

FISHERIES  
& AQUACULTURE  
**PIRSA**

# PIRSA Fisheries & Aquaculture Cost Recovery Program

SOUTHERN ZONE ABALONE FISHERY

FOR THE YEAR ENDING AT 30 JUNE 2019



**Government  
of South Australia**

Primary Industries  
and Regions SA

# Table of Contents

Summary Table.....	3
Program Daily Charge Out Rate .....	4
Introduction .....	5
Management Objectives 2016/17 to 2018/19 .....	6
Fisheries Policy and Management Program .....	8
Legal Services Program.....	11
Leasing and Licensing Program.....	14
Directorate Program.....	17
Fisheries Compliance Operations Program .....	19
Stock Assessment and Monitoring Program .....	27

Information current as of November 2017

© Government of South Australia 2017

## Disclaimer

PIRSA and its employees do not warrant or make any representation regarding the use, or results of the use, of the information contained herein as regards to its correctness, accuracy, reliability and currency or otherwise. PIRSA and its employees expressly disclaim all liability or responsibility to any person using the information or advice.

## Summary Table Abalone Fishery – Southern Zone

2017-18 (\$)	PROGRAM AREA	2018-19 (\$)	COMMENTS	DAYS	FTE
<b>RESEARCH COSTS</b>					
125,510	Stock Assessment and Monitoring	270,169	Year 2 of 2 year SARDI project scope.		
2,972	Economic Assessment	3,062	As per contracted services 2018-19		
231	Other Research	235	Contribution towards Threatened and Endangered Species		
<b>PIRSA RELATED COSTS</b>					
14,271	Policy and Management	14,580	Same level of service as previous year	15.43	0.08
1,718	Legislation	1,755	Same level of service as previous year	1.71	0.01
6,197	Licensing	6,334	Same level of service as previous year	8.57	0.04
2,789	Directorate	2,851	Same level of service as previous year	3.09	0.02
122,400	Compliance	125,100	Same level of service as previous year	100.00	0.50
4,210	Quota Monitoring	4,306	Same level of service as previous year	6.86	0.03
5,400	VMS	5,400	VMS cost is \$900 per licence holder	6.00	0.03
<b>OTHER COSTS</b>					
8,881	FRDC	8,881	Same level of contribution as previous year		
<b>294,579</b>	<b>TOTAL</b>	<b>442,673</b>			

<b>Licence Fees 2018-19</b>		<b>\$</b>
SZ Base Fee		15,476
SZ Unit Fee		278
<i>Licence Fees 2017-18</i>		
SZ Base Fee		10,539
SZ Unit Fee		183.60

## Program Daily Charge Out Rate

DAILY RATE (\$)	Compliance	Quota	Directorate	Legislation	Licensing	Policy
<b>Total Employee Expenses</b>	622	373	588	700	470	595
<b>Total Operating Expenses</b>	332	62	139	126	72	153
<b>Depreciation and Capital Costs</b>	79	4	0	0	8	0
<b>Total Other Expenses*</b>	217	189	197	197	189	197
<b>TOTAL DAILY RATE</b>	<b>1,251</b>	<b>628</b>	<b>924</b>	<b>1,024</b>	<b>739</b>	<b>945</b>

**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	Leasing and Licensing
<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>Implement fine spatial scale management framework</p> <p>Ensure sufficient data and information is available to implement harvest strategy and fine scale spatial management.</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 and fine scale spatial management framework.</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>Implement review of season and reporting requirements.</p> <p>Lead review of fishery management plan in 2017/18</p> <p>Assess the need and implement a split of Rivoli Bay into two SAUs if appropriate</p>	<p>Implement compliance program, informed by risk assessment.</p> <p>Provide compliance advice in the monitoring of fine spatial scale management framework</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>Provide scientific advice, in the monitoring of fine spatial scale management framework</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>Provide licensing advice, in the implementation of fine spatial scale management framework</p> <p>Support review of fishery management plan in 2017/18</p>

