

Strategic Plan 2014-2017

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1. EXECUTIVE SUMMARY

The commercialisation of mass-selected Sydney Rock Oyster (SRO) lines is one key priority for the future of the breeding program and the perpetual supply of SRO single seed for the industry. The breeding program, developed by the NSW Department of Primary Industries, at the Port Stephens Fisheries Institute, must now be adopted by industry from the Department, to ensure investment in the future of the breeding program is allocated to R&D, and not used to fund operational duties. Furthermore, there is increasing uncertainty about the future commitment of public funding for R&D if there is no clear commercial outcome. Select Oyster Company (SOCo) adoption of the management of the breeding program will demonstrate to government and stakeholders that the industry is claiming responsibility for the program to secure its future and marketability.

The Morten Rye Review of Breeding programs (2011) focused industry attention on the benefits of adopting world best practice methods by leveraging the genetic gains from this mass selection program, and taking them forward under a breeding program based on family lines and single pair matings. Careful management of this program, and adequate data collection and analysis can deliver significant annual incremental gains in market driven desirable heritable traits.

The challenge for SOCo is production. The levy on sales of selectively bred spat is inadequate at current sales levels - all spat produced is taken up by the industry -to fully fund continued development of the mass selection lines and the development of family lines. Based on sales for the past two seasons a contribution of \$26,000 to \$31,000 from SOCo is possible to contribute to the operational costs of DPI NSW which is about \$100,000 per annum for the mass selection lines.

There is scope for SOCo's contribution to grow in future years. At present about 20% of the spat estimated to secure future production and market supply annually, is sourced from selectively bred stock, with capacity for at least twice this proportion as records indicate that supply is in deficit of demand by approximately 50%.

Select Oyster Company (SOCo) Strategic Plan set over the next four years is the result of contributions from a range of SOCo stakeholders whose information was used as input to critically review and analyse external and internal factors. This culminated in the development of a SWOT analysis, objectives and actions for the next four years.

The Strategic Plan 2014-2017 identifies:-

- A viable future direction for SOCo
- Objectives through which we will deliver our mission
- Actions that flow from the objectives
- Time lines, Responsibility & Budget

1.1 Background – Industry, Environment and history.

Industry Background

The Australian Oyster industry comprises approximately 550+ farmers and businesses located mostly in NSW, South Australia and Tasmania with small production in WA & Qld. The net farm gate value is nearly \$100 million and derived predominantly from family owned, owner-operated businesses. Over 97% of oysters sold in Australia are fresh ½ shells to end users with little value add.

Australia is a net importer of oysters with only 3% of production exported. Frozen half shell imports are from NZ and destined for WA & Qld. Imported canned product is from Asia.

The supply chain is complex, complicated by the market's reliance on a processed i.e. opened oyster. Between two and seven intermediaries are required to move oysters from growers to Australian consumers at various points of sale.

Although Sydney rock oysters (*Saccostrea glomerata* [SRO]) remain the most important commercial species, until recent disease outbreaks, the culture of Pacific oysters (*Crassostrea gigas*), particularly triploids, had increased significantly in NSW. Interest in cultivating other commercially important species, such as flat oysters, *Ostrea angasi*, has also increased.

Overall, since 2003 hatchery-produced oyster seed continues to become more readily accessible in NSW, particularly for SRO which, prior to 2003, had been largely unavailable to the majority of the rock oyster industry. Over the past 5 years, hatchery technologies and access to selectively bred brood stock have significantly improved. However from year to year, supply from hatcheries can be inconsistent and generally does not meet demand.

For both SRO and Pacific's, breeding programs have become an integral part of industry development and protection from disease and faster growth has been the primary reasons for hatchery seed uptake in NSW.

Across the oyster industry, the emphasis placed on the importance of demonstrating environmental sustainability has increased, and both industry and government have been proactive in protecting the estuarine environments in which oyster farming occurs. Collectively, hatchery development, oyster breeding, environmental management systems (EMS) and environmental research has "spawned" a number of new research initiatives that have increased fundamental oyster research during the past 5 years.

The Sydney Rock Oyster Industry (SRO) in NSW, the SRO industry turns over around 36 million dollars per year, and contributes substantially to the economies of many coastal communities.

