

PIRSA

Cost Recovery Implementation Statement for the Blue Crab Fishery

1 July 2021 to 30 June 2022



**Government
of South Australia**

Department of Primary
Industries and Regions

Cost Recovery Implementation Statement

Information current as of February 2021

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Introduction

Wild catch commercial fisheries in South Australia are managed in accordance with the Department of Primary Industries and Regions (PIRSA) Cost Recovery Policy. This policy requires commercial fishery licence fees to fund services related to commercial fisheries management costs. PIRSA Fisheries and 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 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.

In 2018, the Government made an election commitment to initiate an independent review of the cost recovery policy of PIRSA as applied to the fisheries and aquaculture sectors. An independent consultant was engaged to undertake the review and consulted with all fisheries and aquaculture sector representatives and representatives from PIRSA. The final report, with 11 recommendations, was provided to PIRSA in November 2018 and all recommendations were accepted by Government. The report observed that PIRSA's management of both the fisheries and aquaculture sectors had significantly improved since 2015 in terms of increasing transparency and accountability as well as taking significant strides to reduce administrative burden, through the use of longer term cost recovery agreements between PIRSA and individual industry sectors. Implementation of the 11 recommendations from the independent review will further enhance efficiency and transparency of PIRSA cost recovery approach to the Fisheries and Aquaculture sectors. Information relating to the Government response to the recommendations can be found at

https://www.pir.sa.gov.au/fishing/commercial_fishing/pirsa_services_to_fisheries_industry.

Consistent with Principle 7 of the PIRSA Cost Recovery Policy, an annual schedule of meetings for stakeholder engagement and support for the cost recovery process in relation to commercial fisheries is outlined below:

Annual schedule of meetings		
Date	Activity	Parties
Sept/Oct	Review long-term objectives for fishery and update if necessary. Identify priority outcomes for upcoming financial year.	PIRSA and industry association
October	Develop policy, research and compliance work programs in readiness for discussions (fisheries managers with industry) in November.	PIRSA
November	Discuss proposed programs with relevant industry associations and reach agreement on programs for the upcoming period. Industry associations to consult with wider industry.	PIRSA and industry association
February	Formal meetings with industry associations to finalise work programs and summarise costs.	PIRSA and industry association
March	Submit proposed licence fees to Minister. Prepare Ministerial Notice briefing to vary and prescribe lease and licence fees for the next financial year.	PIRSA and government agencies
June	Invoices sent for annual licence fees.	PIRSA

* Dates above are indicative only and may vary due to unforeseen circumstances that may arise throughout any year.

** If a four-year agreement has been adopted, the Cost Recovery Implementation Agreement (CRIA) will determine that an annual meeting will occur to enable annual stakeholder engagement.

Summary Table

2020-21 (\$)	PROGRAM AREA	2021-22 (\$)	COMMENTS	DAYS	FTE
RESEARCH AND ASSESSMENT					
159,976	Stock Assessment and Monitoring	163,096	1 year research project scope including Pot Transition work to be included in 2021-22. Confirmed by industry 12.4.2021		
7,011	Economic Assessment	7,221	As per contracted services 2021-22		
400	Other Research	411	Contribution towards Threatened and Endangered Species		
PIRSA RELATED COSTS *					
38,880	Fisheries Management	34,320	Same level of service as previous year	40	0.20
10,510	Legislation	9,240	Same level of service as previous year	10	0.05
7,790	Licensing	9,300	Same level of service as previous year	10	0.05
3,900	Directorate	3,412	Same level of service as previous year	4	0.02
76,995	Compliance	73,809	Same level of service as previous year	59	0.30
17,628	Quota Monitoring	22,048	Same level of service as previous year	26	0.13
323,090	TOTAL	322,857			

