



NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

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



BOARD OF DIRECTORS

MEETING MINUTES

July 18, 2023

10:00 a.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)
Doug Adams (County of Hawaii)
Alan Hilton (RAC Chair)
Neil Sims (Tenant Representative)
Russell Tsuji (DLNR)
Dick Jones (Tenant Representative)
Stephen Walls (DBEDT)
Dr. Vassilis Syrmos (University of Hawaii)
Dr. Phil Bossert (RAC Secretary)
Gregory Kim (HTDC)

Guests/Staff Present

Greg Barbour (NELHA)
Laurence Sombardier (NELHA)
Rae Nguyen (NELHA)
Alex Leonard (NELHA)
Keith Olson (NELHA)
Faustine Edge (NELHA)
John Cole (AG)
Jeff Zimpfer, (National Park Service)
Jennifer Johansen, (Cyanotech)

Board Members Not Attending and Excused

None

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

The meeting was called to order by Chair Cyd Miyashiro at 10:04 a.m. Chair Miyashiro introduced two new members attending the meeting: Gregory Kim is a new NELHA board director from HTDC, and Stephen Walls who is attending for Mark Glick as the DBEDT representative. Chair asked Director Kim and Director Walls to introduce themselves. Director Kim is a corporate lawyer who has been working in tech starting in the late 90's. He believes we must leverage NELHA's work to help the community more and HTDC hopefully can assist with that by creating more jobs from the work here.

Director Walls started that his experience at NELHA was when he was with the US Department of Energy and participated in the Hawaii-Okinawa Clean Energy partnership. He has seen how the park has evolved and is looking forward to today's discussions.

Chair Miyashiro asked Executive Director (ED) Barbour for a roll call of Board members and NELHA staff. Reference to Act 220. All 12 members present.

- **Item 2. Approval May 16, 2023, NELHA Board of Directors' Meeting Minutes.**

Chair Miyashiro entertained a motion to approve the May 16, 2023 minutes. The motion was made by Director Kalipi and seconded by Director Tsuji. There were no objections, and the minutes were approved as circulated (12-0).

- **Item 3. Approval May 16, 2023, NELHA Board of Directors' Executive Session Meeting Minutes.**

Chair Miyashiro entertained a motion to approve the May 16, 2023, Executive Session minutes circulated by Deputy Attorney General (DAG) Cole. The motion was made by Director Bossert and seconded by Director Hilton. There were no objections, and the minutes were approved as circulated (12-0).

- **Item 4. Approval and Decision-Making on the Performance Review of the NELHA Executive Director for the period July 1, 2021 through June 30, 2022.****

Director Kalipi made a motion to enter into Executive Session to discuss this personnel issue. This was seconded by Director Tsuji. Chair Miyashiro asked for any objections. There were none and a 12-0 vote was given to enter into Executive Session. The Board exited Executive Session at 10:11 am. Director Jones called back the board attendees and meeting was resumed at 10:21 a.m. DAG Cole offered a summary of the discussion. When they went into executive session to discuss the performance evaluation and salary recommendations of the Executive Director. It was moved and unanimously approved by all the directors to approve the report with salary recommendation of a 4 percent increase effective immediately. Director Barbour asked if it is effective now or

July 1, 2022. Director Hilton clarified the salary is retroactive to the start of the fiscal year of the time period of the performance evaluation. Chair Miyashiro asked if a revised motion can be made without going into executive session. DAG Cole replied yes, as long as it is general and ED Barbour's privacy is not affected. Chair Miyashiro asked for a motion to approve the performance review with the salary increase retroactive to July 1, 2022. Director Hilton moved to approve and Director Jones seconded. Chair Miyashiro asked if there were any objections. Hearing and seeing no objections the motion was approved (12-0). ED Barbour thanked the Board for their support.

