# Delishus Fishes

# Business Plan

Revision 3



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#### **1.0 Executive Summary**

#### Introduction

Delishus Fishes will operate an offshore aquaculture farm on a large ship or Seastead, solving logistical and regulatory problems that are currently hampering the development of an industrial scale offshore aquaculture farm. The market looks very attractive because the global demand for fish is growing faster than population growth while supplies are dwindling due to overfishing. The fragmented aquaculture industry makes up less than 50% of the current supply. Regulation in the United States has not kept pace with evolving technology, hampering the relatively new development of open ocean aquaculture which allows fish to grow in large cages moored miles offshore. Using a Seastead as the base of operations, Delishus Fishes will pioneer industrial scale offshore aquaculture.

Seafood commands a high market price, growing in popularity compared to other meats. Demand for meat is growing as the per-capita GDP increases in emerging countries. The US currently has a \$9 Billion seafood trade deficit which continues to grow. The overall seafood market shows an insatiable demand for always available, high quality product. As commercial fisheries collapse, and the current aquaculture industry fails to deliver, an enormous opportunity presents itself to the Seasteading community.

Offshore fin-fish aquaculture is in its infancy with several large scale farms beginning operation over the last 5 years. Using large cages moored offshore, teams from US universities first demonstrated the feasibility of offshore aquaculture and then spun off into commercial ventures. Total current production is in the low thousands of tons per year and growing. Initial assessments demonstrate viability and the potential for growth. With no offshore infrastructure, current operations are presented with a logistical problem when feeding and maintaining fish stocks.

Permitting is another constant problem, with many groups opposed to offshore aquaculture, such as commercial fisherman who view it as competition, and environmentalists concerned with the environmental impact. Initial results from university studies show the environmental impact is negligible. The regulatory environment is ripe for seasteading, which would allow the farm to scale in an environment perfect for the production of fish - the open ocean.

Utilizing a coastal Seastead or ship outside of territorial waters but close to a country open to offshore aquaculture would solve two of the largest problems preventing a truly industrial sized aquaculture farm from starting: regulations for growth and limited access to clean water.

Delishus Fishes is a viable opportunity, not only to launch the first actual Seastead, but to pioneer an industry that operates in a large global market with excellent growth rates.

#### Products

The 2 main species to be grown will be Cobia and Yellowtail.

- Cobia: 42,000 cubic meters cage volume producing 1,572,858 kilograms per year
- Yellowtail: 42,000 liters cage volume which will producing 1,572,858 kilograms per year

#### Financial considerations

The company is seeking \$5,160,000 in both short-term and long term funding to finance the lease of Seastead space, construction of cages, and development costs of the project. This will cover startup expenses and first year losses. It is estimated that the company will begin to make a profit in year 2 of operations. The company's break even point is a monthly production of 16,739 kg's of fish. The project is expected to begin harvest within 10 1/2 months from start of the first cage being built.



#### 1.1 Objectives

The objective of this project is to establish an intensive deep water aquaculture farm, producing highquality seafood for the international market year round.

#### 1.2 Keys to Success

Efficient, scalable production utilizing offshore cage culture An ever expanding, recession proof market for food Dwindling wild fish population yielding decreasing wild-caught harvests

#### 1.3 Mission

Delishus Fishes is a Seastead based company with a two-fold mission:

• to produce high quality, nutritional, and flavorful seafood for consumption in the international market.

• to lead the way in sustainable deep-water aquaculture, eliminating the harmful environmental effects of coastal high density fish farming, while expanding the world food supply.

#### 2.0 Company Summary

Delishus Fishes, Inc. will be a corporation operating a highly productive Seastead based open ocean aquaculture project.

Open ocean aquaculture is the growing of high-quality seafood in self monitoring and feeding robotic cages. The cages are 7000 cubic meter cages which remain at least 25 miles away from the shore in deep water either as a self propelled fleet, free to drift with a Seastead platform, or are towed by a live-aboard Seastead ship travelling at 5 knots or less. This avoids the accumulation of waste and uneaten food in a shallow, confined area in a coastal waterway. Ocean current circulating through the cages promotes healthy, uncontaminated fish growth, far away from the pollution along the coast.

