

NELHA BOARD BOOK
July 16, 2024



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 AGENDA*
Natural Energy Laboratory of Hawaii Authority
July 16, 2024
10:00 a.m.

An Hybrid Interactive Conference Technology Meeting will be held
via Zoom and one location.

Board Directors and members of the public may attend the meeting
at the location listed below or via Zoom using this link:

<https://us06web.zoom.us/j/81490758604?pwd=FJUrwWq87tG4OtChhLe1LMT2pibAaJ.1>

Meeting ID: 814 9075 8604
Passcode: 999612

Members of the public can also join via the toll-free telephone numbers listed below:

+ 1-346-248-7799,,81490758604#
or
+ 1-669-444-9171,,81490758604#

NELHA OceanView Conference Room 208
Hale Iako Building
73-970 Makako Bay Drive
Kailua-Kona, HI 96740

1. Call to Order.
2. Approval May 21, 2024, NELHA Board of Directors' Meeting Minutes.
3. Approval April 9, 2024, NELHA Board of Directors' Executive Session Meeting Minutes.
4. Public Testimony.
5. Old Business.

- a. Seawater Quality Analysis Final Report Presentation by Dr. Jim Wyban.

6. New Business.

- a. Create a Permitted Interaction Group, pursuant to HRS §92-2.5(b), for the purpose of recruiting and making a recommendation to the NELHA Board of Directors for hiring of the NELHA Executive Director position – Discussion and Decision-Making.

7. Financial Report: Approval and Decision Making.

8. Proposed Budget FY 2025: Approval and Decision Making.

9. Executive Director’s Informational Status Report on FY2024 ongoing projects and new projects for FY2025 including: Legislative session, research campus leases, new leases under discussion; water quality and 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; grant applications; design and plans of expansion of the Makai Research Campus; new Mauka Research Campus; renewable distributed energy resources initiative for microgrid; and, solar desalination.*

10. Announcements.

- a. Scheduled Meeting dates for August 2024 through June 30, 2025. (Note: Meeting dates are scheduled for the third Tuesday of odd numbered months.)
- b. Date of next regularly scheduled NELHA Board of Directors meeting is Tuesday, September 17, 2024, at 10:00 am.

11. Adjournment.

* On any of the above items the Board may convene in Executive Session pursuant to section 92-5(a), HRS, to consult with the Board’s attorney on issues pertaining to the Board’s powers, duties, privileges, immunities, and liabilities pursuant to section 92-5(a)(4), HRS, to discuss business trade secrets of confidential or proprietary commercial or financial information of tenants or prospective tenants pursuant to section 227D-3.5, (HRS), or to receive information that is proprietary to a particular enterprise pursuant to HRS 227D-6.

** The Board anticipates convening in Executive Session pursuant to section 92-5(a)(2), HRS to consider evaluation of its executive director where considerations of matters affecting privacy will be involved.

In the event a location loses its audiovisual connection, the meeting will be automatically recessed to restore communications as described in section 92-3.7(c), HRS.

Members of the public may submit written testimony on this agenda via e-mail no later than 2:30 p.m. on Friday, July 12, 2024, addressed to: gregory.p.barbour@hawaii.gov Alternatively, members of the public may mail written testimony on this agenda to Gregory Barbour, Natural Energy Laboratory of Hawaii Authority, 73-4460 Queen Kaahumanu Hwy., #101, Kailua-Kona, Hawaii USA 96740-2637.

Internet Access:

To view the meeting and provide live oral testimony during the meeting, please use the link shown on page 1 of this agenda. You will be asked to enter your name in order to access the meeting as an attendee. We request that you enter your full name, but you may use a pseudonym or other identifier if you wish to remain anonymous. You will also be asked for an email address. You may fill in this field with any entry in an email format, e.g., *****@***mail.com.

As an attendee, your microphone will be automatically muted during the meeting unless you are providing testimony. For each agenda item you wish to testify on, please click the "Raise Hand" button found on your Zoom screen. Board staff will individually enable each testifier to unmute their microphone. When recognized by the Board Chair, please unmute your microphone before speaking and mute your microphone after you finish speaking in order to prevent audio feedback. When testifying, you will be asked to identify yourself and the organization, if any, that you represent.

Telephone Access:

If you cannot get internet access, you may get audio-only access by calling the Zoom telephone number listed on page 1 of this agenda.

Upon dialing the number, you will be prompted to enter the Meeting ID which is also listed on page 1 of this agenda. After entering the Meeting ID, you will be asked to either enter your panelist number or wait to be admitted into the meeting. You will not have a panelist number, so please wait until you are admitted into the meeting.

When the Board Chair asks for public testimony, you may indicate you want to testify by entering "*" and then "9" on your telephone's keypad. After entering "*" and then "9", a voice prompt will let you know that the host of the meeting has been notified. When recognized by the Board Chair, you may unmute yourself by pressing "*" and then "6" on your telephone. A voice prompt will let you know that you are unmuted. Once you are finished speaking, please enter "*" and then "6" again to mute yourself.

If you need an auxiliary aid/service or other accommodation due to a disability, contact Ms. Faustine Edge at 808-327-9585 or faustine.x.edge@hawaii.gov as soon as possible, preferably

three (3) working days prior to the meeting so arrangements can be made. If a response is received three (3) working days or less before the meeting, we will try to obtain the auxiliary aid/service or accommodation, but we cannot guarantee that the request will be fulfilled. Upon request, this notice is available in alternate formats such as large print, Braille, or electronic copy.

The next NELHA Board of Directors meeting is currently scheduled for Tuesday September 17, 2024.

Issued July 10, 2024, in compliance with Sunshine Laws

Item 2.

Draft Minutes
NELHA BOD Meeting
May 21, 2024



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

May 21, 2024
10:00 a.m.

DRAFT

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)
Gordon Bruce (Gov. Appointee)
Dr. Philip Bossert (RAC Secretary)
Mark Glick (DBEDT)
Alan Hilton (RAC Chair)
Dick Jones (Tenant Representative)
Nathan Tsao (Tenant Representative)
Russell Tsuji (DLNR)

Board Members Not Attending and Excused

Noelani Kalipi (Gov. Appointee)
Doug Adams (County of Hawaii)
Gregory Kim (HTDC)
Dr. Vassilis Syrmos (University of Hawaii)

Guests/Staff Present

Greg Barbour (NELHA)
Laurence Sombardier (NELHA)
Alexander Leonard (NELHA)
Bryan Babbitt (NELHA)
Faustine Edge (NELHA)
Pam Madden (NELHA)
Rae Nguyen (NELHA)
Jennifer Rasmussen (NELHA)
John Cole (AG)
Melissa DellaTorre (Pacific Hybreed)
Roger Doyle (Moana Technologies)
Gerald Heslinga (Indo-Pacific Sea Farms)
Dan Jackson (Ocean Era)
Bill Morton (Pacific Filtration Systems)
Sherry Hanson (Blue Ocean Mariculture)
Chris Kiser (Blue Ocean Mariculture)
Federico Rotman (Blue Ocean Mariculture)
Skye Waipa (Blue Ocean Barns)
MT LLC (Member of the Public)
James Wyban (Consultant)

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

The meeting was called to order by Chair Cyd Miyashiro at 10:06 a.m. and asked Executive Director (ED) Barbour for a roll call of Board members and NELHA staff. Reference to Act 220. 8 members present and 4 excused.

- **Item 2. Approval April 9, 2024, NELHA Board of Directors' Meeting Minutes.**

Chair Miyashiro entertained a motion to approve the April 9, 2024, minutes. The motion was made by Director Bruce and seconded by Director Tsuji. Chair Miyashiro asked if there are any objections. Hearing none, the minutes were approved. (8-0).

- **Item 3a. Old Business. Seawater Quality Analysis Report Presentation by Dr. Jim Wyban.**

Chair Miyashiro noted a correction to this agenda item that it is a presentation only. There will be no board action or decision at this time.

ED Barbour explained the change was because the agenda must be filed the Wednesday before the board meeting. NELHA received the draft report the Friday after the agenda was filed. ED Barbour indicated that it was important that Dr. Wyban present his findings and recommendations. ED Barbour continued that this is an important issue, and many tenants and businesses are interested in moving this along rather than waiting to present it to the Board in mid-July. ED Barbour clarified for everyone's understanding this is a draft report submitted last Friday, and that NELHA staff did not have a chance to review it. He also added an important part of the work is that Dr. Wyban would meet with the individual businesses before finalizing the report. ED Barbour again emphasized this is a draft report to provided a status to make sure we are as transparent as possible, and that NELHA understands the importance of the issue.

Dr. Wyban began that he was contracted by NELHA to study the water quality issues in the seawater affecting larval rearing at HOST Park. He will provide an overview of what he learned and his recommendations of how to address these issues.

He continued that HOST Park is a world-renowned aquaculture innovation hub. Animal reproduction is a core function in aquaculture companies at HOST Park. Starting in 2021 several tenants began experiencing significant problems in larval rearing with high mortality rates. This was happening in companies who had successfully reproduced their animals for many years. This problem led to the 2023 formation of the Keahole Point Larval Group (KPLG), a group of 12 companies with animal reproduction as their core function. They began meeting to discuss their larval rearing problems and discovered it was a shared problem across species including shellfish, shrimp, and

finfish. Their discussions and concerns reached NELHA who subsequently hired him as an outside consultant to investigate the problem.

