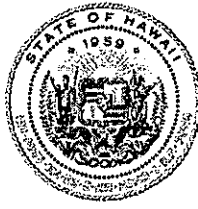
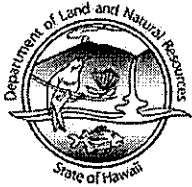


HB 568, HD2

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
WILLIAM J. AILA, JR.
Chairperson**

**Before the Senate Committees on
AGRICULTURE
and
WATER, LAND, AND HOUSING**

**Tuesday, March 22, 2011
2:00 PM
State Capitol, Conference Room 225**

**In consideration of
HOUSE BILL 568, HOUSE DRAFT 2
RELATING TO AQUACULTURE**

House Bill 568, House Draft 2, amends subsection (b) of Section 171-59, Hawaii Revised Statutes (HRS), to increase the maximum term for aquaculture leases from thirty-five (35) to forty-five (45) years; allows a maximum term of sixty-five (65) years for existing aquaculture operations in good standing for ten or more years; allows aquaculture lessees in good standing the right of first refusal; and allows for supportive aquaculture activities. The Department of Land and Natural Resources (Department) respectfully opposes this bill, but offers a suggested amendment below.

The amendments proposed by the bill affect direct negotiation leases that, pursuant to Section 171-59(b), HRS, already benefit by being exempt from the public auction process and the public participation requirement that would ordinarily be required for such leases. While this bill would provide a benefit to aquaculture operations, it does so at the expense of ensuring fair competition for the leasing of public lands by excluding other potential bidders seeking to participate in the public disposition process.

The Department acknowledges the need for long term leases in order for certain business ventures to be economically viable, however, notes that potential aquaculture lessees are in fact eligible for sixty-five year leases through the public auction process and other public processes, in addition to direct negotiation through subsection (a) of Section 171-59, HRS, which is a form of public process akin to requests for proposals. The Department has become aware through testimony on related bills that in some cases, a minimum 45-year term may be necessary in order for an aquaculture operation to qualify for certain federal financial assistance programs and to

**WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT**

**GUY H. KAULUKUKUI
FIRST DEPUTY**

**WILLIAM M. TAM
DEPUTY DIRECTOR - WATER**

**AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAIHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS**

amortize the cost of improvement over the term of the lease. In such cases, the Department believes that a more palatable compromise would be to limit the disposition to a maximum term of 45-years, with conditions noted below. SECTION 2 of the bill could be amended to read:

(B) Aquaculture operations, which may provide for a maximum term up to forty-five years, provided that such forty-five year term is required of the aquaculture operation in order to qualify for federal financial assistance and to amortize the cost of improvements over the term of a forty-five year lease; and

Moreover, the bill also provides for a right of first refusal in favor of the tenant which is essentially an option to extend a lease that can be exercised unilaterally by a lessee. Such options have a chilling effect on other prospective bidders' willingness to bid on the property. Many prospective bidders would be reluctant to invest the substantial time, effort and resources to prepare and submit a bid with the knowledge that the existing lessee can exercise his or her right and nullify the bid at any time. Rights of first refusal provide an unfair benefit to the current lessee by depriving persons awaiting the published termination of the lease a fair opportunity to compete for the use of those lands at public auction. That inherent inequity ensures lower bids and consequently less revenue to the State.

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. When seeking public lands for private use, potential lessees are well aware of the benefits and drawbacks of leasing state lands as opposed to conducting their activities on private lands. First and foremost is the knowledge that those lands are public assets that must serve primarily the interests of the general public and the public trust purposes, and secondarily the needs of a private user.

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. The Board's ability to fulfill its fiduciary obligations to promote all five public trust purposes equally should never be compromised by any erosion of this authority.



Hawaii Farm Bureau
F E D E R A T I O N

2343 Rose Street • Honolulu, Hawaii 96819
Phone: (808) 848-2074 • Neighbor-Islands: (800) 482-1272
Fax: (808) 848-1921 • Email: info@hfbf.org
www.hfbf.org

**Committee on Agriculture
and
Committee on Water, Land, and Housing**

March 22, 2011

2 pm

Room 225

Aquaculture Leases

HB 568 HD2

Aloha Chairs Nishihara and Dela Cruz, Vice Chairs Kahele and Solomon, and Members of the Committees:

The Hawaii Farm Bureau Federation, the largest general agriculture organization in Hawaii, on behalf of our commercial farm and ranch families and organizations across the State, is in **strong support** of HB 568 HD2, which will allow longer aquaculture leases and will also allow lessees in good standing the right of first refusal to extend their leases.

GOOD FOR THE STATE:

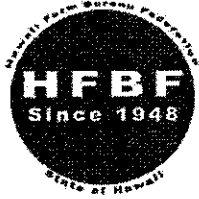
- Serves the public interest in food security and self-sufficiency for Hawaii
- Supports diversified agriculture
- Hawaii's people love fresh fish
- Fish consumption is up but wild stocks are not
- Diversifies job opportunities
- No cost to State in these difficult economic times!

FAIR AND REASONABLE:

- Allows lease renewal for experienced and successful farmers
- Encourages long-term investment-----opens financing options to those farmers who have invested the necessary time, effort, and money to make their operations work
- BLNR retains discretion to terminate lease

We hope you will help support local agriculture by passing this important bill. Thank you for the opportunity to offer these comments.

LATE



EAST OAHU COUNTY FARM BUREAU
45-260 WAIKALUA ROAD S 101 KANEHOE, HI 96744

March 18, 2011

Senator Clarence K. Nishihara, Chair, Senate Committee on Agriculture
Senator Donovan M. Dela Cruz, Chair, Senate Committee on Water, Land, and Housing
State Capitol Building, 415 S. Beretania St.
Honolulu, Hawaii 96813

Dear Chairs Nishihara and Dela Cruz and Members of the Committees:

I am sending this testimony to express the **strong support** of the East Oahu County Farm Bureau for **HB 568 HD2**, "Relating to Aquaculture." Aquaculture is one of the largest and fastest-growing sectors of Hawaii's diversified agriculture industry. Aquaculture and aquaponics farms tend to have substantial infrastructure requirements such as wells, tanks, raceways, pipes, and support structures which in turn require a substantial investment. In order to make this investment, aquafarmers need to have access to long-term loan capital, and need to know that they will be allowed to remain in place long enough to justify not only the financial investment, but the investment of personal time, labor, and ingenuity that is necessary to succeed in a challenging endeavor.

HB 568 HD2 would increase the maximum lease terms for aquaculture and aquaponics farms, which would encourage investment in farm facilities and allow farmers greater access to Federal loan guarantees. It would allow established farms in good standing the right of first refusal, reducing the risk that farmers who have invested much of their lives in building successful businesses will see their life's labors taken away when their original leases expire. It also encourages more efficient use of resources by specifically permitting supportive activities such as the use of aquaculture effluents to produce secondary crops. We therefore support HB 568 HD2, and encourage its passage.

Thank you for the opportunity to testify.

Sincerely,

Frederick M. Mencher
for Grant Hamachi, President



THE SENATE
THE TWENTY-SIXTH LEGISLATURE
REGULAR SESSION OF 2011

COMMITTEE ON AGRICULTURE
Senator Clarence K. Nishihara, Chair
Senator Gilbert Kahele, Vice Chair

COMMITTEE ON WATER, LAND, AND HOUSING
Senator Donovan M. Dela Cruz, Chair
Senator Malama Solomon, Vice Chair

DATE: Tuesday, March 22, 2011

TIME: 2:00pm

PLACE: Conference Room 225, State Capitol
415 South Beretania Street

RE: Testimony in strong support of HB568 HD2 - Relating to Aquaculture, as written.

