



10 Year Business Plan for 100 Acre Lease site, assuming a 1-year build out with a service vessel purchased capable of managing seeding and maintenance. Separate boat is contracted for installing all anchors and gear, and/or part owned for servicing and harvesting 500 acres. Total startup loan of \$1,100,000 at 5% paid off at 10 years. Use 4 Nursery Longlines stocked once a year (in Q1, then each feeds 5 longlines beginning in Q2, 10 in Q3, 5 in Q4).

Description	0									
	1	2	3	4	5	6	7	8	9	10
Key Assumptions										
Number of Market Longlines harvested	0	20	20	20	20	20	20	20	20	20
Number of Nursery Longlines cycles	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total Long Lines Installed	24	24	24	24	24	24	24	24	24	24
Annual Production (lbs.)	-	585,000	585,000	585,000	585,000	585,000	585,000	585,000	585,000	585,000
Wholesale price (\$ /lbs.)	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50
Initial Loan Amount at 5% interest	\$	1,100,000.00								
Start-up Investments	Year 1	Year 2								
Longlines	\$ 408,672.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Specialized Seeding (Y1) and Harvesting (Y2) Eqt.	\$ 20,000.00	\$ 150,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Service vessel (Y1), 1/5th of Harvest vessel (Y2)	\$ 300,000.00	\$ 300,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Decommissioning Escrow account	\$ 80,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Startup Investment	\$ 808,672.00	\$ 450,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operational Expenses										
Farming costs										
Wages, salaries, benefits	\$ 65,000.00	\$ 126,750.00	\$ 126,750.00	\$ 126,750.00	\$ 126,750.00	\$ 126,750.00	\$ 126,750.00	\$ 126,750.00	\$ 126,750.00	\$ 126,750.00
Administration	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00
Seed costs	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00	\$ 93,600.00
Property insurance - stock mortality	\$ -	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00
Property insurance - land based equipment	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
Vessel insurance (Hull & Machinery, + \$1M of P & I)	\$ 11,600.00	\$ 24,700.00	\$ 22,336.00	\$ 21,830.98	\$ 20,994.71	\$ 19,875.23	\$ 18,534.28	\$ 17,041.70	\$ 15,469.43	\$ 13,885.91
Utilities	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00	\$ 18,250.00
Fuel	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00	\$ 72,000.00
Repairs & maintenance	\$ -	\$ 64,693.76	\$ 100,693.76	\$ 100,693.76	\$ 100,693.76	\$ 100,693.76	\$ 100,693.76	\$ 100,693.76	\$ 100,693.76	\$ 100,693.76
Marketing	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
Slip Fees	\$ 6,077.00	\$ 8,355.80	\$ 8,355.80	\$ 8,355.80	\$ 8,355.80	\$ 8,355.80	\$ 8,355.80	\$ 8,355.80	\$ 8,355.80	\$ 8,355.80
VPD Landing Fees	\$ -	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00	\$ 73,125.00
Sub-Total Farming costs	\$ 281,527.00	\$ 569,599.56	\$ 603,235.56	\$ 602,730.54	\$ 601,894.27	\$ 600,774.79	\$ 599,433.84	\$ 597,941.26	\$ 596,368.99	\$ 594,785.47
Monitoring & Compliance										
Start-up Education and Training (1)	\$ 663.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Start-up Construction Wildlife Monitoring (2)	\$ 10,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Baseline Substrate Sampling (plus coordination and reporting) (3a + 3c + 4)	\$ 6,763.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Laboratory testing (shellfish bio-toxin*)	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00
Monitoring (Benthic and WQ sample collection, Gear Inspections*) (3b + 3c + 4)	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00	\$ 5,034.00
Project Coordination, Analysis and Reporting (3e)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-Total Monitoring & Compliance	\$ 30,460.00	\$ 12,534.00	\$ 12,534.00	\$ 12,534.00	\$ 12,534.00	\$ 12,534.00	\$ 12,534.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00
Lease Fees										
ACOE Lease Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CDFW Aquaculture Registration	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00
Sub-Total Lease Fees	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00	\$ 1,243.00
Debt Repayment										
Yearly Payments	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48	\$ 140,006.48
Total Operational Expenses	\$ 453,236.48	\$ 723,383.04	\$ 757,019.04	\$ 756,514.02	\$ 755,677.75	\$ 754,558.27	\$ 748,183.32	\$ 746,690.74	\$ 745,118.47	\$ 743,534.95
Total Revenue	\$ -	\$ 1,462,500.00	\$ 1,462,500.00	\$ 1,462,500.00	\$ 1,462,500.00	\$ 1,462,500.00	\$ 1,462,500.00	\$ 1,462,500.00	\$ 1,462,500.00	\$ 1,462,500.00
Pretax Profit	\$ 1,261,908.48	\$ 289,116.96	\$ 705,480.96	\$ 705,985.98	\$ 706,822.25	\$ 707,941.73	\$ 714,316.68	\$ 715,809.26	\$ 717,381.53	\$ 718,965.05
Pretax Cumulative Profit	\$ 1,261,908.48	\$ 972,791.52	\$ 267,310.56	\$ 438,675.42	\$ 1,145,497.67	\$ 1,853,439.40	\$ 2,567,756.08	\$ 3,283,565.34	\$ 4,000,946.87	\$ 4,719,911.92



