

03/11/14

Mariculture

Industry

Overview

<TARGET><BILL></BILL><SUBJECT>03-11-14 Mariculture Industry
Overview</SUBJECT><COMM>HFSH28</COMM></TARGET>

Louie Flora

Subject: FW: Questions for Tuesday's Hearing on Mariculture in House Fisheries

From: Tempel, Esther (DNR) [mailto:esther.tempel@alaska.gov]
Sent: Monday, March 10, 2014 8:47 AM
To: Louie Flora
Subject: RE: Questions for Tuesday's Hearing on Mariculture in House Fisheries

Hi Louie,

We will be prepared to respond to these questions. Adam Smith, Leasing Section Manager for South Central Region of DMLW will be online to speak to the topic. However, Wyn Menefee, Chief Operations Officer of Division of Mining, Land and Water will be there in person as back-up.

Thanks!

Esther

From: Louie Flora [mailto:Louie.Flora@akleg.gov]
Sent: Saturday, March 08, 2014 4:12 PM
To: Tempel, Esther (DNR)
Subject: Questions for Tuesday's Hearing on Mariculture in House Fisheries

Hi Esther,

For Tuesday's hearing in House Fisheries we would like to discuss the agency permitting of mariculture operations in AK and ways that DNR might expand the industry.

Rep. Seaton would like the following topics discussed:

- The price differential between mariculture lease costs per acre compared to other land and water use i.e. grazing, mining, under water gold mining off Nome and Oil and gas acreage. *35,38,083 Appraised fair market value 1 acre - 450 + 120/acre after voluntary - appraised at former expense*
- Current lease mariculture extension provisions compared to other state land renewals and extension
- Do we need escalating lease terms to ensure that people are actively working their leases and not tying up space. Is there a timeline where we should be revoking or terminating leases if not put into use by year six or ten?
- Do we need prohibition on import of used mariculture gear unless certification of decontamination of hitchhiker invasives?
phasing + authorization

1 *public comment*

Department of Environmental Conservation
House Special Committee on Fisheries
Mariculture Overview: Regulatory Structure & Potential of Expansion of the Industry
March 11, 2014

Background

The Department regulates shellfish growing areas and requires a permit for certain harvesting, processing and shipping activities. Background information is provided below, along with data maintained by the Department. There are two main elements to shellfish regulation: 1) classified growing waters; and 2) operation permits.

A shellfish growing area may be either an aquatic farm as defined by AS 16.40.199 or a natural shellfish growing area. Alaska has approximately 27 classified growing areas. Some growing areas encompass large areas and may include more than one aquatic farm.

Shellfish & Water Quality

Oysters, clams, mussels, and scallops are filter feeders that pump large quantities of water through their bodies when actively feeding. During this process, molluscan shellfish can concentrate microorganisms, toxigenic micro-algae, and poisonous or deleterious substances when they are present in the growing waters. Concentrations in the shellfish may be as much as 100 times those found in the water. If human pathogens are concentrated to an infective dose, and if the shellfish are consumed raw or partially-cooked, human disease can result.

Growing Water Classification

The foundation of Alaska's shellfish sanitation program is ensuring that shellfish are harvested from areas free of contamination. The Food Safety and Sanitation (FSS) program establishes and classifies growing waters based on a sanitary survey. During the survey, FSS considers many factors, including:

- pollution sources that may contaminate the growing areas, including industrial or domestic wastewater discharges, seepage from water disposal sites, agricultural land, geochemical reactions, and presence of wildlife populations;
- meteorological facts that affect distribution to or delivery of pollutants to a growing area;
- hydrographic factors that affect distribution of pollutants throughout a growing area; and
- physical dilution factors.

Water samples are required to initially classify a growing area. Depending upon whether a pollution source has an impact on the water quality of a growing area, 15 to 20 samples are collected under various environmental conditions over a one year period. The growing area is then classified according to the information gathered in the survey. The classification determines how the shellstock from that area may be used (i.e., sold directly to the consumer ready-to-eat or required to go through a natural or artificial cleansing prior to sale to the consumer.)

After initial classification, two to five water quality samples must be collected annually from each area, depending on the classification and location of the growing area, and whether the area is affected by point or nonpoint sources of pollution. These samples are analyzed to ensure that water quality meets bacteriological standards for fecal coliform and may be analyzed for other potential sources of pollution, including pesticides and petroleum by-products, as established in the National Shellfish Sanitation Program Model Ordinance.

When feasible, the Department combines contiguous geoduck and oyster growing areas for sampling based upon the geography, hydrology and oceanography of each area, particularly if new farms are established. The annual fee for reclassification and sampling expenses will now be shared among wild harvesters and farmers in the entire area.

