

**HB**

**128**

<TARGET><BILL>HB 128</BILL><SUBJECT>HB  
128</SUBJECT><COMM>HFSH30</COMM></TARGET>

# REPRESENTATIVE DAN ORTIZ

*Alaska State Legislature / Ketchikan, Saxman, Wrangell, Hydaburg, Metlakatla, Hyder, Loring and Meyers Chuck*

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## HB 128 Shellfish Enhancement Sponsor Statement

Enhancement of Alaska's shellfish industry holds the potential of expanded economic opportunities in Alaska's coastal communities and increased resilience of the State's fisheries portfolio.

To tap this potential HB 128 allows qualified non-profits to pursue enhancement and/or restoration projects involving shellfish species including red and blue king crab, sea cucumber, abalone, and razor clams.

The bill creates a regulatory framework with which Alaska Department of Fish & Game can manage shellfish enhancement projects and outlines criteria for issuance of permits. It sets out stringent safety standards to ensure sustainability and health of existing natural stocks. The Commissioner of ADF&G must also make a determination of substantial public benefit before a project can proceed.

In addition, the bill sets the application fee for a shellfish enhancement project at \$1,000 and amends the application fee for a salmon hatchery permit, increasing the fee from \$100 to \$1,000.

HB 128 plays an important role in the development of mariculture in Alaska by providing a method to increase the available harvest of shellfish for public use in an environmentally safe manner.

**Sectional Analysis**  
**HB 128: Shellfish Enhancement Projects**

**Sec. 1**

Provides the Alaska Board of Fisheries authority to direct the department to manage production of enhanced shellfish stocks, beyond brood stock needs, for cost recovery harvest.

**Sec. 2**

Increases the permit application fee for new private nonprofit salmon hatcheries from \$100 to \$1,000.

**Sec. 3**

Adds a new Chapter 12 to Title 16, "Shellfish Stock Enhancement Projects". Provides direction to the commissioner of the Department of Fish and Game on issuance of permits for private nonprofit shellfish fishery enhancement projects and establishes a \$1,000 permit application fee. This section directs the commissioner to consult with technical experts in the relevant areas before permit issuance. This section provides for a hearing prior to issuance of a permit and describes certain permit terms including cost recovery fisheries, harvest, sale, and release of enhancement project-produced shellfish, and selection of brood stock sources. This section describes reporting requirements and terms for modification or revocation of a permit. It specifies that shellfish produced under an approved enhancement project are a common property resource, with provision for special harvest areas by permit holders.

**Sec. 4**

Provides Commercial Fisheries Entry Commission authority to issue special harvest area entry permits to holders of private nonprofit shellfish rehabilitation, or enhancement project permits.

**Sec. 5**

Defines legal fishing gear for special harvest area entry permit holders.

**Sec. 6**

Exempts shellfish raised in a private nonprofit shellfish project from the farmed fish definition.

**Sec. 7 and 8**

Establish state corporate income tax exemption for a nonprofit corporation holding a shellfish fishery enhancement permit.

**Sec. 9**

Exempts shellfish harvested under a special harvest area entry permit from seafood development taxes.

**Sec. 10**

Establishes an effective date for the salmon hatchery permit application fee described in sec. 2.

**Sec. 11**

Authorizes the Department of Fish and Game to adopt implementing regulations.

**Sec. 12**

Establishes an immediate effective date for sec. 11 pursuant to AS 01.10.070(c).

**Sec. 13**

Establishes an effective date for sec. 8 concomitant with sec. 2, Chapter 55, SLA 2013.

# Fiscal Note

State of Alaska  
2017 Legislative Session

Bill Version: HB 128  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: HB128-DFG-CFEC-03-03-17  
Title: SHELLFISH ENHANCE. PROJECTS;  
HATCHERIES  
Sponsor: ORTIZ  
Requester: (H) Fisheries

Department: Department of Fish and Game  
Appropriation: Commercial Fisheries  
Allocation: Commercial Fisheries Entry Commission  
OMB Component Number: 471

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

|                               | FY2018<br>Appropriation<br>Requested | Included in<br>Governor's<br>FY2018<br>Request | Out-Year Cost Estimates |            |            |            |            |
|-------------------------------|--------------------------------------|--|-------------------------|------------|------------|------------|------------|
|                               |                                      |  | FY 2019                 | FY 2020    | FY 2021    | FY 2022    | FY 2023    |
| <b>OPERATING EXPENDITURES</b> |                                      |  |                         |            |            |            |            |
| Personal Services             |                                      |  |                         |            |            |            |            |
| Travel                        |                                      |  |                         |            |            |            |            |
| Services                      |                                      |  |                         |            |            |            |            |
| Commodities                   |                                      |  |                         |            |            |            |            |
| Capital Outlay                |                                      |  |                         |            |            |            |            |
| Grants & Benefits             |                                      |  |                         |            |            |            |            |
| Miscellaneous                 |                                      |  |                         |            |            |            |            |
| <b>Total Operating</b>        | <b>0.0</b>                           | <b>0.0</b>                                     | <b>0.0</b>              | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**Fund Source (Operating Only)**

|              |            |            |            |            |            |            |            |
|--------------|------------|------------|------------|------------|------------|------------|------------|
| None         |            |            |            |            |            |            |            |
| <b>Total</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**Positions**

|           |  |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|--|
| Full-time |  |  |  |  |  |  |  |
| Part-time |  |  |  |  |  |  |  |
| Temporary |  |  |  |  |  |  |  |

**Change in Revenues**

|              |            |            |            |            |            |            |            |
|--------------|------------|------------|------------|------------|------------|------------|------------|
| None         |            |            |            |            |            |            |            |
| <b>Total</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**Estimated SUPPLEMENTAL (FY2017) cost:** 0.0 (separate supplemental appropriation required)  
(discuss reasons and fund source(s) in analysis section)

**Estimated CAPITAL (FY2018) cost:** 0.0 (separate capital appropriation required)  
(discuss reasons and fund source(s) in analysis section)

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? Yes  
If yes, by what date are the regulations to be adopted, amended or repealed? 12/31/17

**Why this fiscal note differs from previous version:**

Not applicable; initial version.

|              |  |        |                            |
|--------------|--|--------|----------------------------|
| Prepared By: | <u>Shirley A. Penrose, Acting Executive Director</u> | Phone: | <u>(907)790-6960</u>       |
| Division:    | <u>Commercial Fisheries Entry Commission</u>         | Date:  | <u>03/03/2017 12:00 PM</u> |
| Approved By: | <u>Benjamin E. Brown, Commissioner</u>               | Date:  | <u>03/03/17</u>            |
| Agency:      | <u>Commercial Fisheries Entry Commission</u>         |        |                            |

**FISCAL NOTE ANALYSIS**

**STATE OF ALASKA  
2017 LEGISLATIVE SESSION**

**BILL NO. HB 128**

**Analysis**

HB 128 would create a new chapter in Title 16 allowing for the creation of shellfish enhancement projects, similar to salmon hatcheries. If enacted, the Commissioner of Fish & Game could issue permits to non-profit corporations seeking to engage in shellfish enhancement activities. The Commercial Fisheries Entry Commission (CFEC) currently issues special harvest area permits to salmon hatcheries, and under the provisions of this bill would issue special harvest area permits to shellfish enhancement enterprises. The Limited Entry Act would further be amended to provide that those holding special harvest area permits for shellfish could employ any gear designated as legal by the Board of Fisheries. CFEC does not anticipate any additional fiscal impact if this legislation is enacted.

