LATE

SB1511: Petition

'Open Ocean Fish Farms Petition' is a 61 page PDF document.

If you are interested in viewing the rest of the document it is available in the WLO Vice Chair's Office.

LATE

OPEN OCEAN FISH FARMS PETITION

The residents and communities of the Kohala coast are against Commercial Open Ocean Fish Farms and specifically the proposed Hawaii Oceanic Technology, Inc. project for the reasons listed.

1) THE POTENTIAL FOR SIGNIFICANT AND LONG TERM IRREVERSIBLE CONSEQUENCES such as interference with and impacts on marine mammals, fish escapes, alteration of marine life migration including concentration of sharks at site. Cumulative impacts could include algae bloom and jellyfish proliferation.

2) WATER POLLUTION from fecal waste, introduction of unnatural substances into the marine environment via fish feed, use of antibiotics and chemical treatment of cages.

3) MICRO-THREATS (pathogens) of disease transmission to native Hawaiian fish populations.

4) HARMFUL EFFECTS on native Hawaiian marine species from escaped farmed fish.

5) SOCIAL AND ECONOMIC IMPACTS: Farms could have a negative impact on our local fishermen and tourism. Homeowners must deal with visible blight created by cages and supporting equipment. Tax payer money – including federal and state grants, as well as tax breaks for corporations – would be poorly spent.

At a minimum, due to significant changes in its proposed operating plans, Hawaii Oceanic Technology Inc. should be required to modify its existing permits, hold public hearings and assess potential new environmental impacts in a supplemental environmental impact statement.

Thank you for your support: SOUTH KOHALA HAWAIIAN CIVIC CLUB, KOHALA RANCH COMMUNITY ASSOCIATION, KOHALA BY THE SEA, RESIDENTS OF KOHALA ESTATES, KAILAPA COMMUNITY ASSOCIATION, PONO AQUACULTURE ALLIANCE

NAME	ADDRESS	EMAIL ADDRESS	SIGNATURE
Amelia K. Dias	P.O. Box 796	Kealakekua 96750	
Anthony R. J—	P.O. Box 796	Kealakekua	Anthony R J—
Michelle L. Lauro	PO Box 6747	Kamuela, HI 96743	
Kenneth Demaya, Jr.	P.O. Box 6747	Kamuela, HI 96743	
Alton M Murakami	P.O. Box 731	Honokaa, HI	Alton M. Murakami
IVAN R Fernandez	P.O. Box 957	Honoka'a, HI	

6

[redacted]

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, March 17, 2011 11:25 PM
To: WLOtestimony
Cc: Sheiks2@aol.com
Subject: Testimony for SB1511 on 3/18/2011 10:30:00 AM
Attachments: I oppose SB 1511.docx

Categories: Joint With Ag

LATE TESTIMONY

Testimony for WLO/AGR 3/18/2011 10:30:00 AM SB1511

Conference room: 325
Testifier position: oppose
Testifier will be present: No
Submitted by: Tom Kapp
Organization: Individual
Address:
Phone:
E-mail: Sheiks2@aol.com
Submitted on: 3/17/2011

Comments:
Attached file opposing SB1511

I oppose SB 1511 to extend leases beyond 35 years because of the following reasons. The National Aquaculture Act of 2005 permits foreign-owned companies to own fish farms in the U.S waters, it is likely that large multinational companies with a tendency toward consolidation will be the owners of these leases. In British Columbia in 1989 there were 50 companies operating 135 salmon farms. In 2003 there were only 12, with five companies owning 80 percent of the remaining viable farms. In Washington State in 2003 one company –Omega Salmon Group(owned by Norwegian giant Pan Fish) controlled all the salmon industry. Industrial fin fish farming generate environmental and social cost that is rarely evaluated before farming begins or expands. Professor Whiteley from University of Washington compared waste from 4 fish farms near Bainbridge Island to that of 830,000 Seattle residents. Any business that has to rely on Federal funding is a poor investment. Example Cates Int. in Hukilau sold once had financial help from NOAA now in chapter 11. Kona Blue 1.5 million financial help from NOAA is not producing at present time sold once. A good investment for the State of Hawaii would land-based aquaponics. Unfortunately that would take effort and research about a Bill before our Senators voted.