Aloha Chairs Nishihara and Dela Cruz, Vice Chairs Kahele and Solomon, and Committee Members,

The Hawaii Aquaculture and Aquaponics Association (HAAA), representing Hawaii's aquaculture and aquaponics industry statewide, strongly supports HB 568 HD2 as written.

Aquaculture is typically a high investment form of agriculture. Long term Federal and Federally guaranteed financing is available from the U.S. Department of Agriculture and the U.S. Department of Commerce for up to 40 year loans, but requires remaining lease terms to be in excess of the loan term by up to 50%, eg., a 60 year lease term remaining at time of 40 year loan, as explained in the Section 1. of this bill.

The right of first refusal would allow tenants in good standing the opportunity to renew their lease to continue their aquafarming operations. Without this opportunity to be able to renew leases, as allowed for terrestrial agriculture, future aquaculture investment and industry expansion will clearly be constrained. The right of first refusal is critical to developing and ensuring future sustainable seafood production for Hawaii that currently relies on imports for approximately 90 percent of its seafood supplies. At present, DLNR has means to terminate problematic tenants but no such mechanism to retain demonstrated good tenants. As such, under the current law, the tenants' years of investment and hard-earned site specific operational knowledge could be lost at the

auction block to an unknown real estate speculator from outside the State. This represents an unnecessary potential loss to the tenant, the tenant's employees and customers, the State, and the community, and is clearly a disincentive to continued tenant investment in leasehold improvements during the latter years of a DLNR lease. The right of first refusal will provide the opportunity for Hawaii to keep and support its good aquaculture farmers, encourage their continued investment into this public resource, and ease the transition of such operations to successive generations of family members and employees who helped build and best know the characteristics of the aquafarm site and operations. HB568 HD1 supports the long term future of the Hawaii aquaculture and aquaponics industry, and helps support a more sustainable seafood future for Hawaii.

The right to engage in supportive activities that are related to or integrated with an aquaculture operation simply makes good economic sense by allowing aquafarmers to develop additional revenue streams so as to maximize farm output and facilitate aquafarm profitability and economic sustainability. As the aquaculture industry evolves and as the global marketplace becomes ever more competitive, the aquaculture and aquaponics industry needs the flexibility to maximize its use and reuse of aquafarm inputs and to develop multiple profit centers. Aquaculture effluents can be used very successfully for aquaponics and the growing of plants, and in the process help the aquaculture farm meet current EPA and DOH discharge requirements. Some of these aquaculture effluent-fertilized plants could include *Azola* (duckweed), forage grasses, algae, or cellulosic crops which in turn could be fed to secondary animals, eg., ducks, poultry, and livestock, or used to produce biofuels to help power the aquaculture operation's water pumps and aeration devices. HB568 HD1 provides the flexibility to allow aquafarms to pursue such innovative and environmentally appropriate activities.

Thank you for the opportunity to comment.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ronald P. Weidenbach". The signature is written in a cursive, flowing style.

Ronald P. Weidenbach
HAAA President

UNIVERSITY OF HAWAII AT MĀNOA

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

Testimony of
NEIL FRAZER, PHD¹
Professor

Before the Senate Committees on Agriculture, and Water, Land & Housing

In consideration of

House Bill 568_HD2

Tuesday March 22, 2011, 2:00 p.m.
Conference Room 225
State Capitol
415 S. Beretania Street

Summary

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 local aquaculture enterprises what they need to qualify for long term federal loan guarantees, while safeguarding the interests of other enterprises, such as tourism, in a healthy ocean. 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. A slide show comparing sea-cage aquaculture with loko i'a kuapā can be viewed at <http://www.sites.google.com/site/aquaponohome/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 require large amounts of fish oil in their diets to survive [Alder et al. 2008; Tacon & Metian 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

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.

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 year². 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 300 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. Walters and Martel [2004, Chapter 2] note that the problem with fisheries management is not bad science; rather it is a lack of good incentives.

² The report stated "It is, therefore, more realistic to expect total annual production of marine food products (exclusive of aquaculture) to grow to 400 to 500 million metric tons before expansion costs become excessive. Even this estimate may be too conservative if significant technological breakthroughs are achieved in the ability to detect, concentrate, and harvest fish on the high seas and in the deep ocean." It was too optimistic by a factor of 5.

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 unprincipled 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 he and his then-business partner Virginia Enos were profitably growing moi (Pacific threadfin) 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 so his farmed moi 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.

The reason for 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. The declines of wild fish near farmed fish are unsurprising because that is what basic epidemiological principles predict [Frazer 2009].

Last summer 5,000 citizens from all walks of life gathered on the grounds of the BC legislature to protest sea-cage aquaculture. Yesterday (March 21, 2011), Canadian Member of Parliament Fin Donnelly carried a petition to his fellow legislators. The petition, which had 9,000 signatures, demanded removal of all sea-cage farms from the BC coast [Sanderson 2011]. 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 the model used by multinational corporations.

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 create good incentives for appropriate restraint in stocking and careful husbandry. Moreover, you would give all of Hawaii aquaculture a 'brand' that has the potential to be a powerful marketing tool in both domestic and export markets [Aaker 1995; 2011 Chapter 2] because consumers increasingly prefer foods produced without drugs [Yiridoe et al. 2007; Wikipedia].

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 'Aquapono Bill' as an amendment to HB568_HD2. 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,



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

- Aaker, D.A. 1995. *Building Strong Brands*. New York, The Free Press.
- Aaker, D.A. 2011. *Brand Relevance: Making Competitors Irrelevant*. Wiley,
- Alder et al. 2008. Forage fish: from ecosystems to markets, *Annual Reviews in Environment and Resources* **33**: 153–166.
- Clark, C.W. 1990. *Mathematical Bioeconomics: the optimal management of renewable resources*. Wiley, New York, 386pp.
- CMSE, 1969. Our Nation and the Sea: A Plan for National Action. *Report of the Commission on Marine Science Engineering and Resources*. United States Government Printing Office, Washington D.C., 305 pp.
- Clark, C.W. 2006. *The worldwide crisis in fisheries*. Cambridge University Press, 263 pp.
- Costello et al. 2008. Can catch shares prevent fisheries collapse? *Science* **321**: 1678–1681.
- Dill et al. 2009. Comment on Beamish et al. (2007) “A proposed life history strategy for the salmon louse, *Lepeophtheirus salmonis* in the subarctic Pacific” *Aquaculture* **286**: 154–155.
- Finlayson, A.C. 1994. *Fishing for Truth: A Sociological Analysis of Northern Cod Stock Assessments from 1977 to 1990*. Institute of Social and Economic Research, Memorial University of Newfoundland, 176 pp.
- Ford, J. & Meyers, R.A. 2008. A global assessment of salmon aquaculture impacts on wild salmonids, *PLoS Biology* **6**(2): e33 doi:10.1371/journal.pbio.0060033
- Frazer, L.N. 2007. Comment on “Sea lice on adult Pacific salmon in the coastal waters of British Columbia, Canada” by R.J. Beamish et al. *Fisheries Research* **85**: 342–345.
- Frazer L.N. (2009) Sea-cage aquaculture, sea lice, and declines of wild fish. *Conservation Biology* **23**, 599–607.
- Gordon, H.S. 1954. The economic theory of a common-property resource: the fishery. *Journal of political economy* **62**: 124–142.
- Harris, M. 1998. *Lament for an Ocean: The Collapse of the Atlantic Cod Fishery*, McClelland & Stewart, Toronto, 342 pp.
- Harvey J. & Milewski I. (2007) *Salmon Aquaculture in the Bay of Fundy*. Conservation Council of New Brunswick, Fredericton, NB, Canada.