Key assumptions made and ranges for 100 acre mussel farm.

Row #	INVESTMENT	Range	Assumption	
1	Annual production per longline	4-8 lbs. per foot - assume 6 lbs. on 12 mo. cycle from seed to market		29250.0
2	Length of continuous mussel rope per longline (feet)	2880 - 6720 feet		4875.0
3	Length of seeded mussel rope per longline (feet)	195 droppers at 30' each per nursery LL		5850.0
4	Total number of longlines required	Plant 4 seed nursery LL in Q1, transplant 5 grow lines in Q2, 10 in Q3, 5 in Q4.		4
5	Total number of nursery cycles required (1 cycle per line per year)	4 nursery longlines with 1 cycle per year		4
6	Longline (575'), all ropes, buoys, anchors	\$15,000 - 20,000 per longline (not including BOAT and specialty weights (\$45K) for install.	\$	17,028.0
7	Seeding, harvesting equipment	\$120,000 -200,000	\$	170,000.0
8	Service vessel (owned and operated by 100-acre farm)	\$200,000-400,000	\$	300,000.0
9	Harvest vessel (shared & services 500 acres)	\$500,000-2,000,000 (assume \$300K for service boat & \$1.5M for harvest boat)	\$	1,500,000.0
10	Decommissioning Escrow account ^{2A}	\$50,000 to \$100,000	\$	80,000.0
11	Permitting	tbd		
FARMING COSTS				
12	Seed Cost	\$4 /ft.	\$	4.0
13	Seed assumption, 5:1, 5 final growout lines from 1 hatchery seed line	3:1 - 5:1 (SBM est. 10' seed to 1K lbs harvest vs. Taylor est. 150 lbs harvest)		5.0
Insurance Costs				
14	General liability insurance	tbd		tt
15	Property insurance - stock mortality	4-5%		5.00
16	Property insurance - offshore rigging	tbd		tt
17	Property insurance - land base equipment	1-2%		2.00
18	Vessel insurance (Hull & Machinery, \$1M of P & I)	3% of value plus \$2K P&I per vessel		3.00
Farm Operations				
19	Av. annual staff pay + benefits	\$40,000 to \$80,000	\$	65,000.0
20	Productivity (lbs. / man year)	100,000 to 500,000		300.00
21	Annual farm office / administration	10000-20000	\$	15,000.0
22	Utilities \$ per day	25-50	\$	50.0
23	CDFW Lease Fee (per acre) -N/A for federal farm lease	\$50		
24	CDFW Privilege Tax -N/A for federal farm lease?	\$0.0625 per 100 mussels		
25	Slip Fees	Vessel length 35-80 feet, assume 40' service boat in Y1 (per farm), then purpose-built boat of 75 feet @ \$12.8K	\$	11,394.0
26	VPD Landing	3 to 5% of gross - assume 5%	\$	0.1
Annual Consumable cost				
27	Fuel per farm day (200 days per year)	\$3/ gal x 20-40 GPH (2 hours full then 10 gph idle for 6 hours) = \$360 per trip x 4 per wk	\$	360.0
28	Repairs & maintenance (% of capital invest/ yr)	5-10%		8
Start-up and Annual Compliance, monitoring, testing				
29	Start-up Education and Training (1)	\$13,260 divided by 20 farms (one-time fee)	\$	663.0
30	Start-up Construction Wildlife Monitoring (2)	\$10,500 over 5 days	\$	10,500.0
32	Baseline Substrate Sampling (plus coordination and reporting) (3a + 3c + 4)	\$21,385 (sampling) plus \$6,200 (coord., report) plus \$6,230 (lab) per 500 acres (one-time)	\$	6,763.0
33	Laboratory testing (shellfish bio-toxin*)	Biotoxin (\$144/sample incl. S&H, x 52 wks= \$7,500)	\$	7,500.0
33	Monitoring (Benthic and WQ sample collection, Gear Inspections*) (3b + 3c)	\$12,740 (sampling) plus \$6,200 (coord., report) plus \$6,230 (lab) per 500 acres (Y1 - Y6)	\$	5,034.0
34	Project Coordination, Analysis and Reporting (3e)	Removed. Included in costs above.	\$	
35	CDFW Aquaculture Registration	Not clear if these apply - R. Lovell is checking	\$	1,234.0
36	Debt Repayment	10 Year, \$1,100,000 at 5% interest	\$	11,667.2
37	Depreciation (% of capital investment)	20% first year, 5% there after		20-5
38	Wholesale landed price per lbs.	\$2 - \$3		\$2.1
39	Rate of Inflation	2-5%		0.00