Permitting Categories

In addition to ensuring that shellfish are grown and harvested from safe growing waters, FSS has regulatory oversight of harvesting, processing, and shipping shellfish and issues shellfish permits for five different categories of activity:

1. **Harvester** (*a person who takes shellfish by any means from a shellfish growing area*)
2. **Re-shipper** (*a person who purchases shucked shellfish or shellstock from a dealer and sells the product without repacking or relabeling to another dealer, wholesaler, or retailer*)
3. **Shipper** (*a person who buys and repacks and then sells shellstock – also means a person who ships previously shucked shellfish*)
4. **Shucker-Packer** (*a person who shucks and packs shellfish*)
5. **Vessel** (*geoduck dive vessels*)

Although FSS does not utilize the term “farm” for permitting purposes, most “farms” receive permits as either a “Harvester” or a “Shipper.” If a shellfish operation consists of two or more different types of activities occurring at the same location, the operation is not required to obtain a permit for each separate activity. The operation receives one type of permit that is based on the activity with the highest applicable permit fee.

Permit Counts, by Year

	<i>Harvester</i>	<i>Shipper</i>	<i>Shucker-Packer</i>	<i>Vessel</i>	<i>Re-shipper</i>	<i>Total</i>
2013	200	31	6	87	0	324
2012	180	28	7	78	1	294
2011	158	28	8	79	1	274
2010	141	25	7	63	1	237

ALASKA

NORTH TO OPPORTUNITY

Mariculture Industry Overview

DEPARTMENT OF COMMERCE, COMMUNITY, AND ECONOMIC DEVELOPMENT
DIVISION OF ECONOMIC DEVELOPMENT

03/11/2014





MARICULTURE INDUSTRY SUPPORT

- Mariculture Revolving Loan Fund
- Potential to use other DED loan funds for mariculture industry
- Industry assistance
- Research
- Investment outreach





Boats in harbor at Seward

MARICULTURE REVOLVING LOAN FUND

Loan Purpose: loans may be made for the planning, construction, and operation of a mariculture business.

Must be Alaska resident with experience or training in the mariculture industry.

Maximum loan amount is \$100,000 per year with max balance of \$300,000 per borrower.

Maximum loan term is 20 years.

Interest rate will be fixed at the the time of loan approval; payments may be deferred for the first six years of loan.

All loans must be adequately secured and include a priority lien.





FEES AND COSTS

- A \$100 non-refundable application fee must accompany all applications
- A 1% origination fee is due at closing
- Borrower is responsible to pay all direct costs incurred in processing an application including title reports and title insurance, recording fees, appraisals, travel and other direct costs



DEVELOPMENT PROJECTS

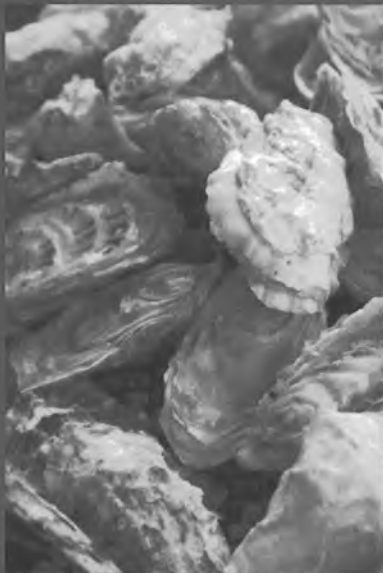
- Mariculture prospectus follow up
- Hatchery audit
- Mariculture industry business plan
- Sets foundation for investment recruitment
- Part of broader maritime industry initiative



QUESTIONS?



Status of Aquatic Farming in Alaska



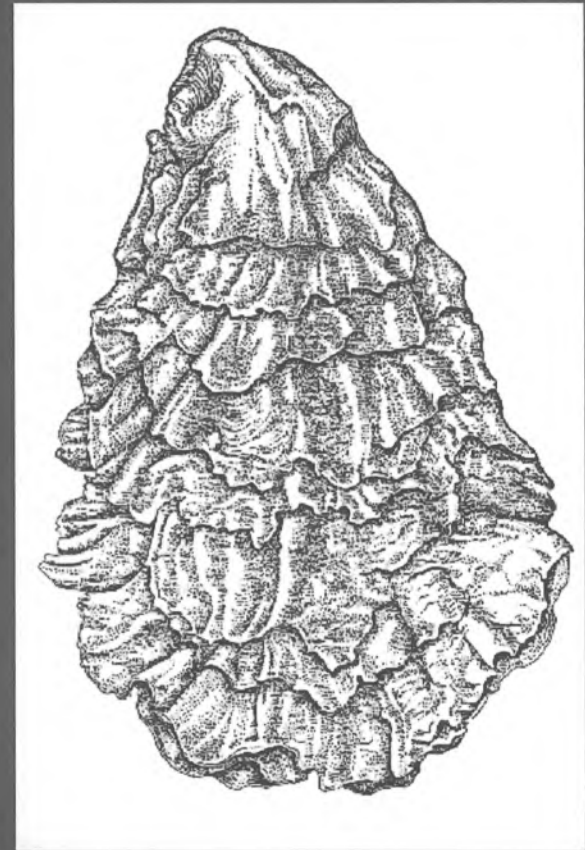
**Jeff Regnart
Ron Josephson
Division of Commercial
Fisheries
ADF&G**