Licence Fees 2021-22 (\$)	
Base Fee	3,218
Unit Fee (Blue Crab Pot)	27.00
Unit Fee (MSF Net)	29.75
Total of Licences	9
<i>Licence Fees 2020-21 (\$)</i>	
<i>Base Fee</i>	<i>3,215</i>
<i>Unit Fee (Blue Crab Pot)</i>	<i>27.00</i>
<i>Unit Fee (MSF Net)</i>	<i>29.75</i>
<i>Total of Licences</i>	<i>9</i>

Program Daily Charge Out Rate

	DAILY RATE (\$)					
	Compliance	Quota	Directorate	Legislation	Licensing	Fisheries Management
Total Employee Expenses	640	424	624	720	503	622
Total Operating Expenses	319	125	90	65	127	98
Deprecation and Capital Costs	69					
Total Other Expenses*	223	299	138	138	299	138
TOTAL DAILY RATE	1251	848	853	924	930	858

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.

Fishery Management Objectives

Long term objectives	Outcomes	Fisheries Management	Compliance	Assessment and Research	Leasing and Licensing
Ensure the Blue Swimmer Crab resource is harvested within ecologically sustainable limits.	<p>Implementation of Management Plan under <i>Fisheries Management Act 2007</i>.</p> <p>Maintain integrity of the quota system.</p> <p>Support any strategic research activities within the BCF.</p>	<p>Implement plan, including TACC setting and updated Harvest Strategy protocols.</p> <p>Support progression of eCatch reporting arrangements.</p> <p>Support any strategic research activities within the BCF, including industry priority investigating transition from research pots to commercial pots for surveys</p>	<p>Implement compliance program, informed by risk assessment.</p> <p>Ensure integrity of quota system.</p>	<p>Conduct FIS consistent with updated Harvest Strategy.</p> <p>Produce FIS advice note and stock assessment report to assess fishery performance, in accordance with Management Plan.</p> <p>Support implementation of outcomes of Harvest Strategy review.</p> <p>Support any strategic research activities within the BCF</p>	<p>Provide ongoing support for licensing, quota and transfer queries.</p>
Allocate access to Blue Swimmer Crab resources to achieve optimum utilisation and equitable distribution to the benefit of the community.	<p>Stock maintenance.</p> <p>Develop management arrangements to mitigate conflict issues between sectors.</p>	<p>Review allocations consistent with Management Plan and allocation policy.</p> <p>Support process to review area of fishery</p>	<p>Implement compliance programs for commercial and recreational fisheries, informed by risk assessment.</p>		

Long term objectives	Outcomes	Fisheries Management	Compliance	Assessment and Research	Leasing and Licensing
Minimise impacts on the ecosystem.	Progress DAWE recommendations under EPBC Act accreditation.	Continue implementation and management of DAWE recommendations through existing programs and reporting.	Implement compliance program, informed by risk assessment.	Produce Overall TEPS report (all fisheries).	
Cost effective and participative management of the fishery.	Effective engagement with industry in accordance with agreed co-management arrangements and communication strategy	Follow co-management arrangements, and timelines including maintaining regular communication with industry representatives.	Support industry by following co-management arrangements, and communication strategy for Blue Crab Fishery.	Support industry by following co-management arrangements, and communication strategy for Blue Crab Fishery.	Provide ongoing support for licensing, quota and transfer queries.

Fisheries Management Program

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Program summary

The Fisheries Management Unit of PIRSA Fisheries and 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 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 Executive Director, Fisheries and Aquaculture, Minister for Primary Industries and Regional Development, Chief Executive and Deputy Chief Executive on matters relating to fisheries
- Represent the Executive Director, Fisheries and Aquaculture 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 (1999) assessment.

Objectives

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

Program strategies and supporting actions and initiatives

Anticipated outcomes

1. Prepare day-to-day necessary legislative instruments and/or advice required for the management of the Blue Crab Fishery (regulations, closure notices, licence conditions, Ministerial exemptions etc).