# Fiscal Note

State of Alaska  
2017 Legislative Session

Bill Version: HB 128  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: HB128-DFG-DCF-02-24-17  
Title: SHELLFISH ENHANCE. PROJECTS;  
HATCHERIES  
Sponsor: ORTIZ  
Requester: (H) Fisheries

Department: Department of Fish and Game  
Appropriation: Commercial Fisheries  
Allocation: Statewide Fisheries Management  
OMB Component Number: 2171

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

|                               | FY2018<br>Appropriation<br>Requested | Included in<br>Governor's<br>FY2018<br>Request | Out-Year Cost Estimates |            |            |            |            |            |
|-------------------------------|--------------------------------------|--|-------------------------|------------|------------|------------|------------|------------|
|                               |                                      |  | FY 2018                 | FY 2019    | FY 2020    | FY 2021    | FY 2022    | FY 2023    |
| <b>OPERATING EXPENDITURES</b> |                                      |  |                         |            |            |            |            |            |
| Personal Services             |                                      |  |                         |            |            |            |            |            |
| Travel                        |                                      |  |                         |            |            |            |            |            |
| Services                      |                                      |  |                         |            |            |            |            |            |
| Commodities                   |                                      |  |                         |            |            |            |            |            |
| Capital Outlay                |                                      |  |                         |            |            |            |            |            |
| Grants & Benefits             |                                      |  |                         |            |            |            |            |            |
| Miscellaneous                 |                                      |  |                         |            |            |            |            |            |
| <b>Total Operating</b>        | <b>0.0</b>                           | <b>0.0</b>                                     | <b>0.0</b>              | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**Fund Source (Operating Only)**

|              |            |            |            |            |            |            |            |            |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|
| None         |            |            |            |            |            |            |            |            |
| <b>Total</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**Positions**

|           |  |  |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|--|--|
| Full-time |  |  |  |  |  |  |  |  |
| Part-time |  |  |  |  |  |  |  |  |
| Temporary |  |  |  |  |  |  |  |  |

**Change in Revenues**

|              |            |            |            |            |            |            |            |
|--------------|------------|------------|------------|------------|------------|------------|------------|
| None         |            |            | ***        | ***        | ***        | ***        | ***        |
| <b>Total</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**Estimated SUPPLEMENTAL (FY2017) cost:** 0.0 *(separate supplemental appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**Estimated CAPITAL (FY2018) cost:** 0.0 *(separate capital appropriation required)*  
*(discuss reasons and fund source(s) in analysis section)*

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? **Yes**  
If yes, by what date are the regulations to be adopted, amended or repealed? **07/01/17**

**Why this fiscal note differs from previous version:**

Not applicable; initial version.

|  |                                  |
|--|----------------------------------|
| Prepared By: <u>Morgan Foss, Special Assistant to the Commissioner</u> | Phone: <u>(907)465-6137</u>      |
| Division: <u>Office of the Commissioner</u>                            | Date: <u>02/24/2017 02:00 PM</u> |
| Approved By: <u>Carol Petraborg, Division Director</u>                 | Date: <u>02/24/17</u>            |
| Agency: <u>Department of Fish and Game</u>                             |                                  |

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2017 LEGISLATIVE SESSION

BILL NO. HB 128

**Analysis**

Commercial Fisheries Division intends to utilize existing staff under the Aquaculture Section to administer the program proposed in this legislation. The Private Nonprofit Hatchery Permit Coordinator is the primary person responsible for evaluating these permit applications. Department of Fish and Game genetics, pathology, and management staff also contribute to the permit application review process. Permit application review generally takes six months to one year to complete. The permit fee is established in AS 16.012.010(c) at \$1,000. This fee would also apply to applications for new salmon private nonprofit hatcheries. That fee is currently \$100. Based on industry interest, the Division anticipates that there will be two to three applicants per year for the first two years and then decline to an estimated one permit application per year. Because the number of potential applicants is unknown, however, the anticipated revenue is indeterminate.



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March 1, 2017

Representative Daniel Ortiz  
State Capitol, Room 513  
Juneau, Alaska 99801

RE: Support for HB 128 – shellfish enhancement

Dear Representative Ortiz,

The Alaska Shellfish Growers Association (ASGA) would like to express support for HB 128. We recognize that HB 128 is part of a larger effort to develop mariculture in Alaska.

While the focus of this bill supports enhancement efforts, we believe that the mariculture industry overall will benefit overall from a healthy base of infrastructure that supports both growers and enhancement efforts.

HB 128 plays an important role in the development of mariculture in Alaska, creating a regulatory framework that supports ADF&G in management and enhancement efforts. This would allow interested stakeholders to either continue or begin enhancement and/or restoration of species such as King crab, sea cucumber, geoduck, abalone, razor clams, or others, some of which have been successfully farmed in other areas. This framework (HB 128) is absolutely necessary to continue moving forward with the development of mariculture.

Thank you for sponsoring this important legislation.

Sincerely,

A handwritten signature in cursive script that reads "Margo Reveil".

Margo Reveil, President  
Alaska Shellfish Growers Association

Cc: Representative Stutes, Chair, House Fisheries Committee: [Rep.Louise.Stutes@akleg.gov](mailto:Rep.Louise.Stutes@akleg.gov)  
Reid Harris, Staff, House Fisheries Committee: [Reid.Harris@akleg.gov](mailto:Reid.Harris@akleg.gov)

Representative Dan Ortiz  
Alaska State Legislature  
State Capitol  
Juneau, AK 99801  
[Rep.Daniel.Ortiz@akleg.gov](mailto:Rep.Daniel.Ortiz@akleg.gov)



**Re: Support for HB 128**

March 1, 2017

Dear Representative Ortiz:

The Alaska Fisheries Development Foundation (AFDF) would like to express support for HB 128 which creates a framework to manage and develop shellfish fishery enhancement which will benefit the state's economy by providing a method to increase the available harvest of shellfish for public use in an environmentally safe manner.

AFDF's membership is comprised of seafood harvesters, seafood processors, and support sector businesses. Founded in 1978, AFDF's mission is *to identify problems common to the Alaska seafood industry and develop efficient, sustainable solutions that provide benefits to the economy, environment and communities.*

One of AFDF's recent areas of work is spearheading the *Alaska Mariculture Initiative*, which is meant to expedite the development of mariculture in Alaska with the vision to grow a \$1 billion industry in 30 years. Many organizations across the state have endorsed this initiative (i.e. Alaska Chamber, Alaska Shellfish Growers Association, Southeast Conference, SE AK Regional Dive Fisheries Association, Southwest Alaska Municipal Conference, United Fishermen of Alaska, and others).

As a direct result of this initiative, Governor Walker established the **Alaska Mariculture Task Force** by Administrative Order #280. The purpose of the Task Force is to provide recommendations for a comprehensive plan to develop a viable and sustainable mariculture industry producing shellfish and aquatic plants for the long-term benefit of Alaska's economy, environment, and communities.

**HB 128 plays an important role in the development of mariculture in Alaska.** HB 128 creates a regulatory framework with which ADF&G can manage shellfish fishery enhancement, restoration and shellfish hatcheries. This will allow interested stakeholders to either continue or begin enhancement and/or restoration of species such as King crab, sea

Alaska Fisheries Development Foundation  
P.O. Box 2223, Wrangell, AK 99929 - Ph: 907-276-7315  
[www.afdf.org](http://www.afdf.org)

## Board of Directors

**Jan Jacobs – President**  
*Harvester, Region IV*  
*American Seafoods Company*

**Ken Simpson – Vice President**  
*Harvester, Region II*  
*F/V Lady Simpson*

**Trevor Sande - Treasurer**  
*Harvester, Region I*  
*Marble Seafoods*

**Mark Scheer - Secretary**  
*Service Sector*  
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**Al Burch**  
*Harvester, Region III*  
*Alaska Whitefish Trawlers*  
*Association*

**Jim Denning**  
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**Tom Enlow**  
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*UniSea*

**Buck Laukitis**  
*Harvester, At-Large*  
*Magic Fish Company*

**Chris Mierzejek**  
*Service Sector*  
*Aleutian Pribilof Island*  
*Community Development Assoc.*

**Stefanie Moreland**  
*Processor, At-large*  
*Trident Seafoods*

**John Sund**  
*Service Sector*  
*Stellar North LLC*

**Mark Tupper**  
*Processor, At-large*  
*Triad Fisheries, LTD*

cucumber, geoduck, abalone, or razor clams.