Long term objectives	Outcomes 2016/17 to 2018/19	Fishery Policy and Management	Compliance	Assessment and Research	Leasing and Licensing
		<p>Work with Industry to evaluate the risks and mitigation measures for shucking at sea.</p> <p>Assist in the transition of the fishery to a GPS tracker and data logger system of gathering fishery independent data.</p>			
Minimise impacts on the ecosystem	Disease risk management	<p>Undertake aquatic animal health risk assessment</p> <p>Provide management advice on fish kills, as required</p>	Provide support with investigation of fish kills, as required	Provide scientific advice on aquatic animal health risks and support with investigation of fish kills	
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>

# Fisheries Policy and Management Program

SOUTHERN ZONE ABALONE FISHERY

FOR THE YEAR ENDING AT 30 JUNE 2019

## All enquiries

### Program Manager

Jon Presser, General Manager Fisheries Policy and Management Unit  
Telephone: 08 8429 0588 Email: [Jon.presser@sa.gov.au](mailto:Jon.presser@sa.gov.au)



# 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 Deputy Chief Executive on matters relating to fisheries.
- Represent the Executive Director, Fisheries & Aquaculture 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 Southern 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

- Prepare day-to-day necessary legislative instruments and/or advice required for the management of the Southern 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 Southern Zone Abalone Fishery.
- Prepare policies to support fisheries management.
- Prepare submissions to enable regular assessment of the Southern 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 Southern Zone Abalone Fishery

## 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 (\$)
Policy and Management	15.43	0.08	14,580

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

# Legal Services Program

SOUTHERN ZONE ABALONE FISHERY

FOR THE YEAR ENDING AT 30 JUNE 2019

## All enquiries

### Program Manager

Lambertus Lopez, Manager, Legal and Legislative Programs  
Telephone: 08 8429 0527 Email: [Lambertus.lopez@sa.gov.au](mailto:Lambertus.lopez@sa.gov.au)

## Program Summary

The Legal and Legislative program of PIRSA Fisheries & Aquaculture Directorate provides legal and governance services to the Executive Director Fisheries and Aquaculture, Director Operations and all other groups within 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 or governance issues relating to proposed decisions 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 Leasing and Licensing) 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, Ministerial delegations, 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 Executive Director Fisheries & Aquaculture 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 and initiatives used to manage risks and reflect the anticipated split of effort and associated costs.

Strategy/Activities	Days	FTE	Cost (\$)
Legislation	1.71	0.01	1,755

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

# Leasing and Licensing Program

SOUTHERN ZONE ABALONE FISHERY

FOR THE YEAR ENDING AT 30 JUNE 2019

## All enquiries

### Program Manager

Rob Falco, Manager, Leasing and Licensing  
Telephone: 08 8204 1374 Email: [Rob.Falco@sa.gov.au](mailto:Rob.Falco@sa.gov.au)

## Program summary

The Fisheries Leasing & Licensing section of PIRSA Fisheries & Aquaculture is responsible for the management of Licensing and Quota Monitoring 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 reports as required.

### 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 licence fees.
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 Deputy Chief Executive, Fisheries and Aquaculture and the Executive Director, Fisheries and Aquaculture.
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 and initiatives used to manage risks and reflect the anticipated split of effort and associated costs.

Strategy/Activities	Days	FTE	Cost (\$)
Leasing and Licensing	8.57	0.04	6,334
Quota Monitoring	6.86	0.03	4,306

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



# Directorate Program

SOUTHERN ZONE ABALONE FISHERY

FOR THE YEAR ENDING AT 30 JUNE 2019

## All enquiries

### Program Manager

Chiara Ciui, Business Manager

Telephone: 08 8429 0378 Email: [Chiara.ciui@sa.gov.au](mailto:Chiara.ciui@sa.gov.au)

## 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. Meet with industry on matters 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 Deputy Chief Executive, Executive Director Fisheries and Aquaculture, 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	2,851

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

# Fisheries Compliance Operations Program

SOUTHERN ZONE ABALONE FISHERY

FOR THE YEAR ENDING AT 30 JUNE 2019

## All enquiries

### Program Manager

Melanie Snart  
Regional Manager  
Telephone: 0428 101 198

Email: [melanie.snart@sa.gov.au](mailto:melanie.snart@sa.gov.au)

