

Transcript of Meeting at NELHA Conference Room  
on Tuesday, May 21st, 2002, to discuss with Kekaha kupuna the concept of the  
proposed open ocean fish farm, and obtain input on traditional perspectives and cultural issues.

Present : Valentine K. Ako (Kekaha kupuna, now resident in Kaua'i), Robert Punihaole Sr. (Kekaha kupuna), Annie Coelho (family member), George 'Kino' Kahananui Sr. (Kekaha kupuna), Cynthia Punihaole (Hawaiian fisherwoman and cultural practitioner), Isaac Harp (Hawaiian fisherman and cultural practitioner), E. Kalani Flores (Hawaiian Studies Instructor, HCC Hilo), Neil Anthony Sims and Dr Dale J. Sarver (Black Pearls, Inc.).

Invited, but absent : Sam Keanaaina, Mikahala Roy and David Roy, Kepa Maly, Ed Stevens.

Meeting convened at 10 am. Kino opened the meeting with a prayer, asking for guidance, unity and tolerance.

Neil reviewed the main points about the proposed project. In meetings over the past year, with a range of community interests, the need for assessment of the cultural and social impacts of the project has been often raised. Dale and Neil recognize that these impacts need to be considered, and wanted to open a dialogue with the kupuna from the area. We recognize that this is a new innovation, and as such it needs to be put forward in an appropriate way; hence this meeting.

Val pointed out that there is a whole string of 'opelu ko'a as right along the shore, near the drop-off of the reef. People used to come from Mahai'ula to fish these ko'a. Each ko'a had a type of fish that was associated with it – the 'opleu mama. These were ulua, kamanu, kaku, kahala, etc.

Val stated that this was also an area of very strong currents. Some discussion ensued about how strong the currents were directly off Keahole – Val indicated that they are over the 2 knots shown in the records. Your fishing line can trail right out behind you like a trolling lure. The strong currents are the source of the name "Ke ahole" – or the swirling. Dale pointed out that some of these fish cages were deployed in currents up to 7 knots.

Val asked what we proposed to do with the fish. With the abalone farm, it will all be exported, and none would be available for local people to eat. Would the mahimahi be sold locally, and if so, for what price? Would it be affordable? Dale replied that around 70,000 lbs of mahimahi are imported into Hawaii each week, already. We would try to substitute for some of this to reduce our reliance on imported fish. He believes that we have to start to take responsibility for being more self-sufficient for our own food.

Val asked what would be the advantage for the local community; what would be gained? Robert talked about the potential conflict with night-fishing for 'opelu on the ko'as, but that the lines were not down deep – only about 20 feet. Val talked more about how strong the currents are, particularly when the tide changes. Sometimes if you are fishing near the 'cliff' and the current changes to the West, it can pull your hook straight in to shore and hook you up.

Neil said that they still see some fishermen using an 'opelu net on the South side of Keahole. He asked if anyone still fishes the 'opelu ko'a to the north of Keahole. Robert replied that no-one still fishes them these days, but that they are hoping to start training some of their children or grand-children. He feels that they have to look towards the future fishermen, and we have to look at the feeding habits of the fish. The old fishermen used to feed the ko'as, and so there would be a risk that the fish cages would create a new ko'a. He said that the ko'as were not only for the 'opelu, but were also for the aku, kawakawa, o'io, ahi. They all have their separate areas where they congregate.

Isaac asked if there were any plans to compensate the community for the loss of access to the ocean area. Are there any plans for expansion?

Neil replied by describing the plans that have evolved out of earlier community consultations. Under the Ocean Leasing Law, the lease revenues are split with 20% going directly to OHA, and the other 80% goes into a Special Land Development Fund. This is administered by the Land Board, and there are no hard rules about how it is disbursed. In our earlier discussions, we talked about using this for supporting a stock enhancement program. If we can develop hatchery techniques for these overfished bottomfish species, such as opakapaka and ehu, we will build a commercial-scale hatchery to stock the farm. This facility could then also be used for a reef-restocking program. We have talked about getting community groups involved in the restocking program, so that instead of releasing little fish at around 1 inch, we could have people involved in helping to rear these through the nursery to a size of 4 inches or 6 inches, and then releasing these. Their survival would then be a lot better, and we could have community and education aspects involved in the nursery stages.

