

HB

208

Cover Sheet for Fiscal Notes for HB208

Year	02	03	04	05	06	07	08
DEC	0	0	0	0	0	0	0
DNR	98.3	123.9	0	0	0	0	0
F&G/Com Fish	90.0 *	*	*	*	*	*	*
F&G/Habitat	72.5	36.5	*	*	*	*	*
TOTAL	260.8	159.4					*

DNR estimates \$55,000 revenue within 3-4 years

*may be additional long-term costs

Note: On 4/16/02 F&G notified Rep. Scalzi that the ComFish note would be lowered by approximately \$50,000. Fiscal note forthcoming.

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: 1
Bill Version: CSHB 208(FSH)
(H) Publish Date: 3/6/02

Revision Date/Time (Note if correction): _____ Dept. Affected: Environmental Conservation
Title: An Act Relating to Aquatic Farming of Shellfish BRU: Environmental Health
Sponsor: Representative Scalzi Component: Food Safety and Sanitation
Requestor: House Fisheries Component No.: 2343

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0
Travel	0.0	0.0	0.0	0.0	0.0	0.0
Contractual	0.0	0.0	0.0	0.0	0.0	0.0
Supplies	0.0	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0	0.0	0.0
Land & Structures	0.0	0.0	0.0	0.0	0.0	0.0
Grants & Claims	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1003 GF Match	0.0	0.0	0.0	0.0	0.0	0.0
1004 GF	0.0	0.0	0.0	0.0	0.0	0.0
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1037 GF/Mental Health	0.0	0.0	0.0	0.0	0.0	0.0
Other (Specify Type-Do not abbreviate)	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: 0.0
Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time	0	0	0	0	0	0
Part-time	0	0	0	0	0	0
Temporary	0	0	0	0	0	0

ANALYSIS: (Attach a separate page if necessary)

This fiscal note was developed using information from testimony on the Senate companion bill (SB 141). During this testimony, it became clear that "suitable" did not mean already certified as a growing area under the National Shellfish Sanitation Program (NSSP), therefore the department does not expect any increased costs during the years covered by this fiscal note. Certification under the NSSP normally takes place shortly before commercial harvesting begins. Currently the industry pays for part of the cost to certify growing areas and we would expect that to be the case if this bill passes. However, even with industry support for some of the certification costs, there will be an increased cost to the department when any of the growing sites permitted under this legislation need to be certified under the NSSP.

Prepared by: Janice Adair, Director Phone: (907) 269-7644
Division: Division of Environmental Health Date/Time: 2/28/02 3:49 PM
Approved by: Kurt Fredriksson, Deputy Commissioner Date: 2/28/2002
Agency: Department of Environmental Conservation

FISCAL NOTE

**STATE OF ALASKA
2002 LEGISLATIVE SESSION**

Fiscal Note Number: _____
Bill Version: CSHB 208(RES)

() Publish Date: _____

Revision Date/Time (Note if correction): 3/12/2002
Title: Aquatic Farms for Shellfish

Dept. Affected: Natural Resources

BRU: Minerals, Land & Water Dev

Component: Claims, Permits and Leases

Sponsor: Rep. SCALZI, Chenault, Lancaster, Harris, Hudson, James

Requester: (H) FIN

Component Number: 2460

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services	82.8	110.4				
Travel	5.0	10.0				
Contractual	2.5	2.5				
Supplies	1.0	1.0				
Equipment	7.0	0.0				
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	98.3	123.9	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008

CHANGE IN REVENUES ()	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
	0.0	13.9	27.8	41.7	55.5	55.5

FUND SOURCE (Thousands of Dollars)

FUND SOURCE	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
1002 Federal Receipts						
1003 GF Match						
1004 GF	98.3	123.9				
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	98.3	123.9	0.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: none

Check this box (X) if funding for this bill is included in the Governor's FY2003 budget proposal:

POSITIONS

Position Type	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Full-time	2	2				
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*
This bill creates a one-time disposal program of at least 90 aquatic farmsites and requires DNR to condition leases for sites that culture wild stocks of indigenous shellfish to restore the wild stock upon termination or expiration of the lease to the population level that existed prior to issuance of the lease. It provides an attempt at a new type of mariculture program - one that is modeled on DNR's existing land disposal program where state agencies do all of the up-front work and an applicant bids for a site. DNR and DF&G would solicit nominations; pick the areas and sites; prepare best interest finding and coast zone consistency, then put the sites up for bid. With respect to the DNR lease, the applicant could, in the best of circumstances, bid for the site, submit an operating plan and obtain the site with little or no additional work by the agency. This is very different than the 9-month long process currently required of an applicant. As the agencies do the work up front, significant up-front expenses are necessary.
(CONT.)

Prepared by: Bob Loeffler
Division: Minig, Land and Water
Approved by: Pat Pourchot
Agency: Natural Resources

Phone: 269-8600
Date/Time: 12-Mar-02
Date: 12-Mar-02

ANALYSIS: (continued)

DNR's current aquatic farm program, which is very different from the procedures envisioned in this bill, operates with one employee and brings in approximately \$48.0 a year. It would continue to operate while this bill is implemented.

DNR's current mariculture staff consists of one person who is working at full capacity with the current program. Implementing the bill would require a new unit consisting of two employees to pick sites and complete the work.

Total estimated costs for DNR's portion of a one-time mariculture disposal: \$222,200, over two fiscal years.

Changes in revenue (annually): \$13,900+ for the first year, eventually reaching \$55,500+ over a period of 3-4 years.

It is unlikely that the market could absorb 90 aquatic farmsites at once. We come to this conclusion because the average number of applications received during an opening is approximately 15 to 20. For purposes of projecting revenue, we estimate that one-quarter of the sites, or 22, would be taken the first year, and the remainder would be taken "over the counter" over the subsequent three years. Rent for 22 three-acre sites would total approximately \$13,900. If half of the 90 sites, or 45, are taken initially, the possible annual revenue could be \$27,800. The total annual revenue after 90 sites are taken would be \$55,600. This estimate is based on an average 3-acre suspended culture site x 60 sites = \$33,000 and an average of 5-acre on-bottom culture site x 30 sites = \$22,500. (As of August 2, 2001, the aquatic farm lease fee was adjusted to \$350 for the first acre, plus \$100 for each additional acre.)