Phased expansion

2 nursery lines are planted in Q3 and seed 10 Prod. LL in Q4 assumes nursery cycle of 4 to 6 months. So 2 nursery lines capable of seeding 22 LL
2 nursery lines are planted in Y2 Q1 and seed 10 Prod LL in Y2 Q2
2 other nursery lines are planted in Y2 Q3 and seed 10 Prod. LL in Y2 Q4

Can we depend on just 2 nursery lines? Depends on reliability of seed from hatchery.

May want to strategically order more seed than necessary in most reliable seasons.
Use nursery lines to buffer planting and harvest cycles
Or conservatively plan to stock 4 LL with nursery seed - see alternative Proforma projections

^Biggest expense will be for removal of anchors; this requires a large boat with >20 ton winch. Est. \$15K/d for 3 or 4 days (removal of 2 per h).

		Who pays?
Task 1	Mandatory Worker Training	\$13,260 (one-time cost) 100% growers one time
Task 2	Marie Wildlife watching - construction	\$10.5K per 100 acre farm assuming \$1,530/per day for a 5-day construction schedule (consecutive or non-consecutive) 100% growers one time
Task 3	Substrate Monitoring (Tasks 3a, 3b, 3c)	\$21,385 (baseline); \$12,40 (operational); \$6,200 (coord., report). Baseline sampling 1x per year. 100% growers one time
Task 4	Lab Analysis	\$890 per composite sample 100% growers one time
Task 5	Project Management and Meetings	\$28,940 - assumes VPD covers these costs 100% VPD

1/20 Slip fees are \$11.61/ft for 35 to 45' boats, and \$12.66 for 55 to 80' boats

* based on use of CA State lab for biotoxin testing per est. costs for oyster farmer
^assumes no additional expense to farmer other than time conducting regular sonar/depth finder and surface surveys as part of farm maintenance
Water quality testing

Deprecation year 1 20.00%
 Depreciation there after 2.00%

Year	1	2	3	4	5	6	7	8	9	10
Service vessel (40' Harvest vessel (1/5th share))	\$ 300,000.00	\$ 240,000.00	\$ 235,200.00	\$ 225,886.08	\$ 212,602.17	\$ 196,097.47	\$ 177,256.58	\$ 157,021.39	\$ 136,314.28	\$ 115,971.15
Equipment	\$ 20,000.00	\$ 150,000.00	\$ 136,000.00	\$ 133,280.00	\$ 128,002.11	\$ 120,474.56	\$ 111,121.90	\$ 100,445.40	\$ 88,978.79	\$ 77,244.76
Total Value	\$ 320,000	\$ 690,000	\$ 611,200	\$ 594,366	\$ 566,490	\$ 529,174	\$ 484,476	\$ 434,723	\$ 382,314	\$ 329,530