The fish are automatically fed an optimal amount of food, growing in the best suitable growing conditions. This allows each fish to produce the maximum feed conversion ratio, with a minimum of waste. The seafood is grown using sustainable methods, with no herbicides or antibiotics. Stocking density is typically 30 kilograms of fish per cubic meter of cage volume. They are fed a combination of 50% or less fishmeal and oil derived from fish processing byproduct or species at the bottom of the food chain, like anchovies and krill, and 50% or more grain based meal from soy beans or dried distiller's grain solids, a byproduct of fermentation for ethanol production. The use of filter fed fishmeal and grain-fed feed also eliminates the build-up of mercury and other heavy metal contamination in the fish. Open ocean farm raised fish have a feed conversion ratio of 1.6 compared to 4-5 for wild caught fish, so the consumption of these fish has a much lower impact on natural feed stocks of bait fish and krill.

All fish are individually tested and certified for mercury. The fish are killed as quickly as possible, either by stabbing the brain, instant death, or cutting the gills, 15-20 seconds to death, so the harvest is more humane than is typical in the industry. The resulting taste is much better since there is no lactic acid build-up in the muscles.

The company will initially concentrate on the production of fresh, fresh frozen, whole and cleaned fish in the cages, and will process and package the fish onboard a Seastead when the space becomes available.

#### 3.0 Products

#### **Fish Species**

Delishus Fishes' first line of production will be Cobia (Rachycentron canadum) and Hawaiian yellowtail, also known as Almaco jack (Seriola rivoliana). The farm will have the capacity sufficient to produce in excess of 3,145,716 kilograms of fish per year by the end of the first year.

#### 4.0 Market Analysis Summary

#### **Market Summary**

The aquaculture market has a number of factors contributing to demand now and well into the foreseeable future. As seen in Figure 1, the amount of Global seafood cannot be met by wild capture alone. In fact, overfishing and unsustainable fishing practices could lead to the steady decline of wild-capture seafood, which has been holding relatively steady since 1985, at 80 Million Metric Tons per year.



Global seafood production from wild-capture fisheries and aquaculture

Another large market factor for global seafood consumption is the worldwide growth in per capita GDP of developing countries, which leads to a corresponding rise in per-capita meat consumption. As emerging markets reach the maximum amount of seafood they can harvest from their fisheries, they will look to aquaculture to fill the gap. Indeed, Costco recently stopped stocking certain types of fish due to the fact that the fisheries they came from are on the brink of collapse.

The US Federal Accounting Office estimates that relative to other kinds of meat, seafood prices will rise 20% due to the fact that near shore fishing techniques cannot be continually ramped up to meet demand.

The overall global landscape looks very ripe into the foreseeable future for large scale, open ocean fish farming.

#### Market Summation

The current US trade deficit in seafood is \$9 billion annually, second only to oil. When you factor in the fact that near shore aquaculture farming cannot be expanded to meet demand, due to seafood contamination and scaling problems, offshore aquaculture is the only viable option to meet the monstrous growing demand for seafood, both here in the United States, and abroad in developing countries, as they consume more and more meat products.

Cobia is demonstrating itself around the globe as a great fish suitable for aquaculture, and the market is very receptive to a high-quality, always available fresh fish product. Over the long term, the sustainably farm raised seafood market will open up to traditional retail and wholesale type customers as overfishing and global demand start to curtail increasingly limited wild-caught supplies.

#### 4.1 Industry Analysis

#### **Industry Overview and Current Offshore Farms**

Several commercial off shore fish farms and related companies have developed over the last decade, primarily spinning out of different university research programs. Most of the companies looking to operate off shore farms have come into consistent problems that could be solved by locating the farm next to a seastead. These concerns are primarily regulatory in nature, but also the profitability of the farms is affected by the costs associated with the operation of an off shore farm.