Please do not gamble with Hawaii's most important asset.

[redacted]

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, March 17, 2011 8:18 PM
To: WLOtestimony
Cc: merway@hawaii.rr.com
Subject: Testimony for SB1511 on 3/18/2011 10:30:00 AM

Categories: Joint With Ag

LATE TESTIMONY

Testimony for WLO/AGR 3/18/2011 10:30:00 AM SB1511

Conference room: 325
Testifier position: oppose
Testifier will be present: No
Submitted by: Marjorie Erway
Organization: Individual
Address:
Phone:
E-mail: merway@hawaii.rr.com
Submitted on: 3/17/2011

Comments:
Please oppose SB1511. I hope you will put residents and the environment first and vote AGAINST this bill. It is time to re-evaluate the role of open ocean aquaculture in our State

It's time to exclude open ocean commercial finfish aquaculture -- and short or long-term leases should not be let.

Mahalo for your consideration; I look forward to your reply.

LATE TESTIMONY

THE HOUSE
THE TWENTY-SIXTH LEGISLATURE
REGULAR SESSION OF 2011

COMMITTEE ON AGRICULTURE
Rep. Clift Tsuji, Chair
Rep. Mark Hashem, Vice Chair

COMMITTEE ON WATER, LAND, &OCEAN RESOURCES
Rep. Jerry L. Chang, Chair
Rep. Sharon E. Har, Vice Chair

DATE: Tuesday, March 18, 2011
TIME: 10:30am
PLACE: Conference Room 325, State Capitol
415 South Beretania Street

RE: Testimony In Strong Support of SB 1511 SD1 - Relating to Aquaculture

My name is John Corbin. I was formerly manager of the State Aquaculture Development Program in the Department of Agriculture and have worked in the aquaculture industry in Hawaii for over 30 years. I strongly support what S,B 1511 SD 1 and recommend passage.

My experience with the application of Section 171-59 HRS is land based and ocean farmers would benefit from longer lease terms; 65 years for farmers in good standing. The additional time would provide more time to grow the business and provide for more financing options, particularly federal loans. In addition, allowing complimentary activities such as aquaponics and productive use of aquaculture effluents that can enhance farm profitability is consistent with the Governor's desire to encourage industries that contribute to economic development, jobs and food security. Finally, giving successful aquaculture farmers the right of first refusal to further extend their lease would promote successful farmers and farm families to stay on the farm and continue to contribute economically to Hawaii.

In summary, I believe this is a positive bill that strongly promotes a supportive business environment for aquaculture development, while not costing the State money in these difficult economic times. Hawaii urgently needs private investment and job generation on all islands and aquaculture provides one activity that sustainably accomplishes that goal. I strongly urge you to pass this bill and allow it to take effect now to promote fish farming. Thank you for the opportunity to testify.

John Corbin MS, CFP, AICP
Aquaculture Planning and Advocacy LLC
47-215 Iuiu Street
Kaneohe, Hawaii 96744
Phone: 239- 8316

LATE TESTIMONY

UNIVERSITY OF HAWAI'I AT MĀNOA

School of Ocean and Earth Science and Technology
Department of Geology and Geophysics

Testimony of
NEIL FRAZER, PHD[1]
Professor

Before the House Committees on Agriculture, and Water, Land & Resources

In consideration of

Senate Bill 1511_SD1

Friday March 18, 2011, 10:30 a.m.
Conference Room 325
State Capitol
415 South Beretania Street

Summary
Bills HB568-SB1511 present a dilemma. Briefly, supporters of these bills argue that property rights are necessary to qualify for federal loan guarantees. Opponents argue that some types of aquaculture have undesirable effects on the ocean environment and thus on other enterprises, hence DLNR must retain its discretionary authority. I strongly oppose the first-refusal part of the bill. Moreover, for the reasons outlined below, I respectfully suggest that you amend the bill to outlaw the use of antibiotics, toxic chemical therapeutants, hormones and genetically modified organisms in any Hawai'i aquaculture. The resulting bill would give both opponents and supporters most of what they want, while safeguarding the public interest in a healthy ocean and a profitable, locally controlled aquaculture industry. It would have the additional benefit of costing little to administer.