The HOST Park Seawater System is a marvel of engineering and innovation. It is two parallel systems, the deep seawater cold system and the surface seawater (SSW) warm system. Combined the systems are capable of pumping 42,000 gpm which is a huge amount of water. It was designed to accommodate the Ocean Thermal Energy Conversion (OTEC) projects which were the original concept of NELHA. In its early days biofouling was a major concern of the engineers designing the OTEC facility because of its impact on pumping efficiency. Biofouling is referred to repeatedly in NELHA's Environmental Impact Study (EIS) which is on their website. Over time, as OTEC has faded, and aquaculture became the one of the dominant activities at HOST Park

KPLG includes the following 12 companies with animal reproduction at HOST Park: Big Island Abalone, Blue Ocean Mariculture, EcoHarvest, Indo-Pacific Seafarms, Jamestown Seafoods, Marine Biologics, Moana Technologies, Ocean Era, Ocean Rider, Pacific Hybreed, Shrimp Improvement Systems and Taylor Shellfish. Some of NELHA's largest tenants and largest water users are members of this group.

The result of KPLG'S meetings is that there is a serious water quality problem in HOST Park. It happens in larval rearing, and it's affecting oyster, abalone, shrimp, and finfish. The most dramatic effects are in the larval stages particularly in shellfish (oysters) within 0-10 days. It is not affecting algae (micro & macro), and there is no obvious pathogen found to explain these results.

KPLG members are entrepreneurs and innovators who have been working hard to solve this problem. They have used bio-hydrox which is basically a pipe disinfectant. This has somewhat improved results, but there are side effects on animal quality from its use.

Blue Ocean Mariculture's response was the installation of a \$100,000 ozone generator. They did see some improvement in their larval rearing results in 2023. Improvement was enough that some of the KPLG companies have ordered ozone systems and are about to install them.

One of the most interesting observations to Dr. Wyban was with the shellfish at Pacific Hybreed. They had seen a severe impact in their larval rearing using the HOST Park water regardless of the type of treatment they used. Ms. DellaTorre brought water from a Hilo shellfish company, Hawaii Shellfish, to her facility and the larvae did great in that situation. She did a second experiment with water that NELHA provided directly from the ocean and from the Research Campus sump Ms. DellaTorre still had high mortality rates. This shows us there isn't a technical problem or a site-specific problem. The problem really was in the water.

Dr. Wyban presented a chart with Pacific Hybreed's larval survival. At 10 days a precipitous drop in survival takes place. With the application of bio-hydrox at 40 ppm there is a little improvement, but it still isn't a good result.

The next chart presented was Blue Ocean Mariculture larval rearing results from 2017 to 2023. This chart showed that between 2017 to 2020 the results were pretty good. But starting in 2021, survival dropped significantly until the Summer of 2023 when they installed ozone. These bars jumped up quite a bit, which is a good indication that ozone really helps.

In a following chart, Blue Ocean Mariculture shared their broodstock mortality issues which they associate with this seawater problem. There is a precipitous drop in survival in 2022 and somewhat improved in 2023.

Dr. Wyban presented another chart for another dataset that KLPG and NELHA's water lab submitted for water samples from a variety of sources to a company on the mainland, Aqua Biome. Aqua Biome does environmental DNA analysis which filtered the surface seawater to 5 microns. This does take a lot of junk out, but it does not remove vibrio which were quite abundant, with the worst and highest at 40% is vibrio coralliilyticus. ED Barbour asked Dr. Wyban for the sake of the audience what is vibrio? Dr. Wyban answered it is bacteria, potentially pathogenic bacteria. The vibrio coralliilyticus is a known documented severe pathogen for shellfish in particular but also shrimp and fish. There are published results that in 2015, vibrio coralliilyticus has been shown to cause the collapse of the oyster hatchery industry in Korea.

Dr. Wyban continued that from all the things that he learned, observed, and heard his assessment is that there are two likely causes of the water quality problem. One is biofouling inside the pipes that could release chemicals. Biofouling is very common, and the engineering and biology is well documented in literature. The other is vibrio bacteria has become much more prevalent in the system, and this vibrio also releases toxic chemicals in their environment. Dr. Wyban believes it's one or the other or a combination of the two causing this larval rearing problem.

Dr. Wyban presented a map of the Kona Coast and the area around HOST Park. HOST Park is surrounded by the Kona airport with multiple jets taking off and landing. These jets pour huge plumes of exhaust into the air, and the daily trades blow out that jet exhaust over the ocean where it settles. A few miles south of HOST Park is Kohanaiki, a new development and golf course. Golf courses are known to use lots of pesticides so there is a possibility of pesticide contamination. Further down a few miles from Kohanaiki is a Hawai'i County sewage treatment facility which has a reputation for having problems in operations. Because of the massive dilution effect of the Pacific Ocean at Keahole point, and that the water moves rapidly, Dr. Wyban considers all three to be less likely causes.

Dr. Wyban presented next his recommendations for NELHA to consider for HOST Park:

1. Implement a high-volume flushing protocol for the surface seawater system. This is standard operating procedure (SOP) in aquaculture facilities around the world, particularly hatcheries. They flush the water on a regular basis to try and push out any kind of junk that might've been accumulated in the system.
2. Conduct pipeline inspection not on the outside, but on the inside of the pipeline. This is standard operating procedure in pipeline industry, and it's done all over the world by engineering companies. They put a device with video camera and lights, and it swims its way through the pipe.
3. Develop a Pigging System. In pipeline parlance pigging is a device which is engineered to fit in the pipe. The pig is pushed through with water pressure, and it scrubs the inside of the pipe. NELHA has done this once in its history back in the 1990's under the guidance of HOST Park's former Operations Manager, Mr. Jan War. Mr. War told Dr. Wyban NELHA bought an engineered pig from a company in Houston, Texas. They installed it at the Lighthouse pumpstation, pushed it through the system to the Ka`u Pump station.
4. Reduce frequency of surface seawater interruptions. KLPG made this request because with the interruptions, the turn off and restart of the system, they see a lot of debris come into their systems.
5. HOST Park's Water Quality Lab (WQL) recommendations:
 - a) Reinstitute bacteriology testing. This was part of CEMP, but it was discontinued about 15 years ago.
 - b) Identify SSW chemical toxin. This is more challenging with surface seawater because it's like looking for a needle in haystack, but there are labs mostly at universities who have that expertise. Dr. Wyban suggests that NELHA engage with one of those labs to identify the toxin so that it can be monitored for on a regular basis.
6. Consider adapting some of the groundwater wells as a new supply to the hatcheries. In the global hatchery industry, nobody uses open ocean intake. They use wells because the well water is filtered and doesn't have living organisms like open ocean seawater.
7. Nanobubble technology is just emerging to clean pipelines all over the world. They push nanobubbles into the pipeline (in can be just air). Dr. Wyban did not know exactly how it works, but believes it is electrostatic physics.
8. Conduct a Whole Effluent Toxicity (WET) study using marine larvae with the SSW. this is the EPA approved standard for understanding whether water is contaminated or not.

Dr. Wyban continued with his recommendations to KPLG:

1. Use probiotics in larval rearing to enhance larval health and resilience.
2. Upgrade hatchery seawater filtration systems.

- a. At a minimum, mechanical filtration 50 um, 10 um, 5 um, 0.5 um,
 - b. Implement carbon filtration,
 - c. Use some combination of UV, chlorination or ozone to disinfect the water,
 - d. Consider ultrafiltration, a new state-of-the-art technology that will take any kind of bacteria out of the water.
3. Upgrade their hatchery water system maintenance and protocol in hatcheries to flushing, acid wash, freshwater rinse, and dry out. In many cases hatchery water supply is parallel with one active and one sitting idle cleaned and dried. Each week they rotate so the pipes are always clean when used.
 4. Strongly recommends replacing all above ground PVC which have been in place six months or longer as sunlight penetrates the PVC and stimulates the growth of filamentous algae and other junk. Once replaced the pipes should be buried and protected from sunlight.
 5. Install hatchery bypass plumbing so when there's water interruption in the HOST PARK system, they can flush their water supply past the hatchery and dump that water.

Dr. Wyban concluded his summary with an outlook for HOST Park.

- HOST Park has a world class reputation in ocean science innovation.
- Solving the current hatchery problem will build on this legacy and further elevate HOST Park's brand.

Chair Miyashiro thanked Dr. Wyban for his summary and commented that though there is no board action on the report, she understands it's top of mind for a lot of tenants, an important issue to a lot of people, and for NELHA. She opened the floor for discussion from tenants, board members and members of the public.

Mr. Heslinga with Indo-Pacific Sea Farms and chairman of KLPG started by asking Dr. Wyban, to put into context and perspective, if it is possible to put a price tag on the problem to date considering things like the loss of productivity, potential company failures and mitigation methods planned or in progress. Mr. Heslinga continued that he did a rough calculation, and he thinks it's into the millions potentially \$3-5 million, and asked if that is reasonable.

Dr. Wyban answered that he hasn't calculated what the financial impact has been, so he cannot answer at this point. Mr. Heslinga thinks it is important to consider and pointed out that Blue Ocean Mariculture is planning mitigation methods including moving to a recirculating system for the hatchery, putting over \$1 million into the research system, and they are planning another \$1.5 million in solar panels for generation. Mr. Heslinga continued that in the last year-and-a-half, NELHA has lost six companies of which four were hatchery companies which had the common denominator which is failure to produce larvae. So those companies are essentially gone as are their expertise and institutional memory. The other aspect is just the lost productivity. KPLG has been meeting now for

about a year-and-a-half, at first monthly for about nine months and then as needed. Every time they do that it takes time effort and energy away from their hatcheries and their customers. Mr. Heslinga believes all of these must be considered and it is no exaggeration to say it is a multi-million-dollar problem. This needs to be emphasized because it's going to cost money to do pipe inspections, pipe pigging, seawater analysis and so forth. Dr. Wyban answered that with the example of Blue Ocean Mariculture switching to a recirculating aquaculture system (RAS), their water use will drop a lot, and if that becomes a trend the economics of the NELHA system as a seawater utility changes considerably. This is serious issue and though he doesn't have a number, the Board needs to understand some of the members of KPLG are NELHA's biggest tenants in terms of water use (Big Island Abalone, Moana Technologies, Blue Ocean Mariculture). Mr. Heslinga commented that it would be interesting to do a poll of the other KPLG members asking for an estimate of losses due to water quality issues. Dr. Wyban agreed it is a good idea and he can get it into the final report because we are in a draft.

