



**PIRSA FISHERIES & AQUACULTURE
COST RECOVERY PROGRAM**

2016-17

**ABALONE FISHERY
(CENTRAL ZONE)**

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SUMMARY TABLE ABALONE FISHERY – CENTRAL ZONE

2015-16	PROGRAM AREA	2016-17	Comments	DAYS	FTE
RESEARCH COSTS					
217,121	Stock Assessment and Monitoring	217,121	As per second year of two year program with total cost of \$434,241. Program cost to be recovered from industry in equal amounts of \$217,121 each year under the program.		
2,911	Economic Assessment	2,960	As per contracted services 2016-17		
226	Other Research	226	Contribution towards Threatened and Endangered Species		
PIRSA RELATED COSTS					
14,202	Policy and Management	13,976	Same level of service as previous year	15.43	0.08
1,723	Legislation	1,676	Same level of service as previous year	1.71	0.01
6,169	Licensing	6,025	Same level of service as previous year	8.57	0.04
2,815	Directorate	2,725	Same level of service as previous year	3.09	0.02
205,284	Compliance	205,155	Same level of service as previous year	170	0.85
4,230	Quota Monitoring	4,129	Same level of service as previous year	6.86	0.03
OTHER COSTS					
14,705	FRDC	14,123	Funding based on 0.25% of rolling three year average GVP		
0	Adjustments	-759	Adjustment for 2015-16 over collection		
\$469,386	TOTAL	\$467,357			
Licence Fees 2016-17					
CZ Base Fee		15,576			
CZ Unit Fee		623.15			
<i>Licence Fees 2015-16</i>					
Base Fee		15,646			
CZ Unit Fee		622.85			

PROGRAM DAILY CHARGE OUT RATE

DAILY RATE (\$)	Compliance	Quota	Directorate	Legislation	Licensing	Policy
Total Employee Expenses	594	362	542	669	448	566
Total Operating Expenses	325	56	153	120	70	151
Deprecation and Capital Costs	79	3	0	0	4	0
Total Other Expenses*	209	181	189	189	181	189
TOTAL DAILY RATE	1,207	602	883	978	703	906

Please Note: All dollar values have been rounded to the nearest dollar figure.

* Other expenses includes ICT, finance, human resources, WHS, accommodation, insurance and other costs incurred corporately in providing services to divisions, apportioned across PIRSA using a range of cost drivers such as number of logons, headcount, volume data and other workload indicators, in accordance with PIRSA's cost recovery policy. It excludes the costs of servicing government and costs too far removed from the activity such as Ministerial Offices, Office of the Chief Executive, Strategic Communications and Engagement and the PIRSA Policy Unit, for example.

INTRODUCTION

Wild catch commercial fisheries in South Australia continue to be managed in accordance with the PIRSA Cost Recovery Policy. This policy requires commercial fishery licence fees to fund services related to commercial fisheries management costs. PIRSA Fisheries & Aquaculture continue to manage the process of consulting with service providers and relevant industry associations to establish fishery based management programs which form the basis of annual licence fees.

For each sector, the program required to manage the fishery has the following components:

- Assessment and Research Services;
- Fisheries Policy and Management Services;
- Compliance Services, including communication, enforcement and monitoring activities;
- Support Services, including Legislation, Licensing and Business Services (Directorate).

This documentation provides a framework to assist in establishing appropriate research, policy, compliance and support services to manage a fishery.

MANAGEMENT OBJECTIVES 2016/17 TO 2018/19

Long term objectives	Outcomes 2016/17 to 2018/19	Fishery Policy and Management	Compliance	Assessment and Research	Systems & Information
<p>Ensure the Abalone resource is harvested sustainably</p> <p>Optimum economic utilisation and equitable distribution of the Abalone resource</p>	<p>Maintain Greenlip and Blacklip Abalone stocks above ecologically sustainable levels.</p> <p>Review harvest strategy.</p> <p>Ensure sufficient data and information is available to implement harvest strategy.</p> <p>Maximise catches for both species within ecologically sustainable limits.</p> <p>Implement improvements to integrity of quota management system.</p> <p>Explore suitable economic and social indicators to inform decision-making processes and for inclusion in next harvest strategy for the fishery.</p> <p>Review fishery management plan under the <i>Fisheries Management Act 2007</i></p>	<p>Manage fishery in accordance with management plan.</p> <p>Set TACC annually, in accordance with the harvest strategy.</p> <p>Conduct review of the harvest strategy in the management plan.</p> <p>Facilitate independent review of the stock assessment program, subject to funding availability.</p> <p>Assist Industry to explore suitable social and economic indicators for inclusion in next harvest strategy.</p> <p>Facilitate the development of a preliminary diver survey to inform Harvest Strategy decisions</p> <p>Assist in the development of a FRDC proposal to develop a diver survey to contribute to Stock Status.</p> <p>Lead review of fishery management plan in 2017/18</p> <p>Support the incorporation of new fishery independent data (GPS and data loggers) in the interpretation of stock condition.</p>	<p>Implement compliance program, informed by risk assessment.</p> <p>Implement changes to quota monitoring system.</p> <p>Support review of fishery management plan in 2017/18</p>	<p>Stock Assessment and monitoring to underpin stock status and stock assessment reports</p> <p>Support the review of harvest strategy.</p> <p>Facilitate the development of a preliminary diver survey to inform Harvest Strategy decisions</p> <p>Assist in the development of a FRDC proposal to develop a diver survey to contribute to Stock Status.</p> <p>Support review of fishery management plan in 2017/18</p>	<p>Provide ongoing support for licensing, quota and transfer queries.</p> <p>Support review of fishery management plan in 2017/18</p>
<p>Minimise impacts on the ecosystem</p>	<p>Disease risk management</p>	<p>Undertake aquatic animal health risk assessment</p> <p>Provide management advice on fish kills, as required</p>	<p>Provide support with investigations of fish kills, as required</p>	<p>Provide scientific advice on aquatic animal health risks and support with investigation of fish kills</p>	