Val pointed out that opakapaka are too expensive for local people to afford. Would there be some way to make them more accessible to local people?

Isaac expressed concern about the feed, and the potential for use of antibiotics. He pointed out that the state has outlawed feeding of fish in many locations. One of his main concerns had been the potential for pollution, but he had talked to Randy, and Randy had allayed many of his fears. Had we talked to Bill Walsh, the DAR Fisheries Biologist?

Dale replied that he has talked to Bill many times about our project, and that he is waiting to see the complete documentation of our proposal. Dale said that Bill had also been concerned about the potential for water pollution and waste fish feed. However, Dale said, any fish farmer is going to be also very concerned about waste fish feed – its wasted money.

Val said that he didn't mind the idea of the project, so long as there was something comes back to the local community.

Neil then asked if it would be possible to site the cages on top of an 'opelu ko'a, so that the cages helped to keep the 'opelu there. If we knew where the ko'as were, we might be able to locate the cages in a mutually acceptable site. It was generally agreed that the ko'as were located at the dropoff well inside the locations of the cages, but that the cages could still effect the ko'as by drawing the fish away. Val asked for a map to indicate where the ko'a were located. Isaac then asked Val not to show the ko'a location, as this was traditional family knowledge, and he didn't want to see it shared with people outside the family. He said that instead we should hire Kepa Maly to conduct interviews with the kupuna, to find out where there are possible sites for locating cages.

Neil said that they were doing much of the work themselves, and weren't in a position to be hiring outside consultants.

Kino then asked everyone to think about what was going to happen. No matter where the cage is located, the 'opelu will go there, and the surrounding ko'a will be lost. Traditionally people used to feed the 'opelu before they fished them. Now, the cage will draw all the fish. He asked how deep the net would go down into the water. Dale replied that surface cages would extend down 20 or 30 feet, but that the submersible cages could extend down much deeper.

Dale suggested that the cage might not draw the fish away from the reef, but just add more habitat for fish to live by. The presence of the cage could result in more fish in the area just by providing more places for fish to live.

Kino pointed out a number of other concerns. What about whales in the area? What about boats, and the potential for collision? His main point, he concluded, was what protections would there be for the ko'a. Opihi used to be very plentiful – you could walk on the opihi out here. Now they are gone. There were different foreign fish introduced by the University – like the ta'ape. He eats any of the ta'ape that he catches, and it's a good eating fish. What benefits will there be? he asked.

Kalani said that part of the problem here is that no one is certain what might be the impacts from the cages. He asked what would happen if, after the project started, there were negative impacts. Dale said that there is good evidence as to what the impacts would be – we can base many of our projections on the results from the Ewa Beach cage project. Dale also stated that the terms of the lease would ensure elaborate monitoring of the environment by several State and Federal agencies. If there were any adverse impacts, we would be called on to mitigate any negative effects. If there were serious problems these agencies could force the closure of the farm.

Isaac said that he would like to see more complete documentation. He asked why the presentation was only three pages of text outlining the project, with very few specifics. Neil pointed out that BPI was doing it this way, bit by bit, because we wanted to keep an open mind when we were discussing the project with the community. We wanted to meet with different groups, and engage the community in discussions - to find the community concerns and get the community input. We didn't want to present a complete and final plan and say "Take it or leave it". We realized that it was a new project, a new concept, and that we didn't want to just shove it down the community's throat.

Isaac then said that Kepa may indeed already have much of the information on the 'opelu ko'a locations, from the CO2 study. He thought Kepa may be able to provide that information, or he may volunteer his time to assist in compiling that information.