Personal Services New Position Detail

DRAFT

Department of Natural Resources

Scenario: DNR FY2003 Fiscal Notes - for Positions (2481)
 Component: Claims, Permits & Leases (2460)
 BRU Name: Minerals, Land, and Water Development (330)

PCN	Job Class Title	Time Status	Retire Code	Barg Unit	Location	Salary Sched	Range & Steps	Budgeted Months	Split / Annual Count	Annual Salary	COLA	Premium Pay	Annual Benefits	Total Costs
10-#075	Natural Resource Mgr I	FT	A	GG	Anchorage	2A	18 C	9.0		35,154	565	0	12,959	48,678
Justification: HB208						Funding Detail:								
						1004	General Fund Receipts					100.00%	48,678	
								Total Funding:				100.00%	48,678	
10-#077	Natural Resource Tech II	FT	A	GG	Anchorage	2A	12 C	9.0		23,247	373	0	10,519	34,139
Justification: HB208						Funding Detail:								
						1004	General Fund Receipts					100.00%	34,139	
								Total Funding:				100.00%	34,139	

Component Summary:

Total New Positions: 2

Fund Description	Fund Percent	Fund Amount
1004 General Fund Receipts	100.00%	82,817
Total Funding:	100.00%	82,817

Note: If a position is split, an asterisk (*) will appear in the Split/Count column. If the split position is also counted in the component, two asterisks (**) will appear in this column.

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: 3
Bill Version: CSHB 208(RES)
(H) Publish Date: 3/13/02

Revision Date/Time (Note if correction): _____ Dept. Affected: Fish and Game
Title: Aquatic Farms For Shellfish BRU: Commercial Fisheries
Sponsor: Representative Scailz Component: Fisheries Development
Requester: House Resources Component No. 1942

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services	40.0	25.0	*	*	*	*
Travel	10.0	5.0	*	*	*	*
Contractual	30.0	10.0	*	*	*	*
Supplies	5.0	3.0	*	*	*	*
Equipment	5.0	2.0	*	*	*	*
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	90.0	45.0	*	*	*	*

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	90.0	45.0				
1005 GF/Program Receipts						
1037 GF/Mental Health						
TOTAL	90.0	45.0	*	*	*	*

Estimate of any current year (FY2002) cost: 0.0

Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary	2					

ANALYSIS: (Attach a separate page if necessary)

ADF&G is required to provide consultation to DNR regarding the suitability of various sites before they are offered for lease. The Mariculture Program Leader and Assistant will lead and coordinate, in conjunction with industry nominations, the selection of sites to survey as well as field activities with ADF&G regional staff, and staff from other participating agencies. To accomplish site surveys for suitability, ADF&G will conduct dive surveys on potential sites. Personnel costs include funding for a seasonal Fisheries Biologist I, certified divers associated with dive surveys and inspections at proposed aquatic farm sites, and laboratory testing of samples taken from the sites. Travel costs include per diem and transport of department staff, including certified divers, to proposed and existing farm sites. Contractual costs include vessel time to conduct surveys and

Prepared by: Doug Mocom
Division: Director
Approved by: Gordy Williams for Commissioner Frank Ruo
Agency: Fish and Game

Phone 465-6100
Date/Time 3/5/02 3:15 PM
Date 3/5/2002

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

BILL NO. CSHB 208 (RES) - FN#3

ANALYSIS CONTINUATION

Inspections of proposed farm sites, and laboratory work for the analysis of water quality samples and PSP and Domoic Acid analysis for growing area certifications. Supplies include materials necessary for dive surveys, scientific supplies and data processing supplies, and assistance with regional mariculture plan development.

Additional time and funding needed to complete the work associated with identification of new areas in FY 2004 are roughly estimated at 50% of the FY 2003 costs.

* There will also be increasing costs associated with any large increases in mariculture permitting and support. Many services, such as water quality and product testing, currently provided at little or no cost to aquaculture farm operators by various state facilities, resources, and personnel, will probably not be fiscally possible as the number of mariculture operations increases, unless funding is provided. These are essential to meet statutory requirements. Since such impact is completely contingent on the number of new farms and the size of the farms, these costs are impossible to estimate. This fiscal note merely identifies the likelihood of additional long-term costs.

NOTE: ADFG Division of Habitat and Restoration has also submitted a fiscal note.

FISCAL NOTE

**STATE OF ALASKA
2002 LEGISLATIVE SESSION**

Fiscal Note Number: 4
 Bill Version: CSHB 208(RES)
 (H) Publish Date: 3/13/02

Revision Date/Time (Note if correction): _____ Dept. Affected: ADF&G
 Title Aquatic farms for shellfish BRU Habitat and Restoration
 Component Habitat
 Sponsor Representative Scalzi
 Requestor House Resources Component No. 486

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services	65.5	33.0	*	*	*	*
Travel	5.0	2.5	*	*	*	*
Contractual	2.0	1.0				
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	72.5	36.5	*	*	*	*

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	72.5	36.5	*	*	*	*
1005 GF/Program Receipts						
1037 GF/Mental Health						
Interagency Receipts from DNR						
TOTAL	72.5	36.5	*	*	*	*

Estimate of any current year (FY2002) cost: 0.0

Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time	1				
Part-time					
Temporary	2				

ANALYSIS: (Attach a separate page if necessary)

CSHB 208 (FSH) creates a one-time offering of at least 90 aquatic farm sites for lease.