I would like to briefly address concerns of the potential for negative impacts to wild shellfish from hatchery shellfish. AFDF is the Client for seafood sustainability certification programs such as the Marine Stewardship Council (MSC) and the Alaska Responsible Fisheries Management (RFM) program. As the Client and facilitator for these certification programs, AFDF has a unique viewpoint on this issue. As a part of these certifications, the Alaska Department of Fish & Game's (ADF&G) management of the salmon fishery (including salmon enhancement) is reviewed every year by independent third-party experts to determine whether it meets internationally accepted standards for sustainably managed fisheries. ***Alaska salmon maintains the Alaska RFM certification, because ADF&G's management incorporates a precautionary approach that prioritizes wild fish and minimizes adverse impacts to wild stocks.*** ADF&G has extensive enhancement policies which protect wild stocks (e.g. genetics, marking, and disease). Given these policies, AFDF and independent third-parties experts have confidence that ADF&G is fulfilling its constitutional mandate to manage the State's fishery resources for sustainability. ***AFDF is confident that ADF&G would manage shellfish enhancement with the same priority to wild stocks, therefore, AFDF support HB 128 which will give ADF&G the authority and regulatory framework to manage shellfish enhancement.***

Another benefit of developing shellfish fishery enhancement is the important role that shellfish hatcheries can play in adapting to ocean changes and acidification. As we develop shellfish hatcheries and techniques, we also learn more about the effects of ocean acidification and our abilities to mitigate these effects in a hatchery setting (e.g. adjusting pH levels at critical stages of survival). Shellfish hatcheries can play a critical role in the future and position Alaska to better protect its wild stocks.

***Shellfish enhancement can diversify and expand opportunities in coastal communities and increase the resiliency of Alaska's wild shellfish.***

If there are any questions, I am happy to answer them. Thank you for your consideration and support of this bill.

Sincerely,

  
Julie Decker, Executive Director

Cc:

Representative Stutes, Chair, House Fisheries Committee: [Rep.Louise.Stutes@akleg.gov](mailto:Rep.Louise.Stutes@akleg.gov)

Reid Harris, Staff, House Fisheries Committee: [Reid.Harris@akleg.gov](mailto:Reid.Harris@akleg.gov)

March 6, 2017

Representative Louise Stutes, Chair  
House Fisheries Committee  
Alaska State Legislature  
State Capitol  
Juneau, AK 99801

**Re: Support for HB 128**

Dear Representative Stutes and Committee members:

The Steering Committee of the Alaska King Crab Research, Rehabilitation and Biology (AKCRRAB) program would like to express appreciation and support for House Bill 128.

The AKCRRAB program is a coalition of university, federal and stakeholder groups, formed in 2006 with the goals of adding to the scientific understanding of crab life history and ecology, as well as the eventual rehabilitation of depressed king crab stocks in Alaska. AKCRRAB is developing scientifically sound strategies for hatching, rearing and outplanting king crab in Alaska, in order to help restore populations to self-sustainable levels.

In phase one, from 2006 to 2011, AKCRRAB researchers made significant accomplishments in developing and improving methods of hatchery rearing of larval and juvenile king crab from wild-caught broodstock, to the point where large-scale production is feasible. Parallel field and laboratory studies of crab ecology and population genetics were also conducted during this time.

In the second and current phase, hatchery studies have been complemented by studies essential to understanding optimal release strategies, appropriate habitat, and potential impact on existing ecosystems. This research is providing the science necessary for informing the responsible release of hatchery-reared animals. Increased knowledge will allow scientists and managers to assess the feasibility of ecologically sound rehabilitation of depressed stocks, with potentially substantial benefits to Alaska.

In the third and final phase, AKCRRAB intends to evolve from the current, research-oriented coalition, to a formal entity focused on transitioning

hatchery techniques and outplanting technologies to communities and industry as part of statewide efforts to help rehabilitate depleted king crab stocks. As phase three develops, the program will require support and guidance from the State of Alaska, as the transition from feasibility to implementation will need to be guided with a new regulatory structure.

House Bill 128, similar to last year's House Bill 300, is a response to the need for new regulations for shellfish culture. The AKCRRAB Steering Committee is pleased that the Legislature is addressing this need.

We intend to participate fully in further discussions and hearings on this important legislation. The AKCRRAB Steering Committee stands ready to interact with Committee members and staff as needed. Please let us know how we can be of help.

Best regards,

The image shows two handwritten signatures in black ink. The signature on the left is for Dr. Ginny Eckert, and the signature on the right is for Heather McCarty. Both signatures are written in a cursive, flowing style.

Dr. Ginny Eckert, College of Fisheries and Ocean Sciences, UAF, Juneau  
Division Heather McCarty, Central Bering Sea Fishermen's Association  
AKCRRAB Steering Committee Co-chairs

Steering Committee members: Jeff Hetrick, Alutiq Pride Hatchery, Seward; Jeff Stephan, United Fishermen's Marketing Association, Kodiak; Dr. Bob Foy, NMFS, Alaska Fisheries Science Center, Kodiak; Chris Mierzejek, Aleutian Pribilof Islands Community Development Association, Anchorage; Gale Vick, Fairbanks; Lauren Divine, Tribal Government of St. Paul; Tyson Fick, Alaska Bering Sea Crabbers.



CITY AND BOROUGH OF WRANGELL  
INCORPORATED MAY 30, 2008

Office of the Borough Mayor

P.O. Box 531  
Wrangell, AK 99929

907-874-2381  
907-874-3952

March 1, 2017

Representative Dan Ortiz  
Alaska State Legislature  
State Capitol  
Juneau, AK 99801  
[Rep.Daniel.Ortiz@akleg.gov](mailto:Rep.Daniel.Ortiz@akleg.gov)

**Re: Support for HB 128 – Shellfish Enhancement**

Dear Representative Ortiz:

On behalf of the City and Borough of Wrangell, I would like to express support for HB 128 which creates a framework to manage and develop shellfish fishery enhancement which will benefit the State's economy by providing a method to increase the available harvest of shellfish for public use in an environmentally safe manner.

HB 128 plays an important role in the development of mariculture in Alaska. HB 128 creates a regulatory framework with which ADF&G can manage shellfish fishery enhancement, restoration and shellfish hatcheries. This will allow interested stakeholders to either continue or begin enhancement and/or restoration of species such as King crab, sea cucumber, geoduck, abalone, or razor clams.

Another benefit of developing shellfish fishery enhancement is the important role that shellfish hatcheries can play in adapting to ocean changes and acidification, and the ecosystem services that shellfish provide to the marine environment.

Shellfish enhancement can diversify and expand opportunities in coastal communities and increase the resiliency of Alaska's wild shellfish. The City and Borough of Wrangell Assembly supports HB 128 and appreciates your work to provide additional economic opportunities in Alaska.

Sincerely,

Dave Jack  
Mayor

cc: Governor Bill Walker  
Representative Louise Stutes, Chair, House Fisheries Committee  
NRC Alaska  
Alaska Fisheries Development Foundation, Inc. (AFDF)  
Alaska Maritime Task Force (AMTF)

# Seafood & Ocean Products Industry

## Goal Statement:

*Create jobs and wealth by advocating for a well-managed, sustainable and resilient Seafood sector, and develop higher-value ocean products that reach more markets.*

## Seafood Priority Objective

★ Priority Objective #1: Mariculture Development.