2. Provide advice to the Minister or his/her delegate on setting total allowable commercial catch and effort levels for the Blue Crab Fishery.
3. Prepare policies to support fisheries management.
4. Prepare submissions to enable regular assessment of the Blue Crab Fishery under the EPBC Act.
5. Prepare annual report to the Australian Government on EPBC Act requirements for the Blue Crab Fishery
6. Support preparation of regular fisheries status reports
7. Develop and maintain day-to-day productive working relationships and outcomes through cooperative management and collaboration with stakeholders.
8. 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 Blue Crab 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.

Activity	Days	FTE	Cost (\$)
Fisheries Management	40	0.20	34,320

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

	Deliverables	Due date
1.	Participate in inter and intra-departmental meetings and workshops on issues relevant to fisheries management.	Ongoing
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.	Ongoing
3.	Liaise within PIRSA, with other government agencies and with industry representatives in implementing decisions relevant to fisheries management.	Ongoing
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.	November 2021
5.	Coordinate consultation with fishery stakeholders through established co-management processes. For TACC setting; <ul style="list-style-type: none"> • Pre TACC presentation of FIS advice • TACC Meeting 	Ongoing April 2021 May 2021
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.	Ongoing
7.	Participate in industry development initiatives related to fisheries management. <ul style="list-style-type: none"> • Facilitate process to consider pot transition in FIS or other agreed processes to refine harvest strategy or management plan. • Support process to review area of fishery 	June 2021 June 2021
9.	Attend to general correspondence and enquiries relevant to the Blue Crab Fishery.	Ongoing
10.	Provide advice to Minister in relation to the management of fisheries and Ministerial correspondence.	Ongoing
11.	Communicate on fisheries management issues to key stakeholder groups and the broader community.	Ongoing

Legal Services Program

Program Manager:

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Program summary

PIRSA Fisheries and Aquaculture Directorate provides legal services to the 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 blue crab 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 and initiatives

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.

Activity	Days	FTE	Cost (\$)
Legislation	10	0.05	9,240

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

Anticipated outcomes

	Deliverables	Due date
1.	Co-ordinate and review 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 delegations, licences, permits, closures or exemption instruments as required under the <i>Fisheries Management Act 2007</i> (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 and review of the cabinet process and working with the Office of Parliamentary Counsel and the Crown Solicitor's Office and other government agencies to ensure that proposed regulatory arrangements are accurately described, drafted and scrutinised before being implemented.	Ongoing
2.	Review licensing arrangements required on an as needs basis to lawfully 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) and policy program to ensure licence conditions are effective and where necessary to implement efficient administrative systems and finalise forms and instruments that are legally sound.	Ongoing
3.	Problem solve and review policy developments together with the provision and co-ordination of legal advisory services in liaison with the Crown Solicitor's office relating to and the lawful 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.	Ongoing
4.	Coordinate applications for Ministerial exemptions under Part 10 Division 1 and Permits under Part 7 Division 2 of the Act and review draft notices.	Ongoing
5.	Additional legal services to support and review, on an as needs basis, the legislative compliance of decision-making documentation created for the Executive Director, Fisheries and 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, carry over of quota arrangements) or new administrative or compliance arrangements (for example, changes to licensing processes, conditions, introduction of closures).	Ongoing
6.	Support compliance for statutory interpretation, problem solving and correspondence advice (per above).	Ongoing

Leasing and Licensing Program

Program Manager:

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Program summary

The Fisheries Leasing and Licensing unit of PIRSA Fisheries and 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 and 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.

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.