Both annual production and the number of growers are decreasing. The current 350 (approx) number of growers is expected to halve in the next 10 years. This is driven by the increasing costs of doing business, particularly due to costs of regulation, and the competition from Pacific oyster market, making the margins tighter.

The awareness of the threat of QX disease, rapidly escalating operational costs and the added competition as a result of market penetration of Pacific oysters has resulted in a heightened awareness amongst growers that change in the industry is inevitable.

However, the fragmented nature of the industry, and relatively small size of most businesses when matched against the need for capital and management capabilities, makes the current commercial position of many of the growers in the industry very fragile. It is probable that a large proportion of the individual enterprises are not returning the cost of capital, and at some point, there may well be an exodus from the industry.

1.2 Select Oyster Company (SOCo) Background

In the 1990's, the NSW DPI established a selective breeding program to develop fast growing, disease resistant SRO. Initially, this program was based on mass selection, interbreeding large numbers of oysters that survived disease outbreaks.

Prior to 2003, commercialisation of the breeding lines was hampered by the failure of hatcheries to produce commercial quantities of spat. In 2003 the Aquaculture Research & Advisory committee and the NSW DPI invited industry hatcheries to produce commercial quantities of spat, the criteria adopted was the hatchery had to be successful in three out of four hatchery runs. In light of the success of this program the

Aquaculture Research & Advisory Committee and industry representatives asked to take over control of the broodstock.

With the improvements in technical and research support, the industry itself was to take the ultimate responsibility for the adoption of the results of the breeding program, and so the development of a commercial vehicle to take on the responsibility of breeding line management and distribution of resultant improved stock was coordinated.

The two industry associations (Oyster Farmers' Association of NSW and NSW Farmers' Association, Oyster Section) combined in 2004 to form the Select Oyster Company P/L (SOCo) to organise production and distribution of stock from the improved breeding lines and to ultimately take control of the management and future development of the breeding lines. With the establishment of SOCO, the breeding lines, developed by NSW DPI assisted with funds from the industry and Fisheries Research & Development Corporation (FRDC), have now been made commercially available to the oyster industry.

Through the original Strategic Plan, SOCo has surveyed industry requirements of the breeding program, and as such, has established the economic values of different SRO traits in order to determine the market sustainability of developing multiple lines with different traits, and to determine the optimum breeding objectives of different lines.

Under the NSW DPI breeding program the focus has been on the following objectives

- Evaluate alternative breeding methods, including single pair mating and mass selection, for the most desirable traits, as identified by industry (faster growth, QX disease resistance, winter mortality resistance etc).
- Review of breeding program designs and application of the best approach to develop a 10-year breeding strategy for SRO, in consultation with industry.
- To develop a risk assessment and reduction model against the loss of brood stock.
- To prepare a technical manual for the continued operation of an SRO breeding program.
- To prepare fully costed options for funding a breeding program for the next 10 years.
- Review the genetic status of the current breeding lines by examining genetic variation.

1.3 SOCo Details

Business Name: Select Oyster Company Pty Ltd

Business Structure: Australian Propriety Company limited by shares.

Registered in: New South Wales

ABN: 98 110 169 509

ACN: 110 169 509

Registered Office: Level 6, 35 Chandos St, St Leonards NSW 1590

Date Established 22 July 2004

GST: registered for GST

1.4 Office Holders

Jane Clout (Director) Jane manages oyster leases in Moreton Bay Queensland for over the last 12 years. She has represented the Queensland industry as Secretary to the Association, and is a member of the Australian Shellfish Quality Assurance Committee, and representative for the CRC Oyster Consortium.

Tony Troup (Director) Tony has owned and operated an oyster farm on the Camden Haven River, on the Mid-North Coast of NSW for 29 years. He is a member of NSW DPI's Aquaculture Research Advisory Committee, member of the NSW Shellfish Quality Assurance Committee and the NSW representative for the Seafood CRC Oyster Consortium.

Ana Rubio (Director) Ana has been involved with the Australian oyster industry for the last decade through her research into oyster productivity, husbandry and monitoring. She has worked on the development of Environmental Management Systems (EMS); has developed a prototype Information Portal for oyster farmers and has set up an array of innovative oyster monitoring programs based around commercial oyster graders.