## Project Description:

Grow a \$1 billion industry in 30 years

## Outline of steps required for project to be completed

1) Support an economic analysis of successful mariculture industries in other regions, how they relate to Alaska, and the impact of a fully developed mariculture industry in Alaska 2016-17

2) **Support and participate in a strategic planning process** inclusive of a broad spectrum of stakeholders and agencies (including coastal communities, industry, the State of Alaska, federal agencies, and interested conservation groups) with the directive to create a coordinated, deliberate and solutions-oriented plan to developing the industry 2016-2018

Examples of issues to be addressed:

- Legal authority to enable invertebrate enhancement and restoration
- Stabilize funding for shellfish hatcheries through existing loan funds
- Adjust Mariculture Revolving Loan Fund for increased utilization by farmers
- Long-term funding mechanisms (e.g. salmon enhancement public/private model)

3) **Help to engage federal agencies and private investors with interest and resources** (e.g. CODEL, NOAA, USDA, EDA, NPRB, Native corporations, CDQ groups, Rasmuson Foundation, seafood processors, etc.) 2016-2020

Support integration of development efforts with national initiatives and strategies, such as:

USDA Investment Strategy in support of rural communities in Southeast Alaska 2011-2013  
National Shellfish Initiative (NOAA)  
National Strategic Plan for Federal Aquaculture Research (2014-2019)

4) **Support increased capacity for shellfish safety testing in the SE region.**

## People/Organizations responsible for completing these steps

Southeast Conference, Alaska Fisheries Development Foundation, Alaska Shellfish Growers Association, OceansAlaska, SE AK municipalities, State of Alaska through Governor's Mariculture Task Force

## Cost Estimates

How much will this cost, and who will pay these costs?

\$500,000

AFDF is currently working under a \$200,000 NOAA grant; private interests have donated approximately \$20,000 additional funds; EDA is interested in an approximately \$45,000 grant for economics; private industry may contribute additional matching funds; other interested funders may include: Rasmuson Foundation, USDA, NOAA, AIDEA, Alaska Growth Capital, and Alaska Dept. of Commerce loan funds.

#### **Evaluation Measures**

- Number of stakeholders involved in planning process
- Annual aquatic farm production (value, poundage and species)
- Annual shellfish hatchery production (value, quantity and species)
- Number of businesses working either in aquatic farms or enhanced fisheries (non-salmon)
- Number of employees working either in aquatic farms or enhanced fisheries (non-salmon)
- Number of loan sources available for farmers, hatcheries, etc.
- Number of research projects funded for mariculture
- Completed economic analysis
- Completed strategic plan
- Number of action items completed which were identified in the strategic plan

#### **Key Project Contact**

Name: Julie Decker  
Title: Executive Director  
Organization: Alaska Fisheries Development Foundation

★ Objective 2: Full Resource Utilization & Ocean Product Development.

#### **Project Description:**

350 million pounds of seafood are harvested in Southeast Alaska each year, but most of that product leaves the region with only primary processing (heading, gutting, and freezing) and the secondary processing is conducted in other states or countries. Additionally, a portion (5-40% depending upon the species) of the harvested resource is not utilized and instead is disposed of as waste in local waters. The objective of this initiative is to increase total revenue from existing commercial fisheries in the region by developing new, higher value products and markets from parts of the fish that are currently either thrown away or that go to lower relative value markets. In some cases this means working with seafood processors to develop new products, but we also need to identify businesses or entrepreneurs not currently in the seafood industry who can contribute to this effort. Collaboration with private, state, federal and university researchers needs to be encouraged to identify and accelerate opportunities for commercialization of improved or new products. Support the development of new specialty products that utilize 100% of harvested seafood resources in order to create value-added products with the same resource, reduce discharge into waterways, and provide additional economic benefits to local economies. Examples include pet food, clothing and accessories, pharmaceuticals, nutraceuticals and health food products. Support growth of new businesses to develop these new products.

#### **Outline of steps required for project to be completed**

Support identification of raw materials available for product development  
Work with seafood processors and entrepreneurs to develop new seafood products by connecting them with other necessary expertise (ongoing 2016-2020)  
Support development of incentives to increase secondary processing in the region (ongoing 2016-2020)  
Support "proof of concept" for new products by connecting businesses and entrepreneurs with resources  
Work to get current processors to "think outside the can" through events like the annual Innovation Summit with a portion of the event targeted to new ocean products (ongoing 2016-2020) and in local events/festivals that celebrate the seafood industry in the region.

Encourage and promote value-added products made from Alaska seafood by hosting an annual competition for new products (ongoing 2016-2020)

Learn from other regions and countries through research and visits.

#### **People/Organizations responsible for completing these steps**

Julie Decker, Alaska Fisheries Development Foundation.

Brian Holst, Juneau Economic Development Council.

Southeast Conference

#### **Cost Estimates**

How much will this cost, and who will pay these costs?

\$17,000

Costs (direct and in kind) will be paid by AFDF, JEDC, SEC and State of Alaska activities.

#### **Evaluation Measures**

- Total pounds of seafood processed (explore tracking total pounds of seafood waste reported through DEC)
- Count of Shorebased seafood processors
- Business licenses for seafood products
- Number of new products entered into the Alaska Symphony of Seafood each year
- Number of attendees & presenters at the annual Innovation Summit
- Number of firms with expanded product offerings each year
- Number of R&D collaborations between private sector and a research entity
- Commercialization: Number of new markets reached

#### **Key Project Contact**

Name: Julie Decker & Brian Holst

Title: Executive Director

Organization: Alaska Fisheries Development Foundation and the Juneau Economic Development Council

#### **Other Seafood Objectives:**

**Objective 3: Increase Energy Efficiency and Reduce Energy Costs.**

Support programs that aim to increase energy efficiency of vessels and processing plants.

Encourage reduction of reliance on diesel for both boats and processing plants.

Move commercial fishing fleet away from diesel dependency using concepts such as diesel/electric hybrid vessels, hydrogen, or other energy alternatives.

Find alternatives to reduce use of diesel for fish plants and cold storage facilities that could include increased energy efficiency or hydropower.

**Objective 4: Regional Seafood Processing.**

Support continued and increased processing / manufacturing within region. Increase the number of firms producing high-value products. Increase value-added activities in the region and to improve product quality. Support development of necessary infrastructure for these activities. Update processing plants and update/improve transportation routes to get products to market. Make it cheaper, faster, and fresher.

**Objective 5: Seafood Markets.**

Support ASMI's work to market Alaska Seafood. Support the expansion of markets both domestically and worldwide. Support integration of industry's efforts to develop new products and ASMI's efforts to develop new markets. Support diversification of roe markets.

**Objective 6: Sea Otter Utilization & Sustainable Shellfish.**

Support development of new products and markets for otter products. Support sea otter garment making businesses and strategies for increasing value of these products.

**Objective 7: Maintain Stable Regulatory Regime.**

Support state regulatory stability. Protect commercial fisheries by advocating for stable regulatory regimes at state and federal levels and educating policy makers. Retain access to resources.

**Objective 8: Seafood Workforce Development.**

Engage in workforce development efforts to attract young Southeast Alaskans to participate in the seafood economy. The absence of young Southeast Alaskan fishermen is compounded by the rise in nonresident permit ownership in local fisheries.

# Alaska Mariculture Task Force

Representative Daniel Ortiz  
State Capitol, Room 513  
Juneau, Alaska 99801  
Ph: 907-465-3824  
[Representative.Dan.Ortiz@akleg.gov](mailto:Representative.Dan.Ortiz@akleg.gov)

## RE: Support for HB 128 – shellfish enhancement

Dear Representative Ortiz,

February 24, 2017

The Alaska Mariculture Task Force (Task Force) would like to express support for HB 128. *The Task Force recognizes that HB 128 is part of a larger effort to develop mariculture in Alaska.*

At the request of industry and communities, Governor Walker established the Task Force by Administrative Order #280. The Governor recognized that a developed mariculture industry will have economic, environmental, cultural, industrial and food security benefits to Alaskans. Members of the Task Force were appointed in May, 2016. The Governor's directive to the Task Force is to provide recommendations for a comprehensive plan to develop a viable and sustainable mariculture industry producing shellfish and aquatic plants for the long-term benefit of Alaska's economy, environment, and communities. The Task Force must complete its work by March 1, 2018.

The Task Force would like to highlight that we are using the following guiding principles in our work to develop the mariculture industry:

- 1) Mariculture is defined as enhancement of wild fisheries and aquatic farming of shellfish and aquatic plants. Mariculture does not include finfish farming, which is not allowed in Alaska.
- 2) The development of the mariculture industry will be compatible with Alaska's reputation as a world leader in responsible and sustainable management of its seafood resources.
- 3) The development of the mariculture industry will be stakeholder-driven.
- 4) The development of the mariculture industry will coordinate and integrate with those entities conducting ocean monitoring in order to inform research and management of changing ocean conditions.