Long term objectives	Outcomes 2016/17 to 2018/19	Fishery Policy and Management	Compliance	Assessment and Research	Systems & Information
Cost effective and participative management of the fishery	Support co-management of the fishery	<p>Maintain regular communication with industry representatives and be accessible to all licence holders.</p> <p>Provide management advice, where necessary, throughout the licensing year</p> <p>Progress co-management arrangements consistent with the Co-management Policy</p>	<p>Maintain regular communication with industry representatives</p> <p>Provide compliance advice, where necessary, throughout the licensing year</p>	<p>Maintain regular communication with industry representatives</p> <p>Provide scientific advice to inform decision-making process of new harvest strategy</p>	<p>Maintain regular communication with industry representatives</p> <p>Provide licensing advice, where necessary, throughout the licensing year</p>

FINAL DOCUMENT

PROGRAM: FISHERIES POLICY AND MANAGEMENT

PROGRAM MANAGER

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PROGRAM SUMMARY

The Fisheries Policy and Management Unit of PIRSA Fisheries & Aquaculture undertakes activities such as day-to-day management, long-term planning and policy development for South Australian commercial, recreational and Aboriginal traditional fisheries

The Fisheries Policy and Management unit has the following core functions:

- Administer the *Fisheries Management Act 2007* and regulations.
- Day-to-day management of fisheries resources, to ensure catch and effort levels are commensurate with resource sustainability.
- Develop and implement management plans, including harvest strategy development and ESD risk assessment, in accordance with the *Fisheries Management Act 2007*.
- Provide advice to the Minister for Agriculture, Food and Fisheries, Chief Executive and Executive Director on matters relating to fisheries.
- Represent the Director, Fisheries & Aquaculture Policy and Director, Operations on committees and other forums on matters related to the administration of the *Fisheries Management Act 2007*.
- Develop over-arching policy frameworks to support fisheries management.
- Build and maintain relationships with key stakeholders, with a particular focus on the commercial and recreational fishing sectors.
- Progress Australian Government recommendations under EPBC Act assessment.

OBJECTIVES

To provide day-to-day fisheries management services to for the Central Zone Abalone Fishery to government and industry, as well as advice and facilitation of fisheries policy and management issues, through the Fisheries Policy and Management Program.

PROGRAM STRATEGIES AND SUPPORTING ACTIONS & INITIATIVES

PROGRAM DELIVERY

1. Participate in inter and intra-departmental meetings and workshops on issues relevant to fisheries management
2. Liaise within the Fisheries and Aquaculture Division, with SARDI Aquatic Sciences, other parts of PIRSA and other State and Commonwealth agencies on matters relevant to fisheries management
3. Liaise within PIRSA, with other government agencies and with industry representatives in implementing decisions relevant to fisheries management
4. Conduct regular assessment or review of existing management arrangements for fisheries management, including analysis of statistical information on fisheries and interactions with threatened, endangered and protected species
5. Coordinate consultation with fishery stakeholders through established co-management processes
6. Participate in industry liaison in the field and on vessels to strengthen fishery management knowledge and understanding, and develop rapport with licence holders and divers.
7. Participate in industry development initiatives related to fisheries management
8. Attending to general correspondence and enquiries relevant to fisheries
9. Provide advice to Minister in relation to the management of fisheries and Ministerial correspondence
10. Communicate on fisheries management issues to key stakeholder groups and the broader community

ANTICIPATED OUTCOMES

- Provision of clear instructions for complex legal drafting or compilation of drafts of simple legislative instruments in consultation with the legal manager as necessary for the management of the Central Zone Abalone Fishery (regulations, closure notices, licence conditions, Ministerial exemptions etc).
- Provide advice to the Minister or his/her delegate on setting total allowable commercial catch and effort levels for the Central Zone Abalone Fishery
- Prepare policies to support fisheries management
- Prepare submissions to enable regular assessment of the Central Zone Abalone Fishery under the EPBC Act
- Prepare annual report to the Australian Government on EPBC Act requirements for the Abalone fisheries
- Prepare regular fisheries status reports
- Develop and maintain day-to-day productive working relationships and outcomes through cooperative management and collaboration with stakeholders
- Further the development of co-management arrangements

Performance Indicators:

1. Strong industry and government involvement in co-management relationship and adherence to formally agreed co-management arrangements.
2. Develop and implement management plan. Management plans to include harvest strategies that protect sustainability of the fishery based on ESD risk assessment processes.
3. Australian Government recommendations met in relation to EPBC assessment.
4. Setting of TACC for Central Zone Abalone Fishery

PROGRAM EFFORT ALLOCATION

The table below includes an abbreviated suite of core activities reflect the anticipated split of effort and associated costs.

Strategy/Activities	Days	FTE	Cost (\$)
Policy and Management	15.43	0.08	13,976
TOTALS	15.43	0.08	13,976

Please Note: All dollar values have been rounded to the nearest dollar figure.