10 Year Fixed Rate, compound interest of 5%, option for balloon payment

Annual Interest Rate	5.00%
Effective Interest Rate	0.42%
Duration of Loan	10
Monthly Payment	\$11,667.21
Actual Monthly	
Number of Payments	120
Loan Amount	\$1,100,000.00

Budget for Offshore Mussel Farm with 24 Longlines 15% more LL for droppers than design 2

INVESTMENT	Range	Assumption	Unit cost	Investment	Dropper length	# of droppers	lbs/ft yield
Annual production volume (pounds)		585000					
Longline (575' horizontal - 575' useable) installed	\$15,000 to 20,000	16500 see Cap Cost sheet					
Annual production per line (pounds)	29250				25	195	6
Total number of longlines required		24	17,028		16.6 % lines (4) used just for nursery seed		
Investment in longlines							
Seeding, harvesting, bulk processing equipment	\$100,000 to 200,000	150000		408,672			
Support vessel	500,000-2,000,000	1500000		1,500,000			
TOTAL FIXED CAPITAL INVESTMENT				2,058,672			

Low, 15x4 Hi, 35x8
 Range: 11,520 53,760
 Alternatively just 2 nursery lines can be used with seed deliveries in October and February (Gordon (King, Taylor Shellfish)

FARMING COSTS				Annual cost	% farm cost	% total cost
Average wt mussel/line		29250				
Feet of hatchery seed per 1K lbs harvested	*10 to 70	40				
Number of LLs seeded by 1 hatchery LL		5.0				
Seed Price/Foot	\$2 to \$5	4				
Seed Cost per LL		4680				
Annual cost of seed per farm (22 LL harvested)				93,600	11.7%	10.2%
Av. annual staff pay + benefits	\$40,000 to \$80,000	65000				
Productivity (lbs / man year)	100,000 to 500,000	300000				
Annual payroll cost			126,750	126,750	15.9%	13.8%
Crop Insurance (% annual prod'n valued @ \$.45/lb)	3% to 6%	4.00	0			
Other insurance (% of capital investment)	1% to 3%	2.00	41,173			
Annual insurance cost				41,173	5.2%	4.5%
Farm operations - fuel \$ per day	\$200-\$400	360.00	72,000			
Repairs & maintenance (% of capital invest/ yr)	5 to 10	7.00	144,107			
Other (utilities, monitoring) \$ per day	25-50	50.00	18,250			
Lease Fee (100/acre)			10,000			
Annual cost of operations				244,357	30.6%	26.6%
Annual farm office / administration	10000-20000	15000.00		15,000	1.9%	1.6%
Depreciation (% of capital investment)	5% to 20%	10.00		205,867	25.8%	22.4%
Farm profit margin %	5% to 30%	10.00		72,675	9.1%	7.9%
TOTAL FARMING COSTS				799,422	100.0%	87.1%

Assumes 195 seeded droppers 30' long 5760

*Bernard's estimate is 10' of seed rope yields 1,000 lbs so need 576 droppers or 4 data from 2016/17 - may need updating
 Gordon King's estimate is 10' of seed rope yields 150 lbs.

w

Assumes weather and closures allows for 200 days per year (estimated need for 24 lines (approx. 4 d/wk)

Cost of production including profit (bulk processed)				1.37		
POST HARVEST COSTS				Cost per lb	Annual cost	Farm/processor
Raw material cost into processing			1.37	799,422		
Processing cost per finished lb	.015 to .03	0.015		8,775	8.75%	1.0%
Packaging cost per finished lb	.01 to .02	0.015		8,775	8.75%	0.6%
Finished goods production cost			1.40	816,972		89.0%
Selling cost and general admin, % of production cos	3% to 10%	7.000		57,188	35.02%	6.2%
Freight to wholesaler per lb	\$0.05 - \$0.10	0.075		43,875	43.77%	4.8%
Delivered cost - wholesaler			1.57	918,036	96.29%	11.0%
Selling price to wholesaler	\$2.00 to \$2.50	2.50		1,462,500		
Revenue minus costs				544,464		
Total profit (Farm +Process)				617,139		
Return on investment				22%		

Not including

Shoreside investments, docking, storage
 Monitoring and sub-permit maintenance
 Special anchor installation weight and rigging = \$45K (one time cost for local contractor?)