- **Item 5. Create a Special Investigative Committee for the purpose of preparing and delivering to the Board the annual performance evaluation of the NELHA Executive Director for the period July 1, 2022, through June 30, 2023.**.**

Chair Miyashiro started that she would like to nominate herself, Director Kalipi and the DBEDT Representative to the Special Investigative Committee (Special Committee). This Special Committee will review the annual performance, goals and present the salary recommendation. Before a vote, Chair Miyashiro opened for discussion from the board. See and hearing none, Chair Miyashiro asked if there were any comments or questions from the public. Seeing and hearing none, Chair Miyashiro asked for a motion to create the Special Committee with the proposed members. Director Bossert made the first motion, and Director Sims seconded the motion. There were no objections and the Special Committee was approved (12-0).

- **Item 6. Old Business.**

None.

- **Item 7. New Business.**

None.

- **Item 8. Financial Report: Approval and Decision Making.**

Chair Miyashiro asked ED Barbour to present this agenda item. ED Barbour presented an overview for July 2022 through April 2023.

Revenue

- Total Revenue was \$5.4 M for the 2023 fiscal year and this represents an increase of almost \$750,000 or 16 percent over last year. As shown on the chart above, it is above the past five years apart from FY21 when we received the insurance reimbursement for the Kilauea destruction. Much of the increase \$450,000 or 60 percent is due to increasing cost of electricity. Increased rental income and investment revenue each also exhibited an increase of \$200,000. On the downside, these increases were offset by a decrease of \$200,000 in percent rent which is due to the large amount of arrears collected last year. Of notice for FY23 the following:
 - Overall seawater system revenue is up by \$350,000 or 25 percent. Deep Seawater

demand is up 15 percent, but the main increase is due to the surcharge of \$240,000 (200 percent) as electricity rates significantly higher than 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.
- Percent rent decreased significantly by \$200,000 due to payment of arrears for the same period last year.
- Reimbursements for electric are up by \$225,000 or 55 percent and due to higher electrical costs. Freshwater reimbursements are also up \$90,000 (140 percent) due to an increase from approximately \$3.50 per kgal to almost \$5.00 per kgal.
- Interest/Investment income is up \$70,000 (80 percent) due to a distribution from venture fund HATCH 1.

ED Barbour asked if there were any questions on revenue. Ms. Johansen from Cyanotech asked if the businesses at NELHA were going to be able to provide product for the Matsuyama Store and, if so, who is the contact? ED Barbour said he will contact Ross Matsuyama this weekend for an update. ED Barbour further commented that the Matsuyama's have follow through on all their commitments from the original agreement, they are a respectable business, and that he has no doubts they will follow through on putting HOST Park products in their store.

Expenditures

- Total expenses for the 2023 fiscal year were approximately \$5.0M or up by \$135,000 or 3 percent. Overall expenditures were up mainly due to increase seawater system electrical and tenant electrical reimbursables (\$300,000). We continue to monitor expenditures very closely. Of note are the following:
 - Seawater system expenditures were up by 40 percent (\$550,000) due to shifting of personnel to focus on upgrades; purchase of R&M supplies; and, increased electrical costs.
 - Tenant utilities are up by 40 percent or \$200,000 due to increased HELCO rates and freshwater rates.
 - NELHA utilities are down by \$200,000 due to back payments to PPA provider began in FY22 as well as miscellaneous unresolved issues with meter readings. We have been speaking with Hawaiian Electric about possibility it is a faulty meter, and are meeting with them this Thursday to talk about upgrading the research campus electrical grid which is a big project for us next year. ED Barbour explained because we have 20 different meters and each business has a meter, it

is not as straightforward as it might seem.

- HOST Park security is up by \$40,000 (15%) mainly due to new annual security contract for HOST Park.
- Beach Park maintenance is down by \$7,000 (17%) for the first ten months mainly due shifting of personnel tasks to the seawater system, lower freshwater costs by turning off the irrigation at the beach park and installing portable toilets while closing the restrooms for renovation. We closed the bathrooms last year because it was continuously trashed and vandalized by the General Public, and we could not keep up. Last month we hired a full time maintenance person.
- Administrative costs are down by \$115,000 (8%) due to shifting of personnel.
- OHA quarterly ceded lands payment is down by \$22,000 (6%) for fiscal year 2023.
- Special projects expenditures are down by \$325,000 due to the one-time water well contract payment last year and the final payment to Hawaii Natural Energy Institute for the energy analysis, also last year.