Activity	Days	FTE	Cost (\$)
Leasing and Licensing	10	0.05	9,300
Quota Monitoring	26	0.13	22,048

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

	Deliverables	Due date
	Services to directly support the fishery	
1.	Issue and maintain fishery licences.	Ongoing
2.	Database management for licence and licence holder information.	Ongoing
3.	Monitor and support eBusiness systems.	Ongoing
4.	Quota monitoring and management including applying overcatch and undercatch adjustments.	Ongoing
5.	Collect licence fees and associated payments.	Ongoing
5.	Compose and send quarterly instalment notices.	Ongoing
6.	Record and track unpaid invoices.	Ongoing
7.	Compose and send late payment instalment notices for unpaid quarterly instalments.	Ongoing
8.	Draft and issue notices to fishers.	Ongoing
9.	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 licensing and quota, application for licence transfers, boat changes, gear enquiries and fishing regulations.	Ongoing
10.	Regularly update information about licence holders.	Ongoing
11.	Research and prepare documents for public record.	Ongoing
12.	Liaise with government stakeholders to verify the credentials of fishers.	Ongoing
13.	Liaise with PIRSA Fisheries and Aquaculture, SARDI Aquatic Sciences, Crown Solicitors and other state and local agencies on matters relevant to the fishery.	Ongoing
14.	Draft and update licence conditions over the duration of the licensing year as determined by the Executive Director, Fisheries and Aquaculture.	Ongoing
15.	Provide information to licence holders relating to the requirements pursuant to licence administration.	Ongoing
16.	Manage calls from fishers regarding late payment notices, fees and general enquiries about their licences.	Ongoing
17.	Provide support regarding an increased frequency of last minute administrative enquiries from fishers. e.g., master changes, boat variations	Ongoing

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

Directorate Program

Program Manager:

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Program summary

Business Strategy, within the Directorate Unit of PIRSA Fisheries and 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 and Aquaculture Business Strategy unit.

Program strategies and supporting actions and initiatives

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.

Activity	Days	FTE	Cost (\$)
Directorate	4	0.02	3,412

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

Anticipated outcomes

	Deliverables	Due date
1.	Coordinate and facilitate cost recovery processes and program agreements, including liaising with program providers, managers and financial services as required.	Ongoing
2.	Meet with industry on matters relating to cost recovery, licence setting and related policy issues.	Ongoing
3.	Develop and review cost recovery policy, processes and program agreements	Ongoing
4.	Manage major service providers' contractual agreements, and co-management services contractual agreements with industry associations.	Ongoing
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.	Ongoing
6.	Provide advice on procurement and invoicing requirements.	Ongoing
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.	Ongoing
8.	Ongoing review, development and documentation of the cost recovery model, framework, processes and roles.	Ongoing
9.	Meet agreed timeframes on management and administration of external contractual services.	Ongoing
10.	Appropriate management of industry funds and services.	Ongoing
11.	Provide an Annual Report on PIRSA's service delivery of the Cost Recovery agreement to industry Executive Officer.	September

Fisheries Compliance Operations Program

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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 Blue Crab (BSC) 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 BSC Compliance Plan are primarily delivered by teams located in West Beach, Moonta and Yorketown. Support is also provided as required from the Western and Southern Regional Operation teams, Offshore Patrol Operations and the Intelligence and Strategic Support team.

The coordination of the compliance outputs is guided by the compliance program outlined below in the Compliance Delivery Outputs and Outcomes, which was developed in consultation with the BSC 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 BSC industry and PIRSA and the existence of a mature sustainable fishery.

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 BSC fishery are identified herein.

Legislative and regulatory framework

Fisheries Management Act 2007

Fisheries Management (Blue Crab Fishery) Regulations 2013

Fisheries Management (Fish Processors) Regulations 2007

Fisheries Management (General) Regulations 2007 Schedule 2

Fisheries Management (Demerit Points) Regulations 2009

Fisheries Management (Marine Scalefish Fisheries) Regulations 2006

Blue Crab Fisheries Management Plan

Program effort, funding and 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 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 continually reviews the BSC fishery compliance program, gaining efficiencies through data driven compliance activities, targeted operations and re-directing compliance effort where necessary to address any current or emerging issues and risks. It should be noted that for the year ending 30 June 2020, the program required an additional 26 days of effort (~\$33k) above the cost recovered program. The table below includes the number of days predicted to reflect the anticipated split of effort and associated costs to deliver the compliance outputs for 2021/22.