FINAL DOCUMENT

PROGRAM: LEGAL SERVICES

PROGRAM MANAGER

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PROGRAM SUMMARY

PIRSA Fisheries & Aquaculture Directorate provides legal services to the Group Executive Director and all other members of the Division, in particular the policy group, on a daily basis. Among other things these services include strategic advice and problem solving, review of draft documentation and correspondence, statutory interpretation and the provision of general advice and statutory interpretation, in consultation with the Crown Solicitor's Office where necessary, regarding any legal issues relating to proposed actions and the implementation or administration of abalone fisheries management and regulatory arrangements through existing legislative frameworks and licence conditions. Consideration is also given to the impacts and effects of other related legislation if and when required.

OBJECTIVES

To provide legal services supporting the implementation of necessary, appropriate and effective statutory and administrative changes to government administration of all fishery sectors, as well as strategic advice and facilitation of related policy development, legislative and regulatory issues, through the Legal Services Program.

PROGRAM STRATEGIES AND SUPPORTING ACTIONS & INITIATIVES

ANTICIPATED OUTCOMES

1. Co-ordinate the introduction, amendment or revocation of Fisheries legislation in line with Fisheries Policy decisions i.e. Act or regulation amendments, the introduction of new regulations and drafting of other legislative and administrative instruments such as delegation, permit or exemption instruments as required under the *Fisheries Management Act 2007* (the Act). New regulations or amendments require the drafting of Cabinet submissions and supporting documentation, including the preparation of drafting instructions, for consideration by Cabinet. This service includes co-ordinating the cabinet process involving liaison with the Office of Parliamentary Counsel and the Crown Solicitor's Office and inter agency consultation to ensure that proposed regulatory arrangements are accurately described, drafted and scrutinised before being implemented.
2. Review licensing arrangements required on an as needs basis to appropriately implement approved fishery management policy and measures within the limitations of the Act. The service includes working with the Licensing program (part of Systems and Information) where necessary to implement efficient administrative systems and finalise forms and instruments that are legally sound.
3. Problem solve together with the provision and co-ordination of legal advisory services in liaison with the Crown Solicitor's office relating to the implementation and administration of the Act, Regulations and fisheries management policies, interaction with other Acts, and the defence of those policies and arrangements raised in litigation or industry correspondence.

4. Coordinate applications for Ministerial exemptions under Part 10 Division 1 and Permits under Part 7 Division 2 of the Act.
5. Additional legal services to support, on an as needs basis, the decision-making of the Director Fisheries and Aquaculture policy and the Director Operations and other delegates of the Minister under the Act to safeguard the ongoing sustainability of a fishery in any particular year (where required), depending on positive or negative scientific indicators, to implement new fisheries management arrangements (for example the introduction or variation of a quota system) or new administrative or compliance arrangements (for example, changes to licensing processes, conditions, introduction of closures).
6. Support compliance for statutory interpretation, problem solving and correspondence advice (per above).

PROGRAM EFFORT ALLOCATION

The table below includes an abbreviated suite of core activities reflect the anticipated split of effort and associated costs.

Strategy/Activities	Days	FTE	Cost (\$)
Legislation	1.71	0.01	1,676
TOTALS	1.71	0.01	1,676

Please Note: All dollar values have been rounded to the nearest dollar figure.

PROGRAM: LEASING AND LICENSING

PROGRAM MANAGER

Erin Conlon, Manager, Leasing & Licensing
Telephone: 08 842 41374 Email: Erin.Conlon@sa.gov.au

PROGRAM SUMMARY

The Fisheries Leasing & Licensing Section of PIRSA Fisheries & Aquaculture is responsible for the management of Licensing, Quota Monitoring and VMS services. This business unit provides a range of services related to the timely processing and management of information leading to the issue of licences and other reporting services.

The unit administers a licensing call centre for licence inquiries and other administrative services. The success of these functions is based on maintaining the Primary Industries Information Management System (PIIMS) database.

OBJECTIVES

To provide leasing and licensing services to government and industry through the Leasing and Licensing Program.

PROGRAM STRATEGIES AND SUPPORTING ACTIONS & INITIATIVES

ANTICIPATED OUTCOMES

1. Issue licences to licence holders in an accurate and timely manner.
2. Provide accurate and timely information related to licences.
3. Provide quarterly activity report (as required), within one month at the end of each quarter.

Services to directly support the fishery:

1. Renew and maintain fishery licences.
2. Database management for licence renewal.
3. Collect licence fees and associated payments.
4. Compose and send quarterly instalment notices.
5. Record and track unpaid renewals.
6. Compose and send late payment instalment notices for un-paid quarterly instalments.
7. Draft and issue notices to Fishers.
8. Process requests for information from fishers who make such inquiries over the counter, through the call centre, via facsimile or e-mail. For example, helping fishers to process information relevant to licence renewal forms, application for licence transfers, boat changes, gear enquiries and fishing regulations.
9. Regularly update information about licence holders.
10. Research and prepare documents for public record.

11. Liaise with government stakeholders to verify the credentials of fishers.
12. Liaise with PIRSA Fisheries & Aquaculture, SARDI Aquatic Sciences, Crown Solicitors and other state and local agencies on matters relevant to the fishery.
13. Draft and update licence conditions over the duration of the licensing year as determined by the Executive Director, Fisheries and Aquaculture and the Director, Fisheries and Aquaculture Policy.
14. Provide information to licence holders relating to the requirements pursuant to licence administration.
15. Manage calls from fishers regarding late payment notices, fees and general enquiries about their licences.
16. Provide support regarding an increased frequency of last minute administrative enquiries from fishers. e.g., master changes and quota transfers, as well as provide advice and support to fishers on licence information, to complete the required forms.

