we find it extremely useful dialogue.
 - We are awaiting word from NOAA on our grant application for a Climate Resilience accelerator.
 - We have now closed our contract with WRNS Studio for design of the Makai Research Campus extension. We have accepted their 90% design submission.
- **Item 9. Announcements.**

Chair Miyashiro announced the date of the next regularly scheduled NELHA Board of Directors Meeting is Tuesday, November 21, 2023, at 1:00 p.m. (note moved from 10:00 am).
 - **Item 10. Announcements.**

Chair Miyashiro adjourned the meeting at 2:31 p.m.

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September 19, 2023

TO: NELHA Board of Directors, September 19th Board Meeting

VIA: Email Gregory.p.Barbour@hawaii.gov; Nelha@Nelha.org

RE: Item 7; Research Campus Leases, written testimony of Inga Gibson, Policy Advisor, For the Fishes, Submitted Sept 15th.

This testimony is to provide factual information and background to the NELHA Board of Directors regarding activities undertaken at NELHA by your previous tenant, Kanaloa Octopus Farm, hereafter referred to as KOF, so the Board may make more informed future decisions regarding campus leases to businesses or others who may claim to be engaged in lawful and bona fide research, technology or educational ventures.

Personal visits to KOF throughout 2022 and former KOF employee whistleblower statements were reported to the Hawaii Department of Land and Natural Resources Division of Aquatic Resources (DAR) which prompted an investigation by the state into KOF's failure to hold the required licenses to possess day octopus under 1 pound.

In early January of 2023, DAR sent two (2) cease and desist letters to KOF, for failing to possess the required state permits, however, they continued to operate in violation of state law and despite receiving these cease and desist orders from the state. NELHA did not suspend nor revoke KOF's lease yet chose to extend it to July 31, 2023. The concerns with violations of law at KOF were covered in dozens of local, national and even international media articles (sampling below).

In February, [House Bill 913](#), was subsequently introduced to address the concerns around potentially unlawful activities occurring at NELHA that were contrary to NELHA's mission statement and claims that it ensures all tenants are in compliance with all county, state, federal and local laws. The bill also would have put into statute NELHA's mission statement and claims that it only supported those activities that were culturally sensitive and respectful, that it would specifically consult with native Hawaiian practitioners in the area and who would also serve on the Board, and that all activities at NELHA were environmentally sound and appropriate.

Mr. Barbour testified that the bill was not necessary despite his direct knowledge of at least one of NELHA's tenants (KOF) failing to be in compliance with state laws. KOF also opposed the bill falsely claiming to state legislators that they were in compliance with all state laws. Neither Mr. Barbour nor KOF disclosed the cease and desist letters to the legislative committees.

In an August 26th 2023, Big Island News story, copied below, NELHA leadership continued to ignore that KOF had been in years long violation of state law and instead stated the reasons for non-renewal of KOF's lease being because the business "had outgrew us [NELHA]" and that crowded parking and bathrooms were too much for a "...research campus and not appropriate for eco-tourism."

<https://bigislandnow.com/2023/08/26/kanaloa-octopus-farm-no-longer-operating-out-of-hawaii-ocean-science-technology-park/>

KANALOA OCTOPUS FARM NO LONGER OPERATING OUT OF HAWAII OCEAN SCIENCE TECHNOLOGY PARK

Once accused of being a petting zoo for illegally acquired day octopuses, the Kanaloa Octopus Farm has shut down its West Hawai'i research facility.

The closure occurred after the Natural Energy Laboratory Hawai'i Authority did not renew the octopus farm's annual lease at the state-operated Hawai'i Ocean Science Technology Park at Keahole Point.

"They outgrew us," said Greg Barbour, the state agency's executive director.

The park, he said, is primarily a space for startups. The Kanaloa Octopus Farm had 20 cephalopods when its lease was not renewed.

Farm owner Jake Conroy confirmed that the lease for their facility came to an end and that they would embark on a new chapter of the company.