Compliance Outputs	Days	FTE	Cost
Education and Awareness	15	0.08	18,765
Effective Deterrence, Monitoring and Surveillance	30	0.15	37,530
Enforcement	14	0.07	17,514
TOTALS	59	0.30	73,809

Please Note; to comply with Work Health and 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 and 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.

Delivery outputs

The coordination of compliance outputs is guided by an industry specific compliance plan which was developed in consultation with the BSC Industry. The plan ensures compliance effort is intelligence driven, efficient, 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 compliance related risks to the sustainable harvest of Blue Swimmer Crabs. 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 education meetings for new entrants into the fishery (licence holders/ registered masters) and participate in industry days.
- Provide electronic distribution of educational material to fishers and licence holders.
- Ensure all interested parties understand their respective obligations.

- Develop Industry communication and 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.

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 change of ownership at fish processing premises.
- Ensure information from mandated data loggers is being obtained by SARDI.
- Conduct intelligence driven operations and use 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 and caution notices 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 risks to the fishery. This subsequently informs work priorities for service delivery. The priorities are prone to change during the year however the following are currently relevant to the Blue Swimmer Crab Fishery.

1. Quota Management System Integrity.
2. Fish in closed areas

Anticipated 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 and 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 Blue Swimmer Crab 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 behaviour

- 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 behaviour changes will lead to a longer term impact that is reflected in economic and ecological sustainability, broad confidence in the allocation of Blue Swimmer Crab between user groups, a confidence in the ability of PIRSA to manage Blue Swimmer Crab 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 Blue Swimmer Crab resources is fair and equitable.
- Investment support continues for ecologically and economically sustainable harvest of Blue Swimmer Crab.

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 to participate in the Blue Swimmer Crab industry.
- Industry has not had any impact resulting from Serious Organised Crime activities for a significant period of time.

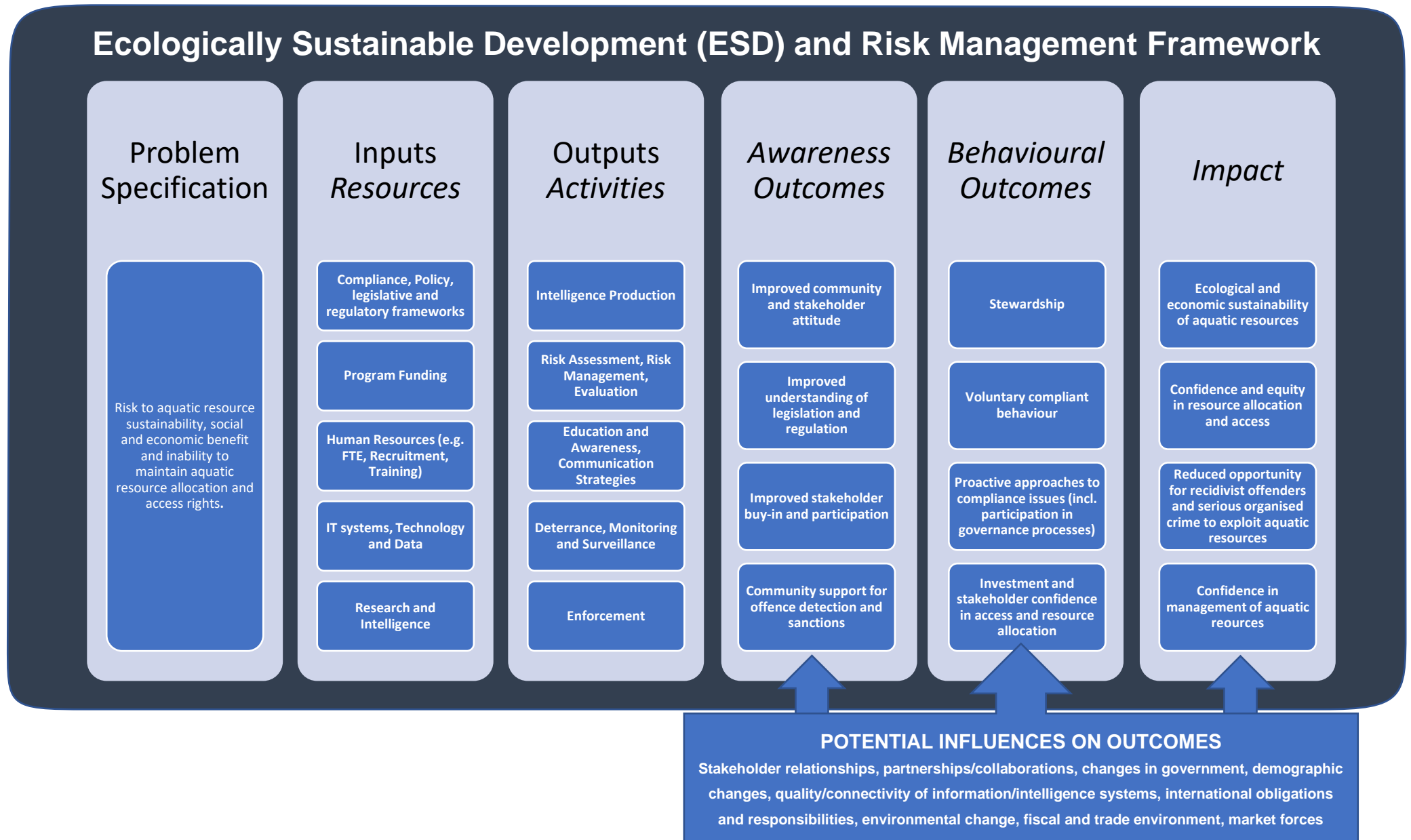
Confidence in management of aquatic resources