**House Fisheries Committee
Juneau, AK
March 11, 2014**



Overview

- Program Mission
- Permitting Process
- Geographic Farm Concentration
- Statewide Production
- Regional Production
- Acquired Seed
- State Program Streamlining Efforts



Program Mission

- To permit and regulate aquatic farming in the state in a manner that ensures the protection of the state's fish, game, and aquatic plant resources and improves the economy, health, and well-being of the people of the state

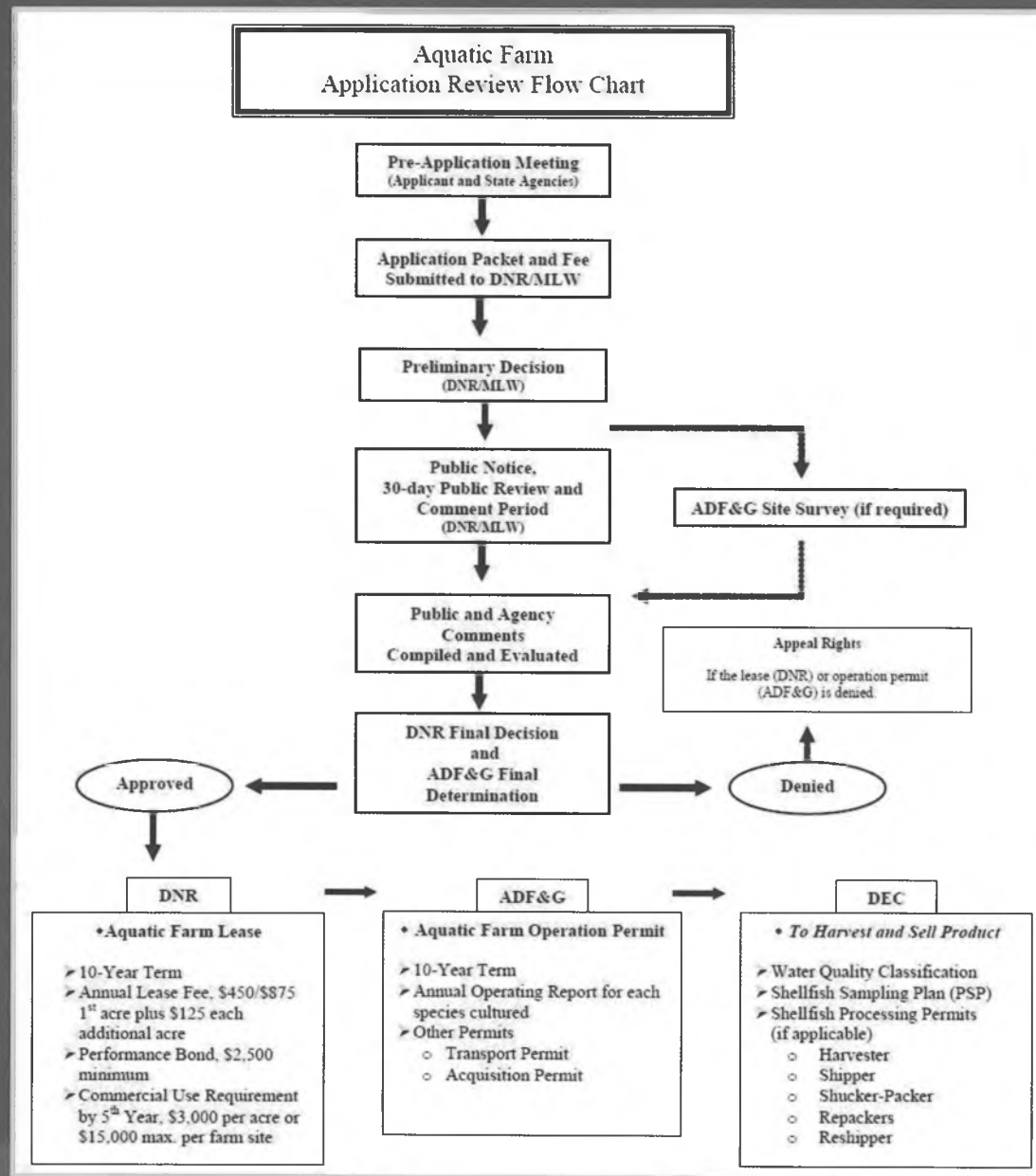
Aquatic Farm
Operation
Permit

Stock Transport
Permit

Disease-Free
Seed Source
Certificate

Aquatic Stock
Acquisition and
Transport Permit

Permitting Process