- Hogans W.E. (1995) Infection dynamics of sea lice, *Lepeophtheirus salmonis* (Copepoda:Caligidae) parasitic on Atlantic salmon (*Salmo salar*) cultured in marine waters of the lower Bay of Fundy. *Canadian Technical Report of Fisheries and Aquatic Sciences No. 2067*. Fisheries and Oceans Canada, Ottawa, Canada.
- Hutchings et al. 1997. Is scientific inquiry compatible with government information control? *Canadian Journal of Fisheries and Aquatic Sciences* **54**: 1198-1210.
- Iudicello et al. 1999. *Fish, Markets and Fishermen: The Economics of Overfishing*. Island Press, 192 pp.
- Odum 1988. Self-organization, transformity and information. *Science* **242**: 1132–1139.
- Pauly, D. 2010. *Five Easy Pieces: The Impact of Fisheries on Marine Ecosystems*, Island Press, 193 pp.
- Pauly, D. & Christensen, V. 1995. Primary production required to sustain global fisheries. *Nature* **374**: 255–257. [Erratum in *Nature* **376**: 279.]
- Rose, A. 2008. *Who Killed the Grand Banks?*, Wiley, Canada 203 pp.
- Sanderson, M. 2011. <http://www.pacificfreepress.com/news/1-/8354-fish-farm-petition-tabled-in-parliament.html>
- Sharp, R. & Sumaila, U.R. 2009. Quantification of U.S. marine fisheries subsidies. *North American Journal of Fisheries Management* **29**: 18–32.
- Tacon, A.G.J. and Metian, M. 2008. Global overview on the use of fish meal and fish oil in industrially compounded aquafeeds: trends and future prospects. *Aquaculture*, **285** : 146–158.
- Tacon, A.G.J. and Metian, M. 2009. Fishing for feed or fishing for food: increasing global competition for small pelagic forage fish. *Ambio* **38**(6): 294–302.
- Vitousek et al. 1986. Human appropriation of the products of photosynthesis. *Bioscience* **36**: 368–373.
- Walters, C.J. & Martell, S.J.D. 2004. *Fisheries Ecology and Management*. Princeton University Press. 399 pp.
- Watson, R. & Pauly, D. 2001. Systematic distortions in world fisheries catch trends. *Nature* **414**: 534–536.

- Wikipedia http://en.wikipedia.org/wiki/Organic_food#North_America Notes that organic food sales in North America are growing at 17 to 20% per year while sales of conventional foods are growing by only 2–3% per year.
- World Bank, 2009. *The Sunken Billions: the Economic Justification for Fisheries Reform*. The International Bank for Reconstruction and Development. Washington D.C., 100 pp.
- Yiridoe et al. 2007. Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food systems* **20**: 193–205.

HAWAII FISH COMPANY, INC.
North Shore AquaFarm

P. O. Box 740
Waialua, HI 96791, USA
Contact: 808-429-3147, 429-3187
E-mail: hawaiiifish@gmail.com

City Bank 2000 TIGR Award
US SBA 2000 Tibbitts Award
US SBA 2001 Small Business Award
Special Congressional Recognition 2001

The Senate
The Twenty-Sixth Legislature
Regular Session of 2011

Committee on Agriculture
Senator Clarence Nishihara, Chair
Senator Gilbert Kahele, Vice Chair

Committee on Water, Land, and Housing
Senator Dovovan M. Dela Cruz, Chair
Senator Malama Solomon, Vice Chair

Date: Tuesday, March 22, 2011
Time: 2:00 pm
Place: Conference Room 225, State Capitol
415 South Beretania Street

Re: Testimony in Strong Support of HB 568 HD 2—Relating to Aquaculture

Hawaii Fish Company is the largest freshwater food fish farm in the state and the recipient of various federal and local aquaculture grants; however, we have been unable to capitalize on our 30- plus years of dedicated research and hard work and to expand our business because we do not have the long-term lease required. To secure long-term Federal and Federally guaranteed financing from the US Department of Agriculture and the US Department of Commerce, we would require a 60-year lease term remaining on our farm for the 40-year loan to be available to us.

It is also only proper that the right of first refusal be given to farmers who have dedicated their lives towards developing the property and who may have trained a next generation of responsible land stewards in their children. Why not support good tenants who are already familiar with and committed to the land?

Certainly, the right to engage in supportive activities is common sense; the discharge from aquaculture should be recycled for other crops and would help aquafarms thrive. If Hawaii is serious about providing local food and other products to its people and about achieving its goals of sustainability, HB 568 HD 2 is necessary.

Estralita Pasalo Weidenbach, Vice President

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 15, 2011 9:30 AM
To: AGL Testimony
Cc: metldoc@mindspring.com
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM

Follow Up Flag: Follow up
Flag Status: Flagged

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
Testifier position: oppose
Testifier will be present: No
Submitted by: Robert Sterne
Organization: Individual
Address:
Phone:
E-mail: metldoc@mindspring.com
Submitted on: 3/15/2011

Comments:

I oppose HB 568 since there appears to be no practical reason to extend the leases beyond 35 years. The writer did long range planning for a Fortune 500 corporation for many years, and the farthest we could forecast with any degree of accuracy was 10 years. DLNR Chairman William Aila's opposing testimony deals with the fairness issues of allowing options to be exercised to the possible exclusion of new bidders, and I agree with him. In addition, the bill does not deal with the important issue of financing and transfer of leases to other corporations. Once a lease is issued, it should only be valid for the entity or corporation to whom it is issued, and not transferrable. This will eliminate the current world wide problem of large multinational corporations buying up established leases.

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 15, 2011 12:39 PM
To: AGL Testimony
Cc: rittew@hotmail.com
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM

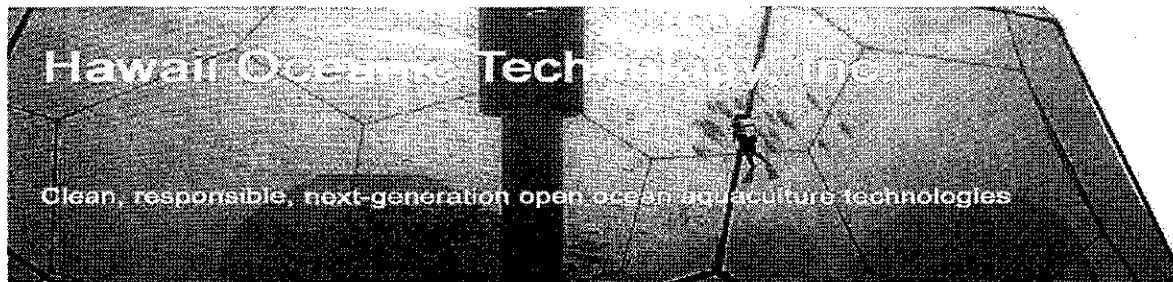
Follow Up Flag: Follow up
Flag Status: Flagged

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
Testifier position: oppose
Testifier will be present: No
Submitted by: Walter Ritte
Organization: Individual
Address:
Phone:
E-mail: rittew@hotmail.com
Submitted on: 3/15/2011

Comments:

I have been operating fishponds on the island of Molokai for the past 10 years. I am in strong oppositions of the open oceans aquaculture, as the negative impacts far out weigh the the proposed economic impacts. No long term ocean leasing should be allowed, THE PROPOSED PLANS THUS FAR ARE UNSUSTAINABLE AND DO NOTHING TO HELP OUR FOOD SECURITY PROBLEM.