Services to support fisheries management:

1. Participate in inter and intra departmental meetings and workshops on issues relevant to the fishing industry.
2. Liaise with relevant staff within PIRSA Aquaculture and Fisheries in implementing decisions relevant to the fishery.
3. Interrogate the PIIMS database to extract information for other stakeholders to use in preparing reports.
4. Prepare reports requested by internal and external customers including maintenance of a public register of licence holders.
5. Liaise with information technology providers to maintain PIIMS and administer licensing requests.
6. Generate quota management reports to update stakeholders on varying Total Allowable Commercial Catch (TACC) returns and end of season quota holdings.

PROGRAM EFFORT ALLOCATION

The table below includes an abbreviated suite of core activities reflect the anticipated split of effort and associated costs.

Strategy/Activities	Days	FTE	Cost (\$)
Leasing and Licensing	8.57	0.04	6,025
Quota Monitoring	6.86	0.03	4,129
TOTALS	15.43	0.07	10,154

Please Note: All dollar values have been rounded to the nearest dollar figure.

PROGRAM: DIRECTORATE

PROGRAM MANAGER

Chiara Ciui, Business Manager

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PROGRAM SUMMARY

Business Strategy, within Directorate of PIRSA Fisheries & Aquaculture, provides a range of services to support fisheries management. These include coordinating the cost recovery process and establishing agreements with service providers; coordinating program provider reports; administering external contracts and agreements; and providing audit, financial and human resource functions.

OBJECTIVES

To provide support services to government and industry, as well as advice and facilitation of corporate related policy and management issues, through the Directorate Program that incorporates the Fisheries & Aquaculture Business Strategy Unit.

PROGRAM STRATEGIES AND SUPPORTING ACTIONS & INITIATIVES

ANTICIPATED OUTCOMES

1. Coordinate and facilitate cost recovery processes and program agreements, including liaising with program providers, managers and financial services as required.
2. Attend meetings relating to cost recovery, licence setting and related policy issues.
3. Develop and review cost recovery policy, processes and program agreements.
4. Manage major service providers' contractual agreements, and co-management services contractual agreements with industry associations
5. Project manage and administer external contractual services and agreements – including liaising with PIRSA Accredited Purchasing Unit, preparing acquisition plans and selecting evaluation criteria, managing tender processes, drafting purchase recommendations and liaising with the Crown Solicitor's office to develop contractual agreements.
6. Provide advice on procurement and invoicing requirements.
7. Consult with the Group Executive Director, Director, Fisheries and Aquaculture Policy, Director, Operations, PIRSA fisheries managers, and the Office of the Minister and other parties as needed.
8. Ongoing review, development and documentation of the cost recovery model, framework, processes and roles.
9. Meet agreed timeframes on management and administration of external contractual services.
10. Appropriate management of industry funds and services.

PROGRAM EFFORT ALLOCATION

The table below includes an abbreviated suite of core activities and initiatives used to manage risks and reflect the anticipated split of effort and associated costs.

Strategy/Activities	Days	FTE	Cost (\$)
Directorate	3.09	0.02	2,725
TOTALS	3.09	0.02	2,725

Please Note: All dollar values have been rounded to the nearest dollar figure.

FINAL DOCUMENT

PROGRAM: FISHERIES COMPLIANCE OPERATIONS

PROGRAM MANAGER

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STATE COORDINATOR

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COMPLIANCE PROGRAM SUMMARY

PIRSA Fisheries and Aquaculture teams coordinate compliance activities to educate fishers, deter opportunistic and financially motivated fishery related crimes and enforce the rules and regulations.

The coordination of these activities is guided by an industry specific compliance plan which was developed in consultation with the Central Zone Abalone Industry. The plan ensures compliance effort is intelligence driven, efficient, cost-effective and outcome focussed. The compliance plan comprises three core strategies (Education and Awareness, Effective Deterrence and Appropriate Enforcement) and is optimised towards increasing voluntary compliance and maximising effective deterrence.

Analysis of intelligence and information holdings is regularly conducted to identify the major risks to the sustainable harvest of Abalone. The combination of strategies, actions, and initiatives are critical to focus the primary compliance effort to manage the risks and achieve targeted outcomes.

OBJECTIVES

This program provides a compliance framework to monitor and regulate fishing activities that support the sustainable commercial take of Abalone in the Central Zone Abalone Fishery in accordance with the Act and the Abalone Fishery Management Plan.

The plan provides a focus for the teams to undertake coordinated compliance activities to educate fishers, deter opportunistic and financially motivated fishery related crimes, and enforce the rules and regulations of the fishery.

Any risks or emerging trends/issues of significance that arise outside the plan are addressed as required.

The risks and strategies are regularly reviewed and assessed for relevance to ensure compliance activities meet the following objectives:

- Meet the objectives of the *Fisheries Management Act 2007*;
- To promote voluntary compliance with associated fishery rules
- To support meeting the goals and objectives of the Abalone Fishery Management Plan;
- To deliver an effective education and awareness program;
- Continue developing effective deterrence strategies;
- Undertake appropriate enforcement activities;
- Increase integrity in fishery management systems and/or quota systems;
- Promote positive interactions & collaboration with stakeholders;
- To deliver an efficient and effective compliance program.

COMPLIANCE EFFORT

- Monitoring of Central Zone Abalone fishery management and quota systems for compliance and integrity;
- Offence identification and response;
- Operational and Investigation Planning and Surveillance;
- Risk assessments, trend and threat analysis;
- Master Operational Planning Process;
- Legislative review for efficacy and relevance;
- Industry liaison and education.

