

PURPOSE AND INTENT

The purpose of the regional meetings is to draft a strategic business plan that will ultimately focus Alaskan shellfish mariculture participants, as well as communities and governmental entities, on the barriers and obstacles facing the industry. From candid discussion with the public and those persons working within industry or in association with it, the OceansAlaska Marine Center strategic plan will recommend goals and solutions that will encourage the growth of an economically sustainable industry through research, education and training.

A critical part of the strategic plan assessment will be to review industry opinions and views to find a common set of goals that will provide the fundamental mission for the planned research center with a set of industry-driven outcomes.

As each meeting synopsis is posted on the OceansAlaska website, it is hoped that interested parties will feel free to edit, comment on or expand the scope of each topic presented below. As we move forward to more meetings through the summer/fall of 2007, the draft of each meeting will be incorporated into the planning process.

PROGRAM GOALS AND STRATEGIES

I. SHELLFISH MARICULTURE EDUCATION AND TRAINING

With the objective of encouraging growth of the shellfish mariculture industry in Alaska, it is of the utmost importance to provide quality education, training and outreach to existing owners, nascent entrepreneurs and employees involved or wishing to be involved in the industry.

1.1 Goal – Industry specific education to be developed with best-practice techniques to promote job creation and technically proficient new hires for workforce development

- Create mentorship pool for new entrants
- Assist in development of internships between partnering educational, research and institutional mariculture centers to further shellfish mariculture knowledge

1.2 Goal – Develop educational syllabus and programs for current best practice culture, harvest and marketing techniques in shellfish mariculture to provide an easily accessible source of information.

- Provide on-site workshops at the research center and in rural communities; develop exchange programs with partnering marine and educational institutions through research center facilitation
- Develop continuing education programs and seminars to include government, educational and industry sources for partnerships to further industry knowledge and technology; these programs may be achieved through distance delivery methods as they become available
- Develop and maintain a comprehensive database for start-up requirements, education, training and funding sources and opportunities for the Alaska shellfish mariculture industry

1.3 Goal – Work with existing business development organizations on local, state and federal levels to raise the business acumen of participants in the Alaska shellfish mariculture industry

- Develop comprehensive business plan models specific to the shellfish mariculture industry to promote better business development and management
- Actively promote and assist in development of basic business education seminars, programs and workshops to aid industry participants in sustaining best business practices and management to promote individual revenue growth

Success Indicators:

Growth of the industry would attract new entrants and increase measurable job creation. Many of the goals outlined above would enhance productivity through increased education in the application of technology and improved species culture techniques thereby measurably increasing profits for farmers and industry participants.

Entities Involved:

Higher education institutions, Alaska Small Business Development Centers, University of Alaska Center for Economic Development, State of Alaska Department of Labor Workforce Development, State Department of Commerce, Community and Economic Development, USDA and regional ARDORS

II. SHELLFISH MARICULTURE RESEARCH AND DEVELOPMENT

To encourage the growth of the industry through species diversity and synergies of multi-species culture on farms in Alaska, research and development of shellfish mariculture and marketing techniques would be promoted to enhance the economic viability of the shellfish industry in an ecologically sustainable manner.

- 2.1 Goal – Promote research projects dedicated to industry-specific shellfish mariculture which promote best practices in culture and technology, regardless of species
 - Develop research programs which encourage product diversity, best practices in growing methods and gear development
 - Promote and build partnerships worldwide for research information exchange to aid in production and industry growth
- 2.2 Goal – Develop a model farm at the research center to demonstrate best practices in shellfish mariculture husbandry, with in-depth, hands-on educational opportunities for industry participants
 - Planting techniques, spat production, predator control and harvest methods need best practice techniques developed for greater production efficiencies
 - Promote a structure to explore, research and develop recommendations for mechanized technology to improve efficiency and productivity of shellfish farms
- 2.3 Goal – Promote research to enhance and rehabilitate native shellfish stocks in Alaska waters
 - Long-term, systematic research programs may be facilitated by the center in partnership with governmental agencies, private research institutions or institutions of higher education to achieve enhancement of the shellfish mariculture industry
 - Gather data on mortality and growth rates of shellfish stock from valid, recognized sources and make information available through the research facility
- 2.4 Goal – Provide research opportunities which seek to address solutions to a consistent and adequate supply of healthy seed and brood stock in a hatchery setting for the industry and other user groups

Success Indicators:

The successful development of a research facility which would house research programs, aid in transfer of new technologies and act as a repository and mentor for information about industry best practices in husbandry and marketing of shellfish mariculture.

Entities Involved:

OceansAlaska Marine Advisory Group, State of Alaska and various funding sources

III. PRODUCT DEVELOPMENT AND MARKETS

In order to assist the shellfish mariculture industry in opening new markets and developing potential alternate methods of delivery, the center would promote techniques to enhance and expand product diversification.

3.1 Goal – Investigate opportunities to enhance product transportability through innovative marketing techniques while maintaining safety and quality of products

3.2 Goal – Conduct market research to identify new global markets that may lead to greater market diversification, brand development and improved financial returns from Product sales

Success Indicators:

The development of long-term, systematic research programs to develop enhancement programs for species diversification and development of marketable value-added products to expand the shellfish mariculture markets globally resulting in the increased demand for Alaskan shellfish.