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 \$1,100,000 and up almost \$500,000 over the last fiscal year and the highest it has been at the end of the fiscal year in the past six years.
- As of June 30, 2023, the arrears are very low and totaled approximately \$30,000; down from \$80,000 earlier this year.

Director Adams asked ED Barbour if he might share what issues in general the HOST Park businesses were having. ED Barbour answered from the information on how we monitor shrimp exports to Asia from the United States and it's down 25% over the past year. He speculated perhaps because of people tightening their budgets and moving to less costly foods. ED Barbour asked Director Jones for input as he has a lot of experience in this area. Director Jones shared his thoughts that a lot of the countries that were using Hawaii to import their specific pathogen free (SPF) broodstock shrimp have done a lot for their own biosecurity by building their own facilities. There are also other parts of the world that have picked up on SPF broodstock development so the companies here are less relevant than they were once were. ED Barbour asked Director Jones about the health of Blue Ocean Mariculture. Director Jones replied they were doing quite well and shared they had just signed a development contract with a design build firm for a new processing facility This new facility will include a footprint for a storage freezer, and we are hoping to open the first quarter of 2025.

Chair Miyashiro asked if the shrinking dollar vs yen is impacting demand. ED Barbour said that certainly could be a factor mostly likely Big Island Abalone impacted their market is

primarily Japan. Director Jones added though there is very little impact to Blue Ocean Mariculture even though consumption of their product in Hawaii increases when Japanese visitor counts increase. They had hoped to export to Japan, but are holding off due of the exchange rate. Hawaiian Airlines will start their direct flights from Japan to Hawaii Island on October 23.

Ms. Johansen from Cyanotech answered the supplement space is affected and it has been a challenging time economically.

Chair Miyashiro thanked everyone for sharing their experiences, and further commented that during COVID we didn't feel any affects at HOST Park. She wondered if we had more international exposure than other organizations as well because of this international component.

Chair Miyashiro asked if there were any questions or comments, hearing none, Chair Miyashiro asked for a motion to approve the Financial Report. Director Adams made the motion. Director Bruce seconded the motion. There were no objections and the Financial Report was approved as presented.

- **Item 9. Proposed Budget FY 2024: Approval and Decision Making.**

Chair Miyashiro asked ED Barbour to present this agenda item. ED Barbour presented an overview for Budget FY 2024. Executive Barbour started by commending NELHA's small staff of 17. They are dedicated and hardworking, making everything we do possible.

Overall Summary:

- NELHA is currently managing a total of approximately \$17.3M in projects. Of this \$6.0M is Special Funds; \$4.0M is Federal Grants; and, \$7.3M in CIP projects. There are no General Fund appropriations for FY 2024.
- **Special Fund** – Revenue is projected at \$6.0 million and proposed expenditures are \$6.0 million. The Special Fund balance will remain stable at approximately \$1.1M.
- **Grant Funds** – We have received several grants over the past few years and we continue to implement these projects. They include:
 - The new 2nd EDA grant to operate the Hatch Accelerator is a \$3.1M project including cost share. This is a four-year project that began in October 2021.
 - We will receive \$250K from Sandia National Laboratory to complete the flow battery demonstration project. Though the project is complete, the company that installed the battery is now out of business, and Sandia graciously agreed to provide the funding to remove the battery.
 - We have approximately \$600K remaining from the insurance and FEMA grant funds received because of the destruction of our buildings in Puna due to the Kilauea

volcanic eruption. These funds will be used to make improvements to the building and facilities purchased last year for the Mauka Research Campus.

