

# PIRSA

## **Cost Recovery Implementation Statement for the Spencer Gulf & West Coast Prawn Fishery**

**1 July 2020 to 30 June 2021**



# Cost Recovery Implementation Statement

Information current as of February 2020  
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# Introduction

Wild catch commercial fisheries in South Australia are 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 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 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.

In 2018, the Government made an election commitment to initiate an independent review of the cost recovery policy of Primary Industries and Regions South Australia (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](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 Cabinet Submission to amend regulations to prescribe 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 - Spencer Gulf Prawn Fishery

2019-20 (\$)	PROGRAM AREA	2020-21 (\$)	COMMENTS	DAYS	FTE
<b>RESEARCH COSTS</b>					
569,273	Stock Assessment and Monitoring	540,518	Year 2 of 4 year, reduced amount for new survey design and observer coverage for 2019-20 and 2020-21		
15,722	Economic Assessment	16,193	As per contracted services 2020-21		
1,687	Other Research	1,734	Contribution towards Threatened and Endangered Species		
<b>PIRSA RELATED COSTS *</b>					
43,200	Policy and Management	43,740	Same level of service as previous year	45	0.23
10,300	Legislation	10,510	Same level of service as previous year	10	0.05
22,680	Licensing	15,580	Reduced level of service compared to 19/20 by 10 days	20	0.10
15,056	Directorate	15,600	Same level of service as previous year	16	0.08
40,928	Compliance	41,760	Same level of service as previous year	32	0.16
76,640	Vessel	78,760	Same level of service as previous year	10	0.05
<b>OTHER COSTS</b>					
100,995	FRDC	103,529	Funding based on 0.25% of rolling three year average GVP		
205,510	Co-Management Services	186,995	CMS requested for 2020-21 is \$218,600. Industry have requested the 2018-19 over collection of \$31,605 for CMS be deducted from 2020-21		
<b>1,101,991</b>	<b>TOTAL</b>	<b>1,054,919</b>			

<b>Licence Fee 2020-21 (\$)</b>	
Licence Fee	27,049
<i>Licence Fee 2019-20 (\$)</i>	
<i>Licence Fee</i>	<i>28,256</i>

## Summary Table – West Coast Prawn Fishery

2019-20 (\$)	PROGRAM AREA	2020-21 (\$)	COMMENTS	DAYS	FTE
<b>RESEARCH COSTS</b>					
37,995	Stock Assessment and Monitoring	38,964	Year 2 of 4 year research project scope		
725	Economic Assessment	746	As per contracted services 2020-21		
130	Other Research	133	Contribution towards Threatened and Endangered Species		
<b>PIRSA RELATED COSTS *</b>					
7,680	Policy and Management	7,776	Same level of service as previous year	8	0.04
1,030	Legislation	1,051	Same level of service as previous year	1	0.01
1,512	Licensing	1,558	Same level of service as previous year	2	0.01
1,882	Directorate	1,950	Same level of service as previous year	2	0.01
7,674	Compliance	7,830	Same level of service as previous year	6	0.03
15,328	Vessel	15,752	Same level of service as previous year	2	0.01
<b>OTHER COSTS</b>					
7,048	FRDC	5,902	Funding based on 0.25% of rolling three year average GVP		
0	Co-Management Services	0	No Co-Management Services requested for 2020-21		
<b>81,004</b>	<b>TOTAL</b>	<b>\$81,662</b>			

<b>Licence Fee 2020-21 (\$)</b>	
Licence Fee	\$27,221
<i>Licence Fee 2019-20 (\$)</i>	
<i>Licence Fee</i>	<i>27,001</i>