In addition to the requirements in the bill, the requirements of other State and Federal statutes may affect sites that could be offered. Those may include, but are not limited to, the Alaska Coastal Management Plan, District Plans, legislatively designated areas statutes and regulations, and 16.40.100-199 which requires that the physical and biological characteristics of a site be suitable for shellfish farming, that a farm site not require significant alterations in traditional fisheries or other existing uses of fish and wildlife resources, and may not affect fisheries, wildlife or their habitats (cont)

Prepared by: Chip Donnorloin
 Division: Habitat and Restoration
 Approved by: Gordy Williams for Commissioner Frank Rue
 Agency: Fish and Game

Phone 465-3065
 Date/Time 3/5/02 12:30 PM
 Date 3/5/2002

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

BILL NO. CSHB 208(RES) - FN#4

ANALYSIS CONTINUATION

In an adverse manner, ADNR aquatic farm statutes and guidelines have specific requirements for such things as avoidance of eagle nests, marine mammal and seabird rookeries, and commercial seining areas. ADF&G maintains this information.

Identifying and evaluating 90 permittable lease sites will require intensive effort and additional staff will be needed. A Habitat Biologist III is needed to work with ADNR, ADEC, and ADF&G CFMD to identify potential lease sites. Existing fish and wildlife, habitat and public use data on sites will be collected and evaluated. Potential lease sites will be identified and surveyed in the field to determine suitability. The biologist will: review land use plans, coordinate with ADF&G Wildlife Conservation and Subsistence Divisions, ADNR, ADOL, local governments, and federal agencies; prepare site reports; attend public meetings and hearings; and issue Special Area permits as necessary. A 3-month FT III will aid in habitat site evaluations in the field, and one month of Cartographer 2 time will be needed to enter data into the GIS system.

* Costs for administration and oversight of additional levels of mariculture activity in subsequent years may be significant, but are difficult to quantify at this time.



ALASKA STATE LEGISLATURE

REPRESENTATIVE DREW SCALZI
State Capitol, Juneau
Alaska 99801-1182

OFFICIAL BUSINESS


(907) 465-2689; (800) 665-2689

Fax: (907) 465-3472

Email: Representative_Drew_Scalzi@legis.state.ak.us

April 18, 2002

To: Senator Robin Taylor
Chair, Senate Judiciary Committee.

From: Representative Drew Scalzi 

Re: HB208 – Aquatic Farms for Shellfish

Senator Taylor, please schedule HB208 before your committee pending referral from Senate Resources Committee. This bill is the companion bill to Senator Torgerson's SB141, so we hope it will have a speedy hearing. HB208 will be the version passed.

Thank you for your consideration.

**REQUEST FOR
HEARING**



Alaska State Legislature

Official Business

REPRESENTATIVE DREW SCALZI
State Capitol
Juneau, Alaska 99801-1182

(907) 405-2089; (800) 005-2089
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Representative_Drew_Scalzi@legis.state.ak.us

HB 208 Aquatic Farms for Shellfish

"An Act relating to aquatic farming of shellfish; and providing for an effective date."

The mariculture industry has the potential to increase the availability of fresh seafood to Alaskans, strengthen the competitiveness of Alaskan seafood products in the world marketplace and provide a premium product year-round.

Mariculture is new to Alaska. The permitting process is complex due to the number of agencies that oversee aquatic farming, i.e., Fish and Game, Environmental Conservation, Natural Resources and Governmental Coordination. With cooperation from these entities, this industry, which has proven extremely successful in other states, can certainly enhance economic development in our coastal communities with year-round employment for farmers and processors.

In a good faith effort to encourage good relationships between government agencies and the industry, HB 208 is being introduced as companion legislation to Senator John Torgerson's SB141.

HB 208 requires the Department of Natural Resources to offer public leases on 60 suspended shellfish sites, 20 clam sites and 10 geoduck sites. These lease sites are in addition to those already permitted. Security bonds must be posted according to the value of the product on-site and will be returned upon termination of the lease. Farmers must abide by the sustained yield principle of management when harvesting the wild stock. The Commissioner of DNR must solicit nominations from industry for sites that do not interfere with established commercial, subsistence or personal use.

HB208 is the means for encouraging the state to develop another resource that will add economic diversity to our coffers -- while protecting the right of Alaskans to harvest a common property resource.

Sponsor Statement



Rodger Painter, vice president
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Payback of Fiscal Notes for SB141/HB208

Lease fees

Aquatic farmers pay DNR \$350 for the first acre and \$250 for each additional acre in annual lease fees. For a five-acre farm this equates to \$1,350 per year. For 90 5-acre farms, this would amount to \$121,500 in annual revenues.

Fisheries Business Taxes

Aquatic farmers are subject to the Fisheries Business Tax. If each of the 90 farms were to generate \$100,000 in gross sales per year, the tax liability per farm would be \$3,000. For 90 farms, the total would be \$270,000.

Other Annual Licensing and Permitting Fees

Fisheries Business License = \$25 per farm. Shellfish shipping permits from DEC = \$100. Growing area certification (DEC) = \$300. Total per farm = \$425. Total for 90 farms = \$38,250.

Total Annual Lease Fees, Taxes and Licensing Fees

Per 5-acre Farm = \$4,775. Annual total for 90 Farms = \$429,750.

Economic Contribution

If each farm generated \$100,000 in gross revenues, 90 farms would contribute \$9 million to the economy. If farm supports two jobs, a total of 180 new jobs would be created.

Glen Haight, Fisheries Development Specialist

April 9, 2002

Introduction

House Bill 208 calls for the designation of 90 aquaculture farm sites by the Department of Natural Resources (DNR) by February 2004. The bill has a fiscal note to cover the cost of DNR and Department of Fish & Game's (ADF&G) work in designating these sites. This analysis measures the cost of this fiscal note in FY 2003 and FY 2004 against the expected future income stream the State might expect from aquaculture operations created from this bill.

This analysis utilizes a technique called "net present valuation". A net present valuation takes future cash flows, positive or negative, and discounts them to a present day value through a risk factor (interest rate) appropriate for the nature of the investment. The analysis and supporting assumptions are attached.

The analysis indicates a return to the state through lease fees and taxes. This return is less than 8% and does not consider additional administrative costs that might come from additional farm operations. From a pure investment perspective, the extent of assumptions and duration in the forecast might be too great for such a small return. However, the Legislature has the ability to view the social and economic benefits from this activity apart from the return to the state.

