



NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

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



Draft

**BOARD OF DIRECTORS MEETING MINUTES
Natural Energy Laboratory of Hawaii Authority
January 21, 2020
10:00 a.m.**

**An Interactive Conference Technology Meeting was held between
the following two locations:**

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

and

**County of Hawaii
Research and Development Conference Room
25 Aupuni Street, Suite 1301
Hilo, Hawaii 96720**

BOD Members Present:

	Site
Linda Rosehill (Gov. Appointee - Chair)	Kona
William Mielcke (Gov Appointee – Vice-Chair)	Kona
Dr. Vassilis Syrmos (UH)	Kona
Dr. Gerry Cysewski (Tenant Representative)	Kona
Alan Hilton (RAC-Chair)	Kona
Diane Ley (County of Hawaii)	Hilo
Neil Sims (Tenant Representative)	Kona
Dr. Philip Bossert (RAC- Secretary)	Kona

BOD Members Excused:

Cyd Miyashiro (Gov. Appointee)	N/A
Randall Tanaka (DBEDT)	N/A
Robert Masuda (DLNR)	N/A

NELHA Staff and Guests Present:

	Site
Greg Barbour (NELHA)	Kona
Laurence Sombardier (NELHA)	Kona
Jan War (NELHA)	Kona
Dr. Alexander Leonard (NELHA)	Kona
Keith Olson (NELHA)	Kona
Daniel Jacob (Deputy AG)	Kona
Alexia Akbay (Symbrosia)	Kona
Simona Augyte (Symbrosia)	Kona
Kirk Muller (Symbrosia)	Kona
John Wiltshire	Kona

(rest of this page left intentionally blank)

1. Call to Order.

The meeting was called to order at 10:10 a.m. by Chair Rosehill.

2. Approval November 14, 2019 NELHA Board of Directors' Meeting Minutes.

Chair Rosehill entertained a motion to approve the November 14, 2019 Board of Director's Meeting Minutes. Director Cysewski made the motion, which was seconded by Director Mielcke. A vote was taken to approve the minutes and approved unanimously. There were no corrections.

3. Approval October 3, 2019 NELHA Board of Directors' Executive Session Minutes. **

A motion was made by Chair Rosehill to go into Executive Session to approve the October 3, 2019 Executive Session Meeting Minutes. The motion was made by Director Mielcke and seconded by Director Bossert. Upon reconvening it was announced that the Executive Session Meeting Minutes were approved with no corrections.

At this time audience and board members in the room introduced themselves.

4. Financial Report: Approval and Decision Making.

Executive Director (ED) Barbour presented the NELHA financial revenue report to date.

The report is for the first six months of Fiscal Year 2020. ED Barbour announced that there appeared to be a delay on deposits into the state accounting system by DAGS over the holidays. Based on our internal records, approximately \$210,000 in deposits were not recorded and available in time for this report. As such, the revenue numbers and the revenue chart presented to do not accurately portray activity in the first six months of FY19 and FY20.

FY 2020 Revenue vs. FY 2019 Revenue:

Total revenue was \$2.4M for the first half of this fiscal year and this represents a decrease of 1 percent for the same period last year. As shown on the chart in the Board packet a noticeable downturn occurred in December. As noted earlier there were no deposits posted to the State accounting system in late December. We deposited almost \$200,000 into our bank account during this period. If these funds are included revenue would be up approximately 7 percent. Due to the anomaly, ED Barbour moved on to report NELHA expenditures for the first half of FY20.