Permitted Farms Geographic Concentration

Southcentral



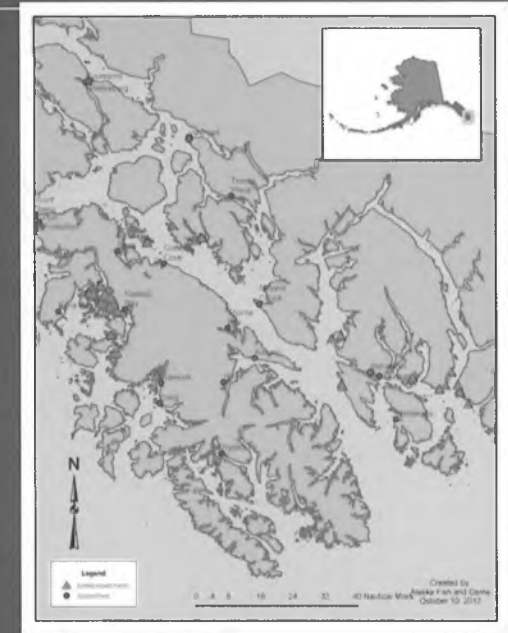
34%

Northern Southeast



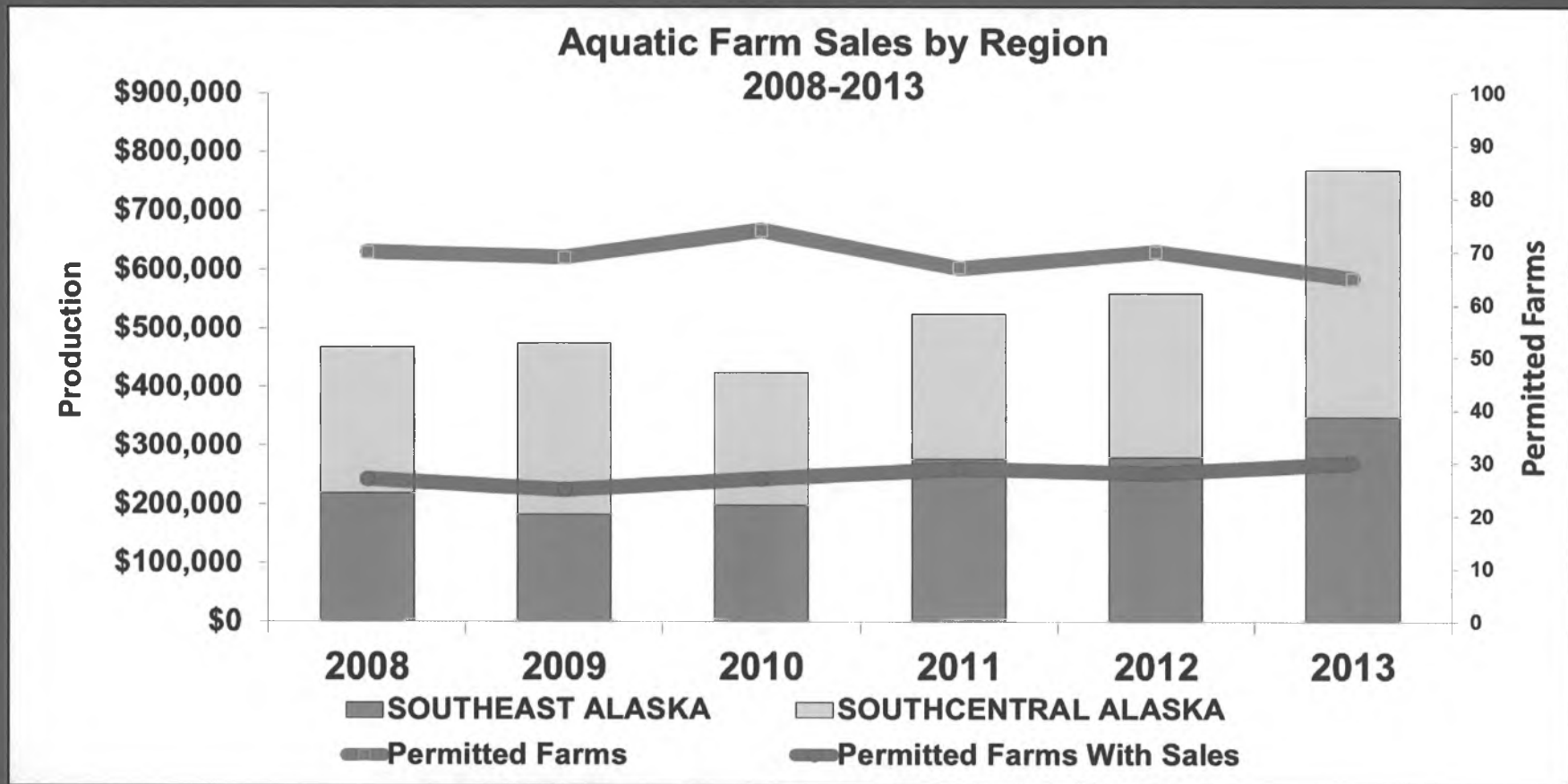
15%

Southern Southeast



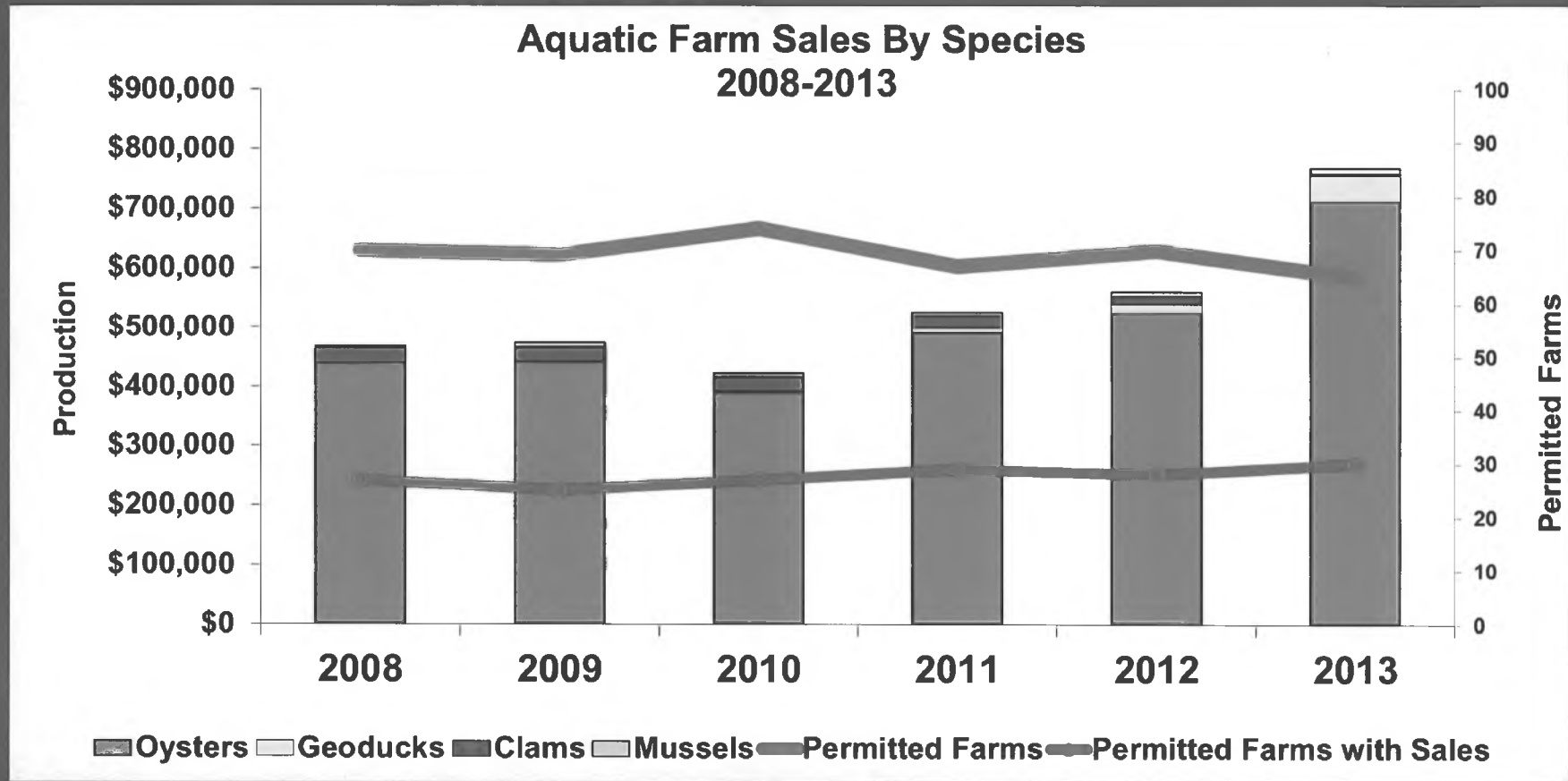
51%

Statewide Production By Region



- 2013 total farm gate value total = \$768,820
- 37% increased sales from 2012 to 2013