*HB 128 plays an important role in the development of mariculture in Alaska. HB 128 creates a regulatory framework with which ADF&G can allow for and manage shellfish fishery enhancement, restoration and hatcheries. This would allow interested stakeholders to either continue or begin enhancement and/or restoration of species such as King crab, sea cucumber, geoduck, abalone, razor clams, or others. This framework (HB 128) is absolutely necessary to continue moving forward with the development of mariculture related to wild shellfish enhancement.*

Thank you for sponsoring this important legislation. *The Task Force supports HB 128 and appreciates your proactive role in introducing the legislation.* If there are any questions, you may contact members of the Task Force.

Sincerely,

Alaska Mariculture Task Force

Cc:

Representative Stutes, Chair, House Fisheries Committee: [Rep.Louise.Stutes@akleg.gov](mailto:Rep.Louise.Stutes@akleg.gov)

Reid Harris, Staff, House Fisheries Committee: [Reid.Harris@akleg.gov](mailto:Reid.Harris@akleg.gov)



# OceansAlaska

MARINE SCIENCE CENTER

March 1, 2017

OceansAlaska  
PO Box 6383  
Ketchikan, AK 99901

Representative Daniel Ortiz  
State Capitol, Room 513  
Juneau, AK 99801

Dear Representative Ortiz,

I am President of the Board of Directors for OceansAlaska which is a non-profit shellfish hatchery located in Ketchikan. HB 128 creates a regulatory framework with which ADF&G can manage shellfish fishery enhancement, restoration and shellfish hatcheries. This will allow interested stakeholders to either continue or begin enhancement and/or restoration of certain species. OceansAlaska supports HB 128 as it will diversify economic development, sustain cultural legacy and increase environmental stewardship through:

1. Enhancement of traditional and economically important shellfish species.
2. Enhancement of shellfish species integral to marine ecosystems and habitat restoration.
3. Enhancement of shellfish species that are vital to climate change and pollution mitigation.

Thank you for your support of HB 128 and the mariculture industry.

Best regards,

Tomi Marsh  
[tomimarsh@mindspring.com](mailto:tomimarsh@mindspring.com)  
206-972-8217



612 W. Willoughby Ave., Suite B  
P.O. Box 21989, Juneau, AK 99802  
Phone (907) 586-4360  
[www.seconference.org](http://www.seconference.org)  
Email [info@seconference.org](mailto:info@seconference.org)

SOUTHEAST ALASKA REGIONAL DEVELOPMENT ORGANIZATION

March 1, 2017

Representative Dan Ortiz  
Alaska State Legislature  
State Capitol  
Juneau, AK 99801  
[Rep.Daniel.Ortiz@akleg.gov](mailto:Rep.Daniel.Ortiz@akleg.gov)

**Re: Support for HB128 – Shellfish Enhancement**

Dear Representative Ortiz:

On behalf of the Southeast Conference, I would like to express support for HB 128 which creates a framework to manage and develop shellfish fishery enhancement which will benefit the state's economy by providing a method to increase the available harvest of shellfish for public use in an environmentally safe manner.

Southeast Conference is a state and federally designated regional economic development organization for Southeast Alaska. For nearly 60 years, Southeast Conference has served as the collective voice for advancing the region's economy. Southeast Conference has 180 member organizations representing people from 32 regional communities. The mission of Southeast Conference is to undertake and support activities that promote strong economies, healthy communities and a quality environment in Southeast Alaska.

HB128 plays an important role in the development of mariculture in Alaska. HB128 creates a regulatory framework with which ADF&G can manage shellfish fishery enhancement, restoration and shellfish hatcheries. This will allow interested stakeholders to either continue or begin enhancement and/or restoration of species such as King crab, sea cucumber, geoduck, abalone, or razor clams.

Another benefit of developing shellfish fishery enhancement is the important role that shellfish hatcheries can play in adapting to ocean changes and acidification, and the ecosystem services that shellfish provide to the marine environment.

Shellfish enhancement can diversify and expand opportunities in coastal communities and increase the resiliency of Alaska's wild shellfish. The Southeast Conference supports HB 128 and appreciates your work to provide additional economic opportunities in Alaska.

Sincerely,

Shelly Wright, Executive Director  
Southeast Conference

cc: Rep. Louise Stutes, Chair, House Fisheries Committee: [Rep.Louise.Stutes@akleg.gov](mailto:Rep.Louise.Stutes@akleg.gov)  
Reid Harris, Staff, House Fisheries Committee: [Reid.Harris@akleg.gov](mailto:Reid.Harris@akleg.gov)  
Elizabeth Bolling, Staff, Rep. Ortiz: [Elizabeth.Bolling@akleg.gov](mailto:Elizabeth.Bolling@akleg.gov)



# UNITED FISHERMEN OF ALASKA

Mailing Address: PO Box 20229, Juneau AK 99802-0229  
Physical Address: 410 Calhoun Ave Ste 101, Juneau AK 99801  
Phone: (907) 586-2820 Fax: (907) 463-2545  
Email: [ufa@ufafish.org](mailto:ufa@ufafish.org) Website: [www.ufafish.org](http://www.ufafish.org)

March 3, 2017

Representative Louise Stutes, Chairman  
House Special Committee on Fisheries  
Alaska State Legislature  
State Capitol  
Juneau, AK 99801-1182

**RE: Support for HB128 –Shellfish Enhancement**

Dear Chairman Stutes and Committee Members,

United Fishermen of Alaska is the statewide commercial fishing trade association, representing 34 commercial fishing organizations participating in fisheries throughout the state, and the federal fisheries off Alaska's coast.

In our 2014 resolution (attached), UFA supported the Alaska Mariculture Initiative as a method to facilitate expansion of the mariculture industry for marine plants and shellfish farming, enhancement and restoration, to increase jobs and economic opportunity for fishermen, farmers and support businesses. We support HB 128 to help implement the goals of the state's Mariculture Task Force as a step towards providing new economic opportunity in Alaska's coastal communities.

HB 128 creates a regulatory framework with which ADF&G can allow for and manage shellfish fishery enhancement, restoration and hatcheries. This would allow interested stakeholders to continue or begin enhancement and/or restoration of species such as King crab, sea cucumber, geoduck, abalone, razor clams, or others. This framework is essential to allow the development of mariculture related to wild shellfish enhancement.

Although we include eight salmon aquaculture associations that will each be subject to the increase of their fee on new hatchery facilities to \$1000, we support HB 128 because of the broader need to help develop shellfish aquaculture beyond only producing broodstock.

UFA strongly supports Alaska's salmon enhancement programs that are carefully regulated to provide salmon for common property harvest by subsistence, sport and commercial fisheries without detriment to wild stocks. We believe the state can carefully develop opportunities for additional enhancement of shellfish, and passage of HB 128 will help in this effort.