## Fishery Management Objectives - Spencer Gulf Prawns

Management Plan Objectives	Outcomes	Policy and Management	Compliance	Assessment and Research	Leasing and Licensing
<p>Maintain ecologically sustainable prawn biomass.</p> <p>Optimum utilisation and equitable distribution.</p>	<p>Maintain stocks and ecosystem in line with the Management Plan under the Fisheries Management Act 2007.</p> <p>Sufficient data and information are available to undertake real time management.</p> <p>Finalise and implement Management Plan under Fisheries Management Act 2007 and its implementation.</p> <p>Maximise value within ecologically sustainable limits.</p> <p>Memorandum of Understanding (MoU) between PIRSA and the Association on the activities to be undertaken by the respective parties under the Ministerial delegation to set fishing runs.</p>	<p>Real-time management in accordance with the Harvest Strategy.</p> <p>Preparation, attendance and participation in selected management committee meetings.</p> <p>Auditing fishing strategies and assisting with the application of the delegation.</p> <p>Support the development and implementation of the new management plan for the fishery.</p> <p>Continue implementation and management of existing programs.</p> <p>Finalise Management Plan and implementation of the Harvest Strategy.</p> <p>Develop and implement MoU between respective parties re the rules and procedures for setting management</p>	<p>Implement compliance program, in accordance with risk assessment.</p> <p>Support implementation of Management Plan.</p> <p>Support finalisation of Management Plan and its implementation.</p> <p>Develop licence conditions for the introduction of eLogs as a compliance or intelligence-gathering tool.</p>	<p>Conduct and report on surveys.</p> <p>Produce biennial stock assessment reports to assess fishery performance, in accordance with Management Plan (2020/21 &amp; 2022/23).</p> <p>Produce annual stock status advice note to inform Harvest Strategy.</p> <p>Support finalising Management Plan and its implementation.</p>	<p>Support implementation of Management Plan.</p> <p>Provide ongoing support for licensing queries.</p> <p>Support finalising Management Plan and its implementation.</p>

Management Plan Objectives	Outcomes	Policy and Management	Compliance	Assessment and Research	Leasing and Licensing
		arrangements through fishing runs.			
Protect and conserve aquatic resources, habitats and ecosystems.	<p>Progress actions and conditions for MSC auditing purposes.</p> <p>Review and implement recommendations in the DotE WTO accreditation under EPBC Act.</p> <p>Consider and implement any arrangements identified through the ESD RA process</p>	<p>Support implementation of actions and conditions for MSC auditing.</p> <p>Support the development and implementation of bycatch and habitat monitoring programs.</p> <p>Continue implementation and management of existing programs.</p> <p>Consider and implement any processes identified through the ESD risk assessment process in relation to habitats and ecosystems.</p>	Implement compliance program, in accordance with compliance risk assessment.	<p>Support implementation of actions and conditions for MSC.</p> <p>Provide scientific advice on habitat and ecosystem research, when required.</p>	
Enable effective and participative management of the fishery.	Effective engagement with the industry, in accordance with agreed co-management arrangements.	Preparation, attendance and participation at association meetings and provision of advice, as required.	Attend association meetings and provide advice on compliance issues, as required.	Attend association meetings and provide advice on scientific issues, as required.	Provide ongoing support for licensing queries.

## Fishery Management Objectives – West Coast Prawns

Management Policy Objectives	Outcomes	Fisheries Policy and Management	Compliance	Assessment and Research	Leasing and Licensing
Maintain ecologically sustainable prawn biomass.	Stock maintenance. Implementation of the management policy and revised Harvest Strategy following delivery of stock assessment.	Real-time management in accordance with management policy. Implement revised Harvest Strategy.	Implement compliance program, in accordance with risk assessment.	Conduct and report on surveys as described in the Harvest Strategy for the fishery.  Produce annual advice note to inform Harvest Strategy decision rules.	Provide ongoing support for licensing queries.
Optimum utilisation and equitable distribution of the resources.					
Ensure optimal utilisation and equitable distribution.	Annual Report for DotE.	Continue implementation and management of existing programs.  Develop options to assess ecological risks including bycatch.	Implement compliance program, in accordance with risk assessment.		
Cost-effective, efficient and participative management of the fishery.	Effective engagement with the industry, in accordance with agreed co-management arrangements.	Preparation, attendance and participation at association meetings and provision of advice, as required.	Attend association meetings and provide advice on compliance issues, as required.	Attend association meetings and provide scientific advice, as required.	Provide ongoing support for licensing queries.