Chair Miyashiro asked if we could get the impact to the system as well as impact by tenants? ED Barbour answered yes. Chair Miyashiro asked then if it's possible for that to be reflected across all tenants. ED Barbour responded they will try.

Mr. Rothman with Blue Ocean Mariculture commented he appreciated Dr. Wyban presented their data on broodstock, and he wanted to emphasize that the word larval comes up a lot and that is one of Blue Ocean Mariculture's primary issues but certainly other life stages of all organisms can be affected. It may not cause direct mortality, but it could cause reduced growth, feed conversion ratios (FCRs) or other issues. Dr. Wyban agreed though it is most acute in this larval stage.

Chair Miyashiro asked if there were cost estimates on the recommendations. ED Barbour answered, not yet, and it wasn't part of the scope of work, but we will work on that.

Mr. Roger Doyle a consultant with Moana Technologies commented they have detailed records of the episodic nature of the issue. There was a lot of mortality in 2021 and 2023 causing a genetic bottleneck which is when the broodstock population gets quite small. This results in an increase in inbreeding and a loss of diversity, and neither can be reversed. The raw material is the basis for long term genetic gain. Moana has been selecting for fast growth rate and survival, and they had been making good progress. They are now reputed to have one of the best populations in the world, and they want to maintain its ability for new prices and for improving. Mr. Doyle stated he can put a cost based on present value and future loss of genetic gain for Dr. Wyban or anyone who asks. He further commented what's happening now in terms of water supply can have a large cost.

Mr. Heslinga commented that on behalf of the individuals who work for the companies that went out of business just in the last year-and-a-half and the four because in large part because of hatchery failures. He met with them monthly, saw the stress that they were

under and then eventually saw them leave the island. Mr. Heslinga continued they had to pack up, sell their stuff, and head off to an uncertain life someplace else. His point is there is a human cost when companies struggle and when companies fail, and he wanted to make sure that is not ignored by NELHA, the State or anybody. Mr. Heslinga continued that we're dealing with people's lives and NELHA is selling a product, which is seawater, and it behooves NELHA to know a) what's in the water, b) what's in the pipes, and c) is the water likely to kill marine larvae. Right now, NELHA does not know the answer to those three questions, and he regards it as imperative that NELHA develop capabilities to answer those questions.

ED Barbour asked Mr. Heslinga what four companies he is referring to, because he mentioned six earlier. Mr. Heslinga clarified that six companies had departed in the last year-and-a-half are Kohanakai Aquaculture, Kanaloa Octopus, EcoHarvest, Pacific Hybreed (which is shut down), Dear Ocean and Forever Oceans.

ED Barbour asked Mr. Heslinga if the thought Kanaloa Octopus left because of this larval issue. Mr. Heslinga confirmed that is what he believed, that Kanaloa Octopus Farm the company wasn't successful in raising larvae. He continued that all the companies had the common denominator of being unable to produce larvae on a consistent basis.

ED Barbour didn't think Mr. Heslinga's statement was correct, as Kanaloa Octopus Farm left for other reasons, in particular because NELHA didn't extend their lease. Mr. Heslinga answered from his experience at NELHA as a tenant and as a company owner going back 29.5 years, he hadn't seen this rate of company failures over the three decades. He believes it is accelerating. Mr. Heslinga repeated his earlier comments regarding the six companies he believes were impacted by the water issue to emphasize his point is this is a very serious problem. It has taken them about 16 months to get to this point from when the initial complaints were made by Jamestown Whitney and Blue Ocean Mariculture at the end of 2022 in a meeting involving Mr. Rothman, Director Tsao, and DD Sombardier which resulted with formation of KPLG.

Director Tsao in his capacity as General Manager of Jamestown Point Whitney Ventures added the survival of their hatchery site at NELHA over the past two years has largely been due to the fact that they were able to buy larvae from outside sources, and they hired three people at their mainland hatchery to include oyster production. They were lucky they had that option; without it they would not have survived. He continued that from what he knows from Taylor Shellfish (no representative from Taylor Shellfish attended this meeting) they had a similar situation, and they are core tenant of NELHA. If Taylor's mainland hatcheries weren't operating, they would've been in a heavily distressed situation in Kona. ED Barbour answered Director Tsao that when Mr. Bill Dewey, Taylor Shellfish's Director of Public Affairs was at NELHA, he mentioned that they were having the same problems in their hatcheries on the mainland, and they were having to buy from another source as well. It wasn't just related to their Hawaii hatchery. Director Tsao explained that was a slightly

different issue, their mainland hatcheries go through large water quality changes through the seasons: winter, summer, spring, fall and they have intermittent episodic hatchery failures, not chronic like what we are experiencing.

Director Tsao added this industry is small across the nation and everyone knows each other through aquaculture events. This problem is out there, and it would behoove NELHA and its reputation to get in front of this problem before it potentially gets worse. ED Barbour responded that is why we hired Dr. Wyban and believes he's worked very hard and quickly since he started in January. Director Tsao acknowledge Dr. Wyban's work expressed his appreciation and communication with KLPG.

Director Jones mentioned in last board meeting they can quantify the amount of water used that would be reduced if they switched to RAS. They will share this financial implication if they are forced to go down this road. Director Jones agreed with Mr. Heslinga that we are in a timebound situation, and time is critical. In the past 18 months they have lost two cohorts at a valuation of \$4 to 6 million in revenue each. Plus, they have low survival in several others so they cannot afford to wait until July for a final report release and must make some pretty significant decisions.

Director Hilton, Chair of the Research Advisory Committee (RAC) commented it is obvious this is a critical SSW issue for the tenants using it for their operations. Groundwater wells were mentioned as a possible source for some tenants and there are some options to switch to groundwater or wells. Director Hilton asked if there are current tenants that use deep water either in part or in whole in their aquaculture operations, and if there is any impact to deep water usage that's similar to what's going on with SSW. Ms. DellaTorre answered Pacific Hybreed did an experiment with heating up the deep seawater and it did not work for larval growth. Director Hilton asked if it is because SSW is loaded with good stuff in addition to bad stuff when it comes to being the medium for rearing larvae. Ms. DellaTorre answered they have been measuring all the qualities of the seawater that they can, and they can account for changes in nutrients and algae, but they haven't been able to determine why deep seawater didn't work.

Mr. Heslinga suggested to Dr. Wyban that he adds one more point to the recommendations for HOST Park, to work toward improvement of communications between NELHA's Water Quality Laboratory and KLPG. There are deficiencies in outreach and reporting that have been ongoing now for at least a year. His example is the last Coastal Environmental Report which is produced by the Water Quality Lab came out in December 2023, but the one before that came out in June of 2020, a 3.5-year lapse. NELHA's own policies and procedures manual last updated in 2018 states this report is to be published on an annual basis, and the data generated in the Water Quality Laboratory are to be made available to interested parties. ED Barbour commented this is irrelevant to the water quality report. Mr. Heslinga disagreed and believed it is relevant because there is discussion about measurement of effluent that's going into the groundwater from the various companies.

ED Barbour again disagreed with Mr. Heslinga's repeated comments about the reasons companies left NELHA in the past year and described that Mr. Heslinga's statements are his opinions. Mr. Heslinga agreed that he is present today to express his opinions.

Chair Miyashiro stated she would like the Board to understand what are near-, mid- or longer term recommendations. Also, ongoing maintenance costs and figures of what are one-time recommendations and what are ongoing actions. Dr. Wyban answered that flushing, pigging and bacteriology would become ongoing activities which would have cost associate budget implications.

Chair Miyashiro asked if with the mitigation recommendations especially pigging, are there any environmental concerns or potential roadblocks that would have to be addressed before the mitigations were implemented. ED Barbour answered that we would have to get a permit to dispose of water in the ocean so that's a long-term recommendation.

Chair Miyashiro asked from a process standpoint what are the next steps for the report.

ED Barbour answered that NELHA will review the report and Dr. Wyban will meet with the businesses for their input. He acknowledged Director Jones' indication that July is too late. Dr. Wyban offered to have a revision completed in a few days after he collects the edits and comments from NELHA and the businesses. Chair Miyashiro stated, if needed, they can call for an emergency meeting of the Board to action the report. Chair Miyashiro confirmed the Board understands the urgency and asked Dr. Wyban to include with the final report the timing and prioritization of the recommendations.

- **Item 4a. New Business. Election of NELHA Board of Directors' Officers.**

Chair Miyashiro introduced the next agenda item, The Election of NELHA Board of Directors for the fiscal year 2025 beginning July 1, 2024, thru June 30, 2025. Chair Miyashiro nominated Director Noelani Kalipi for Chair and herself as Vice Chair. She explained typically the Chair and Vice Chair are Governor appointees. Director Kalipi is not present, but Chair Miyashiro did speak with her, and she is supportive of the nomination. Given Director Bruce is in the first year of his first term, Chair Miyashiro is willing to serve as Vice Chair if it is the pleasure of this board and referenced that she terms out in 2026. Director Kalipi terms out in year 2028 and believes Director Bruce terms out for his first term 2027 with a potential second term.