Equipment	QTY	Unit Cost NZ '17	Unit Cost NZ '19	0.7: 1		0.65:1		Total Cost USD '17	Total Cost USD '19	Comments
				Total Cost '17	Total Cost '19	Total Cost '17	Total Cost '19			
Declumper Infeed Conveyer	1	\$12,750.00		\$12,750.00	\$	12,750.00		\$8,925.00	\$8,287.50	est. assume no change (except exchange rate)
AND600-W Declumper	1	\$37,800.00	\$48,800.00	\$37,800.00	\$	48,800.00		\$26,460.00	\$31,720.00	4 to 6 ton/hr capacity
Davit-Double Winch	2	\$24,600.00	\$43,200.00	\$49,200.00	\$	42,800.00		\$34,440.00	\$27,820.00	Each rated for 1,500 kg (3MT total)
Davit-Single Winch	1	\$24,600.00		\$24,600.00	\$	24,000.00		\$17,220.00	\$15,600.00	est. assume no change (except exchange rate)
ANG7/3 Cam Grader	1	\$44,500.00	\$41,800.00	\$44,500.00	\$	41,800.00		\$31,150.00	\$27,170.00	-7000kg/hr capacity , -3x grades-fully adjustable (small, medium & large), -2x chutes either sides (smalls, mediums)
AND650 Seeder w/ Bag Frame	1	\$18,850.00	\$24,950.00	\$18,850.00	\$	24,950.00		\$13,195.00	\$16,217.50	includes seed rope counter
Bag Filling Elevator	1	\$18,900.00		26,500.00	\$	26,500.00		\$13,230.00	\$17,225.00	
Single Driven Walking wheel	1	\$9,500.00	\$16,000.00	\$9,500.00	\$	16,000.00		\$6,650.00	\$10,400.00	est.
Single Idler Walking wheel	2	\$2,200.00	\$4,000.00	\$4,400.00	\$	4,000.00		\$3,080.00	\$5,200.00	est.for 2 units
Socking loading machine			4500						2925	
Hauling post, rope washer			10300						6695	
Grader outfeed conveyer			2800						1820	-2x conveyors (smalls, mediums)
				Sum				\$154,350.00	\$171,080.00	

Alternative lower cost grader and declumper (save about \$18,000)

Scroll Grader	26300	17095	Up to 3 tons/hr capacity (depending on product size) - 2 grade sizes. Option to grade straight into bags or bins via chutes (no con
AND450-W Declumper	36800	23920	2 ton/hr capacity

Capital costs of 1 longline **x 24 (whole farm)**

Units	Specs.	\$ each	# req.	cost sum	Reference	
Anchors	Fixed	6m helix	1666.666667	48	80000	Fielder Marine 20
	Variable					
Chain						
Longline	feet	1.5" diam.	0.36	1200	432	2015 QE, NZ
Corner/Surface Buoys		300 L black	163	12	1956	Hesp 2017
Anchor Buoys		420 L black	250	2	500	
Submerged Buoys		120 L black	100	40	4000	Hesp 2017
Buoy shipping						Hesp 2017
Hatchery Rope (Feet))	for 4 LL	\$	1.80	5800	10440	2015 QE, NZ
Grow Ropes (feet)	for 20 LL	\$	1.10	5800	6380	2015 QE, NZ
Expendables					800	2015 QE, NZ
	Cotton socking					
	danlash					
						based on approx. 10% of rope costs
Anchor Install. special equipment - one time local expense		\$	45,000			Fielder Marine

Notes

travel, set up etc. (NOT INCLUDING BOAT, or \$45K of specialty weights and rigging for anchor installation)) not needed?

