



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
Tuesday September 20, 2022
10:00 a.m.**

An Interactive Conference Technology Meeting was held at

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

and via Zoom Video Conferencing Software.

Members/Designees in Attendance

Cyd Miyashiro (Gov. Appointee/Chair)
William Mielcke (Gov. Appointee/Vice Chair)
Noe Kalipi (Gov. Appointee)
Scott Glenn (DBEDT)
Robert Masuda (DLNR)
Doug Adams (County of Hawaii)
Dr. Vassilis Syrmos (University of Hawaii)
Alan Hilton (RAC Chair)
Neil Sims (Tenant Representative)
Dr. Phil Bossert (RAC Secretary)
Dick Jones (Tenant Representative)

Guests/Staff Present

Greg Barbour (NELHA)
Laurence Sombardier (NELHA)
Faustine Edge (NELHA)
John Cole (AG)
Arnpór Gústavsson Aurora Abalone
Asgeir Gudnason, Aurora Abalone
Jen Johanssen, Cyanotech
Jeff Zimpfer, National Park Service
Hiroshi Arai, Kona Sablefish Company
Sean Wilton, Kona Sablefish Company
KITV Island News (no name provided)
via Zoom
Light Manufacturing (no name provided)
via Zoom

Board Members Not Attending and Excused

Bernice Glenn

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

The meeting was called to order by Chair Cyd Miyashiro at 10:05 a.m. Reference to Act 220.

Chair Miyashiro asked Executive Director (ED) Barbour for a roll call of Board members and NELHA staff.

Directors Phil Bossert and Noe Kalipi joined at 10:09am

- **Item 2. Approval July 19, 2022, NELHA Board of Directors' Meeting Minutes.**

Chair Miyashiro entertained a motion to approve the July 19, 2022, minutes. The motion was made by Director Masuda and seconded by Director Kalipi. There were no objections, and the minutes were approved as circulated (10-0).

- **Item 3. Informational Presentation from HOST Park Clients.**

Item deferred due to an unexpected conflict for the presenter HATCH.

- **Item 4. Old Business. Discussion and Decision-Making regarding Purchase of a Building from Destiny Deep Seawater LLC at HOST Park to serve as an Office Building and Incubator.***

Deferred. Key decision-making items are not ready.

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

ED Barbour asked Deputy Director (DD) Laurence Sombardier to present this agenda item. DD Sombardier explained Kona Sablefish Company Ltd. (KSCL) which doing business as Kona Butterfish Company is seeking approval in concept from the NELHA Board to develop a 500 metric ton sablefish production facility at HOST Park.

The project principals believe that farm raised sablefish have a large competitive advantage over the wild caught sablefish in that they are free of parasites and can be consumed in the form of sushi or sashimi without first being frozen. NELHA's pristine water will assist in rearing a quality fish which is very much prized both locally and in the Asian market.

DD Sombardier introduced the Kona Butterfish team who consists of three HOST Park veterans:

- Hiroshi Arai, co-founder of HOST Park's 1998 Big Island Abalone Company which sold to Kowa Premium Foods Hawaii Corporation in 2018;
- Don MacQuarrie, founder of HOST Park's 2003 Unlimited Aquaculture LLC which sold to Troutlodge Marine Farms Kona LLC in 2007 and subsequently to Jamestown Point Whitney Venture, LLC in 2017; and
- David Mowry, current owner of HOST Park's Pacific Planktonics since 2020 where he grows ornamental fish.

Other team members include Sean Wilton, environmental engineer with extensive experience with recirculating aquaculture systems and Lawrence Lambert, engineer, inventor and entrepreneur.

The founders of KSCL (Hiroshi and Don) are working closely with an Icelandic Investment firm, Eyrir Ventures, which also has a variety aquaculture companies in its portfolio. This is a well-qualified team with significant experience in all aspects of the project including developing a market for a new seafood product, engineering, biology, project scale up and fundraising.