Cindi pointed out that State Historic Preservation had already described the ko'a as a traditional cultural resource. These ko'a are important for the future generations, as it is their link with the past, with traditional practices. If this does draw fish away from the ko'a, how would we propose to maintain the ko'a?

Neil asked would it be a problem if one of the ko'a was moved – if the farm does result in one 'opelu ko'a shifting further up or down the coast, would this be a problem? Robert replied that it would not really be a problem.

Dale asked for more information on how ko'as work. Are the fish attracted there because people feed them, or do people feed them there because that's where the fish are? Kino explained the principles of triangulation to find the precise spot where the ko'a lies. The fish are usually there. He asked if the 'opelu

would get attracted to the cage. Val thought that they would be attracted to the cage. Fish are like people, he said. They will go wherever there is food. He discussed some of the problems with feeding ko'as these days. Traditionally they would just feed with opae 'ula and ground up vegetable matter, but now people from Hilo are feeding the ko'as with other palu, such as dog food, etc.

Dale thought the fish may be attracted to the cage whether or not they get fed there – as with a FAD in deep water, the cage is just a reference point for the fish to associate with. Val thought that Ewa is different to Kona, and we should be careful when extrapolating the Ewa cage results down to here. Many things in the ocean are inexplicable. When he was long-lining they caught many strange fish that they hadn't ever seen before. It used to be in Mahukona that they could catch abundant malolo (flying fish), but not now.

Val asked if we would consider relocating the project to Kawaihae or Mahukona. Neil replied that we had looked at sites all along West Hawaii, and that this was clearly the preferable site. Any further north would expose the project to the strong trades that blow down through the Waimea saddle.

Cindi said that an important point for her was the fact that they are the stewards for Kekaha. They will perpetuate their culture, or not. The ko'a are not just a spot to feed fish, but they are a place to teach their children. It's not just the waters, but they also need to protect the landmarks that they use to triangulate, so that they can find the ko'a. This is what they have been doing working with Kuki'o.

Cindi asked if something goes wrong on the farm, will BPI clean it up? She said that the Western mindset needs to understand how to take care of properties. They are trying not to dilute their culture. They don't want negative changes as they go forward. They are thinking about the future, and trying to think what is in it for their children.

Robert stated that he thought that this project looked OK, provided that we could help restore the fish stocks along the coastline. O'ama and manini used to be abundant, but now there are no more.

Dale said that it would help if people could also consider the positive aspects of the project, as well as just focusing on the potential negatives. This project would help to focus research efforts on fish hatchery and nursery work, which would then give us the tools to grow valuable species such as opakapaka, jacks, groupers and rear them on the farm as well as restock them on the reef.

Val talked about the Hawaiian tradition of just taking enough fish for their immediate needs – no more. Then, when the fisheries were commercialized, they ran into overfishing problems. Cindi also talked about the coral collecting, how that had become big business with little regard for the environment. She said that there used to be a way to put back in the ocean. There should be something put back, like manini or pakuikui produced in the hatchery. She also had concerns about the precedent of privatizing ocean space.

Val said that in the proposed area, they used to catch palani, po'alu, awa, but now they are all no more. Isaac also said that these were good laenihi (nabeta) grounds.

Isaac proposed that perhaps it would be better if there was just one cage deployed first. He also suggested that, as a former commercial fisherman, BPI should look at entering the retail market – that's where the profits were, rather than just selling to a middleman who sets his own price. While there may be lots of fish imported to Hawaii, there are also lots exported – and not just ahi. Some people are also exporting akule to the West Coast. He felt that opakapaka are not really a local fishery – they are just a commercial fishery, mainly for non-Hawaiians. Most Hawaiians are more interested in the local reef fisheries.