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

Deliverables

In line with the annual performance report the compliance deliverables will be presented separately.

Appendix 1: PIRSA Fisheries and Aquaculture Compliance Program Logic Model



Stock Assessment and Monitoring Program

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1. Project details

1.1 Title

Blue Crab Fishery

1.2 Subcontractor/Collaborator

South Australian Blue Crab Pot Fishers Association

1.3 Timeframe

Commencement Date: 1 July 2021

Completion Date: 30 June 2022

1.4 Summary

This scope of work will provide PIRSA Fisheries and Aquaculture with the information required for the ecologically sustainable management of the Blue Crab Fishery (BCF) in South Australia. The primary outputs from the research program in 2021/22 are:

(1) Annual fishery-independent surveys (FIS) (due 30 April 2022);

(2) Advice Note on FIS (due 15 May 2022); and

(3) Annual stock assessment report (due 30 June 2022).

(4.) Funds are also recovered in the SLA for a Strategic Research Project to support the transition from research to commercial pots (due 31 January 2022)

Secondary outputs include presentations provided to PIRSA and industry on survey results and other information to inform TACC discussions.

2. Project description

2.1 Background

The blue swimmer crab *Portunus armatus* is widely distributed in tropical coastal margins of Australia but also occurs in isolated populations in the temperate gulf waters of South Australia and on the West Coast. Historically, blue swimmer crabs were taken as a by-product of prawn fishing, however since the early 1980's targeted commercial fishing of crabs has been undertaken in three regional fishing zones in South Australia (West Coast, Spencer Gulf, Gulf St Vincent). Research primarily focuses on the pot fishing sectors in Spencer Gulf and Gulf St Vincent, which collectively harvest ~99% of the total allowable commercial catch (TACC).

2.2 Need

The provision of accurate information on blue swimmer crab stocks is critical to ongoing management strategies for the sustainable harvesting of the resource. The annual assessment will provide PIRSA with the capacity to monitor the ongoing performance of the fishery and initiate, where necessary, adaptive management strategies in a timely manner.