Introduction
Hawaii has a 600-year tradition of proven-sustainable aquaculture in the form of loko i'a (fishponds), but sea-cage aquaculture is relatively new here. Sea-cage aquaculture consists of large numbers of hatchery-bred carnivorous finfish confined in cages where they are fed until ready for market. My slide show comparing sea-cage aquaculture with loko i'a kuapā can be viewed at http://www.sites.google.com/site/aquapono/home/powerpoint

What aquaculture has in common with fisheries
Capture fisheries is the technical term that includes hook-and-line, nets, trawls, traps and other gear used to capture fish in the wild. Although sea-cage aquaculture is often spoken of as if it were an alternative to capture fisheries, in fact the two enterprises have much in common. First, they are both forms of rent seeking from a common property resource. Put plainly, they both use the public-trust ocean for profit; thus there is always the potential for conflict between the public interest and the interests of the rent seekers. Second, the culture of fish such as moi, kahala, tuna and salmon is a capture fishery in disguise because those fish are all piscivorous carnivores that

[1] The undersigned is solely responsible for the views expressed in this letter. As an academic institution, the University of Hawaii does not take positions on the scholarship of individual faculty, and this letter should not be interpreted or portrayed as reflecting the official position of that institution.

require large amounts of fish oil in their diets to survive [Alder et al. 2008], and the fish taken for oil are an important source of dietary protein in third world countries [Tacon & Metian 2009]. Third, the dependence of sea-cage farmers on other fish for feed means that sea-cage aquaculture and fishing are both constrained by the same limit on primary production of algae and phytoplankton [Vitousek et al. 1986, Odum 1988, Pauly & Christensen 1995]. Fourth, a sea-cage farmer will invariably expand by adding more cages (until disease devastates his fish) just as a fisherman who owns a large vessel will invariably keep fishing until his costs equal his revenues [see references below]. Finally, U.S. aquaculture is now in the early stages of a bubble of optimism that is eerily similar to the bubble of optimism surrounding capture fisheries thirty years ago. In view of such similarities, it is important to know the history of industrial fishing.

Industrial fishing

In 1954 the economist Scott Gordon warned that the fishing industry would damage itself by over-fishing [Gordon 1954], and subsequent events have proved him right [Costello et al. 2008]. However, not all fisheries are over-fished, and scientists have gone to a lot of trouble to understand why [e.g., Iudicello et al. 1999; Clark 1990, 2006]. Briefly, what they have found is that in order to protect the fishing industry from its suicidal tendencies three things are necessary: The first is property rights; fishermen must have confidence that the fish they do not catch today will be theirs to catch another day. The second is good policing; unless fishermen are confident that poachers will be caught and punished, they will, quite reasonably, cheat by exceeding their quotas. The third is that fishermen should be taxed rather than subsidized, because, quite reasonably, they don't stop fishing until their costs exceed their revenues.

In 1969 the U.S. Government Commission on Marine Science, Engineering and Resources (CMSER) predicted that global fisheries would plateau at 400–500 million tons per year. The U.S. and other nations responded by subsidizing capture fisheries with loan guarantees, fuel credits, and the development of advanced fishing gear; and those subsidies increased after 1982 when exclusive economic zones (EEZ) were expanded from 12 nm to 200 nm. The United Nations Food and Agriculture Organization (FAO) estimated global subsidies to fisheries at US$54 billion/year [Pauly 2010, p25] and the World Bank recently estimated them as US$50 billion/year [World Bank 2009]. The CMSER estimate was revealed to have been wildly optimistic when global fisheries production maxed out at ~85 million tons/y around 1988 [Watson & Pauly, 2001]. From 1996 to 2004, long after the maximum was reached, the U.S. was still subsidizing industrial fishing at the rate of $713 million/y [Sharp & Sumaila 2009].

When a subsidized industry crashes, as it inevitably does, governments must then subsidize the unemployed. Canada is a poster child for this. In the 1980s, after expansion of the EEZ, it began subsidizing new vessels and processing plants for Atlantic cod, which for 500 years had sustained the richest fishery in the world. By 1992 over-fishing had resulted in a stock collapse so severe that 40,000 people in Atlantic Canada were suddenly unemployed [Finlayson 1994, Harris 1998, Rose 2008]. In the following decade Canada's federal government was forced to spend over $1 billion on unemployment benefits, retraining and relocation. Hutchings et al. [1997] give a scientific perspective on the wishful thinking that led to the collapse.