Matt Wassnig (director) Matt is currently a director of a Sydney Rock Oyster farming business located on the NSW North Coast. Previous to entering the oyster industry he worked as an aquaculture research scientist and has completed a PhD in hatchery culture of pearl oysters. He is a member of the NSW Shellfish Committee and NSW Aquaculture Research Advisory Committee

Dave Barker (Director) Dave has a bivalve farm and leases in Woollooware & Quibray bays (Botany Bay). In addition he is the owner of an oyster and seafood processing plant. Dave has over 25 years of experience in marine aquaculture and commercial fisheries research with DPI.

Brad Evans is an applied geneticist with over 15 years experience and a PhD in aquaculture genetics. He has hatchery expertise primarily in the pearl oyster industry and several years experience in the operation and commercialization of selective breeding programs in shellfish and salmon working with CSIRO, SALTAS, universities and industry partners. He is currently the geneticist at Tassal Operations and manages the Tasmanian Atlantic salmon selective breeding program for Salmon Enterprises of Tasmania.

Anthony Sciacca is a third generation oyster grower and business owner from Wallis Lake. He has been part of several industry bodies including Chair of NSW Farmer's Oyster section, State SQAP, and local coordinator among others. He has been growing wild caught seed for the majority of his farming career, and grown SOCo stock for some time. He has seen great benefits in SOCo stock during recent years. He contributes a valuable 'on farm perspective' and champions the selective breeding program.

Luke Messer (Company Secretary) Luke is currently the general manager of corporate services for NSW Farmers Association with over twenty years experience in the area of governance for large corporations and the last five years focusing on not for profits.

1.5 Key Personnel

Emma Wilkie (Operations Manager) Emma has 5 years experience in the Australian oyster industry. Emma has a PhD on the sustainability of selective breeding for QX disease-resistance for the SRO industry. Her background includes project management, industry liaison, networking and conference presentation both in Australia and overseas, and community engagement. Emma is based in NSW DPI Port Stephens Fisheries Institute, and works closely with NSW Farmers and oyster consortium groups. She regularly travels to oyster farms throughout NSW to monitor broodstock, network with industry and provide knowledge of SOCo activities.

2.1 SWOT Analysis

<p>Internal</p> <p>External</p>	<p>Strengths</p> <ol style="list-style-type: none"> 1. Selective breeding is the main strategy to sustain the productivity of the SRO industry 2. Exclusive access to genetic superiority spat 3. The selected lines capable of commercialisation 4. Higher cash flow from an investment in spat over the current wild caught spat. 5. SOCo has the unqualified support of all stakeholders. SOCo seen as insurance against QX. 	<p>Weaknesses</p> <ol style="list-style-type: none"> 1. SOCo's role unclear 2. The breeding program is currently not structured 3. Lenient rules on payment. 4. Revenue model will not sustain a full commercialization. 5. Not sufficient potential market to cover the running costs of a management and research infrastructure 6. Unknown nature of the contracts /proprietary rights
	<p>Opportunities</p> <ol style="list-style-type: none"> 2. Production at 1950's level, consumer demand still high 3. Growers are aware of and concerned about QX, 4. The fast growing and disease resistant characteristics of the spat emerging from the research programs 5. New business models may emerge as a result of the move to hatchery seed (both SRO & Pacific) 	<p>Strategies - S/O</p> <ol style="list-style-type: none"> 1. Commercialisation plan to secure R&D funding & future financial viability. (S3 O2) 2. Develop a breeding program to accelerate the genetic gains (growth & disease) achieved via selective breeding (S1, O1, O4) 3. Educate growers on the advantages of selectively bred oysters. (S5, O5)
<p>Threats</p> <ol style="list-style-type: none"> 1. Risk that Government will withdraw from the breeding program. 2. The size of the industry will have trouble funding the necessary R&D, and IP management. 3. Commercial hatchery are not consistently meeting current demand 4. Reduced profitability at the time when investment to fund the change from sticks to single seed is increasing. 5. The Pacific oyster "exports" (to NSW) creating downward pressure on margins 6. Declining recognition amongst consumers of SRO as a distinctive variety of oyster 7. Little acknowledgement of the costs to collect that "free" spat. 8. The increasing probability of outbreaks of disease. 	<p>S/T</p> <ol style="list-style-type: none"> 1. Promote the value proposition of selective breeding (profitability, disease resistance. (S1, T7), (S5, T1, T2) 2. Form alliances with commercial hatcheries to drive & demonstrate benefits of SOCo oysters. (S2, T4, T7, T8), (S3, T3, T5, T6) 3. Assume management of Mass Selected Breeding Program (S3, T1) 4. Explore extension of statutory research bodies until SOCo spat reaches targeted market share level (S4, T2) 5. Plan for management of the family lines breeding program by 2017 (S1, S3, T1, T2) 	<p>W/T</p> <ol style="list-style-type: none"> 1. Clarify the role of SOCo to drive the benefits of selective breeding for the industry's future. (W1,W2, T1) 2. Secure long-term funding arrangements for industry development activities (sustainability, local employment, export & domestic markets). (W4, W5, T1) 3. Open & continual dialogue between growers, hatcheries, nurseries & SOCo. (W1, W9, T5, T6, T7, T8) 4. Develop business systems to ensure transparency & ability to measure & evaluate SOCo performance. (W1, W3 T3) 5. Explore extension of statutory research bodies until SOCo spat reaches targeted market share level (W4, T1)