See QE quote tab for aggregated 2019 pricing

See QE quote tab for aggregated 2019 pricing

weighs 150kg per 500m

See QE quote tab for aggregated 2019 pricing

per line \$ 17,028.00



QUALITY EQUIPMENT (1989) LIMITED

New Zealand Rope and Twine Manufacturers

Auckland Branch : 70 Hillside Road, Glenfield, P O Box 40154, Auckland, New Zealand.
 Phone (09) 444 7742, Fax (09) 444 5872, www.qe.co.nz

PROFORMA QEVH190711 24LL

To: Ventura Harbour Project

Date: 11-Jul-19

California
 USA

We have pleasure in confirming the following products under the terms and conditions as stated.

- 1 Payment: TT When ready to ship
- 3 Loading: Auckland
- 5 shipping : TBA
- 7 Origin: Made in New Zealand
- 4 Discharge: LA
USA
- Terms: CIF
(Cost plus Sea freight.)

Item	Description,	Quantity	Unit weight (KG)	Total weight (KG)	Unit price	NZ\$ Dollars
	Mussel Fram full set up equipment. Block set up. 24 MEDIUM density, 2000m Grow Out Lines. (all simillar Rope formats as used on Catalina farm, but installed by professionals.)					
1	Anchor Lines x 65mtr (suitable to max 24 mtr water depth)	2				
2	Mainline x 185mtr (Must be spliced into Anchor Lines)	1				
3	Weighted Crop Rope x 2000mtrs (Must be weighted if taken small hatchery seed due to light weight.)	1				
4	Dropper lashing (needs to be cut at 1.8mtrs)	1				
5	Waka 220L Floats (preferable used on the Vertical)	32				
6	Float strop for above. (needs to be cut at about 7mtrs)	1				
	Total Mussel Farming Rope value per Long line.				\$11,626.00	
A	Total for 24 Long Lines					\$279,024.00
	My estimate for Hatchery Ropes as used by Whiskey Creek					
7	Cut Loop Weighted x 1000m	10				
B	Total to provide enough spats for 24 longs lines at 6mm seed.					\$18,650.00
	Steel Screw Anchors as used by CSR and Offshore Devon. FMS x Type 20,000kg Tuq.					
C	Total for 24 Long Lines					N/a
	Installation of Ropes and Anchors to be quoted seperately. Vessel provided by others and importing and re exporting Drilling Rig.					
D	International Freight (I calculate total 5.5 x 40ft containers)				estimate	\$ 24,750.00
		Total Quantity	Total Weight	Total CIF		
		0.00	0.00	NZ\$	\$	322,424.00

\$ 210,000.00 US
 \$ 123,000.00 US from Fielder Marine
 \$ 16,000.00 US cotton socking etc.
 : TOTAL: \$ 349,000.00 divide by 24 LL = **\$14,540 per LL** Scott's calculations

Shipped as 5.5 x 40ft HC Container.

Container Number TBA
 Seal Number TBA

VGM

The Gross Cargo Weight : TBA
 The Dunnage Weight: TBA
 The Tare Weight: TBA
 The VGM : TBA

Seller

Quality Equipment Ltd
 Joe Franklin
 Director
 Bank of New Zealand.
 02 0278 0086400-00
 Swift BKNZNZ22



10 Year Business Plan for 100 Acre Lease site, assuming a 2 year build out with a service vessel purchased capable of installing all anchors and gear, and servicing 500 acres. Total startup loan of \$1,700,000 at 5% with a balloon payment at 10 years. Use just 2 Nursery Longlines stocked twice a year (feeds 5 + longlines each beginning in Q1).