Now Canada is ferociously subsidizing sea-cage aquaculture, perhaps in the hope that Canadians will forget Atlantic cod. Canada's federal government even has a group of scientists tasked with

manufacturing doubt about the environmental effects of sea-cage aquaculture by publishing misleading papers in the scientific literature [Frazer 2007; Dill et al. 2009]. Those papers are then used by industry to deceive credulous bureaucrats and would-be sea-cage farmers both in Canada and in other countries. For example, my employer, UH Mānoa has an Aquaculture Coordinator position whose current incumbent maintains a website where you will find only good news. The sea-cage industry in Pacific Canada has employed Hill and Knowlton, a public relations company notorious for its skillful defense of the tobacco industry.

Subsidies to aquaculture

Consider a local example. In 1998, local businessman Randy Cates began planning the first sea-cage farm in Hawaii. With some help from my colleagues at UH Mānoa (a form of subsidy) he and his then-business partner Virginia Enos were profitably growing moi by 2001. Moi was a good choice for culture because it is a schooling fish with large scales typically found in surf zones. By culturing it in waters much deeper than its natural habitat Randy avoided disease transmission from wild moi, and never needed drugs. Oceanic Institute provided the necessary hatchery services. In 2006 Randy applied for and received a $2 million loan guaranteed by NOAA to build a wholly owned hatchery, and while the hatchery was under construction he stopped production from his cages. Around this time he also cashed out by selling a controlling interest in his enterprise to Grove Farms. Shortly thereafter the enterprise went bankrupt.

My point in relating these events is that if it had not been for the NOAA loan guarantee, Randy would still be growing fish and making a profit. By increasing his tolerance for risk, the loan guarantee caused him to take chances that cost him his business. Economists would say that the loan guarantee reduced Randy's risk-adjusted discount rate, and insurance adjustors would say that it created a moral hazard. I would say that, even without Randy's bad luck, the loan guarantee was a mistake, because if he had not gone bankrupt he would almost certainly have expanded his operation to the point where disease forced him to use drugs and chemicals, thus delivering him into the hands of the pharmaceutical industry which partners with sea-cage aquaculture around the world.

To see what Randy's fate might have been, consider an example from Atlantic Canada. The largest concentration of sea-cage salmon in Atlantic Canada is in the Quoddy Region. Production began in the early 1980s and expanded rapidly after 1986 aided by loan guarantees. In the autumn of 1994 an epidemic struck. Many thousands of farm fish suffered direct mortalities or extensive tissue damage [Hogans 1995]. The unexpected nature of the epidemic can be inferred from the fact that in 1994 no drugs or pesticides were approved by Canada for use in the marine environment. In response to the epidemic, intense lobbying resulted in federal emergency registration of hydrogen peroxide and pyrethrin, while cypermethrin was widely used illegally [Harvey & Milewski 2007]. The chief provincial veterinarian overseeing New Brunswick's salmon aquaculture industry pleaded with the federal Pest Management Regulatory Agency for approval of cypermethrin [references in Harvey & Milewski 2007], and the director of the New Brunswick Department of Fisheries and Aquaculture said "...we're fighting a losing battle. Farms are going bankrupt." Two years after the epidemic, production resumed its expansion using drugs to control the pathogen. Unfortunately drugs are disease specific—an epidemic of infectious salmon anaemia struck in 1998. This episode and its aftermath resulted in $50 million

in direct costs to the governments of Canada and New Brunswick for corporate bailouts and unemployment benefits.