2.2 Risk Action & Management Plan

Risk	Likelihood	Consequence	Mitigation
<i>Outbreak of disease</i>	Almost certain	Critical	Breeding program focus on disease resistance
<i>Pacific Oyster taking market share from SRO</i>	Likely	Major	Breeding program focus on growth, shape and communication & facilitation of Sydney Rock Oyster spat
<i>Reduction in government funding</i>	Likely	Major	Source external industry and NGO funding, increase the supply of hatchery spat, increase levy
<i>Levy collection falls below cash flow requirements</i>	Likely	Major	Increase levy. Seek NGO/industry funding. Seek Government funding
<i>Success is dependent on hatcheries</i>	Likely	Major	Maintain good communications with the hatcheries; work with more than one hatchery (currently 4). Know hatchery needs and prioritise to work together.
<i>Lack of knowledge about family lines as there is no successor of current geneticist who knows the family line data</i>	Possible	Major	Source at least one additional potential geneticist before July 2014. Introduce them to the data and current geneticist to be trained where necessary by 2015
<i>Reduction in the number of nurseries</i>	Possible	Major	Provide education on ways to grow young oysters without the need of nurseries. Longer term provide nursery development workshops. Work with the government to increase the number of nursery permit holders in the state. Advertise the substantial cost benefits of nursing spat from young age
<i>Loss of operations manager</i>	Remote	Major	Document policies & procedures and through the board maintain relationships.
<i>SOCo cannot develop good linkages with all hatcheries and oyster brands</i>	Remote	Major	Effective, regular communications with the hatcheries. Know the hatcheries priorities.
<i>Perception of SOCo stock</i>	Likely	Minor	Marketing & prioritise communications and education about improved growth and handling techniques.
<i>Lack of visibility of the success of SOCo stock</i>	Likely	Minor	Focus on improved communications highlighting sales growth, expansion of hatchery network, grower interaction opportunities, publicise survey results.

Risk profile

	Extreme
	High
	Medium
	Low

3. OUR STRATEGY

3.1 Vision & Mission

Vision Statement

(where we want to be)

SOCo partners with DPI in a best practice breeding program which manages and safeguards selected lines of hatchery produced breeding families and supplies broodstock to hatcheries for the production of commercial quantities of improved oyster into the marketplace. "Oysters produced under the SOCo breeding program are acknowledged for their genetic superiority and improved marketability".