FY 2020 Expenditure vs. FY 2019 Expenditure:

Total expenses for the first half of this fiscal year were \$2.4M or \$100,000 (5%) higher as compared to last fiscal year. We continue to very closely monitor expenditures. Much of the increase is attributable to EDA grant revenue received and paid to Hatch Inc. for the operation of the aquaculture accelerator. Also, of note are the following:

- Seawater system expenditures are down 11 percent (\$100,000) and much of this is due to decreased electrical costs. This is primarily due to NELHA's Purchase Power Agreement (PPA) for the new solar power panels (PV) in the Research Campus and the vendor has not yet billed NELHA for charges incurred in November or December.
- Tenant Utilities expenditures increased slightly by 3 percent; electricity expenditures are up 8 percent (not affected by the PPA) and a decrease of 30 percent or \$10,000 for freshwater, which was due to lower use and billing error.
- NELHA Utilities expenditures are down significantly (90 percent) with the new PV costs showing up now and a savings of \$65,000 for electrical. This is a little bit of an anomaly as the vendor has not billed us for the PPA costs in November and December.
- Ground maintenance and security expenditures show an increase of over \$40,000 due to a timing issue only regarding payment cycle as the security contract in which the cost is the same as last year.
- Environmental Monitoring costs decreased by \$15,000, mainly due to allocation of personnel costs amongst other categories.
- Beach Park maintenance shows modest increase of \$4,000 due to additional personnel costs for repair and maintenance. This is relatively flat compared to FY19 expenditures in this category.
- Administrative costs are up 11% or \$75,000 as compared to the same period last year. Mainly due mainly due to allocation of personnel costs amongst other categories and filling of previously vacant positions (\$55,000).
- OHA costs are up by \$30,000 or 27 percent with increased rent revenue.
- Special Projects/Federal grants increased by over \$130,000 after NELHA taking over the EDA grant from HSDC and payments for the desalination project.

Special Fund (SF) Account Summary

- Special fund balance is \$350,000 which is down slightly from the beginning of the year. However, as noted earlier this figure does not include the \$200,000 late posting. If those funds were included the fund balance would be approximately \$550,000.
- Current arrears are \$115,000 and down significantly in the past several months.
- If arrears are collected this will bring the Special Fund Balance close to \$650,000.

Customer Revenue Report:

- Total revenue, for this time period is down 1 percent or \$30,000. As noted earlier all numbers are skewed without the \$200,000 December deposit included.

Arrears Report:

- As of December 31, 2019, the arrears totaled approximately \$113,000.
- Destiny Deep Sea Water makes up a significant amount of the arrears. They continue to make monthly payments of around \$6,500, although have been unable to make their account current. They are reviewing alternative business plans and the building is for sale.
- Mana Innovations is in arrears by about \$1,500. They gave us a check for partial payment, although the check bounced. They have been given a 10-day notice of eviction. We do have a rent deposit.
- Mera Pharmaceuticals is also in arrears and is trying to sell the company. They have been in arrears before and up to know have always managed to bring themselves current.
- Ocean Rider continues to make additional payments on their arrears and is catching up.

Chair Rosehill entertained a motion to approve the financial report. Director Mielcke made the motion to do so, which was seconded by Director Cysewski. A vote was taken to approve the Financial Report and approved unanimously.

5. New Business

5a. Discussion and Decision-Making regarding Approval in Concept for a 6-acre Commercial Macroalgae Production Facility lease and Final Approval for 2-acre Short Term Intermediate Development Project, both to Symbrosia Inc.

NELHA Deputy Director (DD) Laurence Sombardier presented information concerning Symbrosia Inc. (<https://www.symbrosiasolutions.com/>), a new aquaculture startup company established in 2018. The company was one of the thirteen companies selected by HATCH for their first cohort in fall 2019. They completed the fall program and stayed on after the program ended in NELHA's research campus to continue to utilize HATCH facilities. Symbrosia currently utilizes a room in the research campus laboratory and approximately 1,500 square feet of outdoor space next to the HATCH building and are actively growing macroalgae.

Symbrosia aims to cultivate a local species of red macroalgae (*Asparagopsis taxiformis*, locally known as limu kohu) at scale to produce a livestock feed additive which has health benefits for the animals as well as potentially reduces up to 80% of the methane emissions. Symbrosia has cultivated and demonstrated the benefits of their product at small scale and now need to develop the technology to produce at large scale. Their goals include optimizing growth, developing a low temperature,

partnering with Hawaii cattle farms to demonstrate efficacy of the additive and initially producing supplement for 4,000 dairy cows.