Stages of industrial aquaculture

Again, I'll use Canada as an example because I know its Atlantic coast from many visits and I know its Pacific coast from many voyages there in my own vessel. Sea-cage aquaculture developed in Canada, as in most other countries, in a series of three stages: In stage 1, local entrepreneurs secure the permits and leases, and demonstrate that fish can be grown on a small scale. In stage 2, these entrepreneurs sell out to larger companies. In Stage 3, the larger companies sell out to large multinational enterprises. (Here in Hawaii, local entrepreneurs, Randy Cates & Neil Simms, have already sold out to larger corporations.) In such transactions, the items of greatest value are the leases and permits, and I am afraid that by putting the right of first refusal into law we risk delivering Hawaii's waters into the hands of multinational corporations in perpetuity. In Pacific Canada, over 91% of sea-cage production is from three multinational corporations headquartered in Norway.

In Canada, as elsewhere, multinationals have increased the density of fish at their aquaculture sites to the point where the use of the neurotoxin emamectin benzoate is now required on a routine basis for control of parasites. As parasite resistance has developed in Atlantic Canada they are now moving to other neurotoxins such as deltamethrin. In both Atlantic Canada and Pacific Canada (BC), wild fish are declining in areas with sea-cage farming (even in areas where there has not been a commercial fishery for many years) [Ford & Myers 2008], and algal blooms have increased. Last summer 5,000 citizens from all walks of life gathered on the grounds of the BC legislature to protest sea-cage aquaculture. It is possible to raise sea-cage fish without drugs and chemicals, and Yellow Island Aquaculture [Google it] has been profitably doing so in BC for many years, but that is not how multinationals conduct themselves.

First-refusal

In their present form, HB568 and SB1511 state that "Aquaculture operations in good standing may have the right of first refusal and may seek to renew a lease issued under this paragraph." Mr. William J. Aila, Chairperson of Hawaii's DLNR, testified in opposition to the bill, noting in his testimony that "A right of first refusal clearly goes against all the provisions for fairness in the leasing of state land in Chapter 171, HRS, and inappropriately impinges on the Board of Land and Natural Resources' (Board) discretionary authority to control the use of state lands."

Mr. Aila further noted that

> "The safeguards and terms for leasing public lands are codified in Chapter 171, HRS, to ensure transparency and fairness in the disposition of State assets. Paramount in that process is the need to ensure and maintain the State's ability to use its land resources when and as needed to meet all of the State's obligations and priorities as well as the greater public needs of all of Hawaii's residents. Fundamental to that responsibility is the preservation and protection of the discretionary authority of the Board to consider and determine the most appropriate use of State land at any given time, including when and if an ongoing use should continue."

I agree with Mr. Aila. A right of first refusal would effectively deliver Hawai'i waters to lease holders in perpetuity, and those lease holders may be located many thousands of miles away.

Avoiding the pitfalls

Instead of subsidizing industrial aquaculture by giving it Hawaii's waters in perpetuity, I would rather we tried to encourage responsible aquaculture by making rules that put local operators on a level playing field with multinationals. The attached amendment does this in the simplest possible way by disallowing the use of antibiotics, toxic chemical therapeutants, hormones and genetically modified organisms. By such simple rules, you would ensure that large aquaculture enterprises exercise appropriate restraint in stocking and careful husbandry. Moreover, you would thereby give all of Hawaii aquaculture a 'brand' that is likely to be a powerful marketing tool in both domestic and export markets. No existing enterprise would be damaged by such rules since none of them are currently using drugs. Local businessman Randy Cates successfully cultured moi without the use of drugs, and Kona Blue Water has so far used only a relatively harmless hydrogen peroxide bath to treat its fish for parasites. It has permission (from Montana!) to use the drug Praziquantel, but to the best of my knowledge it has refrained from using it.

In summary, my recommendations are that you (1) attend to Mr. Aila's testimony by removing the first refusal provision, and (2) incorporate the attached amendment. If you cannot do both, I strongly recommend that you kill the bill.

Mahalo for the opportunity to testify, and for your unselfish service to the people of Hawai'i.

Sincerely,

L. Neil Frazer

Neil Frazer
Professor of Geophysics

A BILL FOR AN ACT ('AQUAPONO ACT')

RELATING TO AQUACULTURE

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. By this Act, the legislature intends to promote sustainable local development of commercial aquaculture by preventing abuses that have frequently attended industrial aquaculture development in other countries. This Act will make it difficult for companies to damage Hawaii's waters by overstocking and using drugs; it will put small aquaculture enterprises, which cannot afford drugs, on an equal footing with large multinational corporations; it will reduce the need for expensive regulatory oversight; it will indirectly promote the use of ecological engineering in ocean aquaculture; and it will give the whole of Hawaii aquaculture a drug-free "brand name" that will inspire consumer confidence in both local and export markets.