Chair Miyashiro asked if there are any other nominees for the positions of Chair and Vice Chair. Hearing none she asked for any discussion or comments from the board or the public.

Director Bossert moved to approve the officers, and Director Tsuji seconded. There were no objections, and the NELHA Board of Directors Officers for the fiscal year 2025 beginning July 1, 2024, to June 30, 2025 was approved (8-0).

Chair Miyashiro thanked the Board Directors with additional appreciation to Director Kalipi for willingly volunteering to serve as Chair.

● **Item 5. 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 April 2024.

Revenue

- Total revenue was \$4.3 million for the ten months of the 2024 fiscal year, and this represents a decrease of \$215,000 or 5 percent for the same period last year. Of notice for FY24 are the following:
 - Overall seawater system revenue is down by \$220,000 or 15 percent. This is mainly due to a 15 percent drop (\$80,000) in surface seawater revenue combined with lower electricity rates decreasing the electrical surcharge by \$110,000 or 35 percent over the same period last year.
 - Overall lease rent is up by \$65,000 (3 percent) for fiscal year 2024. More specifically, this is due to an increase in Land Base Rent up approximately \$75,000 or 5 percent and Research Campus office rental revenue was flat. Outside research campus rental was down by \$15,000 or 7 percent.
 - Labor services are up a healthy \$50,000 or 95% over the same period last year.
 - Reimbursements for electric are down by \$115,000 or 25 percent and due to lower electrical costs, which peaked a year ago. Freshwater revenue includes a double payment and is up \$75,000 or 65 percent and will eventually even out.
 - Interest Income/Investments is down by \$65,000 due to the income distribution from the venture fund last year.

ED Barbour asked if there were any comments or questions. Hearing none he continued to expenditures.

Expenditures

- Total for the first ten months of fiscal year 2024 were approximately \$4.2M or down by \$90,000 or 2 percent. This decrease is mainly due the cost of electricity which peaked last summer. We continue to monitor expenditures very closely. Of note are the following:
 - Seawater system expenditures were down by \$500,000 with lower surcharge electrical rate as well as the new microgrid coming online last July. In addition, parts for R&M and services on a fee were lower.
 - Tenant utilities are down slightly flat with a decrease in of \$15,000 due in electrical

reimbursement offset by a like increase in freshwater reimbursements.

- NELHA utilities are up by \$85,000 with accounting change showing costs of PPA only which will align with power consumption after power meter is corrected.
- HOST Park Environmental Monitoring increased by 30 percent with the encumbrance of the annual biota monitoring MOU earlier than last year.
- Beach Park Maintenance increased by \$15,000 with the renovation of the bathrooms and opening for public use.
- Administrative expenses are up by \$230,000 (20%) due to shifting of personnel, insurance premium bill increase of \$70,000, economic impact survey and purchase of new microcomputers.

Special Fund and Arrears

- Special fund balance is \$1,065,000 and up by \$55,000 (8 percent) in the past ten months.
- As of April 30, 2024, the arrears are very low and totaled approximately \$25,000 of which Apparent accounts for 70 percent.

ED Barbour closed his Financial Report. Chair Miyashiro opened for discussion and asked if there were any questions or comments from the board and public. Hearing none. Director Hilton moved to approve the Financial Report, and Director Tsuji seconded, and the Financial Report was approved (8-0).

Director Bossert exited the meeting at 11:19 a.m.

- **Item 6. 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.

Sea Dragon, the seawater to jet fuel project, will be here in the next couple of weeks. They are working on their environmental assessment.

The County has received a significant amount of funding, \$28 million, for a hydrogen maintenance, fueling, storage, production facility which will serve public transportation in

West Hawaii. We have been discussing with them a possible location up near Koyo USA.

Regarding the Microgrid project at the 55" pumpstation we are still awaiting approval from Underwriters Laboratory regarding the container housing the batteries. When we obtain that approval, expected shortly, we will submit for final approval.

Seawater rate analysis has been delayed pending the data from the 55" pumpstation microgrid.

Onshore EIS, we are in discussions with a potential contractor, and we anticipate that the contract will be fully executed next month.

- **Item 8. Announcements.**

Chair Miyashiro noted that our next meeting is scheduled for July 16, 2024, at 10:00 a.m.

- **Item 9. Adjournment.**

Chair Miyashiro adjourned the meeting at 11:24 a.m.

###

Item 3.

NELHA BOD Executive Session

Meeting Minutes

April 9, 2024

Handout distributed by AG John Cole

Item 4.

Public Testimony

No Handout

Item 5a.

Old Business

Seawater Quality Analysis Report
Presentation by Dr. Jim Wyban –
Discussion and Decision-Making.

No Handout

Item 6a.

Create a Permitted Action Group,
pursuant to HRS 92-2.5(b) for the
Purpose of Recruiting and Making a Recommendation
to the NELHA BOD for Hiring of the
NELHA Executive Director Position -
Discussion and Decision Making

No Handout

Item 7.

Financial Report

Approval and Decision Making

NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

Financial Report Summary

July 2023 through June 2024

FY 2024 Revenue vs. FY 2023 Revenue: (See Appendix A for Details)

- Total revenue is estimated at \$5.0M for 2024 fiscal year and this represents a decrease of \$400,000 over the same period last year. Of notice for FY24 are the following:
 - Overall seawater system revenue is down by \$250,000. This is mainly due to a drop in surface seawater revenue combined with lower electricity rates decreasing the electrical surcharge over the same period last year.
 - Overall lease rent is flat for fiscal year 2024. More specifically, there was an increase in Land Base Rent up approximately \$50,000 or 3 percent while Research Campus office rental revenue outside research campus rental combined were down by \$50,000.
 - Labor services are up a healthy \$50,000 or 75 percent over the same period last year.
 - Reimbursements for electric are down by \$180,000 or 30 percent and due to lower electrical costs, which peaked a year ago.
 - Interest Income/Investments is down by \$75,000 due to the income distribution from the venture fund last year.

FY 2024 Expenditure vs. FY 2023 Expenditure: (See Appendix B for details)

- Total estimated expenses for fiscal year 2024 were approximately \$5.0M, the same as last fiscal year. We continue to monitor expenditures very closely. Of note are the following:
 - Seawater system expenditures were down by \$550,000 with lower surcharge electrical rate as well as the new microgrid coming online last July. In addition, parts for R&M and services on a fee were lower.
 - Tenant utilities are flat with a decrease in electrical reimbursement offset by a like increase in freshwater reimbursements.
 - NELHA utilities are up by \$120,000 with accounting change showing costs of PPA only which will align with power consumption after power meter is corrected.
 - Beach Park Maintenance increased by \$15,000 with the renovation of the bathrooms and opening for public use.

Item 7. Financial Report Summary – July 16, 2024

- Administrative expenses are up by \$300,000 (20%) due to shifting of personnel, insurance premium bill increase of \$70,000, economic impact survey and purchase of new microcomputers.

Special Fund Account Summary (See Appendix C for details)

- All preliminary data is as June 30, 2024.
- Special fund balance is estimated at \$550,000 and down by \$350,000 for the year.

Arrears Report: (See Appendix D for details)

- As of June 30, 2024, the arrears are very low and totaled approximately \$55,000 of which Apparent accounts for 50 percent.

NELHA – July 16, 2024

APPENDIX A NELHA ESTIMATED REVENUES

July 1, 2023 to June 30, 2024

	Source Code	Cost Center	Annual Budget FY 24	July - June FY 23 (Actual)	July - June FY 24 (Estimated)	FY 24 vs. FY 23	Percent Change
Seawater System Revenue							
Deep Sea Water	1092	7000	1,750,000.00	1,751,527.06	1,490,359.63	(261,167.43)	-14.9%
Surface Sea Water	1092	7001		761,779.02	728,685.01	(33,094.01)	-4.3%
SW Electric Surcharge	1092	7002		637,535.01	536,924.96	(100,610.05)	-15.8%
Seawater Allocations	1092	7003		349,891.18	223,691.48	(126,199.70)	-36.1%
Seawater Vendors	1092	7004		1,391.85	-	(1,391.85)	-100.0%
		7005		930.00	1,058.18	128.18	13.8%
Host Park Land Lease Base Rent							
	257	1200	1,950,000.00	1,730,731.53	1,779,620.37	48,888.84	2.8%
Research Campus (Covered/Uncovered Space)							
	1508	1300	245,000.00	243,235.45	213,861.68	(29,373.77)	-12.1%
Research Campus (Office/Conference Rental)							
	1504	1400	355,000.00	355,655.71	335,386.80	(20,268.91)	-5.7%
Host Park Lease Percent Rent Payments							
	267	1500	100,000.00	25,768.93	37,529.04	11,760.11	45.6%
Host Park Royalty Lease Payments							
	1089	1600	30,000.00	29,544.62	29,336.77	(207.85)	-0.7%
Labor Services							
	1495	1000	70,000.00	65,272.36	114,732.00	49,459.64	75.8%
Electric Reimbursements							
	1096	2000	580,000.00	623,943.11	444,995.05	(178,948.06)	-28.7%
Freshwater Reimbursements							
	1097	2001	135,000.00	153,340.78	228,923.40	75,582.62	49.3%
Federal/County/UH/Special Projects							
EDA - Aquaculture (2nd Grant)	580 & 683	1100	425,000.00	8,622.97	(21,410.56)	(30,033.53)	-348.3%
Sandia Ntl Lab- Flow Battery	580	1105	200,000.00	26,257.93	8,697.08	(17,560.85)	-66.9%
DOE - Desal Project	580	1101	250,000.00	-	-	-	
H2 Project (HNEI)	683	1100	(25,000.00)	4,008.71	-	(4,008.71)	
				(24,817.52)	(30,107.64)	(5,290.12)	21.3%
Interest Income/Investments							
	0288 & 0340	0001	100,000.00	172,766.55	96,943.68	(75,822.87)	-43.9%
Misc Income							
	Various	0001	280,000.00	275,785.21	278,089.71	2,304.50	0.8%
TOTAL REVENUE							
	Various	Various	6,020,000.00	5,436,194.28	5,028,367.56	(407,826.72)	-7.5%