Symbrosia is working with a local species which has previously been cultivated at NELHA. Therefore, compliance with Hawaii Department of Agriculture requirements is expected to be straightforward.

Symbrosia's proposal requests approval in concept to locate on 6 acres previously leased by Savers Holdings. This lot offers several benefits. The lot is graded thus reducing starting capital costs. It is also located next Moana Technologies, a SPF shrimp broodstock production facility. Symbrosia would like to eventually explore the benefits of utilizing the outflow from Moana's shrimp tanks to provide nutrients for their seaweed tanks.

The current NELHA biosecurity program provides for the transport of effluent across TMKs in special cases. In this case the two projects concern unrelated species and NELHA staff will take a closer look at the implications from a biosecurity perspective as well as a liability perspective before Symbrosia submits a final business plan. NELHA staff has also reached out to Moana Technologies who would be the only immediate neighbor and Moana Technologies has no major concerns.

Symbrosia has a varied and strong team which is described in the preliminary proposal. Their ideas have won innovation prizes and the company has successfully completed two accelerator programs.

Symbrosia's is a new start-up and their ability to raise sufficient capital to develop the 6-acre commercial facility was closely reviewed. Symbrosia listed 5 sources of funding amounting to close to \$1.4M and \$216,000 has already been received. They hope to raise \$4M to get the facility fully built out and operating.

Other areas in the proposal that will need further refinement before a staff will bring a long-term lease commitment to the BOD include: 1) implementation timeline; 2) discharge mechanism; and, 3) capital cost estimates.

There is currently no discharge infrastructure on the 6 acres and the costs to develop the discharge infrastructure. Costs for injection wells could add a significant cost for the project. In addition, a realistic timeline for obtaining all permits from the County and State are unclear at this time.

Considering the cost and timing issues, it seems staff is proposing an intermediate steppingstone and provide Symbrosia with approximately 2 acres and some indoor space for lab work and office at the old HDMI facility for 2 to 5 years under a short-

term rental agreement. This will allow the company to continue making progress and prepare for a longer 30-year commercial project. Except for surface sea water, the HDMI facility is turnkey and ready to go.

This project is very much in line with NELHA's mission and is exactly what was hoped for when establishing the aquaculture accelerator at NELHA to produce a pipeline of startups focusing on technologies with global impact and possible expansion into the HOST Park. A short-term agreement will hold the project over until a longer-term project can be carefully planned. The boiler plate rental agreement will be used as a basis for this project. The agreement will include standard productive base rent (which will be on the order of \$500/acre/month) and a 2.5% percent rent clause.

Many seem to think that seaweed additive products for cattle feed have a promising future including various accelerators and investors, particularly in places such as California where regulations are already in place to reduce dairy and livestock methane emissions. The HOST Park location is ideally suited to develop the technology for growing seaweeds even if it might not be the best large scale grow out location (primarily due to cost of doing business in Hawaii).

Staff recommends that the NELHA Board grant approval in concept to Symbrosia's request for a 6-acre commercial project. Meanwhile, staff also recommends a final approval for a short term 2-acre project in at the former HDMI site as a steppingstone to prepare for the larger project. This provides flexibility for Symbrosia to move forward depending on final amount of funds raised. If Symbrosia decides to forego the short-term project, they will need to present a final business plan including final sublease terms to Board for a final approval before work could commence.

Chair Rosehill entertained a motion to consider the 6 acre approval in concept and the 2-acre short term intermediate development project agreement. The motion was made by Director Hilton and seconded by Director Mielcke. A vote was taken on the motion and approved unanimously.