March 22, 2010

TO: COMMITTEE ON WATER, LAND, AND HOUSING

Senator Donovan M. Dela Cruz, Chair

Senator Malama Solomon, Vice Chair

and

COMMITTEE ON AGRICULTURE

Senator Clarence K. Nishihara, Chair

Senator Gilbert Kahele, Vice Chair

RE: Testimony In Strong Support of HB568 HD2 - Relating to Aquaculture, Tuesday, March 22, 2010 2:45PM, Conference Room 229

Hawaii Oceanic Technology, Inc. strongly supports HB 568 as written. Hawaii Oceanic Technology, Inc. is the first open ocean ahi tuna farm to receive a State Conservation District Use permit and ocean lease for 247 acres of ocean in Hawaiian territorial waters. We anticipate spending tens of millions of dollars to build and deploy our environmentally responsible Oceansphere tuna farming systems at this lease site. A longer term lease that is consistent with other types of land based leases will give our investors a higher degree of confidence in our project and reduce risk. For this project to be sustainable and create and maintain quality jobs, export revenues and tax revenues to the state, HB568 is critical to our success. HB568 also:

1. will increase lease terms for aquaculture leases thereby encouraging investment in aquaculture infrastructure and equipment requiring long-term financing, and encourage multi-generational commitment to aquaculture farming
2. will provide lessees in good standing the right of first refusal such that the years of financial investment in the aquaculture farming operation are not put on the auction block and potentially lost to a higher bidder who would not have the intimate knowledge of the site nor the experience gained in the aquaculture farming operation, and may not have the commitment or experience of the lessee who has already demonstrated such commitment and experience;
3. will allow additional supportive aquaculture activities such as aquaponics, which would reuse aquaculture effluent water to grow additional plant products thereby improving the overall financial viability of the operation, or the generation of renewable energy, which could improve the long-term sustainability of the operation; and
4. it would help stimulate and diversify our economy by encouraging increased investment in aquaculture ventures in Hawaii.

Thank you for the opportunity to testify in strong support of this important bill.

Sincerely,

/s/

Bill Spencer, President/CEO

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, March 16, 2011 5:03 PM
To: AGL Testimony
Cc: carlbernhardt@msn.com
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Yellow Category

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
Testifier position: oppose
Testifier will be present: No
Submitted by: carl bernhardt
Organization: Individual
Address:
Phone:
E-mail: carlbernhardt@msn.com
Submitted on: 3/16/2011

Comments:

I am opposed to this bill because it includes the leasing of ocean sites for aquaculture. Without specific and stringent termination clauses, it will make the current law even worse. There appears to be a one-track mindset on the part of the Administration and Legislature to push ocean aquaculture despite overwhelming evidence of its harmful effects on, inter alia, water quality and wild fisheries. Each member of the Legislature has a fiduciary responsibility to see that his or her actions cause no harm to the environment. Even when there is disagreement as to the facts of a particular issue, it remains incumbent upon each of you to do no harm by your vote. In these days of tight budgets, agencies and departments do not have the staff or funding to carry out effective oversight and enforcement. Therefore, even more fiduciary responsibility falls on your shoulders. The ocean is Hawaii's greatest resource: Do not put it at risk.

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, March 17, 2011 1:21 PM
To: AGL Testimony
Cc: suzanne@ponokai.org
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM
Attachments: WLH HB 568 Testimony.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
Testifier position: oppose
Testifier will be present: No
Submitted by: Christina Lizzi
Organization: Food and Water Watch Hawaii
Address:
Phone:
E-mail: suzanne@ponokai.org
Submitted on: 3/17/2011

Comments:



Food & Water Watch • 1616 P St. NW, Suite 300 • Washington, DC 20036
www.foodandwaterwatch.org • T: +1.202.683.2500 • F: +1.202.683.2501

THE SENATE

THE TWENTY-SIXTH LEGISLATURE
REGULAR SESSION OF 2011

COMMITTEE ON AGRICULTURE
Senator Clarence K. Nishihara, Chair
Senator Gilbert Kahele, Vice Chair

COMMITTEE ON WATER LAND AND HOUSING
Senator Donovan M. Dela Cruz, Chair
Senator Malama Solomon, Vice Chair

DATE: Tuesday, March 22 2011

TIME: 2:45pm

PLACE: Conference Room 229, State Capitol
415 South Beretania Street, Honolulu

RE: Testimony in Opposition to HB 568 – Relating to Aquaculture

Aloha Chairs Nishihara and Dela Cruz, Vice Chairs Kahele and Solomon, and Committee Members,

Food & Water Watch thanks you for the opportunity to provide testimony and voice our strong opposition to HB 568 as it is written. HB 568 would extend lease terms for all aquaculture operations from 35 to 45 years, with the possibility of extension to 65 years for lessees in good standing after 10 years. This includes commercial finfish open ocean cage aquaculture operations. These large-scale operations are highly experimental. Long-term lease extensions could cost the State more in oversight and enforcement costs than it receives in lease payments, which for one existing operation is a mere \$2,100 per annum or 1% gross revenue, whichever greater.¹

FWW is a national consumer advocacy group with over 1,800 supporters in Hawai'i. We are also a founding member of the Pono Aquaculture Alliance, which is comprised of over thirty Hawai'i-focused organizations supporting responsible aquaculture practices. FWW advocates for safe, wholesome food produced in a humane and sustainable manner, and public rather than private control of water resources, including oceans, rivers and groundwater. We work with various community outreach groups around the world to create an economically and environmentally viable future. The FWW Fish Program works specifically to promote safe and sustainable seafood for consumers, while helping to protect the environment and support the long term well-being of coastal and fishing

¹ Board of Land and Natural Resources. "Request for approval of special installment agreement for payment of percentage rent under General Lease No. S-5721 to Kona Blue Water Farms, LLC, Kalaoa 1st through 4th, North Kona, Hawaii, Tax Map Key: 3rd/7-3-43; seaward of Kalaoa." August 28, 2009.



communities. We have worked in Hawai'i for the past three years to promote public control of ocean waters and prevent the reckless expansion of the open ocean aquaculture industry.

We support responsible and culturally appropriate forms of fish farming, such as small scale land-based recirculating aquaculture systems, *loko i`a* (traditional fish ponds) aquaponics and some shellfish culture. We have serious concerns, however, about expansion of the open ocean aquaculture industry (OOA), which already has resulted in negative environmental and social impacts at just its present scale, which are discussed below. The cumulative impacts of these operations and the ability of the marine environment to handle them are largely unknown. **Currently, state agencies have insufficient funding and are not well coordinated to be capable of carrying out oversight of ocean aquaculture.** Also, there are not strong regulations in place to address cumulative impacts and prevent damage to the ocean, its wildlife and Hawai'i's traditional and cultural ocean users from this highly experimental industry. Rather than further entrench this industry through lease extensions, we urge the State to take a precautionary approach and maintain or decrease current lease lengths until these issues are adequately addressed.

To address the issue of lease term extensions without impeding development of sustainable forms of aquaculture, HB 568 could be amended to specifically exclude commercial finfish open ocean cage aquaculture operations from the general definition of "aquaculture" on page 3, line 15.

The following provides more information on community opposition to OOA, its environmental and social impacts, challenges in agency oversight, the need for more rigorous environmental review, and prior legislative efforts in the 2011 regular session pertaining to OOA.