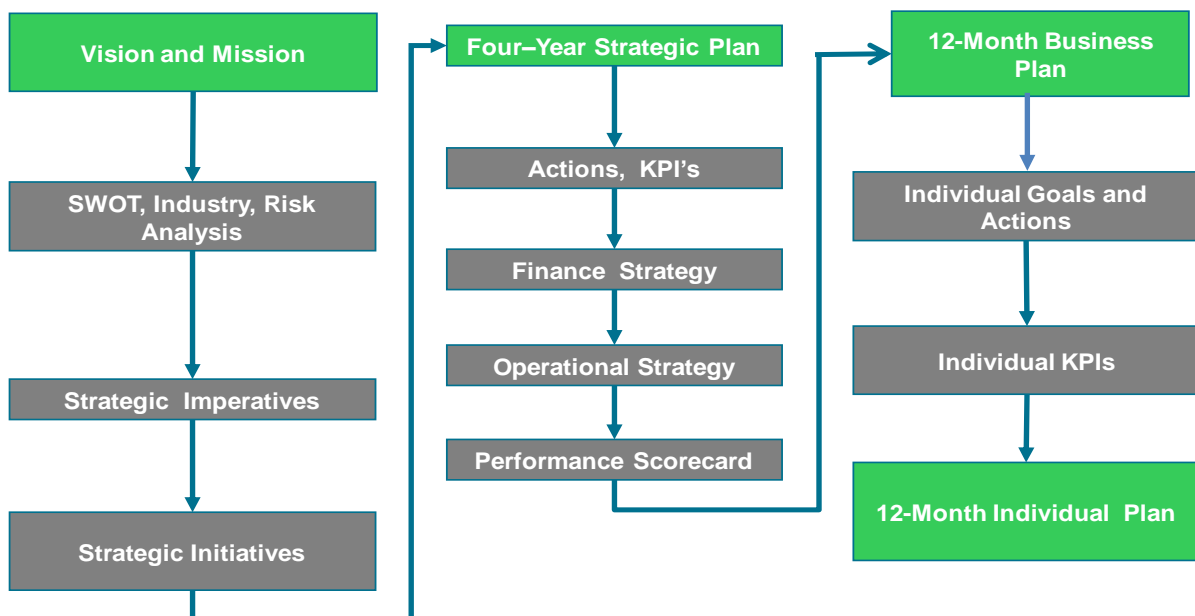
Mission

(why we are here)

"The Select Oyster Company exists to protect and perpetuate breeding lines and families of SRO and enable the introduction of desirable, sustainable, heritable traits to improve growth, marketability, and the risk profile of the Sydney Rock Oyster."

Linking our Strategic Plan with our Business Plan

STRATEGIC PLANNING PROCESS



3.2 Strategic Imperatives (see Strategic Plan)

In 2014, SOCo undertook an organisational review of its Strategic Imperatives and what they mean to our Board and staff. This resulted in the restatement of our imperatives for the next 4 year plan.

Our Imperatives are:-	What does SOCo mean by this?
Commercial Return	Achieve financial independence within 4 years, such that the transfer of IP and responsibility for the management of the breeding program by SOCo is feasible.
Viability	<ul style="list-style-type: none"> • By 2015 assume complete management of the Mass Selected Breeding Program • By 2017 assume complete management of the Family Lines Breeding Program
Reliability	<ul style="list-style-type: none"> • Availability of Stock • Reliability of Number of Seed • Reliability of Delivery • Reliability of Performance
Awareness	<ul style="list-style-type: none"> • Provide a leadership culture across R&D, advocacy and market investment strategies by ensuring linkages are maintained with stakeholders

The Strategic Plan 2014-2017 identifies four strategic Imperatives as the key drivers for developing our strategies and goals over the next four years. These imperatives are further broken down into initiatives which have been identified in the SWOT analysis:

Strategic Imperatives	Strategic Initiatives
Commercial Return - delivering commercial return & sustainability	<ul style="list-style-type: none"> • <i>Commercialisation plan</i> • <i>Secure long term funding</i> • <i>Develop business systems</i> • <i>Explore extension of statutory support</i>
Viability - develop a commercially viable breeding program	<ul style="list-style-type: none"> • <i>Clarify the role of SOCo</i> • <i>Develop a breeding program to accelerate the genetic gains (growth & disease)</i> • <i>Develop a breeding program to drive productivity</i> • <i>Management of the mass selected family breeding program by 2015</i> • <i>Plan for the management of the family lines by 2017</i>
Reliability - develop a reliable & transparent supply	<ul style="list-style-type: none"> • <i>SOCo role in driving productivity & profitability</i> • <i>Highlight commercial benefits to farmers</i> • <i>Hatcheries strategy</i> • <i>Nurseries strategy</i> • <i>Create a value proposition for the SRO industry</i>
Awareness - drive awareness & understanding	<ul style="list-style-type: none"> • <i>Educate and remove false myths</i> • <i>Central point of communication</i>

Each objective is further broken down into actions which drive the development of Select Oyster Company annual business plan.