#### **SnapperFarm and Open Blue Sea Farms**

SnapperFarm is the first company that Brian O'Hanlon created in Puerto Rico around 1998 to demonstrate the feasibility of an offshore farm. In May 2002, O'Hanlon stocked 12,000 Cobia and 4,000 mutton Snapper fish into offshore cages . At first, SnapperFarm was working in conjunction with the University of Miami Rosenstiel School of Marine and Atmospheric Sciences and the NOAA Sea Grant Program.

By 2007, SnapperFarm had reached its quota of 50 tons and was encountering resistance to expand operations. Due to the nature of the companies growth, O'Hanlon moved operations to Panama, securing a lease and the ability to grow and sell up to 250 tons. The company re-organized as Open Blue Sea Farms and purchased a Panamanian seafood company, Pristine Waters. Currently, Open Blue Sea Farms has 50,000 fish in the water and has plans to add 200,000 over the next 12 months. The company is backed by Aquacopia, a VC firm specializing in aquaculture .

In 2009, during the Earth Awards Gala, O'Hanlon mentioned that on a demonstration scale they are "not viable" but do see the light. O'Hanlon mentioned that they are profitable on a per-crop basis, but there is too much overhead with current operations .

#### Kona Blue Farms

Kona Blue Water Farms is a Hawaiian based farm that currently operates a farm consisting of 8 net pens with an expansion opening up shortly in Mexico. The farm was started in early 2002 and was selling fish direct to consumers on its website up until 2008.

Kona Blue grows Kona Kampachi which is a trademarked name that they use to differentiate their farm raised fish from other farm raised fish. Due to the quality of their fish in the off shore cages, they can command a higher price and have positioned their fish as a premium, high quality offering for chefs.

The latest report regarding Kona's Mexican operations is that they are going to start selling fish within a couple of months. The output of the Mexican pens is estimated at 500 tons annually, which would double their current production.

#### 4.2 SWOT Analysis

The following strengths, weaknesses, opportunities, and threats are identified.

#### 4.2.1 Strengths

Utilizing a Seastead or live-aboard ship will provide a number of advantages to the methods currently used for offshore fish farming. These can be summarized here:

• Onsite crew quarters eliminates the need for daily transport of personnel from the shore to the site, improving profitability

• Feed storage allows for the purchase of feed in bulk and reduces the fuel and logistics required to transport feed

• Regulatory concerns are reduced in the open ocean with no permits required to add cages to the farm to increase production

• Onsite facilities for processing, shipping, and hatchery improves the operational efficiency

#### 4.2.2 Weaknesses

• Not the first offshore fish farm in existence, competitors have several years of experience

• Aquaculture would require that the Seastead stay in one region at all times - fish cannot be moved to a colder or warmer water climate

• In general the entire offshore aquaculture movement is barely out of infancy, methods, technology, and approaches are still developing

#### 4.2.3 Opportunities

The major opportunity for Delishus Fishes is the incredible market demand for seafood and fish products. Seafood consumption is growing faster than population rates. Americans are consuming more seafood as the benefits of Omega 3 fatty acids are becoming more well known and publicized. Emerging markets in South America and Asia present an enormous opportunity when high volume production can produce quality seafood at a competitive price.

Utilizing the Seastead allows for the farm to truly grow into industrial size. This positions Delishus Fishes as a fast growing aquaculture company, surpassing current operations that require lengthy permitting processes in the US or even in more "friendly" national jurisdictions.

The combination of the large, insatiable market and the ability to grow the farm to a truly industrial size represents an enormous opportunity to create the largest aquaculture project the world has ever seen, setting an example as to how the world can meet its food needs into the future.

#### 4.2.4 Threats

In general, the threats can be categorized as environmental and regulatory. Obviously storms would be a potential threat to the seastead (but not the underwater cages). Since the fish have so much clean, fresh ocean water the threat of sea lice and other parasitic problems is greatly reduced, along with problems associated with pollution, contamination, and illness.

- Storms that threaten the converted ship or Seastead
- Fish mortality due to illness or other factors
- Fish escaping from the net pens or other predators getting into the cages
- The price of quality fishmeal escalating due to demand from new fish farm operations

• Commercial fishermen represent a potential threat as they are against all aquaculture as it affects the price of their fish. Through political process, they could hamper or seek to harm operations.