### State Coordinator

Chris Amezdroz  
Fisheries Officer  
Telephone: 0409 646 100

Email: [chris.amezdroz@sa.gov.au](mailto:chris.amezdroz@sa.gov.au)

## Compliance Program Summary

PIRSA Fisheries and Aquaculture teams coordinate compliance activities (outputs) to build awareness and behavioural outcomes that have a long term beneficial impact in the Southern Zone Abalone (SZA) Fishery. The objective of the compliance activities (outputs) is to minimise the risks to aquatic resource sustainability, resource allocation and access rights and ultimately commercial economic viability.

The outputs of the SZA Compliance Plan are primarily delivered by teams located in Mount Gambier and Kingston. Support is also provided as required from the other Regional Operation teams, Offshore Patrol Operations team and the Intelligence and Strategic Support team.

The coordination of the compliance outputs is guided by an industry specific compliance plan which was developed in consultation with the Southern Zone Abalone Industry. These outputs are aimed at educating fishers, deterring opportunistic and financially motivated crimes, enforce the rules and regulations and reducing overall compliance risks to resource sustainability.

A diagrammatic representation of the PIRSA compliance model is shown as a Program Logic Model (Appendix 1). This identifies the high level relationships and intended causal links between fisheries compliance inputs, outputs and intended program outcomes.

The elements of the compliance Program Logic Model are also linked to a new assessment tool (Maturity Model) that was developed during National Fisheries Compliance Committee (NFCC) workshops. The Maturity Model allows a weight of evidence approach to assess the efficacy of the compliance outputs and the outcomes achieved. This is designed to support decisions that achieve a shared view between SZA industry and PIRSA and the existence of a mature sustainable fishery.

## Compliance Inputs

Compliance inputs are the resources and constraints that frame the delivery of the compliance outputs or activities. This covers policies, legislative and regulatory frameworks, program funding, human resourcing, information technology systems and research. The compliance inputs for the SZA fishery are identified herein.

## Legislative and Regulatory Framework

*Fisheries Management Act 2007*

*Fisheries Management (Abalone Fisheries) Regulations 2006*

*Fisheries Management (Fish Processors) Regulations 2007*

*Fisheries Management (General) Regulations 2007 Schedule 2*

*Fisheries Management (Demerit Points) Regulations 2009*

*Fisheries Management (Vessel Monitoring Scheme) Regulations 2007*

Abalone Fisheries Management Plan

Boarding Vessels at Sea Code of Practice

## Program Effort, Funding & Resources

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 changed 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 Southern 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. In collaboration with industry a range of initiatives and new strategies aimed at continuous improvements in the QMS integrity have resulted in an overall reduction of the compliance program of over 45% (~\$104k) over the past seven years. In addition, a further 231 days (~\$280k) of recreational Abalone compliance effort was delivered into the fishery. The table below includes the number of days predicted to reflect the anticipated split of effort and associated costs to deliver the 2018/19 compliance outputs.

Table 1: SZA - Effort Allocated Against Compliance Outputs

Compliance Outputs	Days	FTE	Cost (\$)
Education Awareness	50	0.25	62,550
Effective Deterrence, Monitoring & Surveillance	40	0.20	50,040
Enforcement	10	0.05	12,510
<b>TOTALS</b>	<b>100</b>	<b>0.50</b>	<b>125,100</b>

**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.

## IT Systems, Technology & Data

Fisheries and Aquaculture Compliance Operations are supported by a number of electronic systems which continue to be refined to allow optimum delivery of information in a reliable and timely way. Some of the key systems that assist to drive the compliance outputs include:

- IBase and Analyst Notebooks (Intelligence system)

- FACT (Fisheries and Aquaculture Information Collection Tool)
- Timewise (Effort Reporting Tool)
- Evidence.com (Video Evidence Collection Tool)
- PIIMS (Primary Industries Information Management System – Quota and Licence Information)
- eCatch
- eBrief (prosecutions system)
- Commercial Fishing Application
- Vessel Monitoring System (VMS).