Uncharted in this analysis are the benefits expected by the shellfish industry and ancillary businesses. Based on the revenue growth rate assumptions, there will be an increase in gross profits to the farm operations of \$9 million by the time full grow out takes place. Current farm values for the existing industry is \$400,000.¹ This growth rate assumes an increased effort by the State to better educate and assist potential new entrants into the industry, as well as increased assistance to existing participants.

While not quantified in this analysis, there is an expectation of increased business for freight companies, gear supplier and other input providers such as the Qutechak Shellfish Hatchery in Seward. Further, much of the farming activity occurs in rural coastal areas. This should provide an infusion of dollars into these small economies. This in turn will

¹ For reference, the statewide ex-vessel value of the salmon industry in 2001 was \$216 million. Herring roe was about \$11 million (includes spawn on kelp and sac). In 2000, halibut measured at \$134 million, shellfish \$142 million, and groundfish at \$564 million.

increase buying power and lower the cost of goods and services into these communities as the volume of purchases increase.

As you know, much of the likelihood of success in meeting the assumptions of this analysis is predicated on a host of events yet to occur. That aside, this particular bill appears to have a number of benefits beyond simply kick starting a budding Alaska industry. Its usefulness as an economic development-building device appears strong and its downstream impact to communities may be very important.

Assumptions

Estimated Gross Revenues from the Additional Sites	
2005 \$	43,200
2006 \$	155,520
2007 \$	311,040
2008 \$	559,872
2009 \$	1,074,954
2010 \$	1,827,422
2011 \$	3,031,371
2012 \$	4,721,199
2013 \$	6,965,703
2014 \$	8,300,000
2015 \$	8,700,000
2016 \$	9,000,000

General Assumptions

Shellfish aquaculture operations will begin to function more efficiently and profitably than the historical norm for Alaska aquaculture operations. This is based on various factors:

- The State will shift its focus from establishing this industry, to maximizing the value of the industry.
- Expected reduction in employment from salmon fisheries (and likely other wild catch fisheries with the advent of black cod and halibut farms) will put a greater emphasis on alternative coastal employment opportunities.
- With greater production, efficiencies and market advantages will likely occur. Efficiencies might include, spreading out of fixed costs with more operations and lower freight rates through greater volumes. Greater volumes should increase producer's leverage in market negotiation.

Costs

Fiscal Note for 2003 = \$254,500 (DNR - \$92,000; F&G - \$162,500)
 Fiscal Note for 2004 = \$196,500 (DNR - \$115,000; F&G - \$81,500)

Agencies are expecting additional administrative expenses from the increase in farm sites, but cannot provide estimates until the farms are actually operating.

Farm Development

The bill calls for 60 suspended culture sites, including oysters and scallops.

The bill calls for 20 littleneck clam sites.

The bill calls for 10 geoduck sites.

Grow out rates

Oysters are assigned a conservative grow-out rate of 4 years.

Scallops are assigned a grow-out rate of 4 years.

Littleneck clams are assigned a conservative grow-out rate of 5 years.

Geoducks are assigned a conservative grow-out rate of 7 years.

Permitting Schedule

- The sites will be determined by February 2004.
- Actual permitting and development on the sites will not begin until 2005.
- There will be an approximate pro rata development of species along the lines of the bill.
 - 2005 = 10 farms (7 suspended, 2 little neck, 1 geoduck)
 - 2006 = 20 farms (14 suspended, 4 little neck, 2 geoduck)
 - 2007 = 20 farms (14 suspended, 4 little neck, 2 geoduck)
 - 2008 = 20 farms (13 suspended, 5 little neck, 2 geoduck)
 - 2009 = 20 farms (12 suspended, 5 little neck, 3 geoduck)
- Permitting rates exceed historical rates given increased ease of permitting from this bill and increased focus and attention on industry.

Closures

Despite increased focus and assistance to start-up operations, it is expected some level of closures of farm sites will occur.

Closure rates

- 20% of farm sites within one year,
- 10% in the second year, and
- none thereafter.

Resale rate

Farm sites that close will be resold to other farmers.

- In order to maintain salability, original farmers will bear the costs of DNR lease fees.
- The sale will occur one year after closure.
- These closed operations will not have any product. Purchased farm sites will undergo grow out rates starting from the time of purchase.

Acreage

The analysis sets farm average farm acreage at 5. DNR records show current average is 3.5. However, some farm sites are not operating at maximum efficiency. Upon advice of industry, 5 acres are set at an optimum minimal size.

Owner/Business Per Farm Site

For the purposes of the analysis, every two farms will be operated by a single owner/company. This will increase efficiencies in the operation, yet decrease business licensing fees to the state.

Farm Revenue

Some of the more efficient farms in Alaska today net in excess of \$20,000/acre. However, DNR information provides that the average revenue per acre was approximately \$2,400. For this analysis, we assume a starting revenue/acre of \$2,400 in 2002 and increase it at 20% until it reaches \$20,000. At that point, future revenue streams are capped at \$20,000. Industry reports a well-maintained farm of littleneck clams and oysters are capable of achieving this level of profitability at this time. Scallops and geoducks are less certain.

For on-bottom operations, once permitting occurs, harvests of standing stocks will be allowable. This revenue stream will continue up until the time that the farmed stock is harvested. This activity will trigger water quality inspections.

State Fees

DCED business licenses = \$25/owner

DNR permitting fees (first acre/acres thereafter) = \$350/\$100

DNR caretaker fee = left out for this analysis.

State Fisheries Tax

Assumed 75% of all product will be exported and taxed.

Oysters/scallops = 3% of farm value

Littleneck clams = 1%

Geoducks = 1%

Rate of return set at different levels to understand the return at various levels of risk. That concludes the list of assumptions used in this analysis.