I. Abundant Demonstration of Community Opposition to Open Ocean Aquaculture

Since Hawai'i chose to allow leasing of ocean land for the purpose of commercial aquaculture, a number of companies have applied for or received leases. All have faced community opposition. To date, five farms – Ahi Nui Tuna Farms LLC, Ahi Farms, and Pacific Ocean Venture, Maui Fresh Fish, and Indigo Seafood – have been unsuccessful in obtaining the needed community support, permits and/or financing, though some are making a repeated attempt.^{2,3} In 2002, a Native Hawaiian group filed a contested case against Ahi Nui Tuna Farms LLC. Two cases were also filed, though ultimately

² Report to the Twenty-Fourth Legislature of Hawai'i 2008 Regular Session. Implementation of Chapter 190D, Hawai'i Revised Statutes Ocean and Submerged Lands Leasing. Prepared by Department of Agriculture and Department of Land and Natural Resources. November 2007. Page 9-10.

³ Report to the Twenty-Sixth Legislature of Hawai'i 2011 Regular Session. Implementation of Chapter 190D, Hawai'i Revised Statutes Ocean and Submerged Lands Leasing. Prepared by Department of Agriculture and Department of Land and Natural Resources. December 2010. Page 6.



dismissed based on standing, against Hawaii Oceanic Technology, Inc.'s (HOTI) prospective *ahi* operation. Again, the cases were filed by Native Hawaiians, one on behalf of the Kanaka Council and another by Michael Lee, a cultural practitioner.^{4,5} Additionally, due to lack of opportunity for involvement earlier in the permitting process, hundreds of people petitioned the Army Corps of Engineers to hold a public hearing regarding HOTI's Department of Army permit application. These requests, however, were denied.

After facing strong opposition from communities in Lanai, another company, Maui Fresh Fish, is shifting to an alternate location for its operation and is continuing the permitting process.

Kona Blue Water Farms (KBWF), an existing operation off of the Kona coast of Hawai'i Island, has met with numerous expressions of opposition over the years. The Kanaka Council, a Native Hawaiian organization, expressed frustration that Native Hawaiians were not adequately involved or consulted in the decision-making process for siting the KBWF facility which they saw is now located in a traditional fishing area directly off the coast of Kailua-Kona. This frustration led to a backlash in 2007 when KBWF applied to expand its cages that year, resulting in the filing of two contested cases. In response, the company decided to withdraw the application.^{6,7}

These experiences are all relevant to highlight the public opposition in Hawai'i to the expansion of this industry.

II. Ecological Concerns with Open Ocean Aquaculture

There are many serious issues related to OOA. Some of the primary concerns are: potential for pollution; effects on wild fish populations; effects on other marine animals, including mammals; and conflicts with the fishing and tourism.

Some proponents have argued that discharge from aquaculture facilities will have minimal ecological impacts because it will be diluted throughout the ocean, but in reality there is still little knowledge about the long-term effects. The Marine Aquaculture Task

⁴ Petition for contested case hearing, filed by Mike Lee, cultural practitioner with Board of Land and Natural Resources for its decision to award a Conservation District Use Permit to Hawai'i Oceanic Technology for 90 acres off of the North Kohala Coast, Hawai'i Island for the purpose of an open ocean fish farm. Filed on 23 October 2009.

⁵ Petition for contested case hearing, filed by Kale Gumapac on behalf of Kanaka Council Moku 'O Keawe with Board of Land and Natural Resources for its decision to award a Conservation District Use Permit to Hawai'i Oceanic Technology for 90 acres off of the North Kohala Coast, Hawai'i Island for the purpose of an open ocean fish farm. Filed on 23 October 2009.

⁶ "Kona fish farm facing expansion opposition." Associated Press, January 21, 2008. Available at: savekauai.org/oceans/kona-fish-farm-facing-expansion-opposition

⁷ Kona Blue Water Farms, LLC. "Final Supplemental Environmental Assessment for a Modification to Net Pen Designs within the Existing Production Capacity and Farm Lease Area for Kona Blue's Offshore Open Ocean Fish Farm off Unualoha Point, Kona, Hawaii." April 2009 at 3.



Force, assembled by the Woods Hole Oceanographic Institution found that: "Little is known about the assimilative capacity of marine ecosystems for the wastes produced by aquaculture operations,"⁸ A 2006 study of a the University of Hawaii/Cates open ocean facility found that waste from fish cages in deep ocean waters had "grossly polluted" the seafloor and "severely depressed" marine life at some sampling sites close to fish cages. It also found that these effects spread to sites 80 meters away over the course of 23 months.⁹

Additionally, operations may impact insular Hawaiian false killer whales (*pseudorca crassidens*), which are a candidate for the endangered species list.^{10 11} Impacts on whales, dolphins, sharks, seals and sea turtles are also a concern,. One facility, KBWF is actually located within the Hawaii Islands Humpback Whale National Marine Sanctuary, and other proposed projects are located just outside its boundaries.

A recent study showed that the incidence of some species of sharks increased at Hawaiian OOA sites.¹² Sharks can be attracted to the fish in the cages, which can also be a threat to other wild fish or marine animals that congregate around the cages. They also serve as a threat to fishermen in the area. In 2005, KBWF killed a 16-foot tiger shark that was stalking one of its divers.¹³ In September 2009, 500-1000 fish were reported to have escaped from KBWF's operation after a Galapagos shark bit through a cage.¹⁴ The shark then entered the cage and had to be removed using a seine net.¹⁵ Interactions with sharks at OOA sites is also culturally problematic due to the significant role they play for culturally practitioners as `aumakua.¹⁶

Ocean fish farms operations in other parts of the world provide an example of how aquaculture facilities can damage wild fish stocks if not carefully regulated. It has been well documented that when farmed fish escape, they can compete with wild fish for resources and habitat.¹⁷ Despite industry advances, escapes continue to be a major issue.

⁸ "Sustainable Marine Aquaculture: Fulfilling the Promise; Managing the Risks." Report of the Marine Aquaculture Task Force, Takoma Park, MD, p. 3, Jan 2007. Available at: http://darc.cms.udel.edu/Sustainable_Marine_Aquaculture_final_1_07.pdf

⁹ Lee, Han W., et al. "Temporal changes in the polychaete infaunal community surrounding a Hawaiian mariculture operation." *Marine Ecology Progress Series*, 307:175-185, January 2006.

¹⁰ Baird, Robin et al. "False Killer Whales (*Pseudorca crassidens*) around the main Hawaiian Islands: Long-term site fidelity, inter-island movements, and association patterns." *Marine Mammal Science*, vol. 24, iss. 3. January 2008. Pages 598-599.

¹¹ 50 Fed Register 70169-70187, (Nov. 17, 2010)

¹² Papastamatlou, Yannis P. et. al. "Site fidelity and movements of sharks associated with ocean-farming cages in Hawaii." *Marine and Freshwater Research*, vol. 61, iss. 12. December 13, 2010 at 1.

¹³ Lucas, Carolyn. "Fish farm seeks second location." *West Hawaii Today*, May 6, 2006.

¹⁴ Note from Office of Conservation and Coastal Land. Titled September 2009.

¹⁵ E-mail communication. Neil Simms, President, Kona Blue Water Farms to Justin P. Viezbicke; William J. Walsh; Stephen M. Cain; and Nick Whitey. Subject: Galapagos freed. 15 September 2009.

¹⁶ Minerbi, Luciano. "Sanctuaries, Places of Refuge and Indigenous Knowledge in Hawaii." In Morrison, R.J. and Linda Crowl (Eds.). (1994) *Science of Pacific Island Peoples Land Use and Agriculture Vol. 2*. Institute of Pacific Studies, University of the South Pacific. Page 108.