2.3 Objectives

2.3.1 Fishery independent surveys

To undertake FIS of the BCF. Data to be incorporated into annual stock assessments to provide information independent of the commercial fishery. The objective is to provide a measure of relative abundance not altered by changing fishing patterns.

2.3.2 Commercial logbooks

To collect, collate and analyse fisher logbook information. Data to be incorporated into annual stock assessments to provide information on the commercial fishery.

2.3.3 Survey advice note

To provide advice on survey results assessed against the performance indicators for the fishery.

2.3.4 Stock assessment report

To integrate data available for the fishery and to provide a stock status classification of the resource.

2.3.5 Transition from research to commercial pots (Strategic Research Project)

To assess statistical differences in CPUE between the two pot types.

To determine the number of research pots required for annual sampling to calibrate future commercial gear changes.

2.4 Methods

2.4.1 FIS data:

- Collate, validate and analyse FIS data.

- SARDI to provide observers for surveys conducted throughout the season.

2.4.2 **Fisher logbook information:**

- Collate, validate and analyse fisher logbook information.

2.4.3 **Survey advice note**

- Provide a summary of survey results.
- Undertake assessment of performance indicators against reference points specified in the Harvest Strategy.

2.4.4 **Stock assessment report**

- Provide annual report and presentations as required.

2.4.4 **Transition from research to commercial pots (Strategic Research Project)**

The project is proposed to be undertaken in two phases.

- **Phase 1** will be a desktop study to determine whether there is a relationship between commercial pot CPUE and research pot CPUE. A model of the relationship will be developed by fitting a linear equation to observed data. The strength of this relationship will be examined statistically.
 - If the relationship between commercial pot CPUE and research pot CPUE is not significant (as demonstrated by the P-values and R^2), the equation developed will not be suitable to re-calibrate the reference points for commercial pot CPUE.
 - If the relationship between commercial pot CPUE and research pot CPUE is significant, the equation developed will be used to re-calibrate the reference points relative to commercial pot CPUE.
- **Phase 2** will be a desktop study to determine whether there is a relationship between research pot CPUE and commercial pot CPUE under a reduced design (e.g. one or two pots per line of commercial pots). A model of the relationship will be developed by fitting a linear equation to observed data. The strength of this relationship will be examined statistically. The two datasets will be autocorrelated so the purpose of this exercise is not to find a significant correlation but to examine the strength of the correlation to determine the minimum number of research pots that would be required to continue the long-term time series.

3. Deliverables

The key deliverables of the 2021/22 BCF stock assessment and monitoring program are tabulated below; additional work related to the core program is also identified:

Funding Source	Deliverable	Due Date
SLA	Advice Note on transition from research to commercial pots delivered	31 January 2022
SLA	Surveys for Spencer Gulf and Gulf St Vincent zones of the BCF completed	30 April 2022
SLA	Advice Note on FIS results delivered	15 May 2022
SLA	Stock assessment report delivered	30 June 2022
SLA	Advice Note and fishery assessment presentations to PIRSA Fisheries and Aquaculture and South Australian Blue Crab Pot Fishers Association (SABCPFA) representatives delivered as required	30 June 2022
FRDC	Project continuation: Evaluation of a smart-phone application to collect recreational fishing catch estimates, including an assessment against an independent probability based survey, using South Australia as a case study (FRDC project 2020/056)	30 June 2022

3.1 Service Provided:

3.1.1 *Collection of Basic Fisheries Statistics*

- Manage a comprehensive fishing logbook program.
- Collate fishing logbook returns and provide an in-confidence service.
- Validate returns including consultation with fishers to correct returns.
- Enter data and maintain storage in a secure location.
- Ongoing database administration, maintenance and development.

3.1.2 *Fishery Independent Survey*

- Fishery-independent surveys are to be conducted in Spencer Gulf and Gulf St Vincent using commercial vessels. Surveys to be conducted in each gulf during March/April. The cost of hiring commercial vessels is included in the budget.