ANTICIPATED OUTCOMES

The principal outcome of this compliance program is to support sustainable management of the Central Zone Abalone fishery by:

- Increased voluntary compliance;
- Continued development of effective deterrence strategies;
- Accurate intelligence and risk predictions;
- Successful enforcement outcomes for repeat or serious offences;
- Development of efficient and cost effective compliance strategies;
- Continued development of stakeholder engagement programs;
- Reduced incidence of reported illegal activity
- Reduced incidence of documentation errors and inconsistencies
- Increased integrity in fishery management systems and/or quota systems
- Increased positive interactions & collaboration with stakeholders

PROGRAM DELIVERY

The Fisheries & Aquaculture Operations Group comprises three Regional Operations teams: Offshore Patrol Operations team, and Intelligence & Strategic Support team.

The compliance program dedicated to the Central Zone Abalone fishery is primarily delivered by Fisheries Officers from the Central Region with support, as required, by officers from within the Operations Group.

PROGRAM STRATEGIES AND SUPPORTING ACTIONS & INITIATIVES

The compliance program is tailored to the Central Zone Abalone fishery and uses a number of initiatives and actions that fall under the three core strategies of Education & Awareness, Effective Deterrence and Appropriate Enforcement. These initiatives and actions are outlined in the Central Zone Abalone fishery compliance plan which has been developed in consultations with the sector.

The new management arrangements (following the Sealed Bin & Bag Trial) came into effect 1 January 2015. The 2015/2016 compliance plan considered the associated risks, and compliance activities were adjusted accordingly.

PROGRAM EFFORT ALLOCATION

The level of effort required to deliver the compliance program in accordance with the dedicated plan is reviewed annually taking into account;

- previous effort required to deliver established programs developed over last 10 years
- the identified risks to the fishery and any associated changes
- shifts or changes to the fishery management
- changes to fishing practices
- additional pressures or influences on fishers or the fishery
- intelligence holdings
- trends or change behaviours that required monitoring and/or investigation
- cost effectiveness and identified efficiencies
- any other relevant information required to deliver an effective compliance program to monitor and enforce the rules and regulations for each fishery

PIRSA has continually reviewed the Central Zone Abalone fishery compliance program, gaining efficiencies through intelligence driven and targeted operations, and re-directing compliance effort where necessary to address current and emerging issues and risks.

As a result of the implementation of new management arrangements (following the sealed bin and bag trial) on 1 January 2015 and a review of the quota management system in 2013/14, the increased integrity reduced the delivery of the 2015/16 program by 5 days of effort.

The table below includes an abbreviated suite of the core activities and initiatives used to manage the risks. The table also includes days allocated to reflect the anticipated split of effort and associated costs.

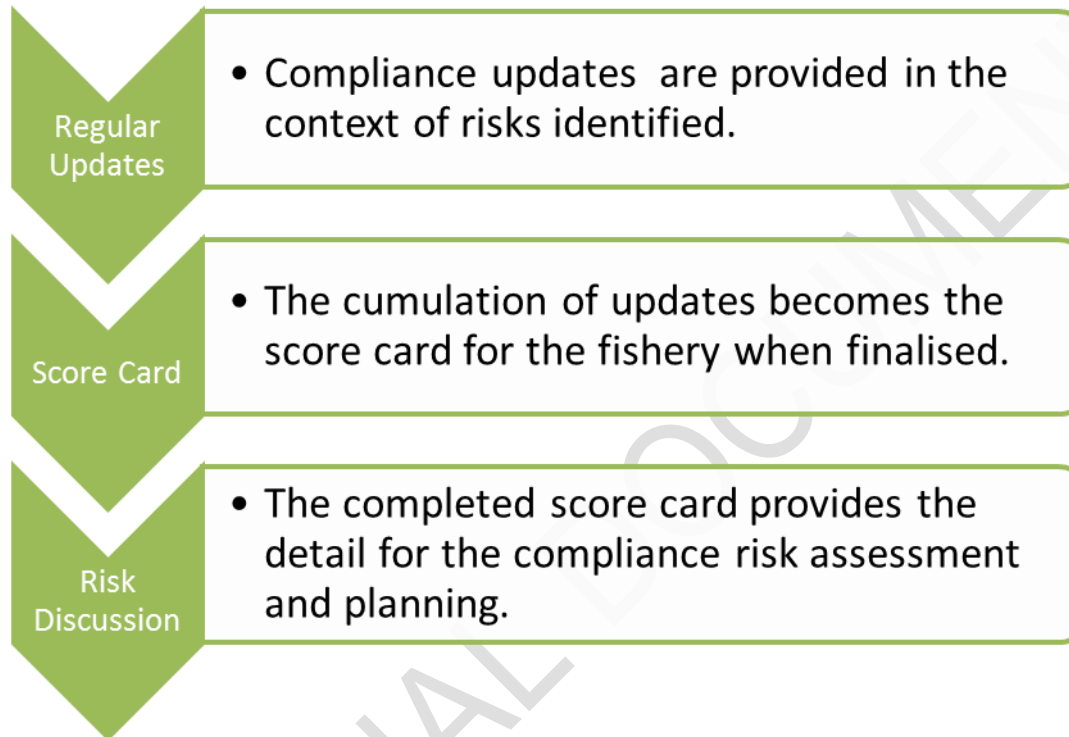
Strategy/Activities	Days	FTE	Cost (\$)
Education Awareness <ul style="list-style-type: none"> • Conduct pre-season education meetings and participate in industry days. • Provide electronic distribution of educational material to fishers and licence holders at the start of the season. • Ensure all interested parties understand their respective obligations and the compliance focus for the coming season. • Develop Industry communication & relationship program to facilitate discussion of topics such as the Quota Management System Integrity review and subsequent change management process. • Ongoing one on one education during inspections • Provision of compliance advice to Industry participants as requested. 	30	0.15	36,204