## Compliance Delivery Outputs

The coordination of compliance outputs is guided by an industry specific compliance plan which was developed in consultation with the Southern Zone Abalone Industry. The plan ensures compliance effort is intelligence driven, efficient, and cost effective and outcome focused. The compliance plan comprises three core outputs (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. The details are identified herein.

### Intelligence

- Information collection
- Analysis and testing of information voracity
- Provide recommendations for targeted operations
- Develop strategic assessments.

### Education and Awareness

- 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 programs to facilitate discussion of topics such as compliance inspection outcomes and issues impacting the Southern Zone Abalone fishery
- Ongoing one on one education during inspections.

### Effective Deterrence, Monitoring and Surveillance

- 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 that give rise to appropriate enforcement action
- Respond to reported incidents/issue
- Communicate activities in formal reporting.

## Enforcement

- Investigate reports of non-compliance and where appropriate take action
- Issue expiations, cautions and court enforced actions
- Communicate enforcement outcomes in formal reporting
- Service of suspension.

## Risk Assessment and Management (work priorities)

PIRSA use information obtained from intelligence, monitoring, surveillance and enforcement processes to assess compliance and sustainability risks to the fishery. This subsequently informs work priorities for service delivery. The priorities are prone to change during the fishing season however the following are currently relevant to the Southern Zone Abalone Fishery.

1. Quota Management System Integrity
2. Take Undersize Abalone
3. Pest and Disease Incursion
4. Illegal Unreported Unregulated Take.

## Anticipated Compliance Outcomes

PIRSA will assess the efficacy of the compliance program by evaluating particular outcomes. The outcomes will be in the form of stakeholder awareness, behavior and impact. The evaluation in the form of a maturity model will be used to establish an order of magnitude to support decision making and progress towards a common view of a mature fishery and ultimately co-management.

## Awareness

Awareness is a short term outcome that is necessary to prevent unnecessary use of enforcement activities. Awareness constitutes an improved community and stakeholder attitude towards compliance, an improved understanding of legislation and regulation, improved stakeholder buy-in and participation and community support for offence detection. The attributes for each are articulated herein;

### Improved community and stakeholder attitude

- Confidence in compliance ability to use statutory and discretionary powers appropriately
- Understanding of the public value of compliance
- Comprehension of services delivered by compliance against the objects of The Act
- Confidence in compliance ability to sustain resource allocation equity amongst direct resource users.

### Improved understanding of legislation and regulation

- Understanding fishing obligations
- Legislation and regulation is considered simple and fair to follow.

### Improved stakeholder buy-in and participation

- Actively engage with compliance in development of risk assessments, reporting frameworks, reviewing rules
- Collaborative problem solving.

### Community support for offence detection and sanctions

- Actively provide relevant information
- Industry driven initiatives and evidence of self-regulation.

## Behaviour

Successful outcomes and long term sustainable fisheries are ultimately driven by behavior that is in the interest of sustainability, ongoing economic viability and public value. The behavioural outcomes that are important to PIRSA include stewardship, voluntary compliance and proactive approaches to compliance issues. The attributes for each are articulated herein.

### Stewardship

Stewardship is the aggregation of a number of actions and behaviours where industry is entrusted with the management of the Southern Zone Abalone resource and the associated compliance of its members within the regulatory and legislative input constraints.

Some of the behaviours of stewardship include:

- An acceptance of change from traditional approaches and attitudes to strong partnerships between government, industry and key stakeholder groups
- An established mutual trust and respect between government, industry and key stakeholders
- An alignment of values that gives rise to industry and PIRSA communicating the same message focusing on the sustainability of the aquatic resource and associated ongoing economic viability as the primary drivers
- PIRSA compliance appears seamless to industry. Inputs and outputs are shared. Joint investigations and national problem solving actions are taken by all, collectively and with representative groups engaged in partnership
- Minimal conflict exists with other stakeholder groups or industry has clear mechanisms or a demonstrated capacity to address the conflict.