Director Hilton presented the Research Advisory Committee's (RAC) report. The RAC was universally positive about the review of the approval in concept for the 2-acre intermediate project agreement. There was some initial concern about the pace of the project development concerning pulling together finances and permits, although the intermediate approach as a "steppingstone" alleviates this concern and improves the prospects of success. There were some concerns about the wider, technical aspects of this project. These were namely related to the use of shrimp

production effluent from Moana Technology Inc. for algal growth once the project moves to the former Savers Holding Co. site, adjacent to Moana. The RAC also commented on the objective to increase of daily growth rates of the seaweed by 10% and wondered what the constraints that there may be to achieve this. There was a comment on the use of bromoform, which is a chemical and naturally occurring compound within the seaweed. Apparently, the synthetic form of this compound is not approved for human consumption by the FDA, as it can be classified as a possible carcinogen. Although, the natural occurrence of bromoform is present in many types of foods and has been consumed by humans for a long time with no apparent detrimental effects.

At this time Ms. Alexia Akbay, CEO of Symbrosia gave a short slide show presentation of the company's background and project objectives at NELHA. Three other Symbrosia staff were then introduced and recognized. The project initially started at Yale University and was selected as one of HATCH's cohorts for 2019. They have been operating at NELHA for the past four months.

The primary objective of Symbrosia is to commercially culture *Asparagopsis taxiformis* (Limu Kohu) as a feed supplement for dairy and beef cattle. They are currently conducting research within the small area set aside in the NELHA Research Campus for HATCH projects. It has been recognized that feeding small amounts of this seaweed, when fed to cattle substantially reduces the amount of methane produced by cows. Symbrosia has been working in collaboration with Cyanotech to use equipment at the former Cellana site to test the composition of the seaweed they are growing at NELHA. The seaweed will be dried using the heat from the sun in Kona, turned into a powder, sent to farmers on the mainland and then added as a feed supplement into the ration of feed fed to cattle.

Ms. Akbay went on to say that Symbrosia is now striving to increase their production up to a pre-commercial scale and develop better techniques for drying and processing the seaweed.

Concerning the effluent matter in collaboration with Moana Technology Inc., Ms. Akbay indicated that Symbrosia could utilize effluent from many other tenants in the Park. For example, they have started doing lab studies with samples of effluent from Shrimp Improvement Systems. Symbrosia is also working with other researchers who are conducting similar research. They are aware of NELHA's biosecurity concerns relating to reuse of effluent.

Director Sims commended the whole Symbrosia team for their efforts and indicated that one of the main drivers behind this undertaking is the premium that farmers in

places like California and Europe will have to pay in the future for greenhouse mandates that will be forced upon them to reduce methane discharges. There is already a great demand in the United Kingdom for this seaweed. Director Sims asked Ms. Akbay if she anticipated a problem with first setting up a temporary facility at one site and then having to move the infrastructure to the permanent site. She indicated that they are aware of this and do not see it as a problem. In fact, Symbrosia may be developing better production methods than the prototypes at the first site for the permanent site.

Chair Rosehill asked what volume of seaweed mix would need to be added to the feed to produce the desired effect. Ms. Akbay indicated that per ton of feed, 0.05% of seaweed extract would need to be added to achieve this objective.

ED Barbour asked Ms. Akbay if USDA approval would be obtained within a year. Ms. Akbay indicated that instead of organic certification that there are lower level USDA approvals that could be initially achieved in this timeframe.

Director Ley asked about the reference to providing product to test on up to 4,000 cattle and asked where this would take place. Ms. Akbay indicated this was in reference to working on the mainland. They have also begun consulting with local companies to develop a local product.

Director Ley went on to express her concern about sharing effluent between sites and assumed that permits from DOA and others may be required. Director Ley also indicated the County's concern about using surplus containers as offices and other purposed on the site(s). There are regulations for the use of containers.

Chair Rosehill indicated that there is a motion on the table to approve the 2-acre parcel lease that has been moved and seconded and asked for a vote. The vote was unanimous, although due to a potential conflict of interest, Director Sims asked to be recused. Director Cysewski also asked to be recused since approval of the lease involves rates. NELHA staff Sombardier indicated that the proposed lease rate is completely standard.