SECTION 2. Section 220-1, Hawaii Revised Statutes, is amended as follows:

§220-1 Aquaculture farms; rules. (a) The board of land and natural resources shall adopt rules for review of applications, and issuance of permits for aquaculture farms, pursuant to chapter 183C. The rules shall specify permitted uses; provided that all uses endorsed by the board of agriculture pursuant to chapter 219 shall be permitted uses; uses for which an environmental impact statement shall be necessary, pursuant to

chapter 343, as well as those actions of repair and maintenance which shall not be subject to the permit and environmental impact statement provisions, including but not limited to emergency repairs.

(b) The use of any antibiotic, hormone, non-nutritive chemical therapeutant, or genetically modified organism in aquaculture farms is prohibited; vaccination is not prohibited.

[~~(b)~~] (c) For the purposes of this section, "aquaculture" means all activities as defined in section 219-2, when carried out by a qualified aquaculturist as defined by section 219-2.

"Antibiotic" means any substance that kills bacteria (bactericide) or slows bacterial growth (bacteriostatic).

"Hormone" is a chemical released by any gland in the body to send messages to cells in other parts of the organism.

"Vaccination" is the administration of a material (vaccine) that triggers the production of antibodies to a particular disease.

"Non-nutritive chemical therapeutant" is any non-food substance given in food to treat or prevent disease.

"Genetically modified organism" is any organism whose genetic material has been altered by insertion of DNA in a way that does not occur under natural conditions.

References

(As my testimony is late, a version of this document with references will be submitted as testimony to the Senate Committees on Agriculture, and Water, Land & Housing.)

LATE TESTIMONY

Marine AgriFuture, LLC.

Testimony By: Dr. Wenhao Sun, President

SB1511 SD1 – Relating to Aquculture
The House Committees on Water, Land and Ocean Resources, and Agriculture
Friday, March 18, 2011, 10:30 a.m.

Position: Strong Support

Aloha Chairs Chang and Tsuji, Vice Chairs Har and Hashem, and members of the Committee:

My name is Wenhao Sun, President of Marine AgriFuture, LLC., a farm of aquaculture of Ogo and fish together with hydroponic culture of sea asparagus in saltwater providing alternative agriculture for the future in Hawaii. Marine AgriFuture strongly supports SB1511 SD1 Increasing aquaculture leases from 35 to 45 years and allows a maximum term of 65 years for ventures in good standing for 10 years or more and supporting aquaculture activities. Furthermore, I propose the following amendment to ensure the long term viability of aquaculture in Hawaii.

Proposed Amendment:
Please incorporate the language from SB1128 into SB1511 which will enable the DOT and DLNR to lease available land around commercial harbors or coastal areas for aquaculture purposes.

What is Marine Agriculture
Marine Agriculture refers growing terrestrial plants on floating cultivation platform in saltwater or on the sea. It is a merging agriculture technology that developed in University of Hawaii ten years ago and commercialized by Marine AgriFuture in Kahuku Shrimp pond in 2006. Marine agriculture overcomes issues of limited land and fresh water supplies and problems of inland flooding during rainy seasons. It uses salt water for agriculture products.

Marine AgriFuture is a leading farm company to conduct marine agriculture in the world. The applied aquaponic system with sea asparagus, Ogo and fish features its sustainability. The terrestrial plants grown on the floating platform can remove nutrients and other various pollutants in salt water serving for a phytoremediation purpose and provide a self-clean up device. Plants grown on regulated platforms do not encroach or endanger, but support local flora and wildlife Therefore, it is an environmental friendly system. Sea asparagus is a cash crop. It has become a popular grommet vegetable in many restaurants, hotels, supermarket, health food stores, and farmers markets in

P.O. Box 423, Kahuku, Hawaii 96731, Phone: (808) 779-2885
email: wsun@marineagrifuture.com

Hawaii. Three products can be generated from one pond allowing the farm multiply its revenue compared to traditional aquaculture, thus marine agriculture is economic viable. Sea asparagus as a vegetable is new to most of world. It is a health food. New products derived from sea asparagus, such as pickled sea asparagus, powder and tea of sea asparagus, etc. is under process. Any business to produce sea asparagus and its derived products will create lot of jobs and promote the development of rural business in Hawaii, benefiting our society. Creating legislation to provide land for marine agriculture will create nationwide demand/awareness/tourism for marine agriculture in Hawaii, and facilitate the replication of success in local production and marketing efforts in other major cities around the US (NYC, LA, SF, others). Overall it will benefit to the development of the local economy.