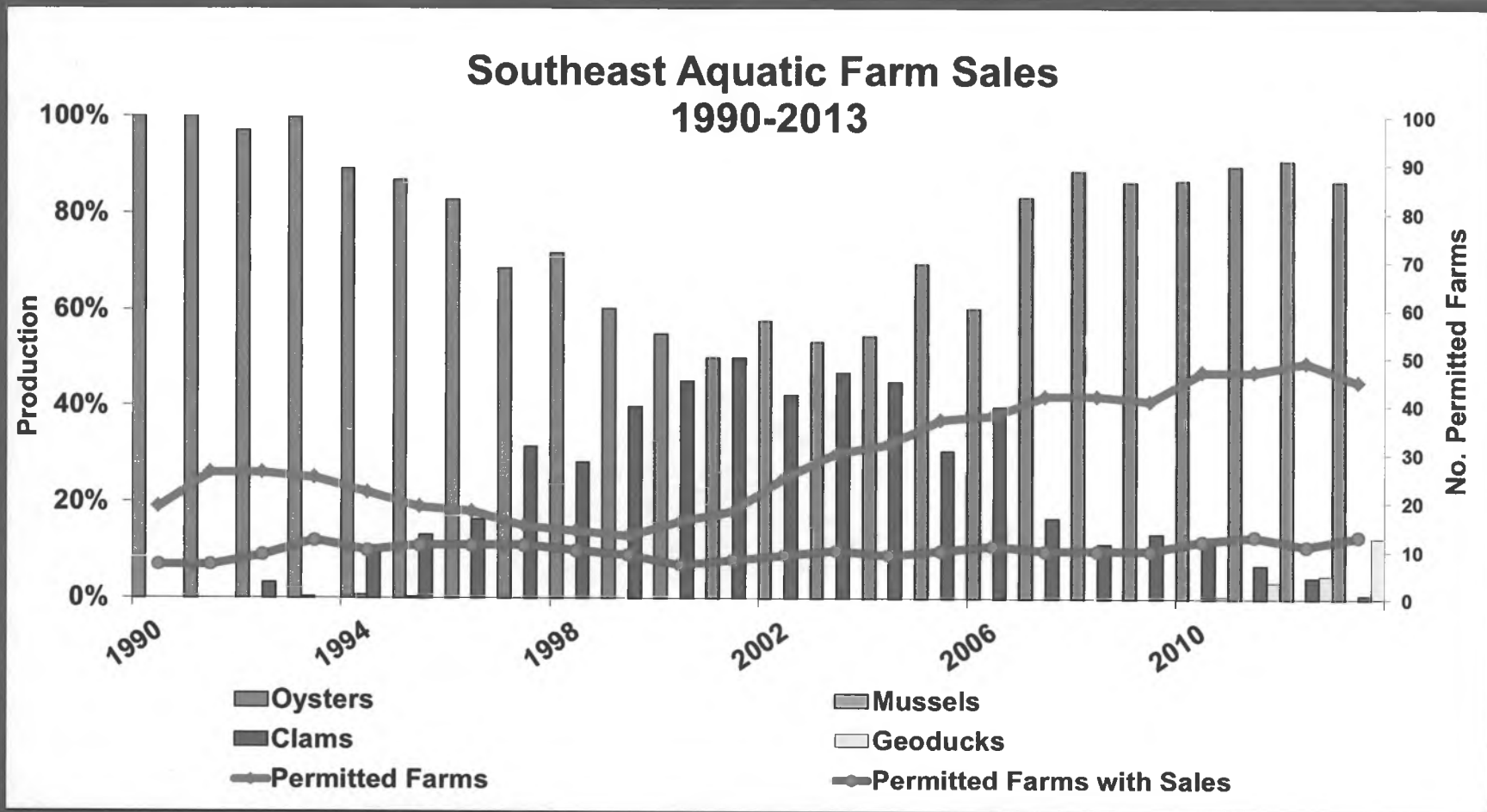
Statewide Production By Species



- Pacific Oysters = \$712,345
- Littleneck Clams = \$2,900

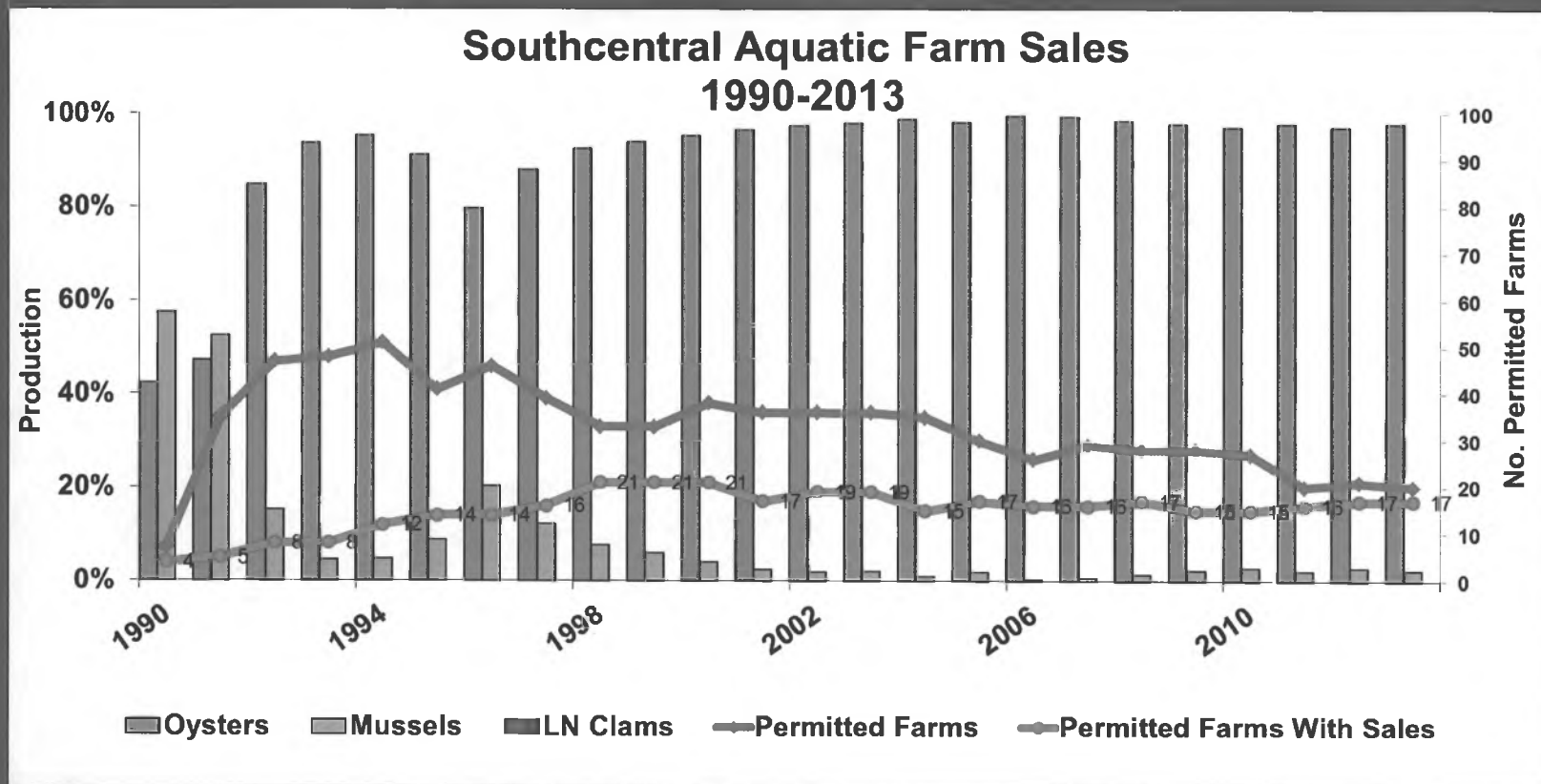
- Mussels = \$9,512
- Geoducks = \$44,064