Due to the two Director vote recusals, a quorum of board members no longer exists. AG Jacobs suggested that the original vote be bifurcated, and a separate motion and vote be taken to approve the 2-acre lease without voting on the rental lease rate.

Chair Rosehill entertained a motion to approve the lease for the 2-acre site without establishing a rental rate. Director Hilton made the motion, which was

seconded by Director Mielcke. A vote was taken, and the motion carried unanimously.

Chair Rosehill next entertained a motion to approve in-concept the 6-acre site for a Commercial Macroalgae Production Facility. Director Hilton made the motion. Director Mielcke seconded the motion. Director Sims recused himself from voting. A vote was taken, and the motion passed unanimously, with one recusal.

There was a discussion regarding as to whether a vote could have been taken concerning rental rate for the 2-acre lease site. ED Barbour indicated it is likely that we will have a special board meeting in a few weeks for another project. It was suggested that the lease rental matter concerning the 2-acre site for Symbrosia be included in the agenda at this special board meeting. AG Jacobs noted in that case this item could easily be addressed at the next board meeting.

5b. Discussion and Decision-Making regarding turning the 4.5-acre property previously leased to Hawaii Deep Marine Inc. into a shared business facility.

DD Sombardier presented an update of the history of the HDMI facility and the prospects of either selling the facility or turning it into a small business park or aquaculture incubator. Should the HATCH program continue to be successful, there will be a pipeline of companies such as Symbrosia Inc. that are moving very rapidly and will need a steppingstone location when it is time to move out of HATCH Research Campus locations.

NELHA has several prospects for a business park at this location, including Symbrosia, Kanaloa Octopus Farm and others. Staff believes it can reach 75% to 80% occupancy within 4 months. This will provide revenue from the facility that has been idle for close to three years, while providing a needed solution for companies that need a steppingstone out of the Research Campus.

The facility would be managed by NELHA staff and offer separate short-term leases for the various occupants. NELHA would maintain the building and charge rates that are the same as its published rates for other office, warehouse and land space.

Staff recommends that the NELHA Board approve the concept of turning the 4.5-acre facility previously leased to Hawaii Deep Maine Inc. into a shared business park complex. It is expected that Kanaloa Octopus Farm would then be willing to enter into a short-term lease arrangement on a smaller footprint rather than to lease the entire facility by themselves. Other immediate occupants would include Symbrosia

and the UH Infrasound Laboratory, which has been using the warehouse for storage and experiments. Other clients are expected to join soon, and their projects will be brought to the Board once proposals are received.

ED Barbour went on to indicate that the existing NELHA Research Campus is nearly fully occupied and as such, more space will be needed soon to accommodate additional small projects. NELHA has considered turning the former 6-acre Savers Holding Company site into a small business compound and lobbied for CIP funding to develop the needed infrastructure. This funding was not obtained thus turning the former 4.5 HDMI site into a business compound like the NELHA Research Campus makes a lot of business sense.

Chair Rosehill entertained a motion to consider the staff recommendation to turn the former 4.5-acre HDMI site into a shared business facility. Director Sims made the motion, which was seconded by Director Mielcke. A vote was taken and the motion pass unanimously.

During further discussions, Director Sims asked what the plan was to bring in warm, surface seawater to the facility. Director Hilton emphasized that a project such as Symbrosia will also need a surface seawater supply for their 2-acre site and would be likely to only install what they needed, which might not be enough for other tenants such as Kanaloa Octopus Farm. NELHA DD Sombardier indicated that the current concept is for Symbrosia and Kanaloa to cost share to development cost of bringing warm seawater to the property. NELHA staff Jan War mentioned that preliminary estimates indicate that \$50,000 would be needed to bring warm seawater to the facility and up to a 12" pipeline would be installed. There will also be small costs associated with bringing the air conditioning system and utility systems back online. A 10" deep seawater line is already plumbed into the facility.

Director Sims mentioned that being at a higher elevation, the pumping costs to deliver seawater to the site would be higher. NELHA DD Sombardier mentioned that NELHA is currently reviewing seawater rates at the higher elevations.