Department of Community & Economic Development

State Revenue Projections From HB208

	Fiscal Year													
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
State Revenues														
DNR Permit	\$ -	\$ -	\$ 7,500	\$ 22,500	\$ 37,500	\$ 52,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500	\$ 67,500
Business License	\$ -	\$ -	\$ 125	\$ 350	\$ 563	\$ 800	\$ 1,050	\$ 1,050	\$ 1,100	\$ 1,125	\$ 1,125	\$ 1,125	\$ 1,125	\$ 1,125
Business Tax	\$ -	\$ -	\$ 65	\$ 233	\$ 467	\$ 840	\$ 2,150	\$ 4,999	\$ 9,771	\$ 16,276	\$ 24,587	\$ 29,213	\$ 30,158	\$ 30,225
Total	\$ -	\$ -	\$ 7,690	\$ 23,083	\$ 38,529	\$ 54,140	\$ 70,700	\$ 73,549	\$ 78,371	\$ 84,901	\$ 93,212	\$ 97,838	\$ 98,783	\$ 98,850
State Costs														
Fiscal Note	\$ 254,500	\$ 196,500												
Additional Management Costs														
Identified State Costs	\$ 254,500	\$ 196,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income (Loss)	-\$254,500	-\$196,500	\$ 7,690	\$ 23,083	\$ 38,529	\$ 54,140	\$ 70,700	\$ 73,549	\$ 78,371	\$ 84,901	\$ 93,212	\$ 97,838	\$ 98,783	\$ 98,850
NPV at 0% return	\$368,644													
NPV at 5% return	\$89,567													
NPV at 7.5% return	\$2,177													
NPV at 10% return	(\$62,683)													
NPV at 12.5% return	(\$110,935)													
NPV at 15% return	(\$146,837)													
NPV at 17.5% return	(\$173,488)													
Internal Rate of Return	7.57%													

QUTEKCAK SHELLFISH HATCHERY

PO Box 369

101 Railway Avenue

Seward, AK 99664

907-224-5181 fax 224-5282

qshatch@arctic.net

February 28, 2002

Dear Representative Scalzi,

On behalf of the Qutekcak Native Tribe and the hatchery, I would like to express our support for HB-208, and our appreciation for your sponsoring this important legislation.

The economics of coastal communities have been negatively impacted in the recent past for a variety of reasons too numerous to recount here. What's important is to look for possible solutions, and we feel the shellfish farming industry has demonstrated the potential to bring needed economic diversity to these communities. That potential is enhanced due to the fact that many of the individuals who have been hardest hit are commercial fishermen who already possess many of the necessary skills and equipment.

Over the past few years we have witnessed an increased awareness of this industry's potential in Alaska, and have managed to dispel some perceptions that draw inaccurate parallels between finfish farming and shellfish farming. We have not been as successful in streamlining the permitting process in a way that will allow the industry to reach the "critical mass" necessary to support the hatchery as our research nears completion and the funding for that research needs to be replaced by marketing the developed product.

We recognize that there is no magic wand, and that the proper course for our industry is incremental and steady improvements in regulation and understanding, and in further demonstrating the economic benefits of the industry. This legislation represents an important step along that course of improvement by making available sites that will increase our customer base. We are cognizant that some investment in the form of agency budgets will be necessary on the State's part to make this legislation work, but are confident that we can provide returns over time on that investment many times over.

Thank you for your support and best regards,

Ron Long,
Director

Letters of Support

MARINE ADVISORY PROGRAM

UNIVERSITY OF ALASKA FAIRBANKS

SCHOOL OF FISHERIES AND OCEAN SCIENCES

April 5, 2002

2221 E. NORTHERN LIGHTS BLVD., #110
ANCHORAGE, ALASKA 99508-4140

PHONE: 907-274-9691

FAX: 907-277-5242

To: Representative Drew Scalzi
State Capitol, Room No.13
Juneau, AK 99801-1182

From: Raymond RaLonde
Aquaculture Specialist

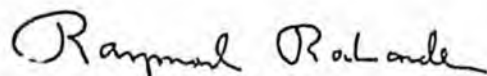
Subject: Supporting information for HB 208

In support of the HB 208, I can contribute substantial support within the University to assist with planning of shellfish aquaculture expansion. Specifically, I have received funding for aquatic farm site evaluations from the following sources and amounts

Source	Funding amount	Project duration
Alaska Sea Grant	\$81,350	2002-04
UAF President's Resources Fund	\$20,000	2002-2004
Alaska Cooperative Extension Service	\$4,200	2002
Alaska Cooperative Extension Service	\$20,000	2003

The initiative to identify and open additional sites for shellfish aquaculture development that you addressed in HB 208 exactly matches the goals of the aquatic site evaluation projects described here. Over the next two years, I and a team of scientists, state agency personnel, industry representatives, and coastal Alaska citizens hope to work together to identify and scale up shellfish aquaculture development in a systematic and environmental responsible manner to improve the economic plight of our coastal communities.

Good luck with your efforts to carry HB 208 through the legislature. Thank you for your support.



Raymond RaLonde

Southeast Conference

P.O. Box 21939 Juneau Alaska 99803-1939 Tel. (907) 463-3445 Fax (907) 463-5670

April 11, 2002

Honorable Drew Scalzi
State Capitol, Room 13
Juneau, AK 99801-1182

RE: Support of HB 208, Aquatic Farms For Shellfish

Dear Representative Scalzi:

Southeast Conference strongly supports the aquatic farm lease sale provided for in CSHB 208 (Resources). This measure complements ongoing efforts by Southeast Conference to develop a strong shellfish farming industry in the region.

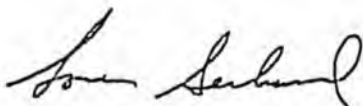
The economies of many Southeast communities have been devastated by the collapse of the timber industry and declining economics of the salmon fisheries. Shellfish farms provide viable opportunities for rural communities to diversify their economic base with year-round jobs.

Shellfish mariculture development is one of our key legislative priorities this year. Southeast Conference has initiated a pilot project on Prince of Wales Island to create "Aquaculture Development Zones" where shellfish farming would be encouraged. Participants in our project include the University of Alaska, the community of Naukati, the Prince of Wales Community Action Council, the Alaskan Shellfish Growers Association, the U.S. Forest Service, and the Alaska Departments of Natural Resources and Fish and Game, and Division of Governmental Coordination.