APPENDIX B - NELHA ESTIMATED EXPENDITURES

July 1, 2023 to June 30, 2024

Category	Object Code	Cost Center	Annual Budget FY 2024	July-June 2023 Actual	July - June 2024 Estimate - 12 months	FY 24 vs. FY 23	Percent Change
Personnel Services	2000	2000	2,000,000.00	1,926,304.53	2,141,512.52	215,207.99	11.2%
Seawater System	Various	0007	2,087,650.00	1,929,473.43	1,371,250.59	(558,222.84)	-28.9%
Personnel	2000		600,000.00	574,163.32	581,082.79	6,919.47	1.2%
Electric (75%)	5000		990,000.00	1,120,881.07	693,148.91	(427,732.16)	-38.2%
Freshwater (13%)	5200		7,000.00	8,044.24	5,644.16	(2,400.08)	-29.8%
R&M Building Supplies	3120		2,100.00	2,054.89	4,313.90	2,259.01	109.9%
R&M supplies (new clamps/VFD filters/Flygt)	3121		150,000.00	117,840.74	36,456.14	(81,384.60)	-69.1%
Motor vehicle oil/gas	3001		5,000.00	6,383.43	5,266.11	(57.32)	-0.9%
Motor vehicle supply/parts	3100		2,000.00	6,332.61	5,139.89	(1,192.72)	-18.8%
Other supplies-heavy equipment	3400		20,000.00	16,339.51	8,114.38	(8,225.13)	-50.3%
SCADA Software License (3 yr renewal)	3402		15,000.00	-	-		
Car Mileage	4100		50.00	36.30	(36.30)		
R&M machinery, & Equip-Special (heavy equipment)	5801		5,000.00	589.66	-	(589.66)	
R&M motor vehicles	5807		2,000.00	37.70	-	(37.70)	
Safety Supplies	8002		1,000.00	84.14	-	(84.14)	
Training	7201		2,000.00	-	-		
Machinery and other equipment	7001		218,000.00	-	2,563.29	2,563.29	
Telehandler	7001		100,000.00	-	-		
Plasma Cutter/ElectroFusion/HDPE Welder	7001		10,000.00	-	-		
Pump Station Docks	7001		20,000.00	-	-		
55' Pumphouse Cooling Upgrades	7001		50,000.00	-	-		
Misc. small equipment	7002		2,000.00	-	2,563.29	2,563.29	
Gator and Trailer	7002		30,000.00	-	-		
Services on a fee	7001		63,000.00	76,685.82	28,461.03	(48,224.79)	-62.9%
Install Pipe Holddowns Nearshore	7001		18,000.00	62,165.42	-	(62,165.42)	
Repair and Maintain Flygt pumps	7001		15,000.00	9,516.15	-	(9,516.15)	
Crane Operator Training	7001		25,000.00	-	-		
Water Quality Consultant	7001		15,000.00	-	-		
Miscellaneous services (Pipeline Removal)	7001		5,000.00	5,004.25	28,461.03	23,456.78	468.7%
Tenant Utilities (Reimbursable)	Various	0002	650,000.00	709,552.57	703,830.55	(5,722.02)	-0.8%
Electric	5000		500,000.00	540,261.78	470,034.70	(70,227.08)	-13.0%
Freshwater	5200		150,000.00	169,290.79	233,795.85	64,505.06	38.1%
NELHA Utilities	Various	0003	100,000.00	(23,069.22)	95,081.62	118,090.84	-513.2%
Electric	5000		80,000.00	(46,795.49)	70,804.12	117,599.61	-251.3%
Freshwater	5200		20,000.00	23,786.27	24,277.49	491.22	2.1%
HOIST Park Ground Maintenance and Security	Various	0004	308,500.00	302,194.59	357,279.49	55,084.90	18.2%
Personnel	2000		53,000.00	50,681.08	41,895.88	(8,785.20)	-17.3%
Security	7110		235,000.00	230,044.84	289,756.00	59,711.16	26.0%
Safety supplies	3002		5,000.00	4,200.63	3,781.60	(419.03)	-10.0%
Supplies and Svs on a fee	3420/7101		2,000.00	6,408.00	12,316.56	5,908.56	92.2%
Other Supplies/other supplies security	3427/3400		5,000.00	5,360.52	3,202.49	(2,158.03)	-40.3%
Other Rentals	5700		5,000.00	5,499.52	654.22	(4,845.30)	-88.1%
R&M Routine Grounds (Tree Trimming)	5806		3,500.00	-	5,672.73	5,672.73	
HOIST Park Environmental Monitoring	Various	0005	261,000.00	166,520.65	173,271.14	6,750.49	4.1%
Personnel	2000		110,000.00	102,247.85	125,578.94	23,331.09	22.8%
Supplies - CEMP	3421		50,000.00	44,485.20	38,220.12	(6,265.08)	-59.0%
Equipment	7001		80,000.00	-	890.76	890.76	
Services on a fee	7101		21,000.00	19,787.60	28,581.82	8,794.22	44.4%
Beach Park Maintenance	Various	0006	33,250.00	36,483.95	50,617.90	14,133.95	38.7%
Personnel	2000		25,000.00	25,880.02	37,335.13	11,355.06	43.8%
Janitorial Supplies (50%) & Other supplies	3000		1,500.00	4,952.69	4,242.23	(429.44)	-8.2%
R&M Supplies	3100		1,000.00	237.87	117.92	(119.15)	-50.3%
Electric	5000		750.00	824.83	1,085.28	260.45	31.6%
Freshwater	5200		5,000.00	4,590.29	7,657.32	3,067.03	66.8%
Services on a Fee	7101		-	-	-		
Administrative Expenses	Various	0001	1,683,000.00	1,397,970.05	1,690,878.29	292,908.24	21.0%
Personnel	2000		1,220,000.00	1,173,332.21	1,355,719.78	182,387.57	15.5%
Janitorial Supplies (50%)	3000		500.00	5,052.29	4,507.48	(544.81)	-10.8%

APPENDIX B - NELHA ESTIMATED EXPENDITURES

July 1, 2023 to June 30, 2024

Category	Object Code	Cost Center	Annual Budget FY 2024	July-June 2023 Actual	July - June 2024 Estimate - 12 months	FY 24 vs. FY 23	Percent Change
R&M- buildings	3120		25,000.00	26,639.32	22,705.29	(3,934.03)	-14.8%
R&M- Misc.	3121		4,314.13	4,314.13	235.10	(4,079.03)	-94.6%
Office Supplies	3200		4,500.00	(268.10)	10,705.39	10,973.49	-4093.1%
Other Supplies	3400		1,350.90	1,350.90	167.28	(1,183.62)	-87.6%
Computer prigns & software	3402		2,000.00	1,490.00	798.48	(691.52)	-46.4%
Dues & Subscriptions	3500		2,800.00	2,740.00	3,000.00	260.00	9.5%
Postage	3700		1,100.00	1,069.59	1,435.24	365.65	34.2%
Telephone	3800		15,000.00	12,091.81	14,971.60	2,879.79	23.8%
Printing/Binding	3900		1,300.00	1,281.60	3,002.37	1,720.77	134.3%
Car Mileage	4100/4101		1,300.00	1,274.39	459.65	(814.74)	-63.9%
Transportation - Intrastate	4200		1,500.00	2,825.93	3,449.44	623.51	22.1%
Substance, Intrastate	4300		1,500.00	1,531.04	3,047.80	1,516.76	99.1%
Substance, Intrastate (BOD)	4301		-	20.00	-	(20.00)	-100.0%
Transportation, out of state	4400		3,000.00	-	1,730.56	1,730.56	
Substance, out of state	4500		3,000.00	-	2,893.71	2,893.71	
Hire of passenger cars	4600		-	58.15	293.40	235.25	404.6%
Other Rentals	5700		-	(3,099.95)	-	3,099.95	-100.0%
Insurance Premium	5900		256,200.00	94,147.00	181,364.69	87,217.69	92.6%
Services on a fee	7101		31,690.25	31,690.25	35,156.79	3,466.54	10.9%
Misc Services on a Fee	7101		1,200.00	508.28	558.61	50.33	9.9%
Janitorial Services - Halle Iako	7101		35,000.00	31,181.97	34,598.18	(3,181.97)	
Economic Impact Survey Update	2900		35,000.00	-	-	-	
Federal Grant Writing Assistance	7101		25,000.00	-	-	-	
Makai Research Campus Expansion	7101		60,000.00	-	-	-	
Makako Bay Road Repair	7101		100,000.00	-	-	-	
Diagnostic lab testing	7101		10.25	10.25	-	(10.25)	
Marketing Promotional Services	7102		105,000.00	19,947.64	-	(19,947.64)	
Solid Waste Removal	7109		8,000.00	7,656.83	9,733.53	2,096.70	27.5%
Computer svcs, other than state	7120		-	6,201.86	3,497.86	(2,704.00)	-43.6%
Contracts other govern. Agencies	7160		-	-	1,570.91	1,570.91	
Outservice training & reg. fees	7201		1,500.00	1,684.70	1,135.87	(548.83)	-32.6%
Bank Service Fee	7211		1,000.00	904.15	744.88	(159.27)	-17.6%
Other exp. - trade show/promotional products	7230		-	379.10	631.88	252.78	66.7%
Local Area Network (LAN)-DBEDT/ASO	7242		-	1,323.59	2,585.99	1,262.40	95.4%
Office equipment & furnishings	7700/7701		2,000.00	2,122.52	3,883.40	1,760.88	83.0%
Purchase of micro/mini computers	7730		25,000.00	-	17,223.57	17,223.57	
Misc. Small Equipment	7700		300.00	218.85	359.07	140.22	64.1%
OHA Ceded Land Assessment - Quarterly Payments	9997	0008	385,000.00	394,420.49	397,240.54	62,820.05	18.8%
Central and Adm. Services Assessment - Quarterly Payments	7204	0009	160,000.00	157,730.87	190,384.10	32,653.23	20.7%
Central Svs	7204		115,000.00	113,136.60	136,124.08	22,987.48	20.3%
Administrative Svs	7204		45,000.00	44,594.27	54,260.02	9,665.75	21.7%
Misc. Expenses	Various	0010	1,600.00	1,500.60	1,866.40	365.80	24.4%
Supplies workshop	3422		800.00	-	1,272.95	1,272.95	
Freight & Delivery	3600		800.00	746.70	564.89	(181.81)	-24.3%
R&M Automobiles	5807		800.00	753.90	28.56	(725.34)	-96.2%
Special Projects/ Federal Grants	Various	0011	350,000.00	17,470.01	21,747.99	4,277.98	24.5%
Accelerator Accommodation - EDA grant funds	7700		30,000.00	-	6,084.00	6,084.00	
Mobile Lab for Aqua Accelerator (80% EDA Grant Funds)	7702		70,000.00	-	-	-	
Flow Battery Wrap Up (100% SNL Grant Funds)	7101		250,000.00	-	-	-	
DOE Desal Project - Supplies	3121		-	6,450.95	2,740.72	(3,710.23)	-57.5%
DOE Desal Project - HELCO Electric	5000		-	1,019.06	12,370.18	1,351.12	12.3%
TOTAL EXPENSES	Various	Various	6,020,000.00	5,030,307.99	5,053,448.62	23,140.63	0.5%