SE Production Percent By Species



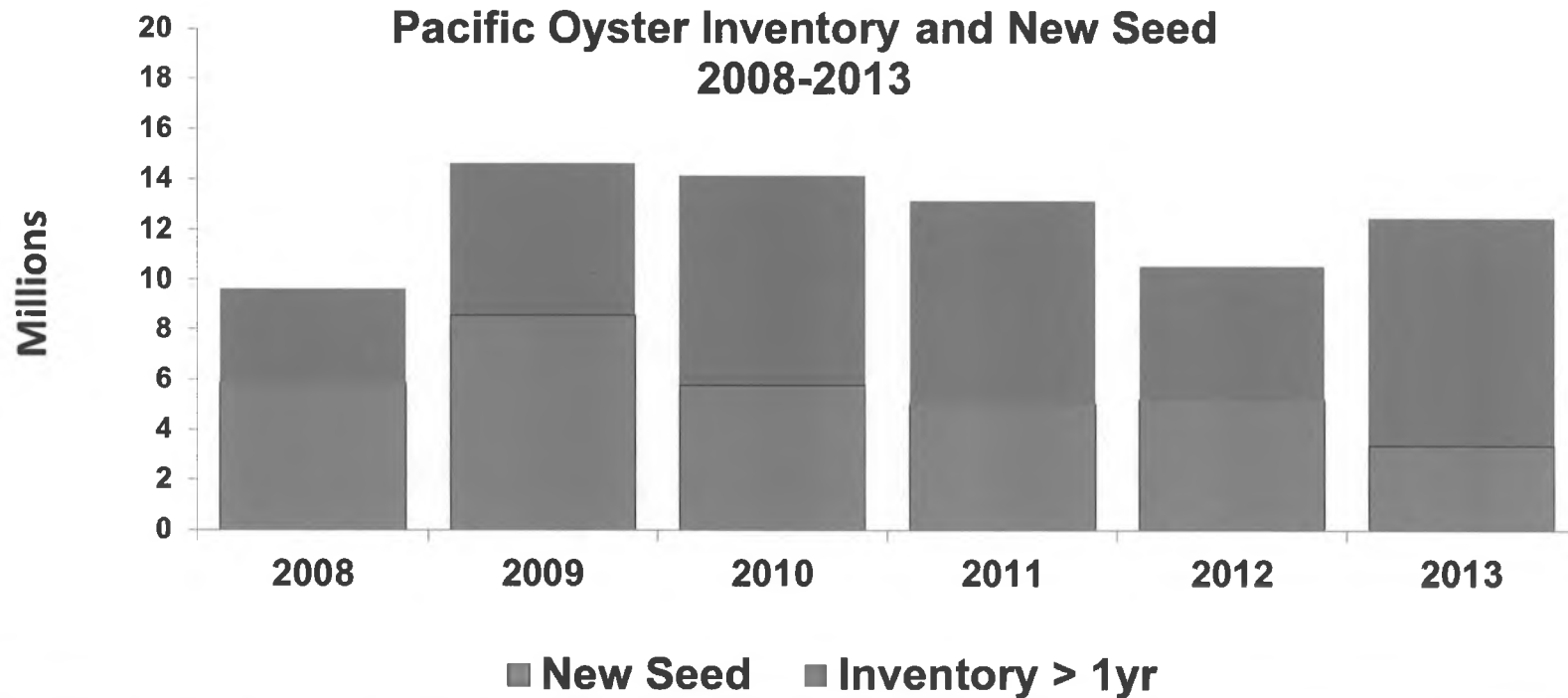
- Pacific oysters made up 87% of SE aquatic farm sales
- Trend shows an increase in the number SE aquatic farmers since 2001

SC Production Percent By Species



- Pacific oysters made up 98% of SC aquatic farm sales
- Blue mussel production was more prevalent in early years; numbers are expected to increase.