Don MacQuarrie operated Unlimited Aquaculture halibut and sablefish farm from 2003 to 2007 at HOST Park and is also involved with a successful sablefish hatchery in British Columbia, Canada. This hatchery will initially provide juveniles for grow out at KSCL. Pacific Planktonics has already secured a Department of Agriculture import permit for the sablefish with Hawaii DOA. The team believes starting with a small initial pilot project at Pacific Planktonics site will allow to make fast progress on the project. Eventually, the Pacific Planktonics site will serve as the hatchery, separated from the main grow out facility for biosecurity reasons.

The project will use Recirculating Aquaculture Systems (RAS) technology along with innovations that are currently being developed and demonstrated at a Canadian R&D facility. Systems will be highly controlled to maximize growth and will be modular to achieve the ultimate production goal. This is expected to take place in phases over the initial 5 to 6 years.

The project fits well with NELHA's mission and current emphasis on developing sustainable aquaculture in Hawaii. Aside from providing economic diversification, the project will assist with replacing fish imports with Hawaii grown fish since a large fraction of the sales will be local. Therefore, benefits include food security and reduced carbon footprint. Job creation would be moderate with 22 new positions expected to be needed at full production capacity. The company anticipates raising \$6M to build out a facility that would produce \$9M in annual sales.

Staff does however note some challenges which would need to be addressed before a final approval could be provided. These are:

- Technical Challenges. Land based production of large fish is notoriously difficult. This is mitigated by the fact that one of the principals have experience with hatchery and production of sablefish. It might be appropriate to base a final approval for a 6-to-10-acre facility on results obtained by the initial pilot at Pacific Planktonics which could proceed immediately. The Pacific Planktonics property is approximately 0.5 acre in size.
- Financial Projections. The 500 metric tons production goal seems optimistic for a 6-acre facility. Actual production amounts will drastically affect the projected financials which show the company becoming profitable in 3 years. These types of projections are often overly optimistic. Data produced by the pilot at Pacific Planktonics would be extremely helpful in evaluating viability of the project.
- Timeline. Similarly, the timeline seems rather optimistic for start of construction of the larger facility in mid-2023 given current conditions for obtaining building permits. Also, construction costs have increased drastically in the past year. Grading costs have more than doubled compared to pre-pandemic times. The stated cost for land improvements should be examined carefully and most likely adjusted upwards.
- Ability to improve entire property under lease. There is a concern that, as with many other projects in the park, land would be committed (through a long-term sublease) but may not get developed in a reasonable amount of time due to lack of funding or other reasons. As NELHA is running out of land and given the high interest for new projects, it might make sense for NELHA to make it a lease requirement for unused land to be removed from the sublease and returned should it not be developed within a reasonable amount of time.
- NELHA Infrastructure Upgrades. At full production, the facility will use 7,500 kgal/day of deep seawater (with 5,208 gpm mean flow). Adjustments will be needed at the NELHA Booster pump station to accommodate this increased flow requirement. There may also be some adjustments needed on the project side as far as boosting water delivered at the road. Finally, depending on usage by other new clients in the park, there may also be a limitation in delivery pipeline size.
- Water disposal. The project will need to address how much wastewater be generated and how it intends to dispose of it.
- Location in HOST Park. A suitable location will need to be settled upon. The company has provided a preliminary site concept plan on page 16 of the power point business description which is makai of Kona Deep Corporation (KDC). This rendering is conceptual only and is likely to be moved to a location mauka of KDC (see Attachment 1).
- Market Development. One of the founders has successfully developed markets for new seafood products in the past. But more details on the marketing strategy and plan would be expected before a final approval could be provided. The company has already trademarked the product as Kona Butterfish and will most likely do business as Kona Butterfish Hawaii.
- Funding. The project is not fully funded at this stage, but the founders have a close relationship with Eyrir Venture Management from Iceland as they are assisting them with some of their portfolio aquaculture companies. NELHA has received a letter from Eyrir expressing their interest in the sablefish project. They believe that it is a viable business opportunity provided sufficient funding and technological advances are made. An approval in concept would help KSCL secure additional investors in addition to Eyrir.