#### 5.0 Strategy and Implementation Summary

The Delishus Fishes strategy is to profitably and efficiently utilize present and future aquaculture technology in the production of seafood. The company, by developing a profitable fish farm with all the necessary custom-innovated equipment, will gain a significant industry advantage.

Additional application and utilization of aquaculture technology in the production of seafood will double utilization of the automated cage culture portion of the overhead.

The company's goals in the first year are to:

- Develop the complete project.
- To have all 12 cages stocked and ready for production.
- To continue adding one stocked cage per month.
- To have hatchery, processing, refrigeration, and pack facility constructed.

The company's long term plan is to also produce more selective species of fish as well as investigating the boutique seafood market.

#### 5.1 Competitive Edge

Delishus Fishes' main competitive advantages are:

- Permanent manned open ocean location on Seastead close to production
- Efficient production utilizing automated cages
- Very few existing projects of this magnitude in the open ocean
- A pioneer in truly sustainable, non-polluting, contamination free aquaculture

#### 5.2 Marketing Strategy

Given that it is difficult for retailers to have a constant supply of high-quality fish for their customers, there is already demand for quality fish products. The key to the sales and marketing plan will be to utilize public relations in all of the culinary magazines to get the word out to target markets about the differences of offshore fish farming.

#### **Public Relations**

The nature of the entire project lends itself very well to utilizing public relations. Kona Blue proved that culinary magazines are interested in sustainable seafood and are educated about the problems associated with near shore farming. Public relations will be a key part of the strategy to position Delishus Fishes as a high quality, sushi grade fish that commands a high price. Utilizing pictures of the fish in deep sea cages and of the operation will be key to build the awareness about offshore farming and how it is drastically different from near shore or inland fish farming techniques. Also, the sensationalism of creating a Seastead will further work to enhance the publicity the project can receive.

#### **Direct Web Sales**

Delishus Fishes will offer Cobia via direct web sales as fillets or as whole fish. Orders from the website will be filled on pre-determined days of the week and always ship fresh and direct to the consumer.

#### 5.3 Sales Strategy

At Delishus Fishes, the seafood will be mainly sold through direct marketing. Shipments of fish will be transported in refrigerated boats, trucks, and air freight as per orders.

#### 5.3.1 Sales Forecast

We expect to do sales over \$4 million in the first year. Our direct unit costs include the costs for the aquaculture labor force who will tend and manage the fish, the fingerlings, and feed.

#### Table: Sales Forecast

Sales Forecast			
	Year 1	Year 2	Year 3
Unit Sales			
Cobia	786,429	3,145,716	4,980,717
Yellowtail	0	1,310,715	3,145,716
Total Unit Sales	786,429	4,456,431	8,126,433
Unit Prices	Year 1	Year 2	Year 3
Cobia	\$5.25	\$5.25	\$5.25
Yellowtail	\$0.00	\$8.80	\$8.80
Sales			
Cobia	\$4,128,752	\$16,515,009	\$26,148,764
Yellowtail	\$0	\$11,534,292	\$27,682,301
Total Sales	\$4,128,752	\$28,049,301	\$53,831,065
Direct Unit Costs	Year 1	Year 2	Year 3
Cobia	\$1.93	\$1.93	\$1.93
Yellowtail	\$0.00	\$1.93	\$1.93
Direct Cost of Sales			
Cobia	\$1,517,808	\$6,071,232	\$9,612,784
Yellowtail	\$0	\$2,529,680	\$6,071,232
Subtotal Direct Cost of Sales	\$1,517,808	\$8,600,912	\$15,684,016

#### 6.0 Management Summary

The start-up team consists of five members. The project manager, Mike Doty, has 30 years of engineering experience and oversees the construction and operation of the facilities. The marketing manager, Travis

Cannell, currently operates an Internet marketing consulting firm and will be in charge of public relations and direct web sales. The consultant will be an established expert specializing in open ocean aquaculture, like Dr. Daniel Benetti, Professor and the Director of Aquaculture at the University of Miami's Rosenstiel School of Marine and Atmospheric Science, who has 30 years experience. The two technicians will be interns from a university aquaculture program specializing in open water aquaculture such as the one at the University of Miami.