### Voluntary compliant behavior

- All appropriate attempts to understand and adhere to rules and regulations are made by industry.
- PIRSA Fisheries and Aquaculture compliance is contacted when industry is unable to meet regulatory requirements so an alternative legal solution can be arranged
- Industry members report other commercial fishers who fail to meet regulatory requirements.

### Proactive approaches to compliance issues (incl. participation in governance process)

- Use established industry structures to collaborate on compliance issues to deliver the shared objective of sustainability and public value
- Actively participate and respond to compliance issues
- Highlight deficiencies in compliance programs and suggest improvements
- Influence other industry participants to promote voluntary compliance.



## Impact

The awareness and behavior changes will lead to a longer term impact that is reflected in economic and ecological sustainability, broad confidence in the allocation of Abalone between user groups, a confidence in the ability of PIRSA to manage Abalone resources and an industry that is free from the influence of serious and organised crime. The attributes for each impact is articulated herein.

### Ecological and economic sustainability of aquatic resources

- SARDI stock status assessments reflect an ecological sustainability
- Industry reflect economic sustainability.

### Confidence and equity in resource allocation and access

- Recreational, commercial and Aboriginal fishing stakeholders are confident that the division of Abalone resources is fair and equitable
- Investment support continues for ecologically and economically sustainable harvest of Abalone.

### Reduced opportunity for recidivist offenders and Serious Organised Crime to exploit aquatic resources

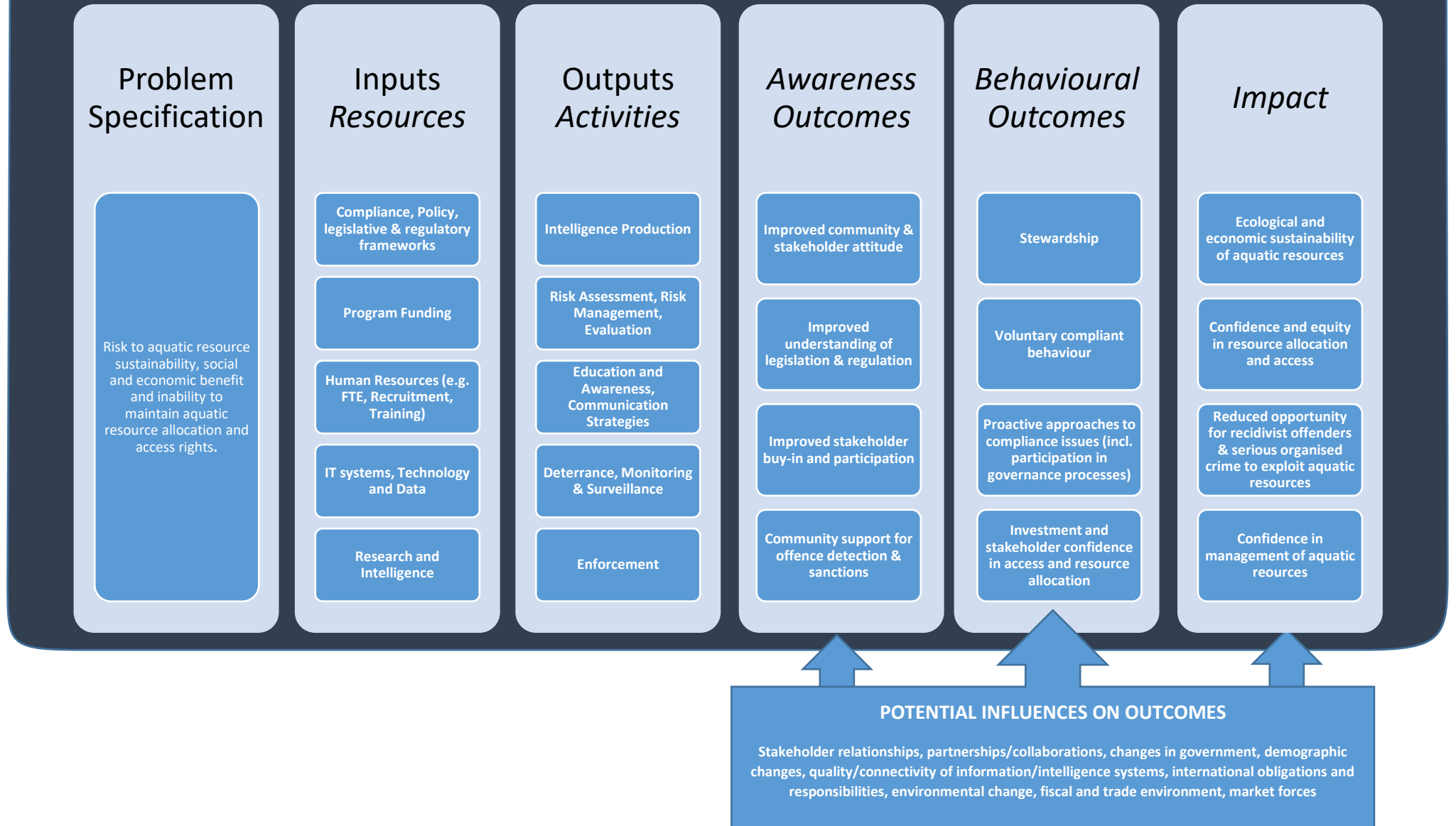
- Regulators, law enforcement and industry have closed opportunities for Serious Organised Crime in the Abalone industry
- Industry has not had any impact resulting from Serious Organised Crime activities for a significant period of time.