- **CIP Funds/Projects** – We have several CIP projects, totaling \$7.5M, that are underway and ongoing from previous fiscal year appropriations. Contracts with various firms are being managed by the NELHA Team. Projects include:
 - We continue to work with Encored Technologies Inc. regarding a design/build contract for the installation of 600kW of PV and 587kWh of energy storage at the 55” Pump Station. Total cost for this project is \$1.85M and will be completed by the end of this calendar year. We will “turn it on” beginning July 21, 2023, for final testing.
 - We also have a \$205,500 contract with Makai Ocean Engineering for the design and costings of strategies to secure or remove the pipelines.
 - There are two CIP projects from last year and include \$1.5M to update comprehensive Environmental Impact Statement (EIS) for Hawaii Ocean Science and Technology (HOST) Park and \$500,000 for the design and planning for development to access offshore deep layer freshwater aquifers.
 - Included in the FY 2024 budget bill passed by the 2023 Legislature are two new CIP projects. One is for \$1.5M to conduct an offshore marine comprehensive Environmental Impact Statement (EIS) and the other is \$1.9M for seawater system upgrades.

FY2024 Proposed Revenue

- Total estimated revenue for FY2023 is \$6.0M. This is an increase of almost \$600,000 or 11 percent over last fiscal year Interest/Investment income is up \$70,000 (80 percent) due to a distribution from venture fund HATCH 1.
- We are using an inflation factor of four percent for general items and specific categories are adjusted for anticipated changes. Categories of note are:
 - Seawater system revenue flat due to projected decreases in energy costs over last fiscal year when oil prices peaked mid-summer and electricity prices reached record levels. We will most likely see an increase in seawater demand.
 - HOST Park lease base rent is projected to increase by over 10 percent or approximately \$200,000 based on new leases.
 - Makai Research Campus office space and outside space are projected to level off at FY23 levels as we maintain full occupancy in the Makai Research Campus.
 - Federal/UH/Special projects increases by over \$400,000 with \$200,000 from EDA for the 2nd aquaculture grant, \$250,000 from Sandia National Laboratory to complete the energy storage project.

FY2024 Proposed Expenditures

- Total expenditures for FY2023 were \$5.0M and are proposed to increase by 20 percent overall or \$1,000,000 in FY2024.
- It is important to note that expenditures for the seawater system maintenance and repairs has been increased by almost \$150,000 or 8 percent. There are 7 new non-recurring items totaling \$1,000,000.
- Eleven additional new non-recurring projects in other budget categories totaling \$800,000 which will be used primarily to buy urgently required new equipment for the seawater system and Water Quality Lab.
- There are also funds designated for a Water Quality Issue Consultant. We are starting to see issues with the quality of our surface seawater here. It is very specific where they are having problems with larval run mainly in 10-14 day period. There is a volunteer group that was formed and NELHA believes that is important and we should hire a consultant who could help us with some boundaries on this issue. We hope to have analysis from the consultant over the next couple of months so that we can develop a plan on how to proceed on this specific issue significantly affecting the fish and bivalve (oysters, kanpachi, clams, ornamental fish), but it will take some time because we will have to go out to bid. Director Jones shared Blue Ocean Mariculture installed an ozone generator, and we haven't used it fully on any runs starting larval area next Wednesday so we'll understand if it helps within the last 20 days. Director Sims added some are using carbon filtration but it's difficult to tell if it is working as it appears to be episodic. It isn't acute, but issues are developing within 10, 14 or 20 days. They are adding a recirculating system for their research facility. ED Barbour commented that we are taking the issue seriously and our clients appreciate it.
- Economic Impact Study. We have been in contact with UHERO to update our Economic Impact Study. The last one we did was in 2018. This survey will be for calendar year 2022.
- Makai Research campus expansion. There is about ½ acre near our PV panels just south of the existing research campus. We have come to an agreement with Pacific Planktonics to reduce the size of their operation from ½ acre to about 1/3. We'll upgrade the rest for Research Campus Space which we are at 100% occupancy.
- Federal Grants. We plan to apply for Federal grant and added in \$25,000. We have been in discussion with UH Dr. Syrmos for another accelerator for ocean technology

and, more importantly, ocean conservation. ED Barbour is hopeful we can have the eventually have two accelerators, one for food security and one for ocean conservation/technology.