Appendix C
NATURAL ENERGY LAB OF HAWAII AUTHORITY
 Fiscal Year 2024

Special Fund - Account Summary
 as of June 30, 2024 (Estimated)

	Actual May 31, 2024	Estimated June 30, 2024
Beginning Fund Balance	0.00	0.00
Prior Year Cash Transfers	982,848.72	982,848.72
	982,848.72	982,848.72
Revenues	4,176,050.34	5,028,367.56
Total	5,158,899.06	6,011,216.28
Cash Expenditures	3,993,893.78	5,053,448.62
Encumbrances	245,173.88	399,952.81
Total	4,239,067.66	5,453,401.43
Special Fund Balance	919,831.40	557,814.85
Arrears	60,853.89	55,580.97
Total Estimated Special Fund Balance	980,685.29	613,395.82

Source: NELHA 12 month revenues and expenditures are estimates. All other data is actual.

Denotes estimate

Appendix D
NELHA ARREARS REPORT
31 days and over
Data as of June 30, 2024

CLIENT	NUMBER OF DAYS IN ARREARS			TOTAL	COMMENT
	31 - 60	61 - 90	90 and over		
Apparent	5,766.63	5,718.60	16,870.04	28,355.27	Lease termination letter sent.
Four Seasons Hualalai	2.97	2.94		5.91	
Integrated Offgrid	148.00			148.00	
Jamestown Point Whitney Venture	3,863.76			3,863.76	Current as of 7/9/24.
Keahole Center for Sustainability	0.53	52.56		53.09	
Legacy Reef Foundation	88.60	87.72	3,772.04	3,948.36	Preparing to send for collection.
Ocean Rider	17,799.00			17,799.00	Client agreed to payoff and become current in July 2024.
Woods Hole	56.17	616.50		672.67	
World Triathlon Corporation	56.78	56.22	621.91	734.91	
TOTAL	27,782.44	6,534.54	21,263.99	55,580.97	

Item 8.

Proposed Budget FY2025
Approval and Decision Making

NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

Summary – Proposed Budget FY 2025

Overall Summary:

- NELHA is currently managing a total of approximately \$16.0M in projects. Of this \$6.0M is Special Funds; \$4.0M is Federal Grants; and, \$6.0M in CIP projects. There are no General Fund appropriations for FY 2025.
- **Special Fund** – Revenue is projected at \$5.6 million and proposed expenditures are \$6.0 million. The Special Fund balance will decline significantly. A detailed summary of special fund revenue and expenditures is listed below and shown on Schedule 1, 2, and 3 which are attached.
- **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 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 \$6.0M, 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 also have an existing CIP funded contract (\$205,500) with Makai Ocean Engineering for the design and costings of strategies to secure or remove the pipelines.
 - There are two CIP funded projects currently under contract and include \$1.5M to update onshore 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.
 - In addition, we have two State CIP funded projects that are currently in the procurement process and include \$1.9M for seawater system upgrades and \$1.5M to conduct an offshore marine comprehensive Environmental Impact Statement (EIS).

FY2025 Proposed Revenue (See Schedule 1 for Details)

- Total estimated revenue for FY2025 is \$5.6M. This is an increase of almost \$600,000 or 11 percent over last fiscal year.
- 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.

Item 8. NELHA Fiscal Year 2025 Budget – July 16, 2024

- 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 increase by over \$200,000 with EDA funds for the 2nd aquaculture grant.

FY2025 Proposed Expenditures: (See Schedule 2 and 3 for details)

- Total expenditures for FY2024 were \$5.0M and are proposed to increase by 12 percent overall or \$650,000 in FY2025, mainly due to two items listed below.
- First, the State recently signed a Temporary Hazard Pay settlement agreement with HGEA and provides employees with either \$20,000 or \$10,000 for coming to work during the March 2020 to March 2022 period during the COVID-19 pandemic. UPW has not reached an agreement yet. However, we are estimating a one-time charge estimated at \$300,000 for FY2025 to cover the HGEA and UPW agreements. This expenditure puts a severe strain on our budget and will most likely reduce our special fund balance.
- We anticipate additional grant funds from EDA for the aquaculture accelerator and these are budgeted at \$200,000.
- A summary of the six new non-recurring projects totaling \$650,000 are highlighted and shaded in green on Schedule 2. These items are also shown separately on Schedule 3.
- Numerous items in the seawater system will be covered by the \$1.9M CIP appropriation and not special funds.
- A significant portion of NELHA annual expenditures are recurring day-to-day expenditures and budgeted based on last years projected expenditures.