Staff does not consider any of the above items as unsurmountable. Staff recommends that the NELHA Board provide an approval for Kona Sablefish Company Ltd. to start a short-term sablefish pilot project at the existing Pacific Planktonics facility immediately, and an approval in concept to build a 6-to-10-acre sablefish production facility as described in the preliminary proposal. Kona Sablefish Company Ltd. should continue working with NELHA staff to address the concerns and information gaps listed above and present a detailed final business plan for final approval for the 6-to-10-acre facility.

RAC Chair Alan Hilton presented the RAC's review. The project is consistently supported by the 6 members of the RAC that provided feedback. Reviewers found that the principals in the project team appear to have sufficient experience and successful track records in similar operations elsewhere, and that the proposal is well aligned with the NELHA mission and appropriate use categories. There is also potential value for contributions to Hawaii's food security and the supply of our markets with a prized seafood product that is locally sourced, along with a potentially profitable share of the growing global market for fresh high-quality sablefish, if this project is able to meet its stated goals. RAC members also provided some additional comments and open questions that should be reviewed and considered by NELHA staff as this project moves forward with its initial pilot project and subsequent expanded facility plans.

Director Masuda asked if there were any other common names for sablefish. Mr. Arai explained that sablefish is known in Hawaii as butterfish. Other common names are black cod and gindara in Japan. The company has selected sablefish and butterfish for marketing reasons including branding their product as a Kona brand product such as Kona coffee, Kona kanpachi and Kona abalone.

Director Masuda also asked if there might be opportunities to recycle the wastewater to which Mr. Arai responded that many opportunities existed and that he was in conversation with people from Iceland in that respect.

Director Kalipi asked for details about the wastewater disposal systems to be used. Mr. Wilton from KSCL explained the two water streams and how each would be addressed. More details will be provided in the plan submitted for final approval.

Director Masuda emphasized that Hawai'i needs to work towards food sustainability and encourages KSCL to strive for reasonably priced butterfish.

Chair Miyashiro asked for any other comments or discussion from the board. After hearing none, she asked for any comments from public. ED Barbour confirmed no comments. Director Masuda moved to approve the project as stated in the staff

recommendation. Director Hilton seconded. There were no objections and the motioned was approved as presented (10-0).

• **Item 6. Financial Report: Approval and Decision Making.**

Chair Miyashiro asked ED Barbour to present this agenda item. ED Barbour presented an overview of July and August 2022.

Revenue

- Total revenue was \$850,000 for the first two months of this fiscal year and this represents an increase of \$150,000 or 23 percent for the same period last year. As shown on the chart above, it is like the past five years. Of notice for FY23 are the following:
- Overall seawater system revenue is up by \$30,000 or 15 percent, but demand continues to decline mainly due to conservation by businesses in the park. However, total revenue is up due to the surcharge of \$50,000 as electricity rates are at an all-time high.
- Overall lease rent is up by \$60,000 for the first two months of the year. HOST Park lease base rent is up a healthy 10 percent or \$30,000 and research campus office space and outside space in the Research Campus continued to increase by 70 percent and 55 percent respectively.
- Percent rent increased by \$20,00 due to payment of arrears by Kona Cold Lobster prior to the sale of their property.
- Labor services is decreased slightly by \$8,000 for the first two months of the year.
- Reimbursements for electric are up by \$45,000 or 75 percent and due to higher electrical costs. Freshwater reimbursements are also up slightly (\$4,000) due to higher costs.
- For Special Projects, a new line item \$230,000 revenue has been added. This is for Direct Administrative Costs from FEMA for administering the Disaster Recovery grant.