INITIATIVES	ACTION	TIMING	WHO	BUDGET
3.21 – Delivering Commercial Return & Sustainability				
<i>Commercialisation plan to secure R&D funding & future financial viability</i>				<i>ref s/o1</i>
Strategic Plan	To determine the best methods for use and protection of existing & future intellectual property for industry development.	June 2015	Board	
	Prepare a detailed 4-year operational and cash-flow budgets for the operation as basis for a realistic assessment of the funding needs for the SRO breeding program	June 2014	Board	
Industry Funding	Agree pricing policy into the future. Potential to increase levy once production issues are over come and demand increases	Dec 2016	Board	
	Build case & communicate with growers at each step, for a national levy comprising R&D, 'biosecurity' and marketing & promotion components.	Dec 2016	Board	
<i>Secure long-term funding arrangements for industry development activities (sustainability, local employment, export & domestic markets) ref w/t 2</i>				
Long – term funding	Develop effective, long term funding mechanisms for industry development activities. Fisheries Research & Development Council (FRDC) & Aqua Culture Research Advisory Council (ARAC)	Dec 2014	Board	
	Continue to build scientific and management collaboration with NSW DPI and FRDC (Graham Mere), recognizing that the relationships will need to be sustained into the long term.	Ongoing	Ops Mger	
<i>Develop business systems to ensure transparency, ability to measure & evaluate SOCo performance</i>				<i>ref w/t 4</i>
Data Collection	Establishing effective data recording and database management systems of the SOCo spat supply chain from batch to grower	Dec 2014	Ops Mger	
	<ul style="list-style-type: none"> • Brood stock registry • The numbers that carers hold at any given time • Tracking of shipments to hatchery 	Complete Complete Complete		

INITIATIVES	ACTION	TIMING	WHO	BUDGET
3.22 – Develop a Commercially Viable Breeding Program				
<i>Clarify the role of SOCo to drive the benefits of selective breeding for the industry's future</i>				<i>ref w/t 1</i>
SOCo management of the breeding program	SOCo driving the process to ensure that the selection program is developed in line with the SRO industry's long term needs and priorities. Influence and input to the Fisheries / Macquarie Uni genetic marker study.	Dec 2015	Ops Mger (Mac Uni / Fisheries).	
	SOCo has approved evaluation of alternative methods for selection for the most desirable traits, as identified by industry from <u>industry survey</u> (faster growth, QX, disease resistance, winter mortality resistance etc).	June 2014	Ops Mger	
<i>Develop a breeding program to accelerate the genetic gains (growth & disease) achieved via selective breeding</i>				<i>ref s/o2</i>
Accelerate the genetic gains	Maintain a watching brief on the Macquarie Uni review of the genetic status of the current breeding lines by examining genetic variation between wild and selected stock	Launch 2014 4 year program	Ops Mger, Ana Rubio	
	Investigate ways in which mortalities can be efficiently recorded & interpreted. Capture this information via <u>industry survey</u>	June 2014	Ops Mger	
<i>Develop a breeding program to drive productivity thru growth rates and disease resistance</i>				<i>ref w/o2</i>
Drive productivity	Ensure marketable characteristics (condition, texture, colour, uniformity) are not lost when breeding for survival via the <u>industry survey</u>	Dec 2014	Ops Mger	
	Maintain brood stock available for hatcheries.	Ongoing	Ops Mger	
	Deploy current brood stock to brood stock holders and coordinate the provision of this genetic material to hatcheries.	Ongoing	Ops Mger	
	Have in place a plan for brood stock distribution among 5 carers, and review and source new carers with appropriate protocols if the need arises.	Ongoing	Ops Mger	