NELHA – July 16, 2024

SCHEDULE 2 - NELHA PROJECTED EXPENDITURES

July 1, 2024 to June 30, 2025

Category	Object Code	Cost Center	Annual Budget FY 2024	Estimate - 12 months	Variance	Percent Difference	FY 2025 Forecast	Percent Change
Personnel Services	2000	2000	2,000,000.00	2,141,512.52	141,512.52	7.1%	2,000,000.00	-6.6%
Temporary Hazard Pay (THP) Settlement							300,000.00	
Seawater System	Various	0007	2,087,650.00	1,371,250.59	(716,399.41)	-34.3%	1,400,000.00	2.1%
Personnel	2000		600,000.00	581,082.79	(18,917.21)	-3.2%	600,000.00	3.3%
Electric (75%)	5000		990,000.00	693,148.91	(296,851.09)	-30.0%	700,000.00	1.0%
Freshwater (13%)	5200		7,000.00	5,644.16	(1,355.84)	-19.4%	5,000.00	-11.4%
R&M Building Supplies	3120		2,100.00	4,313.90	2,213.90	105.4%	2,500.00	-42.0%
R&M supplies (new repair clamps/VFD output filters/flygt k	3121		150,000.00	36,456.14	(113,543.86)	-75.7%	-	-
Motor vehicle oil/gas	3001		5,500.00	6,326.11	826.11	15.0%	6,000.00	-5.2%
Motor vehicle supply/parts	3100		7,000.00	5,139.89	(1,860.11)	-26.6%	5,000.00	-2.7%
Other supplies- heavy equipment	3400		20,000.00	8,114.38	(11,885.62)	-59.4%	10,000.00	23.2%
SCADA Software License (3 yr renewal)	3402		15,000.00	-	(15,000.00)	-	-	-
Car Mileage	4100		50.00	-	(50.00)	-	-	-
R&M machinery & Equip-Special (heavy equipment)	5801		5,000.00	-	(5,000.00)	-	1,000.00	-
R&M motor vehicles	5802		2,000.00	-	(2,000.00)	-	1,000.00	-
Safety Supplies	3002		1,000.00	-	(1,000.00)	-	1,000.00	-
Training	7201		2,000.00	-	(2,000.00)	-	1,000.00	-
Machinery and other equipment	7701		218,000.00	2,563.29	(215,436.71)	-98.8%	2,500.00	-2.5%
TeleHandler	7701		100,000.00	-	(100,000.00)	-	-	-
Plasma Cutter/ElectroFusion/HDPE Welder	7701		16,000.00	-	(16,000.00)	-	-	-
Pump Station Docks	7701		20,000.00	-	(20,000.00)	-	-	-
55" Pumphouse Cooling Upgrades	7701		50,000.00	-	(50,000.00)	-	-	-
Misc. small equipment	7702		2,000.00	2,563.29	563.29	28.2%	2,500.00	-2.5%
Gator and Trailer	7702		30,000.00	-	(30,000.00)	-	-	-
Services on a fee	7101		63,000.00	28,461.03	(34,538.97)	-54.8%	65,000.00	128.4%
Install Pipe Holddowns Nearshore	7101		-	-	-	-	65,000.00	-
Seawater Well Drilling/Pump Installation	7101		-	-	-	-	-	-
Repair and Maintain Flygt pumps	7101		18,000.00	-	(18,000.00)	-	-	-
Crane Operator Training	7101		15,000.00	-	(15,000.00)	-	-	-
Water Quality Consultant	7101		25,000.00	-	(25,000.00)	-	-	-
Miscellaneous services (Pipeline Removal)	7101		5,000.00	28,461.03	23,461.03	469.2%	-	-
Tenant Utilities (Reimbursable)	Various	0002	650,000.00	703,830.55	53,830.55	8.3%	710,000.00	0.9%
Electric	5000		500,000.00	470,034.70	(29,965.30)	-6.0%	475,000.00	1.1%
Freshwater	5200		150,000.00	233,795.85	83,795.85	55.9%	235,000.00	0.5%
NELHA Utilities	Various	0003	100,000.00	95,081.62	(4,918.38)	-4.9%	100,000.00	5.2%
Electric	5000		80,000.00	70,804.12	(9,195.88)	-11.5%	75,000.00	5.9%
Freshwater	5200		20,000.00	24,277.49	4,277.49	21.4%	25,000.00	3.0%
HOST Park Ground Maintenance and Security	Various	0004	308,500.00	357,279.49	48,779.49	15.8%	375,000.00	5.0%
Personnel	2000		53,000.00	41,895.88	(11,104.12)	-21.0%	45,000.00	7.4%
Security	7110		235,000.00	289,756.00	54,756.00	23.3%	300,000.00	3.5%
Safety supplies	3002		5,000.00	3,781.60	(1,218.40)	-24.4%	5,000.00	32.2%
Supplies and Sys on a fee	3420/7101		2,000.00	12,316.56	10,316.56	515.8%	15,000.00	21.8%
Other Supplies/other supplies security	3421/3400		5,000.00	3,202.49	(1,797.51)	-36.0%	3,000.00	-6.3%
Other Rentals	5700		5,000.00	654.22	(4,345.78)	-86.9%	1,000.00	52.9%
R&M Routine Grounds (Tree Trimming)	5806		3,500.00	5,672.73	2,172.73	62.1%	6,000.00	5.8%
HOST Park Environmental Monitoring	Various	0005	261,000.00	173,271.14	(87,728.86)	-33.6%	175,000.00	1.0%
Personnel	2000		110,000.00	125,578.94	15,578.94	14.2%	125,000.00	-0.5%
Supplies - CEMP	3421		50,000.00	18,220.12	(31,779.88)	-63.6%	25,000.00	37.2%
Equipment	7701		80,000.00	890.26	(79,109.74)	-98.9%	-	-
Services on a fee	7101		21,000.00	28,581.82	7,581.82	36.1%	25,000.00	-12.5%
Beach Park Maintenance	Various	0006	33,250.00	50,617.90	17,367.90	52.2%	55,000.00	8.7%
Personnel	2000		25,000.00	37,235.13	12,235.13	48.9%	40,000.00	7.4%

SCHEDULE 2 - NELHA PROJECTED EXPENDITURES

July 1, 2024 to June 30, 2025

Category	Object Code	Cost Center	Annual Budget FY 2024	Estimate - 12 months	Variance	Percent Difference	FY 2025 Forecast	Percent Change
Janitorial Supplies (50%) & Other supplies	3000		1,500.00	4,522.25	3,022.25	201.5%	5,000.00	10.6%
R&M Supplies	3100		1,000.00	117.92	(882.08)	-88.2%	1,000.00	748.1%
Electric	5000		750.00	1,085.28	335.28	44.7%	1,000.00	-7.9%
Freshwater	5200		5,000.00	7,657.32	2,657.32	53.1%	8,000.00	4.5%
Services on a Fee	7101							
Administrative Expenses	Various	0001	1,683,000.00	1,690,878.29	7,878.29	0.5%	1,710,000.00	1.1%
Personnel	2000		1,220,000.00	1,355,719.78	135,719.78	11.1%	1,350,000.00	-0.4%
Janitorial Supplies (50%)	3000		500.00	4,507.48	4,007.48	801.5%	5,000.00	10.9%
R&M -buildings	3120		25,000.00	22,705.29	(2,294.71)	-9.2%	24,000.00	5.7%
R&M- Misc.	3121		4,500.00	235.10	(4,264.90)	-94.8%	1,000.00	325.3%
Office Supplies	3200			10,705.39	10,705.39		10,000.00	-6.6%
Other Supplies	3400			167.28	167.28		1,000.00	497.8%
Computer prgms & software	3402		2,000.00	798.48	(1,201.52)	-60.1%	2,000.00	150.5%
Dues & Subscriptions	3500		2,800.00	3,000.00	200.00	7.1%	3,000.00	0.0%
Postage	3700		1,100.00	1,435.24	335.24	30.5%	1,500.00	4.5%
Telephone	3800		15,000.00	14,971.60	(28.40)	-0.2%	15,000.00	0.2%
Printing/Binding	3900		3,002.37	3,002.37			3,000.00	-0.1%
Car Mileage	4100/4101		1,300.00	459.65	(840.35)	-64.6%	1,000.00	117.6%
Transportation, Intrastate	4200		1,500.00	3,449.44	1,949.44	130.0%	3,500.00	1.5%
Subsistance, Intrastate	4300		1,500.00	3,047.80	1,547.80	103.2%	3,000.00	-1.6%
Subsistance, Intrastate (BOD)	4301							
Transportation, out of state	4400		3,000.00	1,730.56	(1,269.44)	-42.3%	2,000.00	15.6%
Subsistance, out of state	4500		3,000.00	2,893.71	(106.29)	-3.5%	3,000.00	3.7%
Hire of passenger cars	4600			293.40	293.40		1,000.00	240.8%
Other Rentals	5700							
Insurance Premium	5900			181,364.69	181,364.69		200,000.00	10.3%
Services on a fee	7101		256,200.00	35,156.79	(221,043.21)	-86.3%	61,000.00	73.5%
Misc Services on a Fee	7101		1,200.00	558.61	(641.39)	-53.4%	1,000.00	79.0%
Janitorial Services - Hale Iako	7101		35,000.00		(35,000.00)			
Economic Impact Survey Update	2900		35,000.00	34,598.18	(401.82)	-1.1%		
Federal Grant Writing Assistance	7101		25,000.00		(25,000.00)			
Makai Research Campus Expansion	7101		60,000.00		(60,000.00)			
Makako Bay Road Repair	7101		100,000.00		(100,000.00)			
50th Anniversary	7101						35,000.00	
ETS Network Migration	7101						25,000.00	
Diagnostic lab testing	7101							
Solid Waste Removal	7109		8,000.00	9,733.53	1,733.53	21.7%	10,000.00	2.7%
Computer Svs, other than state	7120			3,497.86	3,497.86			
Contracts other govern. Agencies	7160			1,570.91	1,570.91			
Outservice training & reg. fees	7201		1,500.00	1,135.87	(364.13)	-24.3%	1,500.00	32.1%
Bank Service Fee	7211		1,000.00	744.88	(255.12)	-25.5%	1,000.00	34.2%
Other exp., trade show/promotional products	7230			631.88	631.88		100.00	-84.2%
Local Area Network (LAN)-DBEDT/ASO	7242			2,585.99	2,585.99			
Office equipment & furnishings	7700/7701		2,000.00	3,883.40	1,883.40	94.2%	2,000.00	-48.5%
Purchase of micro/mini computers	7730		25,000.00	17,223.57	(7,776.43)	-31.1%	5,000.00	-71.0%
Misc. Small Equipment	7700		300.00	359.07	59.07	19.7%	400.00	11.4%
OHA Ceded Land Assessment - Quarterly Payments	9997	0008	385,000.00	397,240.54	12,240.54	3.2%	440,000.00	10.8%
Central and Adm. Services Assessment - Quarterly Payments	7204	0009	160,000.00	190,384.10	30,384.10	19.0%	203,000.00	6.6%
Central Svs	7204		115,000.00	136,124.08	21,124.08	18.4%	145,000.00	6.5%
Administrative Svs	7204		45,000.00	54,260.02	9,260.02	20.6%	58,000.00	6.9%
Misc. Expenses	Various	0010	1,600.00	1,866.40	266.40	16.7%	2,000.00	7.2%
Supplies workshop	3422			1,272.95	1,272.95		1,500.00	17.8%
Freight & Delivery	3600		800.00	564.89	(235.11)	-29.4%	400.00	-29.2%
R&M Automobiles	5807		800.00	28.56	(771.44)	-96.4%	100.00	250.1%