Renaming his operation Kanaloa Octopus Research Center — Conroy plans to continue his mission of educating the public on octopuses through private offshore tours out of Kailua-Kona starting in September. The adventures will focus on observing octopus in its natural habitat, according to Conroy.

It was a win for animal advocates who had been pushing for its closure for years.

"We're relieved that [Kanaloa Octopus Farms'] days of capturing and confining octopuses to barren touch tanks are through and hope this sends a clear message that cephalopod farms have

no place in a society that respects animals,” said Rachel Mathews, Acting Clinic Director of Harvard Law School’s Animal Law & Policy Clinic.

“Kudos to the many advocates who spoke out against this octopus petting zoo, particularly our clients For the Fishes and Mike Nakachi.”

Barbour said Kanaloa Octopus Farm, which began its lease with the park in 2016, was started as a research facility to study the life cycle on octopuses. But over the years, the facility became a unique tourist destination. People went through the 5,000-square-foot farm on a gravel lot on a guided tour not only learned about octopuses but also got to handle them

Eventually, Barbour said, the number of visitors to the park was getting to be too much without proper parking or bathroom facilities.

“They were in a research campus and it’s not appropriate for eco-tourism,” Barbour said.

Conroy said the tours also addressed conservation and sustainability of the species.

“Octopuses face threats of overfishing as local and global consumption increases. Given these pressures and climate change, we wanted to be part of a solution to ensure the long-term viability of these animals for future generations,” Conroy said.

Earlier this year, state agencies received several complaints that the aquaculture research facility was in possession and breeding the day octopus — a regulated aquatic life species. A [cease and desist letter](#) was issued by state’s Division of Aquatic Resources.

In July, the coalition of Harvard Law School’s Animal Law & Policy Clinic, Hawai‘i-based For the Fishes and Moku o Keawe cultural practitioner Mike Nakachi asked the Natural Energy Laboratory Hawai‘i Authority not to renew the farm’s upcoming lease stating the facility was “a petting zoo that has likely illegally acquired and possessed dozens of reef-dwelling day octopuses for paid tourist interactions.”

In February, Conroy said most of the octopuses at the farm came from local fishermen who would otherwise sell them for use as bait. He also said they didn't catch octopuses and did not release them back into the wild.

“Our octopuses are typically injured animals that others don't want,” Conroy said. “We feed them and care for them, allowing them to recover.”

Conroy said he is no longer in possession of the octopuses that were at the farm. Out of respect for the privacy of the party who took the farm's octopuses, he said he would not be sharing anything about them.

NELHA's on the record statements that the reason for non-renewal of the lease were unrelated to violations of law that NELHA allowed to occur for years, and allowing KOF's lease to continue for 7 months after being made aware of the cease and desist letters, is unacceptable and should concern all Board Members as well as members of the public whose tax dollars (via recent CIP requests from NELHA to the state legislature) support NELHA as a quasi-state agency.

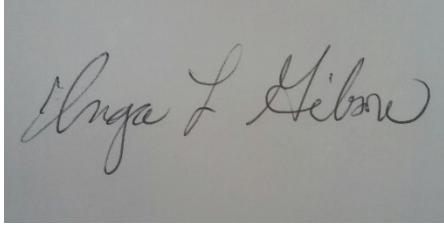
Given the long history with KOF, and public statements to legislators and the press from NELHA Management, we urge the Board to immediately engage in the following:

1. Actively **support** legislation that upholds in statute NELHA's stated mission to ensure all activities undertaken on campus are lawful, respectful of native Hawaiian host culture and are environmentally responsible.
2. Actively verify that any new tenants claiming to engage in bona fide aquaculture or research activities possess the required county, state or federal permits.
3. Actively consult with native Hawaiian cultural practitioners on any activities at the campus that may involve public trust resources such as marine life, including having cultural practitioners on the Board.
4. Publicly post the names/business names of those businesses who are not in compliance or whose leases have been suspended or terminated due to unlawful activities or failure to meet the required obligations set out under NELHA's various agreements with tenants.
5. Ensure that any activities involving cephalopods or other sentient animals, first be reviewed by a scientific committee BEFORE any leases or any activities are approved.