Director Sims commented that they all recognize that NELHA has done a spectacular job with identifying and achieve the grants they have been awarded over the last couple of years. ED Barbour acknowledged DD Sombardier as NELHA's grant writer. Director Sims asked if there is a role for a permanent grant writer at NELHA. ED Barbour answered that because there are significant amounts of Federal grant money, DBEDT is talking about hiring a permanent person to assist agencies department-wide. ED Barbour asked Director Syrmos for his thoughts. Director Syrmos answered their grant writers are their faculty and staff. He added it seems like this be a record year with \$520,000,000 in Federal grants. ED Barbour commented there are significant amounts of Department of Education (DOE) money and from the Inflation Recovery Act (IRA). Director Adams added that the County has looked at it from the government perspective as well. Because they do not have staff with grant writing experience, they have had better results with bringing in department specific grant writers.

- Makako Bay Drive Road repairs. Our main access road was built in 1980, and is now in need of repair. The \$100,000 budgeted will address urgent repairs needed near the Wawaloli Beach Park.

Director Kalipi asked ED Barbour if NELHA will participate in any of the climate resilience planning agencies and grants that are coming out. A number of the State agencies are looking at sea level rise in 2060 and 2100, as there is going to be that level of expenditure in addressing it, especially someplace so close to the ocean. Maybe there is way to coordinate within the ~50 climate resilience task forces that have been popping up in Hawaii in the last six months. ED Barbour answered that NELHA participates peripherally in those groups and we have a lot of contact with Office of Planning and Sustainability Development (OPSD). We also look at UH studies on seawater rise and OPSD studies, but we haven't participated to a significant degree at this point.

Director Syrmos commented that most of the climate resilience is with the IRA. They are large amounts and he doesn't believe that NELHA or UH could compete for those. That's where the County and the State become paramount players, especially the Department of Transportation (DOT) for climate adaptation, and they are meeting tomorrow internally on how to approach State DOT Director, Ed Sniffen.

Director Kalipi clarified that she wasn't thinking of NELHA as the prime, and there is a confluence of planning and infrastructure money being set up by the federal government, there must be collaboration. She pointed as an example repairs to Makako Bay Drive ED Barbour mentioned earlier. The \$20 million required to fix this road is probably not going to meet the 2060 or 2100 required levels. Now is when we have to coordinate. ED Barbour acknowledge it is a great suggestion.

- NELHA 50th Anniversary. ED Barbour is happy to report efforts are starting to recognize our 50th Anniversary most likely in the Fall of next year. We have allocated some funding in the budget to for this milestone anniversary.
- NELHA computers are all at end of life, and we plan to buy 14 new computers. Also, we just completed replacement of our telephone system which was over 30 years old.
- Furniture - Hale Iako. The grant funding received from the EDA included monies to add furniture in Hale Iako. The set up will be similar to HTDC's Sandbox collaboration facility in Honolulu, with meeting pods in downstairs area (one to four-person pods).
- We received funding for mobile labs, and plan to purchase one mobile lab for Hatch's use this year. We'll evaluate, before other purchases.

ED Barbour concluded his report on the Budget for Fiscal Year 2024. Chair Miyashiro commended ED Barbour and NELHA Staff for their efforts on the budget and the Environmental Impact Statement for the Offshore Research Corridor. As discussed in previous board meetings, NELHA's biggest driver of cost, although a pass thru, is electricity. Anything that we can do on the energy front would significantly strengthen the services offered. It's a great thing to see in the budget.