# Fisheries Policy and Management Program

## Program Manager:

Alice Fistr, General Manager, Fisheries Policy and Management Unit  
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## Program summary

The Fisheries Policy and 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 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 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 Spencer Gulf and West Coast Prawn 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 and 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**

1. Provision of clear instructions for complex legal drafting or compilation of drafts of simple legislative instruments in consultation with the legal manager as necessary for the management of the Spencer Gulf and West Coast Prawn Fishery (regulations, closure notices, licence conditions, Ministerial exemptions, regulation 10 notices under the prawn fisheries regulations etc).
2. Provide advice to the Minister or his/her delegate on setting effort levels for the Spencer Gulf and West Coast Prawn Fishery.
3. Develop and implement a Memorandum of Understanding (MoU) between PIRSA and the Spencer Gulf and West Coast Prawn Fishermen's Association (the Association) detailing the activities to be undertaken by the respective organisations under the Ministerial delegation that has been provided to the Association to set fishing runs.
4. Prepare policies to support fisheries management.
5. Prepare submissions to enable regular assessment of the Spencer Gulf and West Coast Prawn Fishery under the EPBC Act.
6. Prepare annual report to the Australian Government on EPBC Act requirements for the Spencer Gulf and West Coast Prawn fisheries.
7. Prepare regular fisheries status reports.
8. Develop and maintain day-to-day productive working relationships and outcomes through cooperative management and collaboration with stakeholders.
9. 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 a bycatch monitoring program.
3. Develop and implement Management Plan. Management Plans to include Harvest Strategies that protect sustainability of the fishery based on ESD risk assessment processes.
4. Australian Government recommendations met in relation to EPBC assessment.
5. Setting of management arrangements, including fishing runs, for Spencer Gulf and West Coast Prawn 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 (\$)
Policy and Management – Spencer Gulf	45	0.23	43,740
Policy and Management – West Coast	8	0.04	7,776

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

### Spencer Gulf Prawn Fishery

	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 and other parts of PIRSA on the application, development and implementation of decisions relevant to fisheries management.	Ongoing
3.	Liaise with the Executive Officer of the Spencer Gulf and West Coast Prawn Fishermen's Association (SGWCPFA) and licence holders in the fishery on the application, development and implementation of decisions relevant to fisheries management.	Ongoing
4.	Support the Executive Officer and Coordinator at Sea positions within the SGWCPFA to develop and implement notices under Regulation 10 of the <i>Fisheries Management (Prawn Fisheries) Regulations 2017</i> to set fishing runs and surveys under the delegation these positions have been provided.	Ongoing
5.	Participate in the SGWCPFA Management Committee and Research Sub-Committee meetings, providing accurate and effective information to assist these parties in the development of fisheries management advice to the Executive Director, Fisheries and Aquaculture.	Ongoing
6.	Implementation of the new Management Plan for the South Australian Commercial Spencer Gulf Prawn Fishery.	Ongoing
7.	Implementation and development of a bycatch monitoring program for the fishery in collaboration with the SGWCPFA Executive Officer and SARDI.	Ongoing
8.	Attend to general correspondence and enquiries relevant to the SGPF.	Ongoing
9.	Provide advice to Minister in relation to the management of fisheries and Ministerial correspondence.	Ongoing
10.	Communicate on fisheries management issues to key stakeholder groups and the broader community.	Ongoing

## West Coast Prawn Fishery

	<b>Deliverables</b>	<b>Due date</b>
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 and other parts of PIRSA on the application, development and implementation of decisions relevant to fisheries management.	Ongoing
3.	Liaise with the Executive Officer of the Spencer Gulf and West Coast Prawn Fishermen's Association (SGWCPFA) and licence holders in the fishery on the application, development and implementation of decisions relevant to fisheries management.	Ongoing
4.	Delivery of SARDI advice note reporting on key performance indicators in the fishery by 30 November 2020.	30 November
5.	Setting of management arrangements for the fishery, through consultation with the SGWCPFA Executive Officer and licence holders in the fishery.	28 February
5.	Participate in the SGWCPFA Management Committee and Research Sub-Committee meetings, providing accurate and effective information to assist these parties in the development of fisheries management advice to the Executive Director, Fisheries and Aquaculture.	Ongoing
8.	Attend to general correspondence and enquiries relevant to the WCPF.	Ongoing
9.	Provide advice to Minister in relation to the management of fisheries and Ministerial correspondence.	Ongoing
10.	Communicate on fisheries management issues to key stakeholder groups and the broader community.	Ongoing