SCHEDULE 2 - NELHA PROJECTED EXPENDITURES
July 1, 2024 to June 30, 2025

Category	Object Code	Cost Center	Annual Budget FY 2024	Estimate - 12 months	Variance	Percent Difference	FY 2025 Forecast	Percent Change
Special Projects/ Federal Grants	Various	0011	350,000.00	21,747.99	(328,252.01)	-99.8%	200,000.00	819.6%
EDA Aquaculture grant funds	7700		30,000.00	6,637.09	(23,362.91)	-77.9%	200,000.00	2913.4%
Mobile Lab for Aqua Accelerator (80% EDA Grant Funds)	7702		70,000.00	-	(70,000.00)	-100.0%	-	-
Flow Battery Wrap Up (100% SNL Funds)	7101		250,000.00	-	(250,000.00)	-100.0%	-	-
DOE Desal Project - Supplies	3121		-	2,740.72	2,740.72	-	-	-100.0%
DOE Desal Project - HELCO Electric	5000		-	12,370.18	12,370.18	-	-	-100.0%
TOTAL EXPENSES	Various	Various	6,020,000.00	5,053,448.62	(966,551.38)	-16.1%	5,670,000.00	12.2%

SCHEDULE 1 - NELHA PROJECTED REVENUES
July 1, 2024 to June 30, 2025

	Source Code	Cost Center	Annual Budget FY 24	12 month Estimate	Variance from Budget	Percent Difference	FY 25 Forecast	Percent Change
Seawater System Revenue	1092	7000	1,750,000.00	1,490,359.63	(259,640.37)	-14.8%	1,500,000.00	0.6%
Host Park Land Lease Base Rent	257	1200	1,950,000.00	1,779,620.37	(170,379.63)	-8.7%	2,000,000.00	12.4%
Research Campus (Covered/Uncovered Space)	1508	1300	245,000.00	213,861.68	(31,138.32)	-12.7%	220,000.00	2.9%
Research Campus (Office/Conference Rental)	1504	1400	355,000.00	335,386.80	(19,613.20)	-5.5%	345,000.00	2.9%
Host Park Lease Percent Rent Payments	267	1500	100,000.00	37,529.04	(62,470.96)	-62.5%	65,000.00	73.2%
Host Park Royalty Lease Payments	1089	1600	30,000.00	29,336.77	(663.23)	-2.2%	30,000.00	2.3%
Labor Services	1495	1000	70,000.00	114,732.00	44,732.00	63.9%	120,000.00	4.6%
Electric Reimbursements	1096	2000	580,000.00	444,995.05	(135,004.95)	-23.3%	450,000.00	1.1%
Freshwater Reimbursements	1097	2001	135,000.00	228,923.40	93,923.40	69.6%	230,000.00	0.5%
Federal/County/UH/Special Projects	580 & 683	1100	425,000.00	(21,410.56)	(446,410.56)	-105.0%	225,000.00	-1150.9%
Puna Lava Insurance Claim	683	1102	-	-	-	-	-	-
EDA - Aquaculture (2nd Grant)	580	1105	200,000.00	8,697.08	200,000.00		200,000.00	
Sandia Ntl Lab- Flow Battery	580	1104	250,000.00	-	-		-	
DOE - Desal Project	580	1101	-	-	-		-	
UH - SWQ	683	1100	-	-	-	0.0%	50,000.00	
H2 Project (HINEI)	683	1100	(25,000.00)	(30,107.64)	(25,000.00)		(25,000.00)	
Interest Income/Investments	0288 & 0340	0001	100,000.00	96,943.68	(3,056.32)	-3.1%	100,000.00	3.2%
Misc Income	Various	0001	280,000.00	278,089.71	(1,910.29)	-0.7%	285,000.00	2.5%
TOTAL REVENUE	Various	Various	6,020,000.00	5,028,367.56	(991,632.44)	-16.5%	5,570,000.00	10.8%

**SCHEDULE 3 - NELHA SPECIAL FUND EXPENDITURES
NON-RECURRING ITEMS FY 2025**

Payroll (Cost Center - Various)			
Item	Description	Object Code	FY2025
1	Temporary Hazard Pay Settlement (HGEA and UPW estimate)	2000	300,000.00
Sub-Total			300,000.00

Administration - (Cost Center 001)			
Item	Description	Object Code	FY2025
1	NELHA 50th Year Recognition Event - October 2024	7101	35,000.00
2	Migration to ETS Domain	7101	25,000.00
Sub-Total			60,000.00

Water Quality Laboratory (Cost Center - 005)			
Item	Description	Object Code	FY2025
1	Seawater Quality Analysis (Phase II)	7101	25,000.00
Sub-Total			25,000.00

Seawater System - (Cost Center 007)			
Item	Description	Object Code	FY2025
1	Seawater Well Drill/Pump Installation	7101	65,000.00
Sub-Total			65,000.00

Special Projects/Federal Grants - (Cost Center 011)			
Item	Description	Object Code	FY2025
1	EDA grant – Aquaculture Accelerator	7101	200,000.00
Sub-Total			200,000.00

Grand Total - Non-Recurring Adds			650,000.00
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9-Jul-24
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Item 9.

Executive Director's
Informational Status Report

NELHA MAJOR GOALS AND KEY PROJECTS TIMELINE SUMMARY
FISCAL YEAR 2024

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

NELHA MAJOR GOALS AND KEY PROJECTS TIMELINE SUMMARY
FISCAL YEAR 2025

MAJOR OBJECTIVES AND KEY PROJECTS		STATUS	2024						2025					
			JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
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	▶											
	WATER QUALITY/NEW SEAWATER WELL - RESEARCH CAMPUS	NEW	▶											
	PLANNING/DESIGN OF OFFSHORE DEEP WATER PIPE REMOVAL	ONGOING	▶											
	SCADA SYSTEM DEVELOPMENT INCL UPGRADE INSTRUMENTS IN WQL	ONGOING	▶											
	UPGRADE MAKAI RESEARCH CAMPUS/FARM COMPUND MICROGRID	NEW	▶											
	SEAWATER SYSTEM RATE ANALYSIS	NEW	▶											
	REVIEW/UPDATE HOST PARK ENERGY MICROGRID ANALYSIS W/TOU PARAMETERS/AI	NEW	▶											
Roads	SECURE FUNDING FOR NEW ROADS	ONGOING	▶											
Freshwater	WATER WELL DRILLING PERMIT - COMMUNITY OUTREACH/CONSENSUS	ONGOING	▶											
	OFFSHORE FRESHWATER SURVEY	ONGOING	▶											
Collaboration and Community	COMMUNITY OUTREACH/CULTURAL HUI Pā Pā'aiea Hui	ONGOING	▶											
	UPDATE HOST PARK ONSHORE MASTER PLAN AND EIS	ONGOING	▶											
	OFFSHORE MARINE RESEARCH CORRIDOR EIS	NEW	▶											
	WORKFORCE DEVELOPMENT	ONGOING	▶											
	COORDINATE WITH GOVERNORS ADVISORY COMMITTEE - MARINE AFFAIRS	NEW	▶											
	2025 LEGISLATURE	ONGOING	▶											
Aquaculture	MANAGE AQUACULTURE ACCELERATOR OPERATIONS CONTRACT	ONGOING	▶											
	MONITOR AQUACULTURE VENTURE FUND DEVELOPMENT - HATCH I	ONGOING	▶											
Resilience	STRATEGY FOR NEW ACCELERATORS IN OCEAN CONSERVATION AND TECHNOLOGY	NEW	▶											
	APPLY FOR FUNDING FOR OCEAN RESILIENCE ACCELERATOR	NEW	▶											
Incubator Space	MAUKA RESEARCH CAMPUS CONCEPT AND UPGRADES	ONGOING	▶											

Item 10.
Announcements

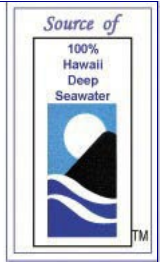
a. Scheduled Meeting dates for
August 2024 through June 30, 2025.
(Note: Meeting dates are scheduled for the
third Tuesday of odd numbered months.)

b. Date of next regularly scheduled
NELHA Board of Directors meeting is
Tuesday, September 17, 2024, at 10:00 am.



NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Attached Agency of the Department of Business, Economic Development & Tourism, State of Hawaii



NELHA BOARD OF DIRECTORS

SCHEDULED MEETING DATES FOR THE PERIOD

August 2024 – June 2025

September 17, 2024

November 19, 2024

January 21, 2024

March 18, 2024

May 20, 2024

BOARD MEETING NOTES:

- 1) NELHA Board meetings in **Kona** normally begin at **10:00 a.m.** and are held in the NELHA OceanView Conference Room in Hale Iako at Keahole Point, Kailua-Kona, Hawaii (on the island of Hawaii, also known as “the Big Island”) and via Zoom. They are normally held the third Tuesday of every odd numbered month.
- 2) Board Meetings are open to the public in compliance with Sunshine Laws, however, a non-public Executive Session may be called during a meeting for the Board to receive information that is proprietary to a particular enterprise and/or to consult with their attorney pursuant to HRS Sections 92-5(a) and/or 227D-6.
- 3) Board meeting dates, times and locations are **subject to change**. Please call (808) 327-9585 extension 221 **one week ahead** of the meeting date to confirm date, time, and location.

NOTE: If you need an auxiliary aid/service or other accommodation due to a disability, contact Ms. Faustine Edge at 808-327-9585 ext. 221 or faustine.x.edge@hawaii.gov as soon as possible, preferably three (3) working days prior to the meeting so arrangements can be made. If a response is received three (3) working days or less before the meeting, we will try to obtain the auxiliary aid/service or accommodation, but we cannot guarantee that the request will be fulfilled. Upon request, this notice is available in alternate formats such as large print, Braille, or electronic copy.

Item 11.

Adjournment