Chair Miyashiro ask for any discussion from the board. Director Kalipi asked if in the any subcategories was there a budget for Community Engagement. ED Barbour, replied, unfortunately, no line item specifically for community engagement. He continued that when he identifies non-recurring items, there is a threshold for \$25,000. We could accommodate community engagement in our recurring costs. ED Barbour did not bring it up in prior meetings, but NELHA as formed a community outreach group/hui which Director Kalipi is a part of the group. ED Barbour expressed his appreciation for her involvement as a board member and that they are meeting with lineal descendants of this area and members from Aha Moku. A USC Grant from Hilo is helping us arrange for

it. ED Barbour feels we can start to do more community outreach we haven't done in past. It's a good direction for us to engage the local community much more and help educate the community about HOST Park's work. ED Barbour asked Director Kalipi if she would like to add any comments about the group. Director Kalipi was asking because she expects issues with respect to water wells and roads. If an ocean conservation program will be established, an indigenous perspective will be needed. It's a proactive investment, she hopes is established before any issues come up.

Director Adams commented that anything coming out of IRA or Bipartisan Infrastructure Law (BIL) in particular the Justice40 Initiative is requiring that low to moderate income communities are included as a part of the application process and implementation. These would involve community engagement as well.

Director Walls commented that though Community Engagement is not a line item in the budget, maybe it is a subject to be considered as a presentation to the board in a near future meeting.

DD Sombardier wanted to highlight the Tetrachrome contract which is approximately \$100,000. They plan an online tour which incorporates a lot of community engagement.

Chair Miyashiro asked if there were any comments from the public. Hearing and seeing none, Director Adams moved to approve the budget for Fiscal Year 2024, and Director Hilton seconded the motion. There were no objections, the Budget for Fiscal Year 2024 was approved as presented.

- **Item 10. 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 began with an update that NELHA is ready for any impact from Hurricane Calvin. Our fuel tanks for our three diesel generators will be topped off today, we expect more of a wind event over a rain event. Because of our location close to major generating power

station within a couple miles and utilities underground any electric disruption it will be brief.

Seawater System. We are going to start the rate analysis after data from our PV Test Bed is received. A significant portion of \$1.9M CIP we received this year will be used to upgrade and repair the microgrid (transformers and switches) in the Research Campus which powers our north pump station. We will meet with Senior HELCO staff this Thursday to begin discussions on these upgrades. The HNEI microgrid analysis completed a few years ago will be re-evaluated by addressing time of use (TOU) and the added storage since are getting the initial data from the Korean microgrid project. Encored has completed initial runs of their artificial intelligence algorithms and the results are very encouraging with production and demand forecasts within the 95% accuracy range.

Makai Research Campus Expansion. WRNS are close to 90% of design. We will continue to search for funding resources.

Community Outreach of Water Well Development. We will continue to work on this and hope to complete in the next several months.

Offshore Freshwater Survey has been scheduled for May 2024. We have had detailed discussions with UH and we have a draft budget and a draft scope of work . We will have to wait until the winter surf season is over to do that study.

Environment Impact Study. There are two studies which we will begin procurement for professional services shortly.

Marketing-website, social media. The consultant is well into their work including eight videos, two minutes each in draft form. One is an online tour highlighting about 30 of the NELHA businesses who chose to participate.

Item 11. Announcements.

Chair Miyashiro noted that our next meeting is scheduled for Tuesday, September 19, 2023, at 10:00am.

Chair Miyashiro and ED Barbour would like to restart “in-person” meetings, two of them this year, one in at NELHA in Kona and the other in Oahu. Chair Miyashiro acknowledged holding the meetings by video conference is very convenient and conducive for forum.

Director Adams asked us to correct the November 12, 2023 NELHA Board of Directors date to November 21, 2023. He also announced the County just had an event that celebrated

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the month of the hydrogen bus working. This would not have happened without NELHA and he thanked NELHA for moving toward this greener, reliable energy capable of reducing greenhouse gas. Last announcement he made was County offices will be closed tomorrow due to Tropical Storm Calvin.

- **Item 9. Adjournment.**

Chair Miyashiro adjourned the meeting at 11:31 a.m.

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