Sincerely,

Jerry McCune  
President

Mark Vinsel  
Executive Administrator

CC: Representative Daniel Ortiz  
Attachment



# UNITED FISHERMEN OF ALASKA

**Mailing Address:** PO Box 20229, Juneau AK 99802-0229

**Physical Address:** 410 Calhoun Ave Ste 101, Juneau AK 99801

**Phone:** (907)586-2820 **Fax:** (907) 463-2545

**Email:** ufa@ufa-fish.org **Website:** www.ufa-fish.org

## UFA Resolution 2014 – 03

### A RESOLUTION OF THE UNITED FISHERMEN OF ALASKA SUPPORTING THE *ALASKA MARICULTURE INITIATIVE*

**WHEREAS** Alaska banned finfish farming, but allowed for aquatic farming of shellfish and marine plants with the passage of the Aquatic Farm Act in 1988; and

**WHEREAS** United Fishermen of Alaska supports Alaska's ban on finfish farming; and

**WHEREAS** United Fishermen of Alaska supports priority consideration of historic uses, especially fishing areas and anchorages, during citing of aquatic farms; and

**WHEREAS** United Fishermen of Alaska supports the Alaska Supreme Court's decision to deny use of significant amount of wild stocks for aquatic farming; and

**WHEREAS** United Fishermen of Alaska supports environmentally sound programs for the aquatic farming of shellfish and marine plants; and

**WHEREAS** Since 1988, Alaska's shellfish farming industry has struggled to grow beyond existing annual production of \$200,000 to \$600,000 and 10 to 30 commercially producing farms; and

**WHEREAS** In 2011, NOAA adopted a *National Shellfish Initiative* to increase populations of bivalve shellfish in our nation's coast through commercial production and conservation activities; and

#### MEMBER ORGANIZATIONS

Alaska Bering Sea Crabbers • Alaska Independent Fishermen's Marketing Association

Alaska Independent Tendermen's Association • Alaska Longline Fishermen's Association • Alaska Scallop Association • Alaska Trollers Association

Alaska Whitefish Trawlers Association • Aleutian Pribilof Islands Community Development Association • Armstrong Keta • At-sea Processors Association

Bristol Bay Reserve • Cape Barnabas Inc. • Concerned Area "M" Fishermen • Cook Inlet Aquaculture Association • Cordova District Fishermen United

Douglas Island Pink and Chum • Freezer Longline Coalition • Golden King Crab Coalition • Groundfish Forum • Kenai Peninsula Fishermen's Association

Kodiak Regional Aquaculture Association • North Pacific Fisheries Association • Northern Southeast Regional Aquaculture Association

Petersburg Vessel Owners Association • Prince William Sound Aquaculture Corporation • Purse Seine Vessel Owner Association

Seafood Producers Cooperative • Southeast Alaska Herring Conservation Alliance • Southeast Alaska Fisherman's Alliance

Southeast Alaska Regional Dive Fisheries Association • Southeast Alaska Seiners • Southern Southeast Regional Aquaculture Association

United Catcher Boats • United Cook Inlet Drift Association • United Southeast Alaska Gillnetters • Valdez Fisheries Development Association

**WHEREAS** The Food and Agriculture Organization (FAO) of the United Nations reports that, in 2010, world aquaculture production attained another all-time high (60 million metric tons worth \$119 billion) of which 20% was bivalves that were non-fed (or grown on food materials that exist naturally in their marine environment); and

**WHEREAS** British Columbia reports that the shellfish growing industry provides over 1,000 full-time jobs in rural coastal communities and produces over \$33 million in annual sales across 16,000 miles of coastline; and

**WHEREAS** the State of Washington is the largest producer of farmed shellfish in the U.S. with annual sales values which exceed \$100 million, employing directly and indirectly over 3,200 people with over \$27 million in payroll and an estimated total economic contribution of \$270 million; and

**WHEREAS** In 2011, New Zealand's annual aquaculture production reached \$400 million, and the industry goal is to reach \$1 billion by the year 2025; and

**WHEREAS** NOAA recognizes the broad suite of economic, social, and environmental benefits provided by sustainably increasing shellfish, including new jobs and business opportunities, meeting the growing demand for seafood, habitat for important commercial, recreational, endangered and threatened species, species recovery, cleaner water and excess nutrient removal, and shoreline protection; and

**WHEREAS** Washington responded to NOAA with a *Washington Shellfish Initiative* to restore and expand shellfish resources through protection, restoration and enhancement efforts; and

**WHEREAS** The document titled, *USDA Investment Strategy in Support of Rural Communities in Southeast Alaska (2011-2013)*, identified mariculture as an area consistent with its goals in the Southeast region and worthy of investment; and

**WHEREAS** In June, 2013, the Alaska Department of Commerce, Community and Economic Development (ADCCED) published a draft *Alaska Mariculture Development Prospectus* in an attempt to establish a formal initiative focused on expediting the development of the mariculture industry; and

**WHEREAS** The University of Alaska Sea Grant Marine Advisory Program consistently provides support to the shellfish farming industry through education, outreach and training; and

**WHEREAS** Alaska's salmon enhancement program offers a comparison of the potential for mariculture to grow the economy of coastal Alaska; and

**WHEREAS** In 2010-2012, the ex-vessel values of hatchery salmon commercially harvested were worth approximately \$250 million, \$110 million, and \$150 million; and

**WHEREAS** According to a recent economic study conducted for the Prince William Sound Aquaculture Association, the rate of return on investment from hatchery salmon in Prince William Sound is 271:1 for the State and 23:1 for commercial fishermen; and

**WHEREAS** On September, 25, 2013, NOAA researchers achieved the first experimental release of hatchery-reared red king crabs in Alaska, as a part of the Alaska King Crab Research, Rehabilitation, and Biology Program (AKCRRAB); and

**WHEREAS** the Southeast Alaska Regional Dive Fisheries Association (SARDF) is working with the Alutiiq Pride Shellfish Hatchery to spawn sea cucumbers as a part of ongoing research into production of juveniles to support enhancement of wild sea cucumber populations; and

**WHEREAS** shellfish enhancement programs could prove to be of value to Alaska's seafood sector and coastal communities; and

**WHEREAS** In summer of 2013, NOAA was petitioned to list the pinto abalone under the Endangered Species Act and the petition is under review; and

**WHEREAS** shellfish restoration programs may ultimately be an effective tool to assist in the recovery of depleted wild shellfish stocks; and

**WHEREAS** the farming of aquatic plants could provide diverse social, environmental, and economic benefits for Alaska residents; and

**WHEREAS** aquatic plant culture can produce healthy foods and supplements, increase and preserve habitat for fish and invertebrates, and assist with bioremediation efforts in areas that contain excess nutrient loads; and

**WHEREAS** The Alaska Fisheries Development Foundation (AFDF) is spearheading the *Alaska Mariculture Initiative* which will expedite the development of mariculture in Alaska, including marine plants and shellfish farming, enhancement, and restoration; and

**WHEREAS** The *Alaska Mariculture Initiative* will complete the following objectives: broaden the vision and constituency of the mariculture industry from shellfish farming to also include enhancement and restoration; coordinate efforts to develop the mariculture industry; convene a planning conference in Alaska; develop a strategic plan; and, gain a commitment by all participating agencies and stakeholders regarding implementation of the plan.

**NOW, THEREFORE, BE IT RESOLVED THAT:**

United Fishermen of Alaska supports the *Alaska Mariculture Initiative* as a method to facilitate expansion of the mariculture industry for marine plants and shellfish farming, enhancement and restoration, to increase jobs and economic opportunity for fishermen, farmers and support businesses; and

**NOW, THEREFORE, BE IT FURTHER RESOLVED THAT:**

Copies of this Resolution will be sent to the Alaska Legislature, Governor Parnell, ADF&G, ADCCED, USDA Rural Development, NOAA Fisheries, and Alaska's Congressional Delegation

By UFA Board of Directors, May 6<sup>th</sup>, 2014.



Jerry McCune, President



Attest: Julianne Curry,  
Executive Director

# Alaska Mariculture Task Force

Representative Daniel Ortiz  
State Capitol, Room 513  
Juneau, Alaska 99801  
Ph: 907-465-3824  
[Representative.Dan.Ortiz@akleg.gov](mailto:Representative.Dan.Ortiz@akleg.gov)

## RE: Support for HB 128 – shellfish enhancement

Dear Representative Ortiz,

February 24, 2017

The Alaska Mariculture Task Force (Task Force) would like to express support for HB 128. *The Task Force recognizes that HB 128 is part of a larger effort to develop mariculture in Alaska.*

At the request of industry and communities, Governor Walker established the Task Force by Administrative Order #280. The Governor recognized that a developed mariculture industry will have economic, environmental, cultural, industrial and food security benefits to Alaskans. Members of the Task Force were appointed in May, 2016. The Governor's directive to the Task Force is to provide recommendations for a comprehensive plan to develop a viable and sustainable mariculture industry producing shellfish and aquatic plants for the long-term benefit of Alaska's economy, environment, and communities. The Task Force must complete its work by March 1, 2018.