3.1.3 *Review of management strategies and plan*

- Work with the industry and the fishery manager to review the research plan and the Management Plan.

- Investigate opportunities for new projects and potential additional funding sources.

3.1.4 *Analysis and interpretation*

- Interpret results of the research program in the stock assessment report.
- Update SA fisheries status report as required.

3.1.5 *Project management*

- Supervise project, quality control, management of deliverables.
- Respond to requests from PIRSA Fisheries and Aquaculture.

3.1.6 *Reporting*

- Attend Blue Crab industry meetings including preparation and follow up.
- Keep the industry abreast of research projects relevant to the Blue Crab Fishery.

3.2 Outcomes:

- Stock assessment of the BCF.
- Advice on the survey results against the performance indicators and reference points in the Management Plan.
- Advice to support fishery management from stock assessment outputs.

3.3. Outputs and extension:

- Provide an annual survey report (in the form of an advice note to PIRSA) that summarises survey results by 15 May, 2022.
- Provide a stock assessment report on the Blue Crab Fishery to PIRSA Fisheries and Aquaculture by 30 June 2022 that documents, analyses and interprets the available data and assesses the fishery against the performance indicators identified in the Management Plan.
- Annual presentation to PIRSA Fisheries and Aquaculture and the SABCPFA on the advice note and stock assessment of the BCF, if required.
- Provide Advice Note to PIRSA on transition from research to commercial pots.

4. Funding arrangements

4.1 Project costing policy

This one-year research program Scope and Costing has been costed at a Discounted rate.

4.2 Project cost

Program Milestones	Total Funded \$ (GST N/A)	Total SARDI In-kind \$ (GST N/A)	Total Project Cost \$ (GST N/A)
Fishery stock assessment program (SLA)	\$232,995	\$37,939	\$270,934
Advice to support Transition from research to commercial pots	13,382	3,024	16,406
TOTAL PROJECT	\$246,377	\$40,963	\$287,340

4.3 Milestone and payment schedule

Date	Milestone	Payment (\$) Ex GST
31 December 2021	Payment 1 of 2021/22 SLA	\$116,497
31 January 2022	Advice Note: pot transition	\$13,382*
15 May 2022	Advice Note: 2022 Surveys	
31 May 2022	Payment 2 of 2021/22 SLA	\$116,498
30 June 2022	Stock assessment report	
SUBTOTAL		\$246,377
GST		NO GST
TOTAL COST		\$246,377

* indicates these funds already available from licence holders

5. Project staff

Staff	Stock assessment FTE	Pot Transition FTE
Principal Scientist (SLA)	0.10	
Research Officer (SLA)	0.38	
Research Scientist (SLA)	0.34	
Principle Scientist (Pot transition)		0.06
TOTAL	0.82	0.06

6. Project cost summary

Cost	Detail	Stock assessment 2021/22 Total (\$) Ex GST	Pot Transition* 2021/22 Total (\$) Ex GST
Salaries (FTE)		0.82	0.06
Salaries (\$)		\$105,574	\$8,267
Operating (\$)			
Logbook program (\$)		\$16,580	
Payment to industry for surveys (\$)		\$34,000	
Fieldwork (\$)		\$12,000	
Laboratory (\$)			
Travel (\$)			
Office and communication (\$)		\$1,200	
Capital equipment (\$)			
SARDI overhead (\$)		\$63,641	\$5,115
SARDI inkind (\$)		\$37,939	\$3,024
Total Cost (\$)		\$270,934	\$16,406
Revenue – PRICE			
Licence holders (\$)		\$163,096	
PIRSA F&A (\$)		\$69,899	\$13,382
Total Revenue (\$)(86%)		\$232,995	\$13,382
SARDI Investment (\$)(%)		\$37,939 (14%)	\$3,024 (18%)

* indicates these funds already available from licence holders

Explanation of costs above:

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