### Confidence in management of aquatic resources

- Positive public perception in the management of Abalone stocks
- Positive consumer perception for commercially harvested Abalone
- An absence of adverse industry publicity.

Appendix 1: PIRSA Fisheries and Aquaculture Compliance Program Logic Model

## Ecologically Sustainable Development (ESD) and Risk Management Framework



# Stock Assessment and Monitoring Program

SOUTHERN ZONE ABALONE FISHERY

FOR THE YEAR ENDING AT 30 JUNE 2019

## All enquiries

### Client Contact Details

Sean Sloan

A/Executive Director PIRSA Fisheries & Aquaculture

Telephone: 8429 0111 Email: [Sean.sloan@sa.gov.au](mailto:Sean.sloan@sa.gov.au)

### Principal Investigator

Prof Gavin Begg

Research Chief, SARDI Aquatic Sciences

Telephone: 08 8207 5401 Email: [Gavin.begg@sa.gov.au](mailto:Gavin.begg@sa.gov.au)

# SCHEDULE 1 - RESEARCH PROJECT SCOPE

## 1. PROJECT DETAIL

### 1.1 Title South Australian Abalone Fishery (Southern 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 SARDI Contact Details

Name: Prof Gavin Begg  
Position: Research Chief  
Address: SARDI Aquatic Sciences  
Email: [Gavin.Begg@sa.gov.au](mailto:Gavin.Begg@sa.gov.au)  
Telephone: 8207 5401  
Facsimile: 8207 5406

### 1.4 Timeframe

Commencement Date: 1 July 2017  
Completion Date: 30 June 2019

### 1.5 Summary

This is the fifth Project Scope developed specifically for the Southern Zone (SZ) of the South Australian Abalone Fishery. Recent Project Scopes for this Zone were for two years to rationalise work programs and reporting frameworks across years. Consequently, not all activities are undertaken in the SZ in all years. This two-year scope of work for 2017/18 and 2018/19 maintains that work program and reporting cycle and specifically addresses strategic research priorities for the fishery, which include: ongoing application, implementation and review of the harvest strategy; surveys of key fishing areas; implementation of fine-scale management and fine-scale fishery assessments.