The Task Force would like to highlight that we are using the following guiding principles in our work to develop the mariculture industry:

- 1) Mariculture is defined as enhancement of wild fisheries and aquatic farming of shellfish and aquatic plants. Mariculture does not include finfish farming, which is not allowed in Alaska.
- 2) The development of the mariculture industry will be compatible with Alaska's reputation as a world leader in responsible and sustainable management of its seafood resources.
- 3) The development of the mariculture industry will be stakeholder-driven.
- 4) The development of the mariculture industry will coordinate and integrate with those entities conducting ocean monitoring in order to inform research and management of changing ocean conditions.

*HB 128 plays an important role in the development of mariculture in Alaska. HB 128 creates a regulatory framework with which ADF&G can allow for and manage shellfish fishery enhancement, restoration and hatcheries. This would allow interested stakeholders to either continue or begin enhancement and/or restoration of species such as King crab, sea cucumber, geoduck, abalone, razor clams, or others. This framework (HB 128) is absolutely necessary to continue moving forward with the development of mariculture related to wild shellfish enhancement.*

Thank you for sponsoring this important legislation. *The Task Force supports HB 128 and appreciates your proactive role in introducing the legislation.* If there are any questions, you may contact members of the Task Force.

Sincerely,

Alaska Mariculture Task Force

Cc:

Representative Stutes, Chair, House Fisheries Committee: [Rep.Louise.Stutes@akleg.gov](mailto:Rep.Louise.Stutes@akleg.gov)

Reid Harris, Staff, House Fisheries Committee: [Reid.Harris@akleg.gov](mailto:Reid.Harris@akleg.gov)



*Alutiiq Pride Shellfish Hatchery*  
PO Box 369  
Seward, AK 99664  
907 224-5181

Representative Dan Ortiz

State Capitol Room 513  
Juneau, Alaska 99801  
Representative.Dan.Ortiz@akleg.gov

Re: HB 128-Shellfish Enhancement  
HB 76- Revolving Loan Fund

March 28, 2017

Dear Representative Ortiz,

Thank you for sponsoring the two shellfish bills to the 30<sup>th</sup> Alaska State Legislature. As Director of the Alutiiq Pride Shellfish Hatchery I would like to express the importance of these two bills.

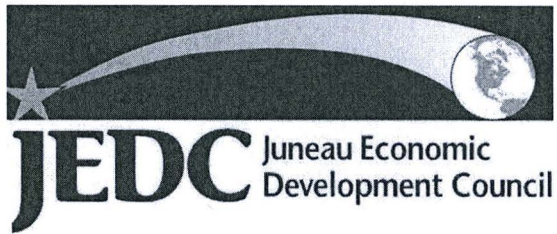
HB89 would allow us to expand on the work we have been doing on many of the shellfish stocks in Alaska. We have developed hatchery techniques for red and blue king crab, little neck and butter clams, cockles and most recently abalone. We have done experimental out stocking experiments with some of these species but need the legal mechanism to do large scale projects that could make a difference.

HB 128 supports the industry from a different angle. In my opinion, the relatively slow growth of the mariculture industry in Alaska is because of under capitalization. This loan program is specifically designed to take into account the delayed return on investment for growers and operators and should help spur the expansion of our industry. As the operator of the shellfish hatchery this is extremely important since I need more customers to keep our operation financially solvent.

I understand the turmoil in Juneau with the fiscal situation and other priorities but would hope you could convince your colleagues to give these bills fair consideration.

Sincerely,

Jeff Hetrick  
Director



[JEDC.org](http://JEDC.org)  
612 West Willoughby Ave. Suite A  
Juneau, AK 99801  
Phone 907-523-2300  
Fax 907-463-3929

March 24, 2017

Representative Dan Ortiz  
Alaska State Legislature  
State Capitol  
Juneau, AK 99801  
[Rep.Daniel.Ortiz@akleg.gov](mailto:Rep.Daniel.Ortiz@akleg.gov)

Re: Support for HB 128 – Shellfish Enhancement

Dear Representative Ortiz:

The Juneau Economic Development Council fosters a healthy and sustainable economic climate in Juneau and throughout Southeast Alaska. In collaboration with other organizations, the council implements initiatives to maintain, expand, and create economic opportunities.

On behalf of the Juneau Economic Development Council, I would like to express support for HB 128 which allows qualified non-profits to pursue enhancement and/or restoration projects involving shellfish species. HB 128 is part of a larger effort to develop mariculture in Alaska by creating a regulatory framework with which ADF&G can allow for and manage shellfish fishery enhancement, restoration and hatcheries. It will bring mariculture one step closer to its potential to become an economic engine for Southeast Alaska.

Thank you for your efforts to support mariculture development in Alaska.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Holst", enclosed within a hand-drawn oval.

Brian Holst  
Executive Director  
Juneau Economic Development Council



Southwest Alaska Conference

3300 Arctic Boulevard, Suite 203 Anchorage, AK 99503  
907.562.7380 • www.SWAMC.org

Alaska Peninsula  
Aleutian Chain  
Bristol Bay  
Kodiak Island  
Pribilof Islands

March 4, 2017

Representative Dan Ortiz  
Alaska State Legislature  
State Capitol  
Juneau, AK 99801  
Rep.Daniel.Ortiz@akleg.gov

Re: Support for HB 128 – Shellfish Enhancement

Dear Representative Ortiz:

On behalf of the Southwest Alaska Municipal Conference, I would like to express support for HB 128 which creates a framework to manage and develop shellfish fishery enhancement which will benefit the state's economy by providing a method to increase the available harvest of shellfish for public use in an environmentally safe manner.

As a representative of 40+ marine economies of Southwest Alaska, opportunity for developing available resources is critical to sustainable economies. While some of the richest waters in the world lie at our doorsteps, the necessary management measures meant to protect the long-term viability of the resource has led to reduced opportunity, particularly for the crab industry. This legislation will provide a regulatory framework to manage crab fishery enhancement, or other species of shellfish, if pursued by interested stakeholders. This could allow for additional fishing opportunity and crab processing while maintaining stocks at healthy levels. We see mariculture as a healthy, viable economic model for the coastal communities that will allow individuals to once again access a new and growing opportunity with limited up-front restrictions.

SWAMC's vision, to promote vibrant and livable communities across Southwest Alaska, is fully realized by a fully developed mariculture industry which creates jobs, improves the natural environment and improves access to usable resources. I look forward to collaborating with your efforts to support this effort.

Sincerely,

A handwritten signature in black ink that reads "Doug B. Griffin". The signature is written in a cursive style with a horizontal line underneath.

Doug Griffin,  
Executive Director, SWAMC



*Mission Statement: To develop, expand, and enhance new and existing dive fisheries in Southeast Alaska.*

Kate Sullivan Co- Executive Director  
Phil Doherty Co- Executive Director  
PO Box 5417  
Ketchikan, Alaska 99901  
1-907-225-2853  
[info@sardfa.org](mailto:info@sardfa.org)  
[www.sardfa.org](http://www.sardfa.org)

March 6, 2017

Support for HB 128 – Shellfish Enhancement

Representative Dan Ortiz  
Alaska State Legislature  
State Capitol Room 513  
Juneau Alaska 99801

Dear Representative Ortiz,

The Southeast Alaska Regional Dive Fisheries Association (SARDFA) appreciates your efforts to assist the emerging mariculture industry in Alaska. SARDFA has been involved in sea cucumber enhancement work for several years with an end goal of producing hatchery raised sea cucumbers to out-plant and supplement wild stocks. In the summer of 2017 we conducted our first high controlled outplanting of hatchery raised sea cucumbers. HB 128 is an important element to have in place so that SARDFA may someday be able to enhance wild stocks. Without HB 128, the State of Alaska lacks the statutory authority to manage invertebrate enhancement.