Passage of HB 208 would solve one of the biggest challenges faced by our informal working group: identifying high potential sites where applicants can be assured of obtaining leases and permits. Since we already have initiated site surveys on Prince of Wales Island, we will be prepared to assist in providing detailed site-specific environmental and biological data along with our areas nominations provided for in HB 208.

We wish to thank you for your efforts to encourage economic development in our coastal communities.

Sincerely,



Loren Gerhard
Executive Director

Legends of the Mountain

412 Washington Street
Seward, Alaska 99664

To Whom It May Concern:

I am currently re-opening a full service restaurant in Seward, Alaska. We are a semi-casual concept with a focus on steaks and fresh seafood.

It has been my experience that local Alaskans and tourists alike look specifically for Alaskan products. Therefore, it is very important to me to have local seafood available not only to make my customers happy, but also to help keep my purchasing dollars in the State that I live in.

I think it is time for us to seriously support aquatic farming projects within the State of Alaska. This should create a renewable source that will benefit everybody now and in the future.

Sincerely,

Jeff Kilgore
Executive Chef/General Manager

Honorable Drew Scalzi
State Capital, Room 13
Juneau, AK 99801-1182

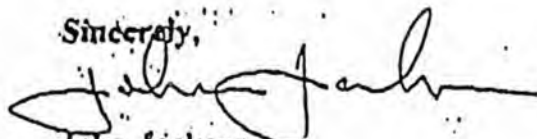
Dear Rep. Scalzi:

Sagaya Corporation is delighted to learn that you have sponsored legislation to increase the number of shellfish farms in Alaska. The oysters and clams we purchase from shellfish growers are among the finest seafood we feature in our stores, and they're the only local products we can obtain fresh on a year-round basis.

The potential for growth in the market for Alaska oysters and clams is great. We recently increased our efforts to push Alaska steamer clams and the response from customers has been very positive. During a recent promotion, customers snapped up about 1,000 pounds of Alaska clams over the weekend.

Increasing the number of aquatic farms in the state is the best gift you can give to seafood consumers in Anchorage and the rest of Alaska. House Bill 208 is a winner in our books.

Sincerely,



John Jackson



Rodger Painter, vice president
P.O. Box 20704 Juneau, AK 99802
Phone/Fax: (907) 463-3600
rodgerpainter@hotmail.com

February 11, 2002

Senator John Torgerson
State Capitol, Room 427
Juneau, AK 99801-1182

Dear Senator Torgerson:

After carefully considering your comments on our proposed "aquaculture development zone" concept, we have decided that your approach on Senate Bill 141 is superior. We'd like to work closely with you and Rep. Scalzi in getting the legislation approved this session.

There is one amendment to SB 141 that we believe is vital to accomplishing the intent of the legislation: removal of the section on lease valuation. Here's the language we'd like to have deleted:

In determining the fair market value of a lease for an aquatic farming site where shellfish indigenous to the site are cultured, the department shall consider the value of the harvestable shellfish resource on the site and the potential productivity of the site for cultured shellfish.

Here's our rationale for removal of the language:

- Adoption of regulations by ADF&G subsequent to development of SB 141 has effectively rendered this section moot. Under current ADF&G procedures, the harvestable "standing stock" of native shellfish on an aquatic farm site must be harvested under commercial fishing permits prior to transfer of the site to the applicant. In addition, ADF&G policies prohibit applicants from obtaining sites with significant numbers of wild geoducks. Insertion of this language could confuse the validity of these practices.
- SB 141 also contains language codifying current ADF&G regulations and permit conditions requiring growers to replace standing stocks prior to relinquishing the site. The practical effect of putting both sections into law would be to require growers to pay for standing stocks twice, in addition to paying the state the same fisheries business tax rates of commercial fishermen AND lease fees for use of state land and waters.
- The existing language could create concerns for growers attempting to farm mussels and other species not subject to commercial fisheries. If the shellfish is not subject to commercial fisheries and we have a great abundance of the species, the state shouldn't create disincentives for utilizing surplus natural resources.
- The final clause of the section includes "potential productivity of the site" as a reason for increasing lease valuations. ASGA has objected strongly to this

language in ADF&G regulations and we will seek to have it removed when a more friendly administration takes office. The "potential productivity" of a site is an extremely elusive concept that is extremely troublesome for the industry.

- Alaska already has some of the highest tidelands lease fees for aquatic farm sites of any jurisdiction in North America, and we have been attempting to convince DNR to bring them more in line with our competitors. The existing language in SB 141 has the potential for increasing existing lease fees and moving us away from our goal.

After discussing your intent behind SB 141, we have become convinced it is a very good approach to moving the industry forward. DNR confirms the sites will remain "in the bank" following the initial offering and that it is possible to obtain annual offerings or even an over-the-counter approach. DNR also says it will be possible to divide a large site between two or more applicants.

We were unaware of these attributes of the state's land disposal process. We appreciate your vision in putting together this package and apologize for taking so long to get solidly behind the legislation. We look forward to working with you and Rep. Scalzi in getting SB 141 approved during this legislative session.

Sincerely,

Rodger Painter

c.c. Rep. Drew Scalzi
Sen. Robin Taylor
Rep. Lesil McGuire



Rodger Painter, vice president
P.O. Box 20704 Juneau, AK 99802
Phone/Fax: (907) 463-3600
rodgerpainter@hotmail.com

February 20, 2002

Honorable John Torgerson
State Capitol, Suite 427
Juneau, AK 99801-1182

Dear Senator Torgerson:

Your efforts to create a "bank" of aquatic farm sites are greatly appreciated by aquatic farmers throughout the state. The committee substitute for SB 141 you have developed has made good bill even better, and we are enthusiastic about working with you to move it through the process this year.

We are particularly grateful for the changes in the committee substitute. We believe SB 141 represents a wise investment in creating new economic development opportunities in coastal Alaska with the use of one of the state's most abundant natural resources. What a better way to bolster the sagging economies of coastal regions than promote an environmentally friendly industry supporting year-round jobs.

We believe this approach to aquaculture development may become a model for the rest of the country. We again thank you.