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

Expenditures

- Total expenses for the first two months of this year were approximately \$730,000 or down by \$115,000 or 15 percent. This is mainly due to the one-

time contract extension cost for the water well last year. Otherwise, overall expenditures were up slightly. Of note are the following:

- Seawater system expenditures were up by 50 percent (\$100,000) due to shifting of personnel to focus on upgrades and increased electrical costs are now at record levels but have stabilized in the past several months.
- Tenant Utilities are up by 75 percent or \$50,000.
- NELHA utilities show the electrical costs increasing by \$10,000 or 300 percent. This is due to back payments to the PPA provider did not begin until December 2021 and increases in electrical costs. Though over the last 3 months it has leveled off to just below \$0.50. It looks dramatic but it's not and we expect it will level off as we go through the year.
- HOST Park security is down mainly due to shifting of personnel tasks to the seawater system upgrades.
- Beach Park maintenance is shown in green. There was an error in our earlier formula and the \$42,400 was not included in the total budget. Also, costs are down for the first two months mainly due to lower maintenance costs at the beach park. We have ceased all irrigation in the park to conserve water and save money as much as possible.
- Administrative costs are down by \$30,000 due to shifting of personnel.

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

Special Fund and Arrears

- Special fund balance is \$800,000 and up slightly by \$125,000 over the first two months.
- As of August 31, 2022, arrears are \$80,000 and if arrears are collected this will bring the special fund balance close to \$875,000.
- Arrears have been stable for the past several months.

Chair Miyashiro opened discussion to board for further comment. Hearing none, Chair opened to the public for any comments, ED Barbour confirmed none at Hale Iako conference room, Chair Miyashiro confirmed none online. Director Adams motioned to approve the financial report for July and August 2022. Director Masuda seconded. There were no objections. The Financial Report was approved as presented (10 - 0).

- **Item 7. 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.***

- ED Barbour reported there were no outages on the seawater system. He pointed out the grid on this island was a little unstable a couple of weeks ago. Hawaiian Electric asked us to disconnect from the grid over four days in a row during peak times 3:00pm to 8:00pm as they had issues with one of their producing plants on other side of the island. We used our generators and there was no interruption to seawater. We were able to do a lot monitoring with our SCADA system and developed new procedures so if there is a planned outage we can respond better.
- We expect the company for the offshore seawater pipe hold-downs to come in the spring after the fall surf season. We should complete the design after receiving this information.
- A new item reported at the July board meeting, the Seawater Rate Analysis is scheduled to start in the next couple months before year end. This should take a couple of months though electrical rates will be harder to project for it. We'll do sensitivity analysis for that.
- SunShot desalination project has run a couple of times and produced a little bit of water. They are in Phase 3, and it will wrap up in next couple months. We don't have any results yet.
- Seawater Air Conditioning Analysis is almost complete, and we hope to present that at the next couple board meetings.
- The grant from the Korean government to develop the PV test bed at the 55-pump station is weeks away from beginning construction. They have moved in equipment for install and heavy equipment, a D9, to begin leveling in that area.
- The HATCH Accelerator update planned for today and will be rescheduled to the November 2022 Board Meeting.
- Regarding the research campus expansion we received the environmental design assessment, and we submitted a finding of no significant impact. Plans reviewed at 60% and sent back to contractor. We still have some additional items with them regarding fixtures and hope to have updated plans back in

the next couple weeks.

- The purchase of a new building continues to move forward. We have interest to lease from two major companies, one a reuse company, the other an energy company. If approved, we will have 50% of the building leased out.
- We cannot discuss the potable water supply project as we have filed a contested case hearing with DLNR.
- Regarding the offshore freshwater survey and the EIS projects, we requested appropriation codes to be ready to allot those funds. We have begun the evaluation of the professional services list for those two companies.
- Lease prospects continue and are encouraging with new businesses like Kona Sablefish. The Hale Iako building is full and we are losing another training/conference room to new lessor, The Nature Conservancy. The Nature Conservancy has also expressed interest in the new building, if we are able to secure it, as a homebase for their offshore and reef projects.
- Tenant Survey has been held up, but we plan to start it in the next couple of months.
- We will have no proposals this year for legislature. We await direction from the new administration.

- **Item 8. Announcements.**

Chair Miyashiro noted that our next meeting is scheduled for Tuesday, November 15, 2022 at 10:00am.

- **Item 9. Adjournment.**

Chair Miyashiro adjourned the meeting at 11:08 a.m.

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