Effective Deterrence <ul style="list-style-type: none"> • Ensure all aspects of the Quota Management System are monitored such as prior reporting and chain of custody requirements in catch disposal records (CDR) including auditing. • Ensure all aspects of commercial fishing activities are monitored such as inspections of catch at sea, when landed, in transit and at change of ownership in fish processing premises. • Conduct intelligence driven operations and use appropriate enforcement action • Respond to reported incidents/issues • Communication Strategy 	115	0.58	138,781
Enforcement <ul style="list-style-type: none"> • Investigate reports of non-compliance and where appropriate take action • Issue expiations, cautions and court enforced actions. 	25	0.12	30,170
TOTALS	170	0.85	205,155

Please Note; to comply with Work Health & Safety obligations and evidentiary requirements, operational activities are generally required to be undertaken by a minimum of two (2) officers at any time.

All values have been rounded to the nearest dollar figure

CENTRAL ZONE ABALONE FISHERY – 16/17 RISK ASSESSMENT & COMPLIANCE PROGRAM



CENTRAL ZONE ABALONE FISHERY RISKS

TAKE ABALONE LESS THAN MINIMUM LEGAL SHELL LENGTH	Likelihood: OCCASIONAL	Consequence: MODERATE	Risk Rating	MODERATE
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Risk Attribute	<ul style="list-style-type: none"> • Shells potentially not measured before sending to surface • Potential exists for the systemic harvesting of small Abalone without detection because of shucking at sea
Legislative & Regulatory Framework	<ul style="list-style-type: none"> • <i>Fisheries Management (General) Regulations 2007 Schedule 2</i> • Abalone Fisheries Management Plan Objective “4c Management arrangements complied with” • Demerit Points
Implication	<ul style="list-style-type: none"> • PIRSA require a compliance presence to deter the potential for opportunistic/systemic harvest of Abalone which don’t meet regulated sizes • Limited opportunities exist for officers to detect the harvest of Abalone from shells less than the minimum legal length • Potentially greater numbers of abalone taken to achieve quota. • Undersize returned to the water from the dive vessel/surface leading to mortalities from predators (as opposed to returned to rock they came from after being measured in the water)
Control Measure	<ul style="list-style-type: none"> • Pre-season education meetings • Boarding vessels at sea and checks at Fish Processors (FP) • Requirement to use a measuring gauge when taking Abalone • Requirement to return undersize immediately to place of harvest • Minimum legislated shell lengths established by science • Minimum legislated meat weights established by science • Validate Catch Sampling measurements are being taken

CENTRAL ZONE ABALONE FISHERY RISKS				
QUOTA MANAGEMENT SYSTEM INTEGRITY	Likelihood: OCCASIONAL	Consequence: SEVERE	Risk Rating	HIGH

Risk Attribute	<ul style="list-style-type: none"> • Failure to accurately weigh abalone at FP • Fail to consign all Abalone to FP for weighing
Legislative Framework	<ul style="list-style-type: none"> • Fishery Management Plan Object 4c. Management arrangements complied with
Implication	<ul style="list-style-type: none"> • PIRSA require a compliance presence to deter/investigate opportunities to subvert the QMS • Inaccurate knowledge of what is taken from the sea and deducted from quota
Control Measure	<ul style="list-style-type: none"> • Pre-season education meetings and electronic distribution of educational information to fishers and licence holders • Checks at landing, in transit and at processors • Prior reporting • Obligation of fishers to deliver all Abalone to nominated processors for weighing • Obligation of processor to immediately weigh catch unless landed whole • Catch Data Records and Catch and Effort Returns • Verify use of data loggers as imposed by licence conditions

CENTRAL ZONE ABALONE FISHERY RISKS				
QUOTA EVASION	Likelihood: POSSIBLE	Consequence: SEVERE	Risk Rating	MODERATE

Risk Attribute	<ul style="list-style-type: none"> Fish taken without being deducted from quota
Legislative Framework	<ul style="list-style-type: none"> <i>Fisheries Management (Abalone Fisheries) Regulations 2006 Clause 20</i>
Implication	<ul style="list-style-type: none"> Abalone taken but not deducted from quota gives a competitive advantage to the fisher Abalone taken not deducted from quota which impacts scientific modelling If quota evasion is systemic, the sustainability of the species would be threatened with potential of local extinction.
Control Measure	<ul style="list-style-type: none"> CDR documentation Checks of catches upon landing, in transit and at FP's Re-weighing of catches after certification by FP's

CENTRAL ZONE ABALONE FISHERY RISKS			
DISEASE AND PEST INCURSION	Likelihood:	Consequence:	Risk Rating
1. AVG	Possible	Catastrophic	EXTREME
2. Other	Address on a reactive basis		

Note – Actions & Initiatives relating to Disease & Pest Incursion risks are addressed and delivered against the Recreational Fishery Compliance Plan

Risk Attribute	<ul style="list-style-type: none"> Potentially diseased Victorian and Tasmanian live Abalone transported into and sold in South Australia
Legislative Framework	<ul style="list-style-type: none"> <i>Livestock Act 1997 Section 68 and 69 (4)</i>
Implication	<ul style="list-style-type: none"> Disease incursion of AVG into SA Abalone stocks has the potential to destroy the SA Abalone Fisheries.
Control Measure	<ul style="list-style-type: none"> Documentation of FP's detailing the origin of fish Inspections of FP's and Aquaculture facilities