Acquired Seed



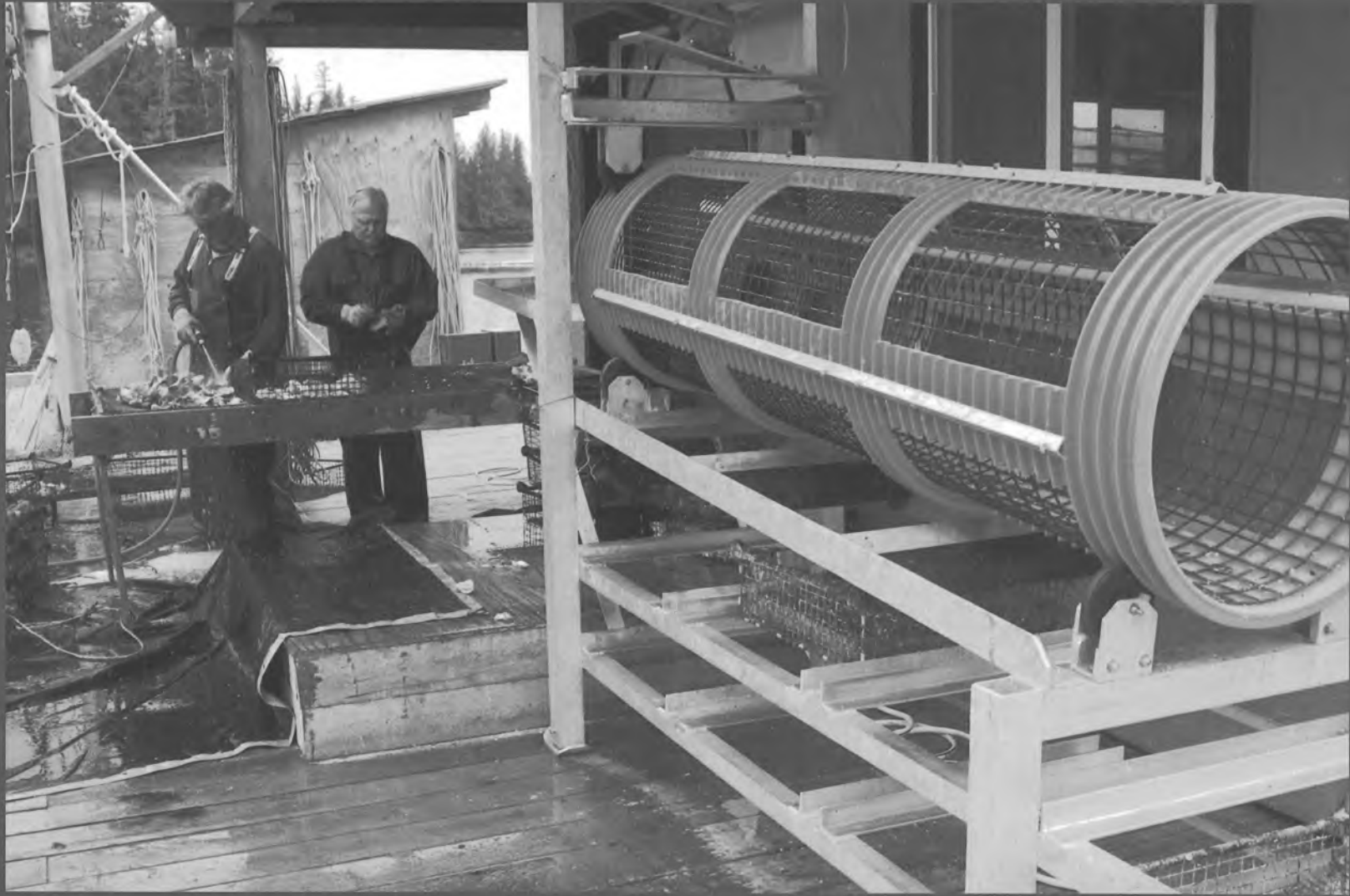
- New seed acquired decreased from 5.1 million in 2012 to 3.3 million in 2013 (35%).
- Decline in seed acquisition from 2009 to 2013.
- Proportion of new seed to inventory less in 2013 (27%) compared to 2012 (49%)

State Program Streamlining Efforts

Application and Annual Report Forms

- *Review and verify that what is being requested coincides with current statutory and regulatory requirements.*
- *Simplify application and annual report forms questions and formatting.*
- *Continue to make improvements, pending DNR regulation changes.*

Questions/Comments/Discussions?



M. Sheets Oyster Farm, SE Alaska, 2011