

State of Alaska Shellfish Mariculture Industry Development Plan

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State of Alaska

Shellfish Mariculture Industry Development Plan

The Shellfish Mariculture Industry Development Plan was produced through consultation between State agencies and the shellfish mariculture industry. The following tasks are intended to represent new services by the State to the shellfish industry. Existing functions related to permitting are not addressed.

Mission

The State of Alaska will establish programs supporting a high-value, high-growth industry development strategy for shellfish farming and enhancement.

Department of Commerce, Community & Economic Development

The Department of Commerce, Community & Economic Development will perform and/or lead in several economic development tasks. Commerce will establish shellfish mariculture as a growing, thriving business for Alaska. Commerce will work in coordination with applicable regulatory agencies.

Task 1 – Designate lead agency for shellfish mariculture development

Lead agency: Department of Commerce, Community & Economic Development

Partner agency(ies): none

Task: Establish the Department of Commerce, Community and Economic Development (Commerce) as the lead agency in the state for shellfish mariculture development. The development plan may involve a new hire for the department.

Purpose: Commerce serves as a clearinghouse to address industry development, agency coordination, and initial point of contact for potential shellfish farmers.

Main services will include:

- 1.) establish a mariculture development center,
- 2.) conduct economic research,
- 3.) coordinate technical assistance efforts,
- 4.) design and implement financing programs for the industry,
- 5.) lead regulatory reviews, and
- 6.) encourage and assist marketing efforts.

Start Date: February 2006

Completion: Ongoing

Funding: Legislature, general fund, and federal sources

ED Category: Leadership

Task 2 – Mariculture Research Center

Lead agency: Commerce

Partner agency(ies): Fish & Game, Natural Resources, Labor & Workforce Development, University – Marine Advisory Program and Fisheries Industrial Technology Center

Task: Establish a mariculture development center (Center).

Purpose: The Center will coordinate research and development, technology transfer, and training needs for the industry. The Center will coordinate with the University, industry, state and federal agencies to design training curriculum, conduct appropriate research and advise on fund allocation for related projects. Appropriate agencies will carry a seat on the Center's board.

Start Date: March 2006

Completion: Formally established by end of 2006

Funding: Revitalization strategy

ED Category: Leadership

Task 3 – Optimal Size, Cooperative Marketing and Hatchery Structure Analysis

Lead agency: Commerce

Partner agency(ies): Fish & Game, Natural Resources

Task: Commerce will contract an optimal size analysis for shellfish farming operations in the State and develop direction setting for managing the State's role in shellfish hatchery production.

Purpose: Determining optimal size for shellfish farming operations in Alaska will assist in establishing regulatory, taxation and other incentive programs to stimulate growth in the industry.

The review will explore the use of marketing cooperatives and cooperative activities to develop greater market penetration for shellfish farmers. Organizational structures, such as a cooperatives, may prove crucial to shellfish farming in Alaska. Operating in remote, high cost conditions take considerable efforts. Pooling resources to increase volumes and markets may be necessary to increase the industries overall value. Marketing cooperatives also enhance the prospect for continued Alaskan control of the industry.

The shellfish hatchery in Seward is a double-edged sword for the industry. On one hand, the industry must have the hatchery to grow out critical spat for species indigenous to Alaska – geoduck. On the other hand, the hatchery is expensive and drains other public funds that might be available for other needs by the industry. Successful hatchery operations in other states are often a component of the farm. The review will recommend potential structures the hatchery may fall into and to what degree the shellfish farming industry should share in the costs of the hatchery.

Start Date: The contract will go out to bid by April 2006.

Completion: Estimated 3 months to complete the review.

Funding: Fisheries Revitalization Strategy - \$30,000 maximum.

ED Category: Economic Information and Research

Task 4 – Formal Training Program

Lead agency: Commerce

Partner agency(ies): UAF – Marine Advisory Program, Mariculture Research Center

Task: Develop a formalized training platform and curriculum

Purpose: Shellfish farming requires specialized skill sets. The strenuous work occurs in remote settings. Farmers and potential farmers face a host of challenges related to improving productivity on their farm, while successfully moving product to markets. Commerce will work with the Marine Advisory Program and the Center to design, implement and provide University driven training for current and potential industry participants.

Start Date: Following successful completion of the Center – Estimate January 2007.

Completion: Ongoing function.

Funding: To be determined.

ED Category: Human Resource Development/Technical Assistance

Task 5 – Comprehensive Financing Programs

Lead agency: Commerce

Partner agency(ies): Commerce – Division of Investments, US Department of Agriculture, Rural Development and Farm Service Agency

Task: Commerce will pursue the development and implementation of financing programs with US Department of Agriculture and Commerce's Division of Investments to encourage development of the industry.

Purpose: Financing is difficult for farmers to obtain. Existing agencies have programs that may require slight changes to meet the needs of Alaska's shellfish farming industry.

Funding: Ongoing staff time. Potential funding from USDA and Commerce's Division of Investments.

Status: Not started.

Completion date: Ongoing.

ED Category: Financing

Task 6 – Enhance Marketing Efforts

Lead agency: Commerce

Partner agency(ies): Alaska Seafood Marketing Institute, Office of International Trade, Marine Advisory Program, and USDA

Task: Commerce will connect shellfish farmers to partner marketing agencies to improve domestic and international markets.