¹⁷ Naylor, R., et al. "Fugitive Salmon: Assessing Risks of Escaped Fish from Aquaculture." *BioScience*, 55: 427-437, 2005.



Some recent examples of escapes include:

- From late December of 2008 through early January of 2009, a series of massive escapes in Chile – totaling more than 700,000 salmon and trout from various farms – prompted the leader of the Chilean Senate’s Environmental Committee to proclaim the incidents an “environmental disaster.”¹⁸
- In October of 2009, 40,000 fully-grown Atlantic salmon escaped from a net pen facility in British Columbia when a machine removing dead fish from the bottom of the pen broke a hole in the net; the company reportedly recovered less than 3% of the escaped fish at the time the article was written, though efforts to recover the fish were ongoing.¹⁹
- In October of 2010, 70,000 harvest-ready salmon escaped from a farm in Norway, resulting in a loss to the company of at least \$600,000; the same location had suffered from an outbreak of pancreatic disease resulting in high levels of mortality only months earlier.²⁰

Disease transfer from farmed to wild fish is another risk. Wild pink salmon populations in British Columbia were depressed due to outbreaks of sea lice – marine parasites that cause viral or bacterial infection and ultimately death – increased incidences of which are associated with salmon farms.²¹

Although aquaculturists have argued that the industry can bring jobs and a local food source to Hawai‘i, the actual job numbers are limited, as the industry is highly mechanized (for example, KBWF modified its net pens so that cleaning the cages would be easier and diver jobs could be eliminated). Moreover, the bulk of the product from OOA operations has been, and in the case of the proposed farms, is planned to be, exported to the U.S. mainland and/or to countries where it will fetch higher prices.

If local food and economy were a true priority for open ocean aquaculturists, they could focus on developing land based facilities, or traditional fish ponds, which many environmentalists and Native Hawaiians consider a more sustainable option.

III. Consequences from Hawaiian Ocean Aquaculture and Inability to Regulate or Mitigate Them

Recent information released by the State after the submission of a FOIA request highlighted additional flaws with KBWF’s operation. Between 2005 and 2008, the

¹⁸ Witte, Benjamin. “Thousands of salmon and trout escape in southern Chile.” *The Patagonia Times*, January 19, 2009.

¹⁹ Lavoie, Judith. “40,000 fish escape farm.” *The Times Colonist*, October 24, 2009.

²⁰ Grindheim, Joar. “Costly salmon escape.” *IntraFish*, October 15, 2010.

²¹ Krkosek, M., et al. “Declining wild salmon populations in relation to parasites from farmed salmon.” *Science*, 2007. Peeler, E.J., et al.



company did little benthic testing. In their application for a modified permit in 2008, they provided only five samples from three sample dates, over three years. These included one sample for each site, with no replicates for any site sampled. The small sample size and lack of repetition call into question the accuracy of any analysis provided by the company regarding their impact on the benthos. In March 2007, the Office of Conservation and Coastal Lands (OCCL) notified KBWF that their current benthic monitoring system was unsatisfactory. They proposed a minimum of quarterly monitoring by drop camera, but it took over a year for the company to comply.²²

KBWF has introduced antibiotics in Hawaiian waters at their site, without approval by Hawaiian officials. The permission to use an antibiotic was given to KBWF by officials at the United States Fish and Wildlife Service in Montana and approved by a federal agency, the Center for Veterinary Medicine at the Food and Drug Administration.²³ After the drug was applied, OCCL questioned whether these outside agencies knew they were approving extra-label use of the drug to be deposited directly into Hawaiian waters and not a land-based tank.²⁴

The State also documented cases of deliberate interference with bottle-nosed dolphins at KBWF's operation, and according to the Hawai'i Department of Aquatic Resources, the animals have begun to exhibit "unnatural behaviors."²⁵

These examples all serve to illustrate the complexity of regulating OOA. Clearly, in these instances, the state agencies have not had the resources to stop problems from occurring, and extending lease durations to sixty-five years will make it even more difficult for the State to avoid undesirable environmental consequences. To envision such a facility not being required to update its technology until the year 2075, regardless of what harm occurs in the interim period, wholly fails to protect Hawaii's ecological, cultural and traditional ocean interests and ignores scientific progress.

IV. Insufficient Environmental Review Process

²² Public comment. Dan Polhemus, Administrator, Division of Aquatic Resources, Department of Land and Natural Resources, to Sam Lemmo, Administrator Office of Conservation and Coastal Lands, Department of Land and Natural Resources. Review of Draft EA/CDUA HA-3443 for the Expansion of Kona Blue Water Farms Offshore Aquaculture Facility. 3 March 2008. Page 7.

²³ E-mail correspondence. November 2, 2007. Susan Storey, Aquaculture Drugs Team, FDA-CVM, Office of New Animal Drug Evaluation, Division of Therapeutic Drugs for Food Animals to Neil Anthony Simms, President, Kona Blue Water Farms. Subject: Florfenicol for your fish. On file with Office of Conservation and Coastal Lands, DLNR

²⁴ Letter dated November 15, 2007. Dan A. Polhemus, Administrator to Samuel J Lemmo, Administrator of Office of Conservation and Coastal Lands, DLNR. RE: Bacterial Outbreak at Kona Blue Offshore Fish Farm On file with Office of Conservation and Coastal Lands, DLNR.

²⁵ Memorandum. Dan Polhemus, Administrator, Division of Aquatic Resources and Jeff Walters, Co-manager of Hawai'i Humpback Whale National Marine Sanctuary to Sam Lemmo, Office of Conservation and Coastal Lands, Department of Land and Natural Resources. Subject: Kona Blue Water Farms open ocean fish farm, concerns regarding dolphin interactions. 20 February 2008.



Issues regarding the environmental review process for OOA operations must be addressed before lengthening their lease times. Currently, companies are not always required to submit an Environmental Impact Statement (EIS). When applying for conservation district use, an aquaculture company must provide: “an environmental assessment or, if required, an environmental impact statement which shall be prepared and accepted in compliance with the rules adopted under Chapter 343.”

According to HRS §343-2 an Environmental Assessment (EA) is a “written evaluation to determine whether an action may have a significant effect.” An EIS is “an informational document prepared in compliance with the rules adopted under section HRS §343-6 and which discloses economic welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.”

Based on an EA, the agency, in this case the Department of Land and Natural Resources (DLNR) OCCL, determines whether there is a “finding of no significant impact,” meaning, “a determination... that the subject action will not have a significant effect.” If significant impacts are expected, the applicant must go on to prepare an EIS. This determination and the final approval or disapproval of an EA or EIS must take public comment into consideration.

Unlike an EA, an EIS: must explore alternatives to the proposed action; must evaluate the environmental setting in greater detail; must give an in depth discussion of the probable impacts, including cumulative impacts, direct and indirect impacts, and impacts on cultural practices and resources; must discuss the relationship between short-term use of the environment and long-term productivity; must detail unavoidable environmental effects; must discuss mitigation measures; and in the final EIS, must discuss how each comment was evaluated or give reasons why a specific comment was not accepted. Given the waste discharge, potential impacts on marine animals and fish stocks, and potential cultural ramifications, it is not reasonable to expect that any OOA facility would not result in “significant effects.” Despite this, DLNR has not required all OOA applicants to conduct an EIS.

OCCL also needs to be held more accountable in the cases where it does require an EIS. In HOTI’s case, OCCL approved the EIS despite finding that “there are still unresolved issues regarding the level of environmental and project disclosure, analysis regarding the engineering design of the proposed engine, fish feed components, lack of benthic studies in the project area, and lack of shark, marine mammal and endangered species plan.”