Isaac also asked that if we did a Section 106 consultation, that we deal directly with the community, rather than going through OHA. Val agreed, asking that, in the future, could we please continue to consult with the local kupuna. He paid his way over from Kaua'i for the meeting, because he sees it as very important. If we put cages there on the ko'a, then the ko'a is dead forever. It has never been done before where one group has leased the ocean and deprived people of access. It hurts him to see the changes that are happening. Val recounted how he came over to fight the CO2 project, and now they are coming over to Kauai. He is very disappointed with this. When he had asked one of the CO2 scientists about the risks of an explosion if the CO2 mixes with the sulfur that leaks out at the bottom of the ocean, the scientist had replied "Who knows?! Its an experiment!". The CO2 people didn't do an EIS. He is one of the last fishermen that knows all of these ko'a, all the way up to Kawaihae.

Val stated that he is not against this particular project, if it starts small. He is grateful that we are meeting with the kupuna. There are too many projects that that don't meet with the kupuna. Like Hokulia: originally they had a haole boss, then a young Hawaiian was put in charge, with no idea of the traditions and the burial sites on that ground. Hawaiians of his generation are peaceful, and haven't turned violent yet, but in future, the younger generations might just burst out in anger. He wants to protect his children's future. He concluded by stating that he thought this was a good idea, but he had these concerns.

Cindi asked if it was possible to do a small project first – maybe just one cage. Dale replied that there are certain fixed costs – the hatchery, the boat, and the labor to maintain the cage and tend the fish would all be needed for one cage or for six. This was the smallest possible project that could be run at a profit. It would be difficult to raise the money for a smaller project, as it would be guaranteed to lose money.

Isaac stated that there is similar hatchery work going on at HIMB, and asked if we had considered working with them. Dale replied that yes, we are already involved in a co-operative research arrangement with Dr Chris Kelley's research team. They provide us with opakapaka eggs to do our research. However, they are somewhat hampered, as they are not allowed by Bill Devick to do any aquaculture research. Their hatchery research is all aimed towards research for increasing knowledge of the fish, and maybe doing restocking.

Val told how he was involved with the original ta'ape introduction, conducted by the University in the 1950's. He opposed the idea of introducing the ta'ape, but he was just a research assistant, and he was told that he was not the majority opinion. Robert told how the menpachi (u'u) and weke 'ula used to be abundant, but now were no more. They used to get a kind of 'opelu that would get up to 25 lbs, but not now.

Robert described how the 'opelu ko'a were only fed in the summer months. He said that he thought this was a good project, and that in the future, maybe it can be developed and expanded more. Dale replied that it is already a huge industry in other parts of the world, and it is growing now that people can move the cages out offshore.

Robert expressed the concern that as this project develops, the other fishermen fishing opakapaka are going to lose out. Neil replied that there are currently about 10,000 lbs of bottomfish like opakapaka imported into Hawaii each week, and 70,000 lbs of mahi. The stocks here in Hawaii are so low that most fishermen can't make a living anymore and they have had to take other jobs on land. When BPI first announced their plans over a year ago, three people called about the project. All were former bottomfish fishermen who could no longer make a living fishing, and they were asking if they could get a job on the farm. These are the kinds of people that we would see the fish farm employing, because they know the ocean and they know the boats and the fish.

Isaac again asked if the local fishermen would lose out, because the farm would mass-produce mahimahi, and would flood the market and drive the price down. Neil replied that the converse would probably apply – the farm would produce a steady supply of mahimahi, with a stable price, but when there is a log or a net found floating offshore, then fishermen load up on mahi, and it's hard to even give away mahimahi in Kona, let alone sell it. Isaac replied that if there is continued growth in this fish farming offshore, then there would be loss of access to the ocean. Isn't this privatizing public areas? He sees lots of potential negative economic impacts. Isaac asked for the proponents to be transparent in all their dealings. If the fish are destined for export, then please say so, up front. If they will be sold locally, then say so.

Isaac thanked BPI for taking the time to meet with them all, and asked if it would be possible, prior to submitting the Draft EA, for the fishermen to view the draft first. Neil replied that BPI's approach has always been consultative – that we have sought input from various groups all the way along. We intend to continue in this vein, and would be happy to provide working drafts for comments and suggestions, as the documents are compiled.