Had NELHA upheld its existing mandate and done its due diligence with KOF, many of our wild sacred he'e (octopus) would have been spared from unnecessary capture, suffering and death (every octopus entering KOF died on premises/was not released alive) and NELHA's otherwise good reputation and image of a being a professional, legitimate, state-supported research and technology campus, could have been retained.

We would be pleased to attend future meetings and/or meet to discuss ways we might provide our support to NELHA's Board in enacting the above recommendations.

Mahalo for your time and attention to this important issue.

A handwritten signature in dark ink on a light gray background. The signature is cursive and reads "Inga L. Gibson".

Inga Gibson, Policy Advisor
For the Fishes

Policy Director, Pono Advocacy
PonoAdvocacy@gmail.com
808.922.9910

Additional media samplings and information on NELHA and KOF:

Harvard Law School

<https://animal.law.harvard.edu/news-article/octopus-petting-zoo/>

Los Angeles Times

<https://www.latimes.com/california/story/2023-02-15/hawaii-says-octopus-farm-operated-without-proper-permits>

Big Island Now

<https://bigislandnow.com/2023/02/04/kanaloa-octopus-farm-in-west-hawai%CA%BBi-receives-cease-and-desist-letter-from-state/>

Star-Advertiser

<https://www.staradvertiser.com/2023/01/23/hawaii-news/octopus-farm-is-ordered-to-halt-illegal-activity/>

Sentient Media

<https://sentientmedia.org/hawaii-octopus-farm-controversy/>

Hawaii News Now

<https://www.hawaiinewsnow.com/2023/02/08/state-serves-kona-octopus-farm-with-cease-and-desist-order-lack-permits/>

HARVARD LAW SCHOOL
ANIMAL LAW & POLICY CLINIC

RACHEL MATHEWS
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Of Counsel



REBECCA GARVERMAN
Clinical Fellow

CARNEY ANNE NASSER
Clinic Research Fellow

July 11, 2023

Gregory P. Barbour
Executive Director
Natural Energy Laboratory of Hawaii Authority

Via email: gregory.p.barbour@hawaii.gov

Re: Request for Termination of Rental Agreement of Kanaloa Octopus Farm

Dear Mr. Barbour:

We are writing on behalf of the Harvard Law School Animal Law & Policy Clinic, Native Hawaiian cultural practitioner Mike Nakachi, and Hawaii-based organizations For the Fishes and Pono Advocacy to alert the Natural Energy Laboratory of Hawaii Authority (NELHA) to apparent violations of Hawaii's aquatic resources law by Jacob Conroy and FatFish Farms, LLC, doing business as Kanaloa Octopus Farm (hereinafter "the Farm" or "KOF").

As detailed in the attached appendix, KOF is operating in violation of laws protecting Hawaii's aquatic life, and its business model relies on the exploitation of the state's public trust resources for private gain. For years, KOF has operated a lucrative octopus petting zoo at NELHA's Hawaii Ocean Science & Technology (HOST) Park using dozens of wild-caught animals to entertain out-of-state tourists while making demonstrably incorrect claims that tours support conservation of this species.¹ The Farm has justified its existence by claiming that it intends to "close the lifecycle" of the day octopus in captivity, with the goal of supplying captive-bred animals to the research, aquarium, and food industries at large scale.² If successful, this business plan could be ecologically devastating and inflict unquantifiable suffering on the animals. However, to date, there is little evidence that KOF has made any progress towards this goal. It also readily admits that it does not know what to feed day octopus paralarvae, so the animals who hatch there die in a matter of days, evidently of starvation.³

¹ Susanne Rust, *Farm-bred Octopus: A Benefit to the Species or an act of Cruelty?*, L.A. Times (Dec. 20, 2022), <https://www.latimes.com/environment/story/2022-12-20/is-farm-breeding-octopus-an-act-of-cruelty> [hereinafter "Rust (Dec. 20, 2022)"].

² Jacob Conroy, Business Plan for the Kanaloa Octopus Research and Education Center 16 (Feb. 6, 2023) [hereinafter "KOF 2023 Business Plan"].