Entities Involved:

OceansAlaska Marine Research Center, University of Alaska Marine Advisory Program, Alaska Seafood Marketing Institute

IV. REGULATORY CHANGE AND FUNDING

The research center may become the catalyst for regulatory change by encouraging clear-cut research, education and development which may strengthen the shellfish mariculture voice in the state of Alaska through irrefutable scientific conclusions.

4.1 Goal – Provide the opportunity to conduct research which may lead to a restructure of legislation regarding spat importation into the State of Alaska

4.2 Goal - Provide the impetus for streamlined and comprehensive industry-specific policy development and regulatory processes to reduce cost and time for stakeholders and policy makers and enforcers

- Compile a database for comprehensive mariculture regulatory processes for easy industry access
- Promote the need for pre-authorized best management practices to create a more streamlined permitting process through regulating agencies

4.3 Goal – Participate in development and implementation of a crop insurance program for shellfish mariculturists

Success Indicators:

Changes in the regulatory environment which would encourage new participants by providing streamlined permitting processes to lower entry cost barriers and encourage sustained growth of the shellfish mariculture industry in Alaska.

Entities Involved:

State of Alaska Department of Fish and Game, State Department of Natural Resources,

SITUATIONAL ANALYSIS

The industry participants involved in the February 27-28, 2007 meeting in Ketchikan, Alaska developed the existing situation of the industry currently impacting individual business as well as industry operations in all areas of shellfish mariculture. While there have been no priorities set on any of the following nor is the presentation in any particular order relating to topics, this presents a general overview of the strengths, weaknesses, opportunities and threats (SWOT) identified through discussion.

Strengths:

- Educational and institutional programs exist which may be stakeholders or partners in research ventures such as the University of Alaska, ASMI, AFDF
- Producers are eager participants in industry-specific education, training, research and development programs
- There are existing research facilities in the State of Alaska such as AFDF, FITC, USDA, NMFS, which would strengthen research capabilities
- There are supportive agencies in both the State and Federal governments to promote sustainable mariculture as an industry
- Existing constitutional and legislative mandates which promote shellfish aquaculture
- species diversity allows more profit and less seasonality to growers
- there is existing permitted land and water to accomplish research objectives
- The US Forest Service is presently active in best practices management pre-authorization in their permitting processes which could serve as a model for future regulatory pre-authorization requests
- There is presently inter-industry dialog initiated to move along shared goals
- Past successes in producing indigenous species
- A world-class facility in Seward for production and research
- Operational and profitable FLUPSY in Naukati, Alaska to serve as a model
- Operational geoduck nursery in Ketchikan, Alaska

Weaknesses:

- Weak and/or isolated growers with no strong affiliations to each other and an undefined organizational structure
- Lack of funding inhibits research and growth of the industry
- There is little or no verifiable history to shellfish farming in Alaska to provide baseline scientific or business information
- A lack of institutional support for coordination of education that is industry-specific
- There is no consolidation of research sharing within the industry
- Limited funding for practical research
- Little growth in the industry due to regulatory costs and constraints
- Present shellfish industry in Alaska may be too small to attract serious research monies
- Seed supplies for enhancement is not well-defined in user groups
- Very little public awareness of the shellfish industry by the Alaskan public
- No unified voice within the shellfish mariculture industry in Alaska
- It is not cost effective for oyster seed production at the present time
- There is no economy of scale among user groups to demand higher production for lower prices

- There is a lack of farm numbers to accomplish transportation economies
- Mortality and grow-out rates for geoducks in Alaska is unknown
- Current industry is considered a “life-style” choice and needs to change to a business model
- Labor costs are too high at present and farming jobs are low paying, in remote locations and highly demanding positions
- There is a distinct lack of industry communication and education to the public

Opportunities:

- There is present political acknowledgement of the need for economic development in rural areas
- Increased interest by NOAA in aquaculture may lead to funding source
- All open tidelands can be used for aquatic farming
- Involvement of native communities and their institutions would create strength for workforce development
- March 2007 begins the International Polar Year which may provide funding opportunities
- Develop strong cooperatives and growers associations to champion development of the industry
- The industry offers an attractive lifestyle
- Shellfish farming sparks local year-round economic development in rural areas
- Climate change or global warming concerns may present some funding opportunities
- There presently exists a successful model (RPT) to learn from
- Alternate sources of funding for hatchery self-sustenance can come from poly-culture and enhancement studies
- Industry transportation issues may find solutions from the Southeast Conference Study Group presently in progress

Threats:

- Budget cuts within local, state or federal governmental agencies may adversely effect the shellfish industry in requesting funding for research, development, education and training opportunities
- No infrastructure at the State university level to accommodate mariculture as a field of study
- Coastal Zone Management may constitute a hindrance in regulatory changes
- There can be no viable hatchery system without industry growth
- Power struggles within and without educational systems, agencies and/or programs
- Repetition of mistakes within the industry at production level
- Activists are against unplanned growth
- The State of Alaska does not invest in sustainable research and development for shellfish industry adequately
- All stakeholders lose by infighting and being cross-purpose to other industry participants
- There is no redundancy for risk diversification within the industry

TOPICS FOR CONTINUED DISCUSSION

There were several themes which were brought up in discussion at the meeting in Ketchikan which were either not fleshed out as main themes due to a lack of time or were considered to be outside the realm of the mission of this research center strategic plan. Those items are listed below and may be again visited with more discussion at future meetings; to be considered for inclusion into goals of the strategic plan in the future.

- Processing
- Attracting Capital
- Land Use

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