Chair Rosehill asked for a vote to approve the motion. The vote was unanimous and the motion to create the former 6-acre HDMI site into a shared business facility was approved.

Chair Rosehill went on to indicate that if NELHA is filling up and despite not receiving CIP funds to create additional small business parts within HOST Park,

NELHA should continue to request additional funds for this purpose every year. ED Barbour mentioned that when NELHA receives the funds from FEMA for the property and infrastructure lost at the Puna site, these funds would be used to replace this infrastructure at the Kona facility. Chair Rosehill agreed, although noted that if NELHA received separate CIP funds, the FEMA funds would be in addition to this and would allow NELHA to put in even more improvements to increase its development capacity.

6. High Technology Development Corporation: Information Status Report

Chair Rosehill serves on the HTDC board and presented the status report. It was indicated that HTDC has gone through a one-year search for an Executive Director. At its last meeting, the HTDC board voted to defer hiring an ED. A new HTDC board will be coming on in the first or second quarter of 2020 and it was recognized that the new board should have a say of who will be hired to be the new ED.

A short break was taken at this time (11:23 a.m.). Director Ley excused herself from the meeting at this time. The meeting resumed at 11:35 a.m.

7. Executive Director's Informational Status Report of Ongoing Projects

NELHA ED Barbour mentioned that the Mats4LLC is requesting an amendment to their lease. The fueling station portion of Mats 4's lease will be funded by Texaco. The typical arrangement involves the petroleum company (Texaco) paying for the fueling station infrastructure (pumps, underground tanks, etc.). Mats4 will purchase fuel from Texaco for 15 years. The agreement includes a clause that provides Texaco first right of refusal to lease the property if Mats4 LLC discontinues operations.

ED Barbour went on to present his status report. Key points of this report include:

- The seawater system continues to operate flawlessly.
- Of the \$4.9M that NELHA received in reimbursable GOB bonds, \$2M has been committed thus far.
- The PPA agreement to create a microgrid project for 600kw of PV and an 800kwh battery has been executed. NELHA did receive a protest from one of the bidders and NELHA responded that the protest is denied. The bidder did not refute NELHA's decision to deny and the bid protest has been settled. For this project, NELHA will invest \$1.85m in this project and receive free power

for the life of the system. This project will be developed adjacent to the NELHA 55" pump station.

- In addition to the use of the GOB bond funds for the microgrid project, NELHA is requesting the release of \$800k to upgrade the electrical system within the Research Campus (\$300K), potentially for construction management of the microgrid project, for spare parts for the seawater system, and for installing a 12" deep seawater pipeline to the area of HOST Park near the corner of Kaiminani Drive and Queen Kaahumanu which is currently not served. Half of the proposed 12" DSW pipeline would be surplus pipe obtained from the removal of NELHA's original 12" DSW pipeline offshore.
- The Mats4 LLC continues to make progress with the County regarding their planning approval and building permit process.
- The deep seawater pipeline removal project is moving forward. NELHA has selected a contractor and is having the draft contract reviewed by AG Jacobs. The first phase of the project (\$250K) will survey and map the six former Ocean Farms of Hawaii pipelines with a remotely operated vehicle (ROV). The second phase of the project (\$250K), which is yet to be bid, will determine a design and method for either removing the pipelines and/or abandoning them in place.
- The installation of hold down hardware to secure the shallow end of three of the abandoned pipelines has been ordered. This hardware will be installed in late Spring or early summer of the current fiscal year. The purpose of this maintenance project will be to ensure that the shallow end of the three pipelines are securely fastened to the seafloor to prevent them from moving away into deeper water.
- The Regional Seawater Air Conditioning System project is moving forward. NELHA is currently working with a contractor to refine the scope of work and finalize the cost.
- The desalination project is moving forward at the former SOPOGY site. A request for a three-month extension has been submitted to DOE for the first year's budget period. This would take the project funding to the end of April 2020. The main delays are on the part of the subcontractor. NELHA Staff Alex Leonard will be meeting with DOE in the next few months to authorized phase II of this project. NELHA staff made significant progress in efforts to restore the single axis tracking panels to their original working condition. Cyanotech has been conducting algae growth trials with various concentrations of the polymer that will be used in the process and is confident that a delivered concentration of 5 ppm will be acceptable. NELHA staff Alex Leonard mentioned that about 1/3 of the CSP panels are now moving as programmed and we know how to make the other panels move. Many of the circuit boards that control the array require reconditioning and repairs. Much of the control

and fields wiring also need to be replaced. The objective is to get all the panels and systems operating in the next few months.