HB 128 is critical to furthering invertebrate aquaculture and enhancement in Alaska. SARDFA fully supports HB 128.

Again, thank you for your efforts to support mariculture development in Alaska.

Sincerely

Kate Sullivan  
Phil Doherty

|  |
|--|
| Member of:<br>Southeast Conference<br>United Fishermen of Alaska<br>PACRIM Shellfish Sanitation Association<br>Interstate Shellfish Sanitation<br>Conference |
|--|

**From:** Nancy Hillstrand [mailto:halibuts@gmail.com]  
**Sent:** Wednesday, February 15, 2017 12:09 PM  
**To:** Rep. Daniel Ortiz <Rep.Daniel.Ortiz@akleg.gov>  
**Subject:** HB128

Please be very cautious with this bill so all facts and figures are on the table. Present salmon legislation is 42 years old. These multiple statutes and regulations are obsolete in many ways because they do not reflect what we have learned over these 4 decades of time.

In the 1976 ADFG Annual Report, the then Commissioner admitted that we had been over harvesting crab and shrimp. The harvest levels take populations over the thresholds of sustainability to withstand other mortality factors like predation, female male size restraints, etc.

Another danger especially with our budget as it is. Monitoring is scanty and there is no money to perform sustainably. All oversight rests on one man...the ADFG commissioner. There needs to be an unbiased oversight Board that can see all angles of this biological introduction into our ecosystems.

Before we "just add fish"...Preliminary information is required. We first need information on all interacting limiting mortality factors of wild shellfish in their nursery grounds. For instance

- what are the predators in these near shore nurseries?
- Have we identified and mapped the critical shellfish nurseries in Alaska?
- are there introduced magnitudes of hatchery pink salmon in these nurseries?
- do the introduced magnitudes of hatchery fish draw in or cause a "swamping" of additional depredation creating a predator pit on shellfish larvae and megalops?

There has been concern in California that hatchery coho held some responsibility in the crash of their Dungeness crab fishery in San Francisco.

The Barents Sea had an introduction of King Crab that created competition with traditional fisheries.

Thank-you kindly. I hope to be able to help give insight to prevent costly mistakes with this legislation.

With Kind Regards,

Nancy Hillstrand

Pioneer Alaskan Fisheries Inc.

Homer Alaska since 1964

907-235-9772

907-399-7777 cell text

March 14, 2017

Hon. Louise Stutes, Chair  
House Special Committee on Fisheries  
Alaska State Legislature

Re: HB128

Dear Representative Stutes:

Wild fisheries resources go up or down, depending on environmental conditions. Sometimes these down periods last years, or even decades. During these down periods, the fishing fleet and coastal communities may experience significant economic hardships. However, given pristine habitats such as we have in Alaska, environmental cycles swing back the other way, and the fish stocks recover. But, during the down period there is inevitably a call to “fix” the depressed stock with a hatchery. In addition to its mariculture provisions, HB128 provides a mechanism for creating enhancement hatcheries (shellfish only) in these situations, which will occur with all of our fisheries resources at some point.

What is wrong with the vision of an Alaskan coastline dotted with facilities releasing millions of juvenile crab, sea cucumbers, shrimp, and in the future possibly also sablefish, halibut, Pacific cod, yelloweye rockfish, starry flounder, etc.? Some might have aesthetic objections to such wholesale changes to the marine environment, but the economic benefit of an enhancement program could be large.

Or, it might not be. If environmental conditions are currently against the species being enhanced, producing more juveniles will often be ineffective at increasing the number of adults, as their survival after release might be quite low. More pernicious is the inevitable shift in environmental conditions back to a favorable state where the fishery resource would be quite productive on its own. Unfortunately, with a large enhancement program in place it will be difficult determining whether the high abundance is due to natural conditions or to the latest tweak to hatchery practices. Once started, there is a high risk of wastefully continuing an unnecessary enhancement program, the cost of which is borne by the fishermen in perpetuity.

However, I’m concerned that the most serious costs will be borne by our fisheries resources. Enhancement is not risk-free. There are three pathways by which enhancement programs can damage our wild stocks:

1. Replacement.- One possibility is that hatchery-reared individuals will simply displace wild-born ones. When environmental conditions are poor, there may be factors that limit the size of the population after the age at which enhanced individuals would be released. Flooding the ocean with animals produced in a hatchery might not increase the population very much, but simply convert much of the population to artificially-produced individuals.

2. Genetic risks.- The presumption that a hatchery-produced animal is equivalent to a wild animal is a critical and dangerous assumption. Our marine environment varies greatly across the state, with a diversity of habitats and oceanographic features, and populations are potentially adapted to their local conditions. Genetic studies often miss significant local adaptations, as they are based on selectively neutral characters. Local adaptation aside, wild populations also have high genetic diversity which, although not currently adaptive, would allow the population to maintain productivity were the environment to change due to global warming, ocean acidification, etc. Enhancement activities can degrade both locally adaptive genetic traits and genetic diversity overall.

Outplanting large numbers of hatchery reared individuals can lower genetic diversity by increasing the level of inbreeding, homogenizing differences in neutral genetic characters, and swamping locally-adapted traits. Domestication, or adaptation to the hatchery environment, may gradually reduce the fitness of hatchery-reared animals for the wild environment. In the hatchery, selection for characteristics such as breeding behavior, egg incubation, foraging, larval reactions to environmental cues, settlement, and predator avoidance will differ greatly from that experienced by animals in the wild, and critical adaptive behaviors may be lost in culture. Using locally-sourced broodstock, continually replenishing broodstock from the wild, and using good breeding practices in the hatchery reduces but does not eliminate these risks.

3. Mixed-stock harvests.- Wild stocks have low productivity, and can sustain only very low harvest rates; otherwise, enhancement would not be necessary. A successful outplanting program will produce many more adults than were used in the brood stock, and thus the enhanced population can sustain a much higher harvest rate. When hatchery and wild components are mixed on the fishing grounds, even if fishing is managed so that total abundance remains high, the wild-born component will be overharvested and will decline. Mixed-stock fisheries accelerate both the replacement of wild fish with hatchery-origin animals and the loss of genetic diversity.

Conservation-minded consumers are well aware of the risks of enhancement to wild stocks. Consequently, a poorly-implemented enhancement program has the potential to jeopardize the sustainability certification of a fishery, which can have a significant financial impact. The large-scale enhancement of salmon in Prince William Sound has led to concerns about damage to the wild stocks that has caused difficulties in certifying those salmon fisheries as sustainable.

So, what about our salmon hatcheries? These produce enormous benefits to our fishing industry, and might seem to be a model for enhancing our other fishery resources. Unfortunately, this is not a great example. Salmon have one feature that allows our salmon hatchery programs to minimize (but not completely eliminate) the risks I've outlined above; salmon return to where they were released.

Because salmon return to where they were released, we can release them in remote locations where they can be targeted for harvest without overharvesting our wild stocks. This remote release strategy minimizes the genetic effects on wild stocks by limiting the interbreeding of wild- and hatchery-produced fish. Most other fishery resources we would enhance would not return to their release site, so

an enhancement program will result in a mixture of wild- and hatchery-origin animals on the breeding grounds and in the fishery, a much riskier situation than with salmon.

In sum, although there is an understandable desire to help economically distressed fishermen and communities during stock downturns by artificially producing fish, this can result in significant risks to the wild populations. Alaska should proceed very gingerly in creating new fisheries enhancement programs. Our fisheries and our markets are based on our sustainable and productive wild stocks, and we should be cautious in tinkering with them.

Recommendation: Although there is language in the HB128 that conveys the desire to protect wild stocks (e.g., Sec. 16.12.010(e)), this language should be made more specific. I would recommend amending the language to read, "The commissioner may not issue a permit under this section unless the commissioner determines that strong proof exists that the action would result in substantial public benefits and would not jeopardize natural stocks". This change would emphasize the intent of the legislature that protection of wild stocks is the highest priority and that the standard of proof that enhancement operations are safe and beneficial should be quite high.

Respectfully,

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