#### 6.1 Personnel Plan

The personnel plan includes the project manager to oversee all design and construction of the aquaculture facilities, a consultant specializing in open ocean aquaculture, a marketing director to manage the business and market the product, and two technicians to assemble the cages and assist in the operations. Wages for the aquaculture laborers who will tend, harvest, and clean the fish are included in the Sales Forecast table as part of the direct unit costs.

#### 7.0 Financial Plan

The financial plan is outlined in the following tables and charts. With initial investment of \$5,160,000, we can construct the aquaculture facilities and begin seafood production. Based on the high demand for these products, we expect solid sales in the first year, with improving margins.

#### 7.1 Start-up Funding

Delishus Fishes needs \$5,180,000 to fund its start-up requirements. The owners will provide \$20,000, and are seeking another \$5,160,000 from investors.

Table: Start-up Funding

Start-up Funding	
Start-up Expenses to Fund Start-up Assets to Fund Total Funding Required	\$7,000 \$20,000 \$27,000
Assets	
Non-cash Assets from Start-up Cash Requirements from Start-up Additional Cash Raised Cash Balance on Starting Date Total Assets	\$15,000 \$5,000 \$853,000 \$858,000 \$873,000
Liabilities and Capital	
Liabilities	
Current Borrowing Long-term Liabilities Accounts Payable (Outstanding Bills) Other Current Liabilities (interest-free) Total Liabilities	\$0 \$0 \$0 \$0 \$0 \$0
Capital	
Planned Investment	
Owners Investors Additional Investment Requirement Total Planned Investment	\$20,000 \$860,000 \$0 \$880,000

Loss at Start-up (Start-up Expenses) Total Capital	(\$7,000) \$873,000
Total Capital and Liabilities	\$873,000
Total Funding	\$880,000

#### 7.2 Break-even Analysis

With monthly fixed costs of \$55,573, we need to sell 16,739 units each month to break-even, or \$87,879. Given the high demand for these products and our expertise in this industry, we should exceed this amount in the tenth month of the plan, after our initial start-up period for construction and first harvest growth.

Table: Break-even Analysis

Break-even Analysis	
Monthly Units Break-even Monthly Revenue Break-even	16,739 \$87,879
Assumptions:	
Average Per-Unit Revenue Average Per-Unit Variable Cost	\$5.25 \$1.93
Estimated Monthly Fixed Cost	\$55,573

#### 7.3 Projected Profit and Loss

The following table and charts show our projected Profit and Loss statement.

Table: Profit and Loss

Pro Forma Profit and Loss			
	Year 1	Year 2	Year 3
Sales	\$4,128,752	\$28,049,301	\$53,831,065
Direct Cost of Sales	\$1,517,808	\$8,600,912	\$15,684,016
Other Costs of Sales	\$0	\$0	\$0
Total Cost of Sales	\$1,517,808	\$8,600,912	\$15,684,016
Gross Margin	\$2,610,944	\$19,448,389	\$38,147,049
Gross Margin %	63.24%	69.34%	70.86%
Expenses			
Payroll	\$194,400	\$388,800	\$777,600
Marketing/Promotion	\$10.000	\$10,500	\$11,025
Depreciation	\$162,474	\$462,426	\$762,378
Fuel	\$100,000	\$105,000	\$110,250
Maintenance	\$20,000	\$21,000	\$22,050
Feed	\$2,908,040	\$8,276,728	\$13,645,417
Other	\$180,000	\$189,000	\$198,450
Total Operating Expenses	\$3,574,914	\$9,453,454	\$15,527,170
Profit Before Interest and Taxes	(\$963,969)	\$9,994,935	\$22,619,879
EBITDA	(\$801,495)	\$10,457,361	\$23,382,257
Interest Expense	\$0	\$0	\$0
Taxes Incurred	\$0	\$0	\$0
Net Profit	(\$963,969)	\$9,994,935	\$22,619,879
Net Profit/Sales	-23.35%	35.63%	42.02%

#### **Delishus Fishes**

Chart: Profit Yearly



#### 7.4 Projected Cash Flow

The following table and chart show our projected cash flow.