An EIS should be required of every OOA project and each project should be more rigorously reviewed.

V. Lack of Demonstrated Economic Benefits



HB 568 states that “direct leasing of public lands had been a cornerstone for building a successful commercial aquaculture industry in the State,” but it does not discuss whether a successful aquaculture industry will **benefit** the State.

As ocean aquaculture is scheduled to increase in Hawai`i, projections for the amount of direct employment it will provide have decreased. Prior to modifications or expansions, Hukilau LLC and KBWF employed a total of 44 people, including jobs at both of their land-based hatcheries. After recently approved modifications are made to both the Hukilau and KBWF site, the industry estimates it will only be providing 39 jobs. This is despite anticipated increases in production of about 2.5 million pounds to 6 million pounds annually.²⁶ In 2010, Hukilau declared bankruptcy, putting their promise of jobs in question.²⁷

Furthermore, it is questionable whether employment by the aquaculture industry is safe or stable. For example, a diver employed by KBWF filed suit against KBWF, alleging that it failed to provide a safe environment, ultimately leading to personal injury. According to the suit: “Kona Blue, acting through its managerial agents, was guilty of outrageous conduct owing to gross negligence, willful, wanton, and reckless indifference to the rights of others, and/or conduct even more deplorable...”²⁸

In addition, the aquaculture industry in Hawai`i has not sufficiently proven that it can achieve profitability with existing operations filing for bankruptcy or transferring leases.

VI. Other Legislative Efforts

The controversy surrounding ocean aquaculture in Hawai`i is further evidenced by the introduction of two other bills this legislative session. HB 221 Relating to Mariculture lends support to the development of land-based, closed-loop re-circulating aquaculture systems, and would suspend the development, expansion or transfer of any existing

²⁶ Information derived from the following sources: Consent to Assign General Lease No. S-5654, Cates International, Inc., Assignor, to Grove Farm Fish and Poi, LLC, Assignee, Oahu, Tax Map Key:(1)9-1-005:Seaward. Land Submittal to State of Hawai`i Department of Land and Natural Resources Land Division Board of Land and Natural Resources on 9 February 2007; Aquaculture Planning & Advocacy LLC. Final Environmental Assessment Proposed Expansion of Hukilau Foods Offshore Fish Farm, Mamala Bay, Oahu, Hawai`i. Prepared for Office of Conservation and Coastal Lands, Department of Land and Natural Resources. 24 July 2009. Page 8; Kona Blue Water Farms, LLC Final Supplemental Environmental Assessment for a Modification to Net Pen Designs within the Existing Capacity and Farm Lease Area for Kona Blue’s Offshore Open Ocean Fish Farm off Unualoha Point, Kona, Hawai`i prepared for Land Division, Department of Land and Natural Resources. Dated April 21, 2009. Page 17; Aquaculture Planning & Advocacy LLC. Final Environmental Assessment Proposed Expansion of Hukilau Foods Offshore Fish Farm, Mamala Bay, Oahu, Hawai`i. Prepared for Office of Conservation and Coastal Lands, Department of Land and Natural Resources. 24 July 2009. Page 8.

²⁷ Gomes, Andrew. “Hukilau Foods files for bankruptcy.” Star Advertiser. November 3, 2010;

²⁸ Wagner v Kona Blue Water Farms LLC United States District Court for the District of Hawai`i No CV09 00600 Filed 16 December 2009.



Food & Water Watch • 1616 P St. NW, Suite 300 • Washington, DC 20036
www.foodandwaterwatch.org • T: +1.202.683.2500 • F: +1.202.683.2501

permits of open water commercial finfish operations. SB 626 calls for tougher requirements for open ocean aquaculture, requiring that applicants submit a full EIS.

Conclusion

Experiences with Hawaiian OOA operations indicate that the state of Hawai`i should proceed with extreme caution in regulating the industry's expansion. Opposition voiced by the local community, especially by Native Hawaiian groups, indicates that many constituents support this approach. We urge the legislature not to extend the maximum lease term, or include an option for renewal, as stated HB 568, as that would allow the industry to completely circumvent meaningful oversight over the long term, and increase the State's difficulty in sufficiently regulating the industry and protecting natural and cultural resources.

Thank you for the opportunity to testify in opposition to the Bill, and in favor of a precautionary approach in protecting Hawai`i's ecological and cultural resources.

Sincerely,

A handwritten signature in black ink, appearing to read "Marianne Cufone". The signature is fluid and cursive, written over a light blue horizontal line.

Marianne Cufone, Esq.
Director, Fish Program
202.683.2511

A handwritten signature in black ink, appearing to read "Christina Lizzi". The signature is fluid and cursive, written over a light blue horizontal line.

Christina Lizzi
Policy Analyst, Fish Program
202.683.2495

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, March 17, 2011 2:02 PM
To: AGL Testimony
Cc: jwikum@gmail.com
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM

Follow Up Flag: Follow up
Flag Status: Flagged

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
Testifier position: oppose
Testifier will be present: No
Submitted by: Jacqueline Wikum
Organization: Keoua Honaunau Canoe Club
Address:
Phone:
E-mail: jwikum@gmail.com
Submitted on: 3/17/2011

Comments:

Keoua Honaunau Canoe Club represents 150 paddlers on the Big Island of Hawaii. We stand opposed to Open Ocean Agriculture farms that pollute our water and our horizon.

Please DO NOT extend the fish farms' leases on our beautiful oceans. Offshore aquaculture is experimental technology that our State does not have the resources to oversee. Sixty-five years is a very long time. We have yet to understand how they will impact our environment, and our wild fisheries. Not to mention our tourism dollars with their nets that are visible for miles.

Please vote NO.

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, March 17, 2011 2:11 PM
To: AGL Testimony
Cc: avotree-testimony@yahoo.com
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM

Follow Up Flag: Follow up
Flag Status: Completed

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
Testifier position: oppose
Testifier will be present: No
Submitted by: Barbara Harris
Organization: Individual
Address:
Phone:
E-mail: avotree-testimony@yahoo.com
Submitted on: 3/17/2011

Comments:

Offshore Fish Farms are a bad idea. Extending their leases is a worse idea. If you will not be around in 65 years, then I recommend you vote NO.

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, March 17, 2011 11:35 PM
To: AGL Testimony
Cc: Sheiks2@aol.com
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM
Attachments: I oppose HB 568.docx

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
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 HB568

I oppose HB 568 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 Representatives voted.

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

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Friday, March 18, 2011 12:24 PM
To: AGL Testimony
Cc: ndavlantes@aol.com
Subject: Testimony for HB568 on 3/22/2011 2:45:00 PM

Follow Up Flag: Follow up
Flag Status: Flagged

Testimony for AGL/WLH 3/22/2011 2:45:00 PM HB568

Conference room: 229
Testifier position: oppose
Testifier will be present: No
Submitted by: Nancy Davlantes
Organization: Individual
Address:
Phone:
E-mail: ndavlantes@aol.com
Submitted on: 3/18/2011

Comments:

In light of the recent tsunami off Japan and its effects on harbors and coasts here, I don't believe that this is a time to increase lease terms for aquaculture operations. There needs to be more study of the largely experimental open ocean industrial fish farming, which would rely on artificial means such as anti-biotics to farm raise fish in close quarters. Waters from the fish farm would blend with the open ocean; a tsunami would mean farm-raised fish would be combined with natural stock. There are just too many unknowns to increase lease terms that in some cases may extend out 65 years.