Challenges Restricting Growth

Currently, Marine AgriFuture uses two acres for sea asparagus in Kahuku which will be transferred to the US Fish/Wildlife. We need to relocate the sea asparagus farm before March next year. More urgently, the 2 acres of land used for growing Ogo have just been transferred to Fish/Wildlife. We have to move out right away, but can extend our lease only temporarily to give us more time to relocate. In all, we will need four acres for immediate use near the ocean, where salt water is readily available, and if possible, existing wells are present to pump water from the ocean. Marine AgriFuture is a major supplier of Ogo in Hawaii. Losing these lands will result in shortages for restaurants and families that depend on ogo during the Holidays and throughout the year.

Anticipated Growth of the Farm

Marine AgriFuture has a sustainable system to conduct agriculture and can also include eco-ag-tours. W e believe that sea asparagus has potential to become Hawaii's next major agricultural export. Therefore, the farm of Marine AgriFuture needs to grow. Land is a priority for our farm, critical to the survival and development of marine agriculture in Hawaii.

We ask you to please pass SB 1511 SD1 with the proposed amendments to ensure the economic survival of our farm. Mahalo for the opportunity to comment.

P.O. Box 423, Kahuku, Hawaii 96731, Phone: (808) 779-2885
email: wsun@marineagrifuture.com

[redacted]

From: mailinglist@capitol.hawaii.gov
Sent: Friday, March 18, 2011 10:22 AM
To: WLOtestimony
Cc: marti@kahea.org
Subject: Testimony for SB1511 on 3/18/2011 10:30:00 AM

Testimony for WLO/AGR 3/18/2011 10:30:00 AM SB1511

LATE TESTIMONY

Conference room: 325
Testifier position: oppose
Testifier will be present: Yes
Submitted by: Marti Townsend
Organization: KAHEA: The Hawaiian-Environmental Alliance
Address:
Phone:
E-mail: marti@kahea.org
Submitted on: 3/18/2011

Comments:
Aloha e Representatives Tsuji and Chang, and members of the House Committees on Agriculture and Water, Land and Ocean,

Mahalo for accepting our testimony. As written, KAHEA opposes the passage of SB 568.

While we support the development of sustainable local food production operations, such as aquaponics, we are concerned that open ocean aquaculture is not yet adequately tested or regulated in Hawaii to protect the public's best interest in this shared public trust resource.

We suggest amending the definition of "aquaculture" in this bill to include:

"Aquaculture shall not include commercial mariculture finfish operations in the open ocean."

KAHEA is a local non-profit network of over 7,000 people working with cultural practitioners and conservationists to protect Hawaii's unique, public trust natural resources. We offer this amendment because open ocean aquaculture operations are not at all like "experienced farmers" on state land.

First, open ocean aquaculture is in its infancy. We have very little data on the long-term affects to the quality of public trust ocean resources from a stationary source of pollution like aquaculture pens.

Second, though it should go without saying, farming on land is fundamentally different from aquaculture in the ocean. The affects of one mistake on an aquaculture operation in the open ocean could have far-reaching, long-term implications for quality of the surrounding ocean and its resources.

Third, lack of financial support has not been the obstacle to open ocean aquaculture in Hawaii, but rather the inherent challenge of "farming" the ocean on an industrial scale. This industry relies on imported fish feed, imported oil, and imported labor to raise thousands of pounds of deep sea fish in a confined area, which they hope will be of sufficient quality to export to high-end markets in Asia. Lack of federally-backed loans, which open ocean aquaculture operations are already eligible to receive, is the least of the challenges confronting this industry.

Mahalo for your time and consideration.