Sincerely,

Rodger Painter
Vice President

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF ENVIRONMENTAL HEALTH
DIRECTOR'S OFFICE
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501
<http://www.state.ak.us/dec/deh>

Telephone: (907) 269-7644
Fax: (907) 269-7654
e-mail: Janice_Adair@envircon.state.ak.us

March 1, 2002

The Honorable Drew Scalzi
Alaska House of Representatives
Room 13, Capitol Building
Juneau, AK 99801

Re: HB 208, an Act relating to aquatic farming of shellfish

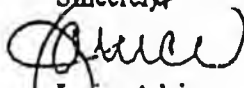
Dear Representative Scalzi:

Enclosed please find a copy of a letter I recently sent to Senator Torgerson regarding SB 141 which, as you know, is the companion bill to yours referenced above.

Although the Department of Environmental Conservation (DEC) has now submitted zero fiscal notes on both pieces of legislation, it is important that everyone understand that any shellfish sites must be certified by DEC under the National Shellfish Sanitation Program (NSSP) before the product can be sold in commerce. We are required by both state law (AS 17.20.005(6)) and federal law to comply with the NSSP. There are significant costs associated with certification, some of which are currently borne by the farmers themselves. The rest is covered in DEC's operating budget. Should either of these bills pass, down the road there will be increased costs to DEC for this certification. In the interest of full disclosure, I wanted you and the rest of the committee members to know that.

I do not plan to be on line for the hearing on HB 208 unless you'd like me to be available to answer questions, which I would be happy to do. You or your staff can reach me at 269-7644 or via email at Janice_Adair@envircon.state.ak.us to let me know.

Sincerely,



Janice Adair
Director

Enclosure:

- Letter to Senator Torgerson dated February 28, 2002

Safe Food, Safe Water, Healthy Communities

DEC Comments

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF ENVIRONMENTAL HEALTH
DIRECTOR'S OFFICE
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501
<http://www.state.ak.us/dec/deh>

Telephone: (907) 269-7644
Fax: (907) 269-7654
e-mail: Janice_Adair@envircon.state.ak.us

February 28, 2002

The Honorable John Torgerson
Chairperson, Senate Resources Committee
Room 427, Capitol Building
Juneau, AK 99801

Re: SB 141, Shellfish Growing Areas

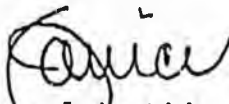
Dear Senator Torgerson:

I have had a chance to discuss the above-referenced legislation with Rodger Painter with the Alaska Shellfish Grower's Association. As you know, we did include a fiscal note on this bill because we interpreted "suitable" to mean certified under the National Shellfish Sanitation Program (NSSP).

While the definition of "suitable" was not discussed in any of the testimony on the bill that I heard, Rodger did point out some very legitimate problems with certifying an area so early in the process. Therefore, I will be submitting a zero fiscal note on the committee substitute when it arrives in the Senate Finance Committee. Certification under the NSSP normally takes place shortly before commercial harvesting begins. Although the industry currently pays for a part of the cost to certify growing areas and we would expect that to remain the case, there will be an increased cost to the department when certification of growing areas is required. However, from talking with Rodger, I believe those costs will be incurred after the time frame covered by the fiscal note form.

I hope our misunderstanding of the bill and the resultant fiscal note did not cause you any undue problems in moving this legislation, and please accept my sincere apologies if it did.

Sincerely,



Janice Adair
Director

cc: Michele Brown, Commissioner

Safe Food, Safe Water, Healthy Communities

Why Clam Farming?

Alaska has enormous potential as a supplier of littleneck clams, often called steamer clams, to the seafood market. Past and current efforts to develop a commercial fishery on the abundant clam resources of Alaska have resulted in limited harvest caused by logistics and economic problems associated with managing the fishery. At present, only Kachemak Bay has a commercial harvest of littleneck clams, and because of depleted stocks, the fishery is limited to only 25,000 pounds annually.

The topic of clam farming in Alaska first appeared as an agenda item at the 1987 4th Alaska Sea Grant Aquaculture Conference. With high worldwide consumer demand for steamer clams and short supply of littleneck clams for the Alaska seafood market, new and existing farms are eager to pursue clam farming.

In 1991, Alaska's original clam farmers were allowed to harvest clams only under commercial fisheries regulations of the Alaska Department of Fish and Game (ADF&G). The first official clam farms were permitted in 1993. Expecting broader interest in clam farming a conference, titled Broadening Shellfish Farming Opportunities in Alaska, was sponsored in 1996 by the ADF&G, the Alaskan Shellfish Growers Association, and the University of Alaska Marine Advisory Program. The purpose of the conference was to begin development of a regulatory program for on-bottom aquaculture in Alaska. At the conference, ADF&G representatives issued a clear statement that the department did not have the resources to manage a commercial clam fishery beyond that existing in Kachemak Bay and favored development of clam farming.

By the end of 1997, three aquatic farmers have obtained tidelands leases to farm littleneck clams in southeastern Alaska. Their combined 1998 harvest was 35,014 pounds of clams worth nearly \$87,535.

What is Clam Farming?

Farming clams requires application of well established farming practices to an existing clam population that will increase the beach productivity and allow for a sustained harvest of the enhanced clam population. In Alaska, farming activities include:

1. Regular inventories of standing stock and determination of the size composition of the clams.
2. Optimizing growth and production of clams by controlling their density by harvest planning, redistribution of seed from overstocked parts of the bed, and/or planting hatchery produced clam seed.
3. Reducing clam mortality by appropriate use of predator exclusion netting.
4. Maintaining the beach free of major deposits of large debris and improving the substrate quality.
5. Harvesting clams to maximize their value and marketability.
6. Complying with the required Alaska Department of Environmental Conservation water quality testing program, and marine toxin certification of farmed product.

Performance of these farming activities, is far beyond what is required of a commercial clam harvester.