Description	1	2	3	4	5	6	7	8	9	10
Key Assumptions										
Number of Market Longlines harvested	0	15	22	22	22	22	22	22	22	22
Number of Nursery Longlines cycles	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total Long Lines Installed	24	24	24	24	24	24	24	24	24	24
Annual Production (lbs.)	-	438,750	643,500	643,500	643,500	643,500	643,500	643,500	643,500	643,500
Wholesale price (\$ /lbs.)	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50
Vessel Purchase	-\$ 500,000.00									
Initial Loan Amount at 5% interest	\$ 1,100,000.00									
Startup Investment										
Longlines	-\$ 408,672.00									
Seeding, harvesting equipment	-\$170,000.00									
Support vessel Year 1	-\$ 500,000.00									
Escrow account	-\$ 80,000.00									
Total Startup Investment	-\$ 1,158,672.00									
Operational Expenses										
Farming costs										
Wages, salaries, benefits	-\$ 47,531.25	-\$ 95,062.50	-\$ 139,425.00	-\$ 139,425.00	-\$ 139,425.00	-\$ 139,425.00	-\$ 139,425.00	-\$ 139,425.00	-\$ 139,425.00	-\$ 139,425.00
Administration	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00	-\$ 15,000.00
Seed costs	-\$ 70,200.00	-\$ 93,600.00	-\$ 93,600.00	-\$ 93,600.00	-\$ 93,600.00	-\$ 93,600.00	-\$ 93,600.00	-\$ 93,600.00	-\$ 93,600.00	-\$ 93,600.00
Property insurance - stock mortality	-\$ -	-\$ 54,843.75	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50
Property insurance - land based equipment	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
Boat and vehicle insurance	-\$ 9,000.00	-\$ 7,200.00	-\$ 7,056.00	-\$ 6,776.58	-\$ 6,378.07	-\$ 5,882.92	-\$ 5,317.70	-\$ 4,710.64	-\$ 4,089.43	-\$ -
Utilities	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00	-\$ 18,250.00
Fuel	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00	-\$ 72,000.00
Repairs & maintenance	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76	-\$ 72,693.76
Marketing	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
Slip Fees	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00	-\$ 11,394.00
VPD Landing Fees	-\$ -	-\$ 54,843.75	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50	-\$ 80,437.50
Sub-Total Farming costs	-\$ 316,069.01	-\$ 494,887.76	-\$ 590,293.76	-\$ 590,014.34	-\$ 589,615.83	-\$ 589,120.68	-\$ 588,555.46	-\$ 587,948.40	-\$ 587,327.19	-\$ 583,237.76
Compliance, monitoring, enforcement										
Laboratory testing	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00	-\$ 7,500.00
Monitoring	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00	-\$ 5,034.00
Enforcement	-\$ 663.00	-\$ 663.00	-\$ 663.00	-\$ 663.00	-\$ 663.00	-\$ 663.00	-\$ 663.00	-\$ 663.00	-\$ 663.00	-\$ 663.00
Enforcement Credit	\$ 663.00	\$ 663.00	\$ 663.00	\$ 663.00	\$ 663.00	\$ 663.00	\$ 663.00	\$ 663.00	\$ 663.00	\$ 663.00
Sub-Total Compliance, monitoring, enforcement	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00	-\$ 13,197.00
Lease Fees										
ACOE Lease Fee	-\$ -	-\$ -	-\$ -	-\$ -	-\$ -	-\$ -	-\$ -	-\$ -	-\$ -	-\$ -
CDFW Aquaculture Registration	-\$ 900.50	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00
Sub-Total Lease Fees	-\$ 900.50	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00	-\$ 1,243.00
Debt Repayment										
Yearly Payments	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48	-\$ 140,006.48
Balloon Payment										
Total Operational Expenses	-\$ 470,172.99	-\$ 649,334.24	-\$ 744,740.24	-\$ 744,460.82	-\$ 744,062.31	-\$ 743,567.16	-\$ 743,071.94	-\$ 742,576.80	-\$ 742,081.67	-\$ 737,684.24
Revenue										
Sales	\$ -	\$ 1,096,875.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00
Total Revenue	\$ -	\$ 1,096,875.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00	\$ 1,608,750.00
Pretax Profit	-\$ 1,628,844.99	\$ 447,540.76	\$ 864,009.76	\$ 864,289.18	\$ 864,687.69	\$ 865,182.84	\$ 865,748.06	\$ 866,355.12	\$ 866,976.33	\$ 871,065.76
<i>Pretax Cumulative Profit</i>	<i>-\$ 1,628,844.99</i>	<i>-\$ 1,181,304.23</i>	<i>-\$ 317,294.47</i>	<i>\$ 546,994.71</i>	<i>\$ 1,411,682.40</i>	<i>\$ 2,276,865.24</i>	<i>\$ 3,142,613.30</i>	<i>\$ 4,008,968.42</i>	<i>\$ 4,875,944.75</i>	<i>\$ 5,747,010.51</i>