CENTRAL ZONE ABALONE FISHERY RISKS

OTHER	Compliance risks identified within the fishery that may occur which will be addressed as they are detected
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Other Risks	<ul style="list-style-type: none">• Illegal, Unregulated, Unreported take (HIGH Risk) – included in Recreational Fishery Plan• Fishing in Closed Areas• More than one diver undertaking fishing activities at a time• Taking non-permitted species (species not listed on Schedule)• Taking protected species• Exceeding cap for Tippara Reef• Inconsistent understanding of legislated and regulatory obligations by commercial operators• Closure of lines of communication between PIRSA / Industry• Failure to lodge SARDI catch and effort returns• Inaccurate or misleading reporting of catch location and volume on SARDI returns
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		CONSEQUENCES					
		NEGLECTIBLE	MINOR	MODERATE	SEVERE	MAJOR	CATASTROPHIC
		0	1	2	3	4	5
LIKELIHOOD	REMOTE	1					
	RARE	2					
	UNLIKELY	3					
	POSSIBLE	4			Quota Evasion		AVG
	OCCASIONAL	5		Take Undersized	QMS Integrity		
	LIKELY	6			Illegal, Unreported, Unregulated Take		

LIKELIHOOD DEFINITIONS		CONSEQUENCE DEFINITION	
LIKELY	It is expected to occur	CATASTROPHIC	Local extinctions are imminent / immediate
OCCASIONAL	May occur	MAJOR	Likely to cause local extinctions, if continued in longer term
POSSIBLE	Some evidence to suggest this is possible here	SEVERE	Affecting recruitment levels of stocks / or their capacity to increase
UNLIKELY	Uncommon, but has been known to occur elsewhere	MODERATE	Full exploitation rate, but long term recruitment / dynamics not adversely impacted
RARE	May occur in exceptional circumstances	MINOR	Possibly detectable, but minimal impact on population size and none on dynamics
REMOTE	Never heard of but not impossible	NEGLECTIBLE	Insignificant impacts to population. Unlikely to be measurable against background variability for this population

RISK RATING

Negligible	Low	Moderate	High	Extreme
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SCHEDULE 1 - PROJECT SCOPE

1. PROJECT DETAIL

1.1 Title South Australian Abalone Fishery (Central Zone)

1.2 Client Contact Details

Name: PIRSA FISHERIES & AQUACULTURE
Address: GPO Box 1625, Adelaide, SA 5001
Attention: Sean Sloan
Email: Sean.Sloan@sa.gov.au
Telephone: 8429 0111
Facsimile: 8226 0434

1.3 Principal Investigator

Name: Stephen Mayfield
Position: Subprogram Leader: Molluscan Fisheries
Address: 2 Hamra Ave, West Beach, SA 5024
Email: stephen.mayfield@sa.gov.au
Telephone: 0401 122 108
Facsimile: 8207 5406

1.4 Timeframe

Commencement Date: 1 July 2015
Completion Date: 30 June 2017

1.5 Summary

This is the fourth Project Scope developed specifically for the Central Zone (CZ) of the South Australian Abalone Fishery and the second two-year Project Scope for this Zone. This CZ abalone research program is guided by the harvest strategy described in the Management Plan for the fishery with previous rationalisation of work programs and reporting frameworks across years retained. Consequently, not all activities are undertaken in the CZ in all years. The scope of work for 2015/16 and 2016/17 specifically addresses strategic research priorities for the fishery, which include: ongoing application, implementation and review of the harvest strategy, management of a GPS/depth logger program and fine-scale fishery assessments. The primary outputs are (1) a stock assessment report for greenlip (GL) and blacklip (BL) in the CZ (due 30/06/2016); (2) a stock status report for GL and BL in the CZ (due 30/06/2017); (3) a biomass estimate from a leaded-line survey in the Tiparra Reef and West Yorke Peninsula spatial assessment units in 2015/16; and (4) 'up-to-date' catch and effort summaries in the form of PowerPoint presentations provided to PIRSA and industry at port meetings to inform TACC discussions.

2. PROJECT DESCRIPTION

2.1 Background

There are four primary components to the research provided by SARDI Aquatic Sciences to PIRSA in support of the CZ abalone fishery. These are:

- (1) collect, collate and analyse commercial catch-effort and catch length-frequency data on both species across the fishery;
- (2) collect, collate and analyse biological data on both species across the fishery;
- (3) fishery-independent surveys of the abundance of greenlip at sites located across the fishery; and
- (4) provision of comprehensive reports that assess relevant fishery-dependent and fishery-independent data, assess fishery performance against performance indicators defined in the Management Plan and detail resource status.

2.2 Need

This project addresses the need for scientific information to support sustainable utilisation of abalone in the South Australian Abalone Fishery and application of the harvest strategy identified in the Management Plan for the fishery.

2.3 Objectives

- 2.3.1** Provide PIRSA with a stock assessment report for GL and BL in the CZ;
- 2.3.2** Provide PIRSA with a stock status Report for GL and BL in the CZ;
- 2.3.3** Provide PIRSA with a biomass estimate from leaded-line surveys in the Tiparra Reef and West Yorke Peninsula spatial assessment units;
- 2.3.4** Provide PIRSA with scientific advice to support the sustainable management of the CZ of the South Australian Abalone Fishery, including TACC setting in accordance with the Management Plan;
- 2.3.5** Assist PIRSA with implementation of the Abalone Fishery Management Plan; and
- 2.3.6** Provide PIRSA and industry with 'up-to-date', catch and effort data summaries to support TACC setting.

2.4 Methods

- 2.4.1** Collect, collate, store and analyse commercial catch-effort and catch length-frequency data, including those from GPS/depth loggers on both species across the fishery;
- 2.4.2** Collect, collate, store and analyse biological information for GL and BL representative of the key populations;
- 2.4.3** Collect, collate, store and analyse the time-series of abundance for GL at sites across the fishery;
- 2.4.4** Apply Harvest Strategy to determine zonal status for each species using the methods described in the Management Plan; and
- 2.4.5** Document and interpret the research findings.