Chart: Cash

#### Table: Cash Flow

	Year 1	Year 2	Year
Cash Received			
Cash from Operations			
Cash Sales Cash from Receivables Subtotal Cash from Operations	\$619,313 \$2,378,620 \$2,997,933	\$4,207,395 \$17,290,333 \$21,497,728	\$8,074,660 \$38,695,067 \$46,769,726
Additional Cash Received			
Sales Tax, VAT, HST/GST Received New Current Borrowing New Other Liabilities (interest-free) New Long-term Liabilities Sales of Other Current Assets Sales of Long-term Assets New Investment Received Subtotal Cash Received	\$0 \$0 \$0 \$0 \$0 \$4,300,000 \$7,297,933	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$21,497,728	\$0 \$0 \$0 \$0 \$0 \$46,769,726
Expenditures	Year 1	Year 2	Year
Expenditures from Operations			
Cash Spending Bill Payments Subtotal Spent on Operations	\$194,400 \$4,278,906 \$4,473,306	\$388,800 \$16,953,103 \$17,341,903	\$777,600 \$29,158,821 \$29,936,421
Additional Cash Spent			
Sales Tax, VAT, HST/GST Paid Out Principal Repayment of Current Borrowing Other Liabilities Principal Repayment Long-term Liabilities Principal Repayment Purchase Other Current Assets Purchase Long-term Assets Dividends Subtotal Cash Spent	\$0 \$0 \$0 \$3,250,000 \$7,723,306	\$0 \$0 \$0 \$0 \$3,000,000 \$0 \$20,341,903	\$0 \$0 \$0 \$0 \$3,000,000 \$0 \$32,936,421
Net Cash Flow	(\$425,373)	\$1,155,825	\$13,833,305
Cash Balance	\$432,627	\$1,588,452	\$15,421,75

### 7.5 Projected Balance Sheet

The Balance Sheet shows a steady increase in Net Worth over the next three years.

#### Table: Balance Sheet

Pro Forma Balance Sheet			
	Year 1	Year 2	Year 3
Assets			
Current Assets			
Cash	\$432,627	\$1,588,452	\$15,421,757
Accounts Receivable	\$1,130,819	\$7,682,392	\$14,743,731
Other Current Assets	\$1,000	\$1,000	\$1,000
Total Current Assets	\$1,564,446	\$9,271,844	\$30,166,488
Long-term Assets			
Long-term Assets	\$3,264,000	\$6,264,000	\$9,264,000
Accumulated Depreciation	\$162,474	\$624,900	\$1,387,278
Total Long-term Assets	\$3,101,526	\$5,639,100	\$7,876,722
Total Assets	\$4,665,972	\$14,910,944	\$38,043,210
Liabilities and Capital	Year 1	Year 2	Year 3
Current Liabilities			
Accounts Payable	\$456,941	\$706,978	\$1,219,365
Current Borrowing	\$0	\$0	\$0
Other Current Liabilities	\$0	\$0	\$0
Subtotal Current Liabilities	\$456,941	\$706,978	\$1,219,365
Long-term Liabilities	\$0	\$0	\$0
Total Liabilities	\$456,941	\$706,978	\$1,219,365
Paid-in Capital	\$5,180,000	\$5,180,000	\$5,180,000
Retained Earnings	(\$7,000)	(\$970,969)	\$9,023,965
Earnings	(\$963,969)	\$9,994,935	\$22,619,879
Total Capital	\$4,209,031	\$14,203,965	\$36,823,845
Total Liabilities and Capital	\$4,665,972	\$14,910,944	\$38,043,210
Net Worth	\$4,209,031	\$14,203,965	\$36,823,845