The primary outputs are (1) a stock status report for blacklip (BL) in the SZ (due 30/06/2018); (2) a stock assessment report for greenlip and BL in the SZ (due 30/06/2019); and (3) 'year-to-date' catch and effort summaries for greenlip (GL) and BL 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 SZ 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 both species at sites located across the fishery; and
- (4) provision of comprehensive reports that assess relevant fishery-dependent and fishery-independent data and 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 status report for BL in the SZ;
- 2.3.2** Provide PIRSA with scientific advice to support the sustainable management of the SZ of the South Australian Abalone Fishery, including TACC setting in accordance with the Management Plan and the review of the Harvest Strategy;
- 2.3.3** Assist PIRSA and industry with implementation of finer-scale, spatial management of the fishery; and
- 2.3.4** Provide PIRSA and industry with 'year-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 on both species across the fishery;
- 2.4.2** Collect, collate, store and analyse biological information for BL representative of the key populations;
- 2.4.3** Collect, collate, store and analyse the time-series of abundance for BL at sites across the fishery (noting no surveys conducted in this SLA);
- 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 program.

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**  
Obtain data on the size composition of the commercial BL catch, ensuring licence holders 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 and BL at sites across the fishery**  
Maintain and develop the time series of the abundance and size composition of BL and GL in the SZ. Surveys to be undertaken in 2018/19 only.
- 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 fine-scale management of 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, including the review of the Harvest Strategy for the fishery.  
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 SZ abalone fishery.

### 3.3 Outputs and Extension:

There are three principal output and extension elements:

- (1) a stock assessment will be provided for the SZ by 30 June 2019
- (2) a stock status report for BL will be provided for the SZ by 30 June 2018; and
- (3) 'year-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	TOTAL FUNDED	TOTAL IN KIND	TOTAL PROJECT COST
SUBTOTAL	395,679	97,749	493,428
GST	NO GST	NO GST	NO GST
TOTAL	395,679	97,749	493,428

### 4.3 MILESTONE AND PAYMENT SCHEDULE

Date	Milestone	Payment (\$) Ex GST
31 December 2017	Payment 1 of 2017/18 SLA	62,755
31 May 2018	Payment 2 of 2017/18 SLA	62,755
30 June 2018	Southern Zone BL stock status report	
31 December 2018	Payment 1 of 2018/19 SLA	135,084
31 May 2019	Payment 2 of 2018/19 SLA	135,085
30 June 2019	Southern Zone stock assessment report	
<b>SUBTOTAL</b>		<b>395,679</b>
<b>GST</b>		<b>NO GST</b>
<b>TOTAL COST</b>		<b>395,679</b>

## 5. PROJECT STAFF

Staff	2017/18 FTE	2018/19 FTE
Principal Scientist	0.10	0.30
Research Officer	0.35	0.65
Research Scientist	0.1	0.25
<b>TOTAL</b>	<b>0.55</b>	<b>1.20</b>

## SCHEDULE 2 - PROJECT COSTING

### 1. PROJECT COST SUMMARY

Cost	Detail	2017/18 Total (\$) Ex GST	2018/19 Total (\$) Ex GST
Salaries	0.55fte/1.20fte	\$65,734	\$155,537
<b>Operating</b>			
Logbook program		\$3,220	\$3,316
Payment to industry for surveys			
Fieldwork		\$4,700	\$22,100
Laboratory			
Travel		\$15,300	\$7,950
Office & communication		\$400	\$700
Capital equipment			
SARDI overhead		\$36,156	\$80,565
SARDI inkind		\$30,203	\$67,546
<b>Total Cost</b>		<b>\$155,713</b>	<b>\$337,715</b>
<b>Revenue – PRICE</b>			
PIRSA F&A	80%	\$125,510	\$270,169
<b>Total Revenue</b>		<b>\$125,510</b>	<b>\$270,169</b>
<b>SARDI Investment</b>	20%	<b>\$30,203</b>	<b>\$67,546</b>

#### 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*



## 2. INKIND CONTRIBUTIONS

Agency	Staff (if identified)	Position	FTE Commitment	Amount
SARDI	n/a	n/a	n/a	97,749

## 3. INTELLECTUAL PROPERTY

AGENCY	\$ CONTRIBUTION	% SPLIT
SARDI		
PIRSA		
TOTAL		