Assume Management of the Mass Selected Breeding Program				<i>refs/t 3</i>
Delivery of CRC commercialisation program in 2015	Deploy current brood stock to brood stock holders and coordinate the provision of this genetic material and liaise with hatcheries as required	Complete	Ops Mger	
	Coordinate breeding requirements to ensure the perpetuation of the genetic gains;		Ops Mger	
	Develop a risk assessment and reduction model against the loss of brood stock. <i>The brood stock is currently held in 5 different haven estuaries and monitored by SOCo.</i>	Completed	Ops Mger	
	Coordinate production of 2 lines (WMR and B2?) of future generations of MSBP breeding stocks through development and implementation of a production schedule for the breeding season.	Dec 2015	Ops Mger	
	Develop practical management and maintenance guidelines for the MSBP brood stock and for the implementation of handling protocols among brood stock carers.	Completed	Ops Mger	
	Introduce selected brood stock into more multiplier hatcheries to act as “herd test” farmers to enable more data on genetic traits being measured.	Completed	Ops Mger	
	Expansion of access to brood stock to other commercial hatcheries so that the selected lines form part of the product offering to industry will consolidate the risk management options available to SRO farmers. Two extra hatcheries introduced.	Jun 2014	Ops Mger	
Establish a plan for the management of the family lines breeding program by 2017				<i>refs/t 5</i>
Future management of family lines	Develop a business plan to support delivery of current research projects including the developing family breeding program. The plan to factor in the provision of genetic advice	Jun 2015	Ops Mger	
	Provide opportunities for SOCo to cost and access any future genetic services.	Jun 2015	Ops Mger / Jane Clout	
	Complete the process of restructuring the breeding program in order to facilitate a move from mass-selected lines to effective single-pair mated family based multi-trait selection.	Jun 2017	Ops Mger / Jane Clout	

	Physical control of the brood stock from which the selected lines are bred transferred to SOCo. Cost \$5,600 (8 inspections for 2 years @ \$700/ inspection plus \$5,000 one off payment to brood stock carers	Ongoing	Ops Mger	\$10,600
	Agreements for securing long-term access to quantitative genetic competence for routine data analysis and breeding value estimations, support selection decisions in breeding nucleus and dissemination, etc.	In progress	Ops Mger / Jane Clout	
	Scientific and process knowledge crucial to propagation of selected lines, successfully transferred to SOCo	Out of scope of 4 year plan	Board	
	Establish management personnel with the core responsibility to coordinate breeding program activities in close collaboration with PSFI and with technical input from a competent provider of quantitative genetic services (e.g. CSIRO). A 2 year fixed term contract to Oct 2015 is in place.	Completed	Board	
	Prepare an operational breeding plan based on sound quantitative genetics and selection theory. Including an external contractor / geneticist.	Dec 2017	Ops Mger / Jane Clout	
	Establish an operational agreement with a geneticist to effectively access, utilise and manage family line database.	Jun 2016	Ops Mger	

INITIATIVES	ACTION	TIMING	WHO	BUDGET
3.23 – Develop a Reliable & Transparent Supply				
<i>Identify opportunities to demonstrate SOCo role in driving productivity and profitability</i>				<i>ref w/o1</i>
Productivity & profitability	A simple series of handling and hygiene management protocols developed and imposed on the nurseries buying stock for resale. They could be registered by SOCo as a “SOCo value chain partner”, which has marketing benefits for all concerned, as well as building reliability of spat performance. Discuss with DPI - 2008 DPI video	June 2015	Ops Mger	

	Initiate a collaborative effort amongst growers. This may include consideration of alliances with Oysters Aust in export markets, and complementary products (wine, finger limes, and others) elsewhere	TBC, ongoing	NSWFA Oyster committee	
	Initiate a value chain initiative to support export growth. Funding will need to come from either DAFF or NFIS, with NSW DSRD or Agriculture as further options. Commercial funding of these projects will require matching funding by growers	TBC, ongoing	NSWFA Oyster committee	
	SRO growers, led by SOCo to form an alliance with Pacific Oysters suppliers in export markets, offering customers a choice of product	TBC, ongoing	NSWFA Oyster committee	
Highlight genetic superiority in order to deliver commercial benefits to farmers				<i>ref w/o 3</i>
Highlight Commercial Benefits	Establish ongoing effective processes for growers to provide input into priorities and project areas via <u>industry survey</u>	Dec 2014	Ops Mger	
	Drive production targets through liaison with industry to market genetic qualities and advantages, and develop a better understanding and awareness of the benefits and availability of improved lines	Dec 2014	Ops Mger	
	Identify strategies to maintain traceability & transfer of origin info of oysters along the supply chain via Survey & Levy	Jan 2014	Ops Mger	
	Show the benefit of the fast growing and disease resistant characteristics of the spat, via the LLS project with the south coast grower	Dec 2015	Ana Rubio	
Form alliances with commercial hatcheries to drive & demonstrate the benefits of SOCo oysters				<i>ref s/t 2</i>
Hatcheries	Develop a better understanding of the existing capabilities of the hatchery industries through site visits and performance monitoring	On going	Ops Mger	
	All hatcheries subject to a contractual arrangement, review exiting contracts	Jun 2014	Luke Messer	
	Undertake audits & site inspections of hatcheries	Twice yearly	Ops Mger	
	Undertake onsite training with hatcheries.	Dec 2015	Ops Mger	
	Look at ways to condition brood stock which is the responsibility of the hatcheries but monitored by SOCo	Jun 2014	Ops Mger	