Purpose: Increase integration into ASMI's marketing material and promotional efforts. Greater efforts will be placed on these generic promotions as volumes from industry increase. Fold shellfish mariculture into ongoing marketing work of the Office of International Trade. Increase the Marine Advisory Program's marketing training efforts for shellfish farmers, while performing marketing research into opportune markets. Work to fold Alaska's shellfish farmers into USDA's many marketing programs.

Funding: Ongoing staff time, USDA, Legislature.

Status: Not started.

Completion date: Ongoing.

ED Category: Marketing

Task 7 – Technology Transfer

Lead agency: Commerce

Partner agency(ies): UAF – Marine Advisory Program, UAF – Kodiak FITC, Mariculture Research Center

Task: Agencies will develop training programs and events that bring increase technical improvements to Alaska.

Purpose: Production methods in Alaska do not keep pace with changes in other parts of the world. Learning from other sectors that have been farming longer will expedite the efficiencies on the Alaska farm.

Funding: Ongoing staff time, Legislature.

Status: Not started.

Completion date: Ongoing.

ED Category: Research and development

Task 8 – Regulatory Review

Lead agency: Commerce

Partner agency(ies): Department of Environmental Conservation, Fish & Game, Natural Resources

Task: Based on the findings from the optimal operational size research, Commerce will facilitate a multi-agency (F&G, DEC and DNR) review of the current 1.) permitting system and 2.) taxation, leasing and other fee collection structure for shellfish farming. From this review, the agencies will make recommend needed changes. This review will include close consultation with current business operations. As necessary, the agencies will carry recommended changes to the Legislature for statutory authority.

Purpose: Within the existing permitting system, there may be disincentives and impediments that prevent the shellfish farming operations from moving towards optimal efficiencies. Discovery and elimination of these impediments will encourage additional business growth. Likewise, there may be incentives put into place that creates greater investment in high growth areas of the industry.

Funding: Ongoing staff time, Legislature.

Status: Not started.

Completion date: December 2006. Set on a 3 to 5 year review period.

ED Category: Regulatory environment

Task 9 - Improving Industry Infrastructure

Lead agency: Commerce

Partner agency(ies): Department of Transportation & Public Facilities

Task: Commerce will review volume projections and determine if additional public infrastructure would assist the shellfish farming industry. This review will attempt to

measure volume projections from other industries to determine overall economic planning needs into the future.

Purpose: As volumes increase, there may be need for additional public infrastructure to assist these remote businesses. Commerce will work with DOTPF as necessary.

Funding: Ongoing staff time, DOTPF, Denali Commission and Economic Development Administration.

Status: Not started.

Completion date: Ongoing.

Partner Agency on:

➤ **Task 10 - Shellfish Enhancement**

Department of Fish & Game

The Department of Fish & Game will assist Commerce in conducting its regulatory reviews, economic research and mariculture research center. Fish & Game will be lead agency in establishing a shellfish enhancement and restoration plan for Alaska

Task 10 – Shellfish Enhancement

Lead agency: Fish & Game

Partner agency(ies): Commerce

Task: Consider the development of a wildstock shellfish enhancement and restoration plan through ADF&G.

Purpose: Following the results of the Revitalization Strategy sponsored geoduck enhancement project, the Department will consider the feasibility of developing a formal shellfish enhancement and restoration plan aimed at increasing and optimizing the economic output of wildstock commercial shellfish fisheries. As hatchery produced spat and juveniles of high value species like razor clams and geoducks become available, the possibility of restoring previously productive fisheries and enhancing stocks that exist only at low levels is becoming a reality. Commercial fisheries will add to economic output and help support the hatchery system through ongoing demand for spat and juveniles. The Department will consider developing this program and funding requirements.

Start Date: Following completion of the existing geoduck enhancement project. Estimated Fall '06.

Completion: Preferably before Legislative session for 2007

Funding: If program is enacted, it will be part of general fund and eventual taxes and fees from commercial and personal use.

ED Category: Access to Resources

Partner Agency on

➤ **Task 2 – Mariculture Research Center**

➤ **Task 3 – Optimal Size, Cooperative Marketing and Hatchery Structure Analysis**

**UAF – School of Fisheries & Ocean Science, Alaska Sea Grant Marine
Advisory Program**

Partner Agency on

- Task 2 – Mariculture Research Center
- Task 4 – Formal Training Program
- Task 6 – Enhance Marketing Efforts
- Task 7 – Technology Transfer

**UAF – School of Fisheries & Ocean Science, Kodiak Fishery Industrial
Technology Center**

Partner Agency on

- Task 2 – Mariculture Research Center
- Task 7 – Technology Transfer

Alaska Seafood Marketing Institute

Partner Agency on

- Task 6 – Enhance Marketing Efforts

Office of the Governor, Office of International Trade

Partner Agency on

- Task 6 – Enhance Marketing Efforts

Department of Natural Resources

Partner Agency on

- Task 2 – Mariculture Research Center
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Department of Environmental Conservation

Partner Agency on

- Task 8 – Regulatory Review

Department of Transportation & Public Facilities

Partner Agency on

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Department of Labor & Workforce Development
Partner Agency on

➤ **Task 2 – Mariculture Research Center**