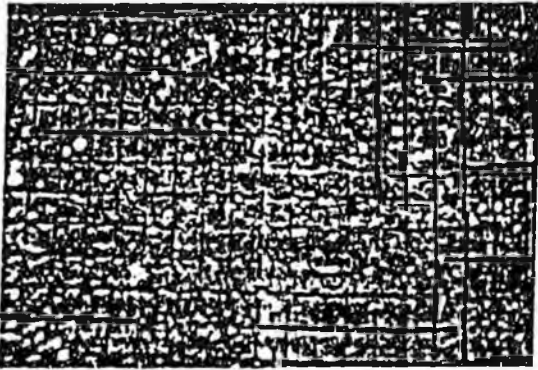
What is a clam farm? A pictorial tour



Clam farming may require application of predator exclusion netting. In this picture, a trench has been dug to anchor the margins of the net.



Predator exclusion netting is rolled out over the prepared plot.



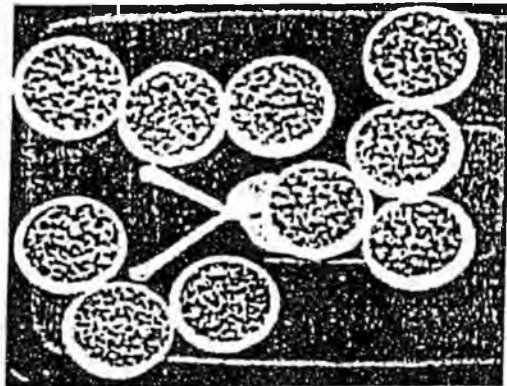
Predator netting is about 1" square mesh. It is not intended to exclude all predators. Crabs and starfish are the farmers primary concern. Birds can feed through the netting



Predator nets anchored and ready for seeding clams.



The farm plot after a few months. Predator netting is partially covered by sediment and algae growth.



Measured quantities of clam seed ready for planting the farm.



Planting clam seed over the netting. Clams are smaller than the net mesh and will dig themselves in as the tide covers them.



In Alaska, clam harvesting is done by hand.

Impacts of clam farming

Environmental (Statements in parenthesis are editorial comments needed for clarification).

Mojica, R. and W.G. Nelson. 1993. Environmental effects of a hard clam (*Mercenaria mercenaria*) aquaculture site in the Indian River Lagoon, Florida. *Aquaculture*. Volume 113, page 326.

- "Measurements of water column nutrients and chlorophyll concentrations gave no indication of changes..."
- "sediment differences were not associated with significant changes in benthic dwelling organisms."
- "Differences in mobile macrofauna were minimal ..." (between aquaculture and natural sites)

Spencer, B.E., M.J. Kaiser, and D.B. Edwards. 1997. Ecological effects of intertidal Manila clam cultivation: observations at the end of the cultivation phase. *Journal of Applied Ecology*. Number 34. Page 451.

"Our results suggest that the biotic and abiotic changes caused as a result of clam cultivation are relatively benign compared to other forms of marine cultivation..."

Kaiser, M.J., I. Laing, S.D. Utting, G.M. Burnell. 1998. Environmental impacts of bivalve mariculture. *Journal of Shellfish Research*. Volume 17. Number 1. Page 63.

"...the benthic community within dredged plots was indistinguishable only 3 months after harvesting regardless of the scale of disturbance..."

Brooks, K. 1996. Intensive clam culture and the environment. Proceedings of the conference: Broadening Alaska's shellfish farming opportunities: A conference and workshops focusing on public issues involved with the development of on-bottom culture of indigenous shellfish. University of Alaska Marine Advisory Program. Anchorage, Alaska. Page 41.

"Of all the forms of aquaculture, intertidal shellfish culture is undoubtedly the most benign. If you minimize encroachment on eel grass beds and find effective methods of predator control, the several hundred pages of literature reviewed in preparing this talk suggest only positive environmental affects associated with either intensive clam or oyster culture."

Economic impacts

The current commercial harvest limit for littleneck clams in Kachemak Bay is 40,000 lbs. Local management has set the commercial harvest at 25,000 lbs having a market value at \$2.50/lb or \$62,500. Actual 1998 harvest was less than 20,000 lbs.

An aquatic farm can produce, with predator protection and seeding, about 10 times the biomass of clams as a natural population. By any definition, this level of production increase would be considered enhancing the clam population of the beach.

Aquatic farming in can produce an estimated conservative production of 12 harvestable clams per square foot per year. From a 10 acre plot, the annual harvest would be 435,000 lbs. worth approximately \$1.1 million.

What is the market?

Homer

- Lands End during the summer buys 6,000 lbs and had indicated that they could sell more than 20,000 lbs if more clams were available.
- His Catch Seafood, Homer, Alaska indicated a sales potential of over 40,000 lbs. annually.

Anchorage

- Favco, Anchorage's largest seafood wholesaler, estimates the Anchorage market demand for littleneck clams at over 1,000,000 lbs. annually.

Western Region of U.S. (Aquaculture situation outlook, Western Regional Aquaculture Center)

- "In 1997, it is estimated that over 5.4 million pounds of clams were produced at an estimate of over \$13.7 million." Farmers are converting oyster production into clam farms, and by 2002 production will increase to 7.7 million pounds

United States

- The long term trend (1988-1998) for clam landings showed an overall decrease, however, imports have increased.

Export market

- The long term trend of clam exports (1988-1998) have shown an increase of 196.16% from 661 metric tons to 1,958 metric tons.
- Recently, exports of clams have been somewhat variable depending on the economic circumstances in Asia. In 1998 exports rose 8% while in first half of 1999, exports declined by 15%. We do know, however, that water quality in Asia is a great concern, and shellfish grown in clean water will have an economic advantage.

Effect clam farming on other clam fisheries in Alaska

- There is no littleneck clam fishery outside of Kachemak Bay
- The Kachemak Bay clam commercial fishery is very limited
- In a hearing before the Alaska Legislature: House Resources Standing Committee Mr. Kevin Duffy, acting deputy director of the ADF&G Division of Commercial Fisheries Management and Development was asked by Representative Harris.

Rep Harris: "Is there anything about this industry that has a negative effect on any other seafood industries that it works around or that it's processed around?"

Kevin Duffy: "The clear answer to that is no."