3. DELIVERABLES

3.1 Service Provided:

3.1.1 Collect, collate and store fishery-dependent (catch and effort) data

Manage a comprehensive fishing-logbook.

Manage a GPS/depth logger program including loan of electronic logging equipment to each vessel.

Enter data received into a secure database.

Administer, maintain and develop the database.

Securely store original logbook returns.

Validate returns, including consultation with fishers to correct errors.

3.1.2 Collect, collate, store and analyse data on the size composition of the commercial catch

Receive data on the size composition of the commercial GL and BL catch from licence holders, ensuring they are aware of the need for representative sampling of the major populations.

3.1.3 Collate, store and analyse biological data representative of the major abalone populations

Validate, store and analyse biological data across the fishery.

3.1.4 Collate, store and analyse abundance-survey data for GL at sites across the fishery

Maintain and develop the time series of the abundance and size composition of GL in the CZ. Undertake a leaded-line survey to estimate the biomass of GL in the Tiparra Reef and West Yorke Peninsula Spatial Assessment Units.

3.1.5 Management and quality assurance of research data

Provide effective storage and management of research data.

3.1.6 Apply Harvest Strategy

Using the approach detailed in the Management Plan, determine the risk of overfishing for GL and BL in each Spatial Assessment Unit and, subsequently, determine zonal status for each species.

3.1.7 Analysis and interpretation

Interpret the results of the research program in reports and presentations.

3.1.8 Catch/effort/survey summaries

Provide presentations summarising year-to-date information for both species across the fishery at TACC and other relevant meetings.

3.1.9 Fishing strategies

Assist PIRSA and Industry with the implementation of fine-scale management for the fishery.

Assist PIRSA with implementation of the Abalone Fishery Management Plan.

Assist PIRSA and Industry with the identification of management options for the fishery.

3.1.10 Project management

Ongoing supervision of projects.

New project development and implementation.

Management of deliverables.

Quality control.

Liaise with PIRSA, industry, State and Commonwealth agencies on matters relevant to the fishery.

Participate in industry development initiatives.

Work with PIRSA and stakeholders to identify research priorities and to develop and implement new projects.

Collaborate on proposed/existing projects

Update relevant chapter in status report for SA fisheries

3.2 Outcomes:

The principal outcome will be scientific advice to support sustainable management of the CZ abalone fishery.

3.3 Outputs and Extension:

There are three principal output and extension elements:

- (1) A stock assessment report will be provided for the CZ by 30 June 2016;
- (2) A stock status Report will be provided for the CZ by 30 June 2017; and
- (3) 'Up-to-date', catch and effort data summaries (PowerPoint presentations) for GL and BL will be provided to PIRSA and at 'Port Meetings' to support TACC setting

4. FUNDING ARRANGEMENTS

4.1 PROJECT COSTING POLICY

This Research Project Scope and Costing has been costed at a Discounted rate.

4.2 PROJECT COST

PROJECT COST	2015/16	2016/17	TOTAL (\$) Ex GST
SUBTOTAL	217,120	217,121	434,241
GST	NO GST	NO GST	NO GST
TOTAL	217,120	217,121	434,241

4.3 MILESTONE AND PAYMENT SCHEDULE

Date	Milestone	Payment (\$) Ex GST
31 December 2015	First Half Payment 2015/16 SLA	108,560
31 May 2016	Second Half Payment 2015/16 SLA	108,560
30 June 2016	Central Zone stock assessment Report	
31 December 2016	First Half Payment 2016/17 SLA	108,560
31 May 2017	Second Half Payment 2016/17 SLA	108,561
30 June 2017	Central Zone stock status Report	
SUBTOTAL		434,241
GST		NO GST
TOTAL COST		434,241

5. PROJECT STAFF

Staff (if identified)	Position	2015/16 FTE Commitment	2016/17 FTE Commitment	Funded/ In-Kind
S Mayfield	Principal Scientist	0.25	0.10	Funded
A Hogg	Research Officer	0.25	0.00	Funded
J Carroll	Research Scientist	0.05	0.05	Funded
G Ferguson	Research Scientist	0.55	0.40	Funded
P Hawthorne	Research Officer	0.10	0.00	Funded
TOTAL		1.20	0.55	

SCHEDULE 2 - PROJECT COSTING

1. PROJECT COST SUMMARY

Cost	Detail	2015/16 Total (\$) Ex GST	2016/17 Total (\$) Ex GST
Salaries	1.20/0.55fte	148,090	72,582
Operating			
Logbook program		4,191	4,284
Payment to industry for surveys		0	0
Fieldwork		62,303	29,090
Laboratory		0	0
Travel		250	250
Office & communication		700	400
Capital equipment		0	0
SARDI overhead		76,326	35,775
SARDI inkind		54,661	25,679
Total Cost		346,521	168,060
Revenue – PRICE			
PIRSA F&A	84%	291,860	142,381
Total Revenue		291,860	142,381
SARDI Investment	16%	54,661	25,679

Breakdown explanations:

Logbook Program

Entry, validation, management and reporting of data

Payment to industry for surveys

Direct costs of using industry vessels and staff to undertake surveys

Fieldwork

Fieldwork costs including vessels, travel and OHS requirements

Laboratory

Costs for processing samples

Travel

Costs for attending meetings with industry, PIRSA F&A and stakeholders

Office and communication

Stationery, communications and publications

Capital equipment