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, March 20, 2011 9:51 PM
To: AGL Testimony
Cc: pinky@lava.net
Subject: Testimony for HB568 on 3/22/2011 2:00:00 PM

Follow Up Flag: Follow up
Flag Status: Flagged

Testimony for AGL/WLH 3/22/2011 2:00:00 PM HB568

Conference room: 225
Testifier position: oppose
Testifier will be present: No
Submitted by: Laura Thompson
Organization: Individual
Address:
Phone:
E-mail: pinky@lava.net
Submitted on: 3/20/2011

Comments:

"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 can be accomplished by restoring and properly managing the many, many fish ponds in Hawaii. Many are state owned. Please PROMOTE and PRACTICE sustainability for the health of our home.

THE SENATE
THE TWENTY-SIXTH LEGISLATURE
REGULAR SESSION OF 2011

COMMITTEE ON AGRICULTURE
Senator Clarence K. Nishihara, Chair
Senator Gilbert Kahele, Vice Chair

COMMITTEE ON WATER, LAND, AND HOUSING
Senator Donovan M. Dela Cruz, Chair
Senator Malama Solomon, Vice Chair

DATE: Tuesday, March 22, 2011
TIME: **2:00 p.m.**
PLACE: Conference Room **225**
State Capitol
415 South Beretania Street

Chair Nishihara, Vice Chair Kahele, Chair Dela Cruz, Vice Chair Solomon:

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 development of the aquaculture industry in Hawaii for over 30 years. I strongly support what H.B 568 HD 2 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; 45 years for new farmers and 65 years for existing farmers in good standing. These changes would move towards giving aquaculture farmers the same leasing opportunities as currently being given to agriculture farmers. The additional lease 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 other activities that recycle farm effluents can lead to enhanced farm profitability. Moreover, providing this flexibility is consistent with the Governor's desire to encourage clean industries that contribute to economic development, jobs and food security.

Finally, giving successful aquaculture farmers the opportunity for a right of first refusal to further extend their lease would promote successful farmers and farm families to stay on the site and continue to contribute to Hawaii's economy and food self sufficiency.

In summary, I believe this is a positive bill that promotes a supportive business environment for aquaculture development, while not costing the State money in these difficult times. It sends the right kind of message to potential farmers and investors that Hawaii wants sustainable commercial aquaculture. I strongly urge that you to pass this bill. 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

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 21, 2011 2:38 PM
To: AGL Testimony
Cc: cindy@ponokai.org
Subject: Testimony for HB568 on 3/22/2011 2:00:00 PM
Attachments: HOTI Petition 1st Batch 586.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Red Category

Testimony for AGL/WLH 3/22/2011 2:00:00 PM HB568

Conference room: 225

Testifier position: oppose

Testifier will be present: No

Submitted by: kohala ranch community assn.

Organization: kohala ranch community assn.,kohala by the sea,residents of kohala estates,kaipala community assn.,south kohala hawaiian civic club

Address:

Phone:

E-mail: cindy@ponokai.org

Submitted on: 3/21/2011

Comments:

We adamantly are opposed to the inclusion of open ocean finfish aquaculture in this bill HB 568. There is overwhelming evidence that this industry is environmentally harmful, causing water pollution, micro-threats(pathogens) of disease transmission to native fish populations, and certain die off of wild fish stocks. Attached are petitions signed by 586 Big Island residents and taxpayers opposed to commerical open ocean finfish aquaculture operating in Hawaiian waters. It would be premature to increase lease terms when this bill does not deal with the important issue of financing, transfer of leases to other corporations, and terminations in the event of permit violations. The ocean is Hawaii's greatest resource. Please take no action that could harm it and the economic future of Hawaii.

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.

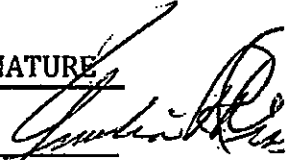
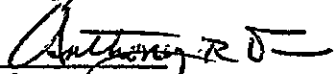
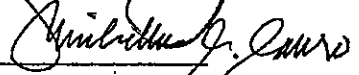
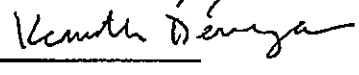
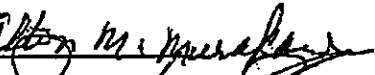

3) MICRO-THREATS (pathogens) of disease transmission to native Hawaiian fish populations.

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 R. Dias	P.O. Box 794 Kealahou		
Anthony R. J.	P.O. Box 796 Kealahou ⁹⁶⁷⁵⁰		
Michelle L. Lauro	70 box 6747 Kamuela, HI 96743		
Kenneth Demaya, Jr.	P.O. Box 6747 Kamuela, HI 96743		
Altora M. Murakami	P.O. Box 731 Honokaa, HI		
IVAN R. Fernandez	P.O. Box 957 Hahaione		

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 21, 2011 8:26 PM
To: AGL Testimony
Cc: neil@soest.hawaii.edu
Subject: Testimony for HB568 on 3/22/2011 2:00:00 PM
Attachments: Testimony_HB568_HD2.pdf

LATE

Follow Up Flag: Follow up
Flag Status: Flagged

Testimony for AGL/WLH 3/22/2011 2:00:00 PM HB568

Conference room: 225
Testifier position: oppose
Testifier will be present: Yes
Submitted by: Neil Frazer
Organization: Individual
Address:
Phone:
E-mail: neil@soest.hawaii.edu
Submitted on: 3/21/2011

Comments:

I suggest an amendment to this bill that gives supporters most of what they want while preserving the interests of the state and other ocean-using enterprises.

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 22, 2011 1:46 AM
To: AGL Testimony
Cc: gfilaban@aol.com
Subject: Testimony for HB568 on 3/22/2011 2:00:00 PM

Testimony for AGL/WLH 3/22/2011 2:00:00 PM HB568

Conference room: 225
Testifier position: oppose
Testifier will be present: No
Submitted by: Gwen Ilaban
Organization: Individual
Address:
Phone:
E-mail: gfilaban@aol.com
Submitted on: 3/22/2011

LATE

Comments:

HB 568 would increase leases for industrialized fish farms from 35 years up to 65 years and further encourage more taxpayer money be spent on it. It is time to reevaluate the role of open ocean aquaculture in Hawai'i

Factory fish farming takes the industrial agriculture model - cramming thousands of animals into a confined environment and growing them to market size - and moves it into the ocean to raise fish. There is no separation between the farm and the natural environment. Additionally, these ocean feedlots rely heavily on imported feed, and the end product is shipped off-island or only found at high-end restaurants.

Put residents and the environment first and vote against this bill HB 568.

I urge you to either vote against the bill or amend it to exclude "open ocean commercial finfish aquaculture" from those fish farms eligible for longer leases.

Mahalo!

nishihara5 - Randy

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 22, 2011 6:36 AM
To: AGL Testimony
Cc: ahloychun@hotmail.com
Subject: Testimony for HB568 on 3/22/2011 2:00:00 PM

Testimony for AGL/WLH 3/22/2011 2:00:00 PM HB568

Conference room: 225
Testifier position: oppose
Testifier will be present: No
Submitted by: Wayne Chun
Organization: Aoao O Na Loko I'a O Maui
Address:
Phone:
E-mail: ahloychun@hotmail.com
Submitted on: 3/22/2011

LATE

Comments:

Extending open ocean leases will have a major impact on our food stock. Large foreign companies will invest and exploit our ocean resources for profit. Please reconsider for the sake of our future and our people! Hawaiian fishponds is the answer!!!