³ See, e.g., Catherine Cruz, *Octopus Eco-tours and Conservation are the Focus of this Big Island Facility*, Haw. Pub. Radio (Jan. 13, 2023), <https://www.hawaiipublicradio.org/the-conversation/2023-01-13/octopus-eco-tours-and-conservation-big-island-facility>.

It is unlawful to possess day octopus under one pound—including eggs and paralarvae—yet KOF has never obtained a permit to do so from the Division of Aquatic Resources (DAR) of the Hawaii Department of Land and Natural Resources (DLNR).⁴ In acquiring cephalopods, KOF may have also violated laws related to the taking aquatic life for commercial purposes.⁵ In January, DAR ordered KOF to cease and desist from violating the law.⁶ The Farm has since applied for an aquaculture facility license to allow it to possess undersize day octopus.⁷ We have requested that DAR refuse to issue any license or permit to KOF, investigate its apparent violations of the law, and hold facility accountable to the fullest extent of the law.

Under the terms of KOF's rental agreement with NELHA, the Farm "shall observe and comply with all laws, ordinances, rules and regulations of the federal, state, municipal or county governments . . . affecting the premises."⁸ Likewise, tenants "shall obtain and be responsible for all required species importation permits and copies of all permits shall be submitted to NELHA prior to introduction of any species to the premises."⁹ A breach of the law "shall be deemed a material default" of the rental agreement, which "NELHA may, in its sole and absolute discretion elect to terminate."¹⁰ KOF's very reason for existence at HOST Park—day octopus aquaculture—is premised on its possession of undersize specimens, which it has *never* been authorized to possess. The Farm's longstanding, unpermitted possession of undersize day octopus demonstrates that it has not observed and complied with all applicable laws and is grounds for terminating its rental agreement.

Moreover, Hawaii's Constitution requires state agencies to "conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources" for the "benefit of present and future generations."¹¹ The "development and utilization of these resources" must be done "in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State."¹² Authorizing an octopus petting zoo and cephalopod research facility that seeks to create a new extractive market for Hawaii's aquatic life could have long-term, large-scale consequences that NELHA must seek to avoid in accordance with its public trust duties.

Finally, state agencies "may not act without independently considering the effect of their actions on Hawaiian traditions and practices."¹³ Kanaloa is of great spiritual and cultural significance to Native Hawaiian culture and religion. As one of Hawaii's primary male gods, he often takes the kinolau (physical form) of an octopus. KOF's commercialization of a Native deity and his kinolau is an offensive appropriation of Native Hawaiian culture, and its irresponsible extraction and holding of octopuses violates cultural fishing practices. NELHA does not appear to have considered these impacts.

⁴ See Haw. Admin. R. § 13-95-55.

⁵ See, e.g., Haw. Rev. Stat. §§ 189-2(a), 188-45; Haw. Admin R. § 13-60.4-7(a).

⁶ Ex. 1, Letter from Brian Neilson, DAR Administrator, to Jacob Conroy, Kanaloa Octopus Farm (Jan. 6, 2023); Ex. 2, Letter from Brian Neilson, DAR Administrator, to Jacob Conroy, Kanaloa Octopus Farm (Jan. 18, 2023).

⁷ FatFish Farms, LLC, Aquaculture Facility License Application no. 36385 (Jan. 17, 2024).

⁸ NELHA Rental Agreement with Kanaloa, RA-0005 ¶ 10 (Aug. 20, 2015).

⁹ *Id.*

¹⁰ *Id.* ¶¶ 10, 38(A)(9); see also *id.* ¶ 42 (requiring tenant to "comply with all applicable federal, state and county permitting requirements").

¹¹ Haw. Const. Art. XI, § 1.

¹² *Id.*

¹³ *Flores-Case 'Ohana v. Univ. of Hawai'i*, 526 P.3d 601, 607 (Haw. 2023) (cleaned up).