- ED Barbour summarized a report received from HATCH that concludes the success of their first round of cohorts. The 2019 accelerator program was a huge success. All indications are that the first round was extremely encouraging and NELHA has two new potential tenants for NELHA and possibly a third. HATCH will announce the exact dates for the 2020 program in February and open the application process for new companies at the same time. They will start the second round of applications a little earlier this year – around June.
- DD Sombardier gave a brief recap of NELHA's involvement in the Aquaculture America 2020 conference in Honolulu. NELHA will be highlighted in a separate special session on Wednesday and use the opportunity of present the success stories of several tenants and the HATCH prospects. NELHA will also have a booth at the trade show and share this with HATCH to promote the accelerator and market the Kona facility. Tours will be offered by FON and NELHA after the conference. NELHA will also be hosting a special bivalve biosecurity workshop in Kona on the Friday, February 14th
- Concerning the water supply development, we are presently in a holding pattern working with DBEDT Director Mike McCartney and Director Masuda regarding the Ota well being developed with HHFDC. NELHA did request \$500,000 for a non-potable water well, which is in the Governor's budget. ED Barbour has presented testimony before both financial committees and discussion with key legislatures, who have all been very positive about the prospects of this project. Water is expected to be less expensive than potable water purchased from the Department of Water Supply.
- The robotic competition that is scheduled to take place at NELHA has been delayed until next summer.
- NELHA has reached an agreement in principle with the State's insurance company to provide \$1M as an insurance claim for loss of the buildings at the Puna facility and the secondary claim from the State's insurers will provide up to \$2M. We are expecting to additional funds from FEMA. This would make for a \$6.4M fund to replace the buildings at the Kona facility.
- Director Sims asked for an update concerning the development of the Ocean Centerpiece Economic Driver development. ED Barbour indicated that funds to hire a consultant to start the planning process for this development would only be available if NELHA sells the building at the former HDMI facility. Director Hilton asked inquired as to the estimated cost for this initial step and ED Barbour that could be in the \$300,000 to \$500,000 range.

- ED Barbour mentioned that Director Sims suggested focusing a master planned offshore research corridor similar to our master planned concept on land and attempting to turn that into more of an opportunity to attract more research and start-up companies. We are drafting a “white paper” along these lines, that will be brought to the Board soon. The idea would be to obtain funding to perform an EIS. Director Sims indicated that the permit process to do this could be lengthy and recommends NELHA to start this process as soon as possible. HATCH is also very interested in this concept as they would like to see NELHA become the global center of offshore aquaculture start-ups. A broad scoped EIS for offshore development, especially for short term and minimal scope projects, would create many opportunities for aquaculture, energy and R&D related projects. The corridor would not be for commercial production. Chair Rosehill recommended that NELHA continue to explore further the legal and permit requirements for implementing this concept.

8. Announcements

ED Barbour announced that he has revised the position description for Ms. Laurence Sombardier from NELHA Chief Marketing Officer to NELHA Deputy Director and which more appropriately describes her duties.

9. NELHA Informational Presentation Series:

A tour of Cyanotech Incorporated took place at 73-4375 Ilikai Place, Kailua-Kona, Hawaii 96740 at 12:30 p.m.

10. Adjournment

Chair Rosehill entertained a motion to adjourn the meeting. Director Hilton made the motion. Director Mielcke seconded the motion. The meeting was adjourned at 1:30 p.m.

###