Val talked about how the fishermen in Kauai are now having a hard time selling their fish. They have to use a fish broker, and then the broker is the one who makes the money. People started selling their fish on the side of the road, but now they are even stopping this.

Val said that the hatchery should be used only for production of local fish. Neil and Dale said that they are only proposing to use Hawaiian fish – that no foreign species will be used.

Cindi asked BPI to please consider the ko'as, and to try to keep them active. Neil asked would it be feasible and an acceptable mitigation of impacts if we were to initiate a program of feeding the ko'as, to keep them active. Robert thought that this was a good idea, and a good way to keep the ko'as working.

Isaac asked if there were any limits in the legislation on the expansion of offshore fish farming. Dale replied that the lease application process is sufficient to control future growth of this concept. Any lease application has to come up before DLNR Board, and if there are concerns about the number of leases, then at some stage the DLNR can simply say no more will be issued.

Isaac thought that it would be a good idea to begin zoning of the ocean. Offshore farming is OK in some areas, and the State should identify the most suitable sites for this. Dale replied that zoning is a logical, practical way to move forward, and that it is practiced worldwide. He was involved in the early freshwater prawn industry in Hawaii, as the State's first aquaculture extension agent, and assisted in the zoning of Oahu for growth in the freshwater prawn farms. Unfortunately, the industry stopped growing, and eventually collapsed.

Kino made general concluding remarks, saying that he felt the meeting was fruitful, and thanking BPI for the invitation to attend. There were some clouds in his mind, and instead of pushing forward on our own, he thought that it had been good for us to get together. He was still concerned that the automatic feeding on the farm could draw 'opelu into the cage. If we can identify the ko'a together, and put the landmarks on a map, then we could agree on where to site the farm so that it has minimal impact. He would like us to get together and discuss the details of siting in relationship to the 'opelu ko'as.

Kino continued that he recognized that BPI was trying to do the best we could. He would like to see us reach an acceptable compromise. He hoped that neither party would walk away from the discussions, but that instead we would "walk away together". This discussion and our working together is not just for today or tomorrow, but also for the future. We all need to put these ideas together, and move forward together.

Val asked that should the project go forward, that he would like to be able to come out and see it. He is not objecting to the project, but he is just wanting to keep the traditional grounds for the younger generation.

Dale then asked Isaac to please clarify his position – did he just have concerns with some aspects of the proposed project, or was he opposed to the whole idea of offshore fish farming. Isaac replied that he just had some concerns, but that he thinks that there is some good potential for this type of project.

Isaac asked if it would be possible to get funding to set up a test cage. He and Cindi both asked how much would such a test project cost. Dale and Neil didn't want to put out a figure, without being able to think of what would be involved. A single cage costs a minimum of \$85,000, without anchors and moorings, but the main costs would be in operating the boat and providing the daily feeding. A full test run could cost more than \$500,000. Cindi thought that there would be sources of funding for conducting such a test. Dale said that a test cage would be fine, so long as it didn't stop the request for the commercial project.

Cindi asked how much the full project would cost. Dale said that it would be over \$2 million to fully finance the project. Cindi and Isaac were both surprised at how inexpensive the project was. Isaac suggested that OHA or other Hawaiian groups might want to invest in the project. Dale replied that BPI's experience with the pearl farm was that OHA had expressed interest in assisting, but that they were limited in participating in a project which involved non-Hawaiians.

Neil concluded the meeting by thanking everyone for their attendance and input. He indicated that BPI would follow up with Kepa, and that he would circulate a written transcript of what was said, so that everyone could have an agreed-upon record of the discussion. He would circulate a draft to everyone who had been present, and if people had any, additions, corrections or changes to the transcript draft, then he would be happy to make these changes.

Kino then concluded the meeting with a prayer.

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