	Implement data recording from hatcheries that ensures counts are accurate and the nursery got what they ordered, they got the right line, that survival and health doesn't impact on the number that they wanted via the <u>industry survey</u>	Dec 2014	Ops Mger	
<i>Develop a nursery management plan</i>				<i>ref w/o 4</i>
Nurseries	Consider using more nurseries to reduce risks of lock down such as workshops to introduce new methods / technology e.g. FLUPSY	July 2014	Ops Mger	
	"Licensed" nurseries should be subjected to a rigorous set of quality and process standards that should probably be an addendum to the MOU.	Jun 2015	Ops Mger	
	Put in place a set of protocols for use by nurseries in handling SOCo stock. These protocols can be displayed on the website, acting as a brand building activity	Jun 2015	Ops Mger	
	Communicate to the industry end users regarding availability of hatchery production stock and information on performance of the commercial and family lines via SOCo web and other SOCo communications.	Jun 2014	Ops Mger	
<i>Promote the value proposition of selective breeding (profitability, disease resistance)</i>				<i>ref s/t 1</i>
Value Proposition	Replacing the current "serious but it won't happen to me" attitude about the potential impact of QX and WMR amongst growers, with the attitude that SOCo stock provides mitigation of the risk.	Dec 2016	Board	
	Assist with reducing the costs of farming (measured thru benchmarking, etc) by sharing information on SOCo products.	Dec 2014	Ops Mger	
	Investigate, communicate, grow out techniques that improve stock performance and survival (i.e. as shown by benchmarking results)	Dec 2015	Ops Mger	
	Investigate, communicate, spat production techniques (hatchery & wild caught) that improve stock performance and survival via hosting workshops e.g. FLUPSY technology	Ongoing	Ops Mger	

INITIATIVES	ACTION	TIMING	WHO	BUDGET
3.24 – Drive Awareness & Understanding				
<i>Educate growers on the advantages of selectively bred oysters</i>				<i>ref s/o 3</i>
Educate	SOCo project manager undertake genetics training under the Aquaculture Innovation Hub Project and Macquarie University training scheme. .	Start Jun 2104	Ops Mger	
	Building an information base that accurately records the performance of SOCo stock, and the benefits that flow from use of the seed via the <i>industry survey</i>	Dec 2014	Ops Mger	
	Educate to change the entrenched views about the performance of the fast growing spat, and the counts that come from the nurseries, which are qualitative rather than fact based through benchmarking and communication., via the LLS project with the south coast grower, video, web , press releases & industry survey	Ongoing	Ops Mger	
	Facilitate greater levels of knowledge dissemination among growers of successful and unsuccessful production practices, via industry survey, workshops, field days & LLS project	Ongoing	Ops Mger	
	Show the calculations of value of the fast growing lines to benefit their cash flow or capital employed	TCB, ongoing		
<i>Open & continual dialogue between growers, hatcheries, nurseries & SOCo.</i>				<i>ref w/t 3</i>
Communicate	Co ordination of hatchery requirements with brood stock availability to improve supply.	Ongoing	Ops Mger	
	Liaison with industry and hatcheries to drive the best outcomes in relation to availability and timing of delivery of seed stocks.	Ongoing	Ops Mger	
	Notifying nurseries that a run is occurring	Ongoing	Ops Mger	
	Liaison with hatcheries and nurseries to ensure the integrity of lines produced and the recording of outputs.	Ongoing	Ops Mger	

	Communication with growers. Communicate hatchery run schedules, R&D development, rebates/offers, website	Ongoing	Ops Mger	
	Develop effective communication between the breeding program operations and the intermediate and end users of the seed in the sector via the <i>industry survey</i>	Dec 2014	Ops Mger	
	As it affects SOCo provide a leadership culture across R&D, advocacy and market investment strategies by ensuring linkages are maintained with other state organizations.		Board	