For all the reasons detailed here and in the accompanying appendix, we respectfully request that NELHA terminate its rental agreement with KOF. Could you please inform us of NELHA's decision? We look forward to hearing from you at your earliest convenience. Thank you for your time and attention to this important matter.

Very truly yours,



Ricardo Diaz Alarcon
Harvard Law School, LL.M. '23
Animal Law & Policy Clinic



Noam Weiss
Harvard Law School, LL.M. '23
Animal Law & Policy Clinic



Rachel Mathews
Clinical Instructor & Acting Director | Animal Law & Policy Clinic
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Enclosures

NELHA MAJOR GOALS AND KEY PROJECTS TIMELINE SUMMARY
FISCAL YEAR 2024

Attachment C

MAJOR OBJECTIVES AND KEY PROJECTS		STATUS	2023						2024					
			JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
PHYSICAL ENVIRONMENT	Self-Sufficiency	NEW LEASE PROSPECTS FOR UNDER UTILIZED ASSETS TO INCREASE REVENUE	ONGOING											
		IMPLEMENT MARKETING PLAN, WEBSITE UPDATES AND SOCIAL MEDIA	NEW											
		MAINTAIN LANDLORD/TENANT RELATIONSHIPS-SEAWATER QUALITY ANALYSIS	ONGOING/NEW											
		BOARD COMMUNICATION/TEAM BUILDING	ONGOING											
	Seawater System	MAINTAIN 99.99% UPTIME AND INCREASE EFFICIENCY OF SEAWATER SYSTEM	ONGOING											
		COMPLETE DEVELOPMENT OF PV AND STORAGE TESTBED @ 55" PUMPSTATION	ONGOING											
		PLANNING/DESIGN OF OFFSHORE DEEP WATER PIPE REMOVAL	ONGOING											
		SCADA SYSTEM DEVELOPMENT INCL UPGRADE INSTRUMENTS IN WQL	ONGOING											
		UPGRADE MAKAI RESEARCH CAMPUS/FARM COMPUOND MICROGRID	NEW											
		SEAWATER SYSTEM RATE ANALYSIS	NEW											
		REVIEW/UPDATE HOST PARK ENERGY MICROGRID ANALYSIS W/TOU PARAMETERS/AI	NEW											
	Land	SECURE FUNDING FOR NEW ROADS	ONGOING											
	Freshwater	WATER WELL DRILLING PERMIT - COMMUNITY OUTREACH/CONSENSUS	ONGOING											
		OFFSHORE FRESHWATER SURVEY	ONGOING											
COMMUNITY ALIGNMENT	Collaboration and Communication	COMMUNITY OUTREACH/CULTURAL HUI	ONGOING											
		UPDATE HOST PARK MASTER PLAN AND EIS	ONGOING											
		MARINE RESEARCH CORRIDOR EIS	NEW											
		WORKFORCE DEVELOPMENT	ONGOING											
		ECONOMIC IMPACT REPORT UPDATE	NEW											
		PREPARE FY 2022-23 ANNUAL REPORT	ONGOING											
		2024 LEGISLATURE	ONGOING											
ENTREPRENEURIAL ECOSYSTEM	Aquaculture	MANAGE AQUACULTURE ACCELERATOR OPERATIONS CONTRACT/PODS/MOBILE LAB	ONGOING											
		MONITOR AQUACULTURE VENTURE FUND DEVELOPMENT - HATCH I	NEW											
		ASSIST IN ESTABLISHING NEW VENTURE FUND - HATCH II	NEW											
	Resilience	STRATEGY FOR NEW ACCELERATORS IN OCEAN CONSERVATION AND TECHNOLOGY	NEW											
		APPLY FOR FUNDING FOR OCEAN RESILIENCE ACCELERATOR	NEW											
	Incubator Space	COMPLETE 90% DESIGN FOR MAKAI RESEARCH CAMPUS EXPANSION	ONGOING											
		MAUKA RESEARCH CAMPUS CONCEPT AND UPGRADES	NEW											
		EVALUATE ALTERNATIVES FOR OCEAN CENTERPIECE	ONGOING											

NELHA 10/3/2023

Attachment C