# Legal Services Program

## Program Manager:

Lambertus Lopez, Manager, Legal and Legislative Programs

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## Program summary

PIRSA Fisheries & Aquaculture Directorate provides legal services to the Deputy Chief Executive 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 Spencer Gulf & West Coast Prawn 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

### Anticipated outcomes

1. Co-ordinate the introduction, amendment or revocation of Fisheries legislation in line with Fisheries Policy decisions i.e. Act or regulation amendments, the introduction of new regulations and drafting of other legislative and administrative instruments such as delegation, permit or exemption instruments as required under the Fisheries Management Act 2007 (the Act). New regulations or amendments require the drafting of Cabinet submissions and supporting documentation, including the preparation of drafting instructions, for consideration by Cabinet. This service includes co-ordinating the cabinet process involving liaison with the Office of Parliamentary Counsel and the Crown Solicitor's Office and inter agency consultation to ensure that proposed regulatory arrangements are accurately described, drafted and scrutinised before being implemented.
2. Review licensing arrangements required on an as needs basis to appropriately implement approved fishery management policy and measures within the limitations of the Act. The service includes working with the Licensing program (part of Systems and Information) where necessary to implement efficient administrative systems and finalise forms and instruments that are legally sound.
3. Problem solve together with the provision and co-ordination of legal advisory services in liaison with the Crown Solicitor's office relating to the implementation and administration of the Act, Regulations and fisheries management policies, interaction with other Acts, and the defence of those policies and arrangements raised in litigation or industry correspondence.
4. Coordinate applications for Ministerial exemptions under Part 10 Division 1 and Permits under Part 7 Division 2 of the Act.

5. Additional legal services to support, on an as needs basis, the decision-making of the 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) 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.

Activity	Days	FTE	Cost (\$)
Legal Services – Spencer Gulf	10	0.05	10,510
Legal Services – West Coast	1	0.01	1,051

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

# Leasing and Licensing Program

## Program Manager:

Rob Falco, Manager, Leasing and Licensing  
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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.

### 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 invoices.
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 licensing, 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 and Aquaculture, SARDI Aquatic Sciences, Crown Solicitors and other state and local agencies on matters relevant to the fishery.
13. Draft and update licence conditions over the duration of the licensing year as determined by the Executive Director, Fisheries and Aquaculture.
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, boat variations and quota transfers, as well as provide advice and support to fishers on licence information, to complete the required forms.
17. Effort required to investigate and implement electronic reporting into fishery and associated troubleshooting between industry, Fisheries and Aquaculture Compliance, Real Time Data, Oracle CMS, PIRSA ICT and SARDI. This effort will be reviewed annually.

### **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 Fisheries and Aquaculture 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.

## 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 – Spencer Gulf	20	0.10	15,580
Leasing and Licensing – West Coast	2	0.01	1,558

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

# Directorate Program

## Program Manager:

Chiara Ciui, Business 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

### 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.

Activity	Days	FTE	Cost (\$)
Directorate – Spencer Gulf	16	0.08	15,600
Directorate – West Coast	2	0.01	1,950

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

# Fisheries Compliance Operations Program

## Program Manager:

Andrew Carr, Regional Manager

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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 Spencer Gulf & West Coast Prawn 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 Spencer Gulf & West Coast Prawn Compliance Plan are primarily delivered by teams located in Port Lincoln and Fisheries Patrol Vessel Southern Ranger. Support is also provided as required from the three Regional Operation teams 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 industry. These outputs are aimed at educating fishers, deterring opportunistic and financially motivated crimes, enforcing 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 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 Spencer Gulf & West Coast Prawn Fishery are identified herein.

## Legislative and regulatory framework

*Fisheries Management Act 2007*

*Fisheries Management (Fish Processors) Regulations 2007*

*Fisheries Management (General) Regulations 2007*

*Fisheries Management (Demerit Points) Regulations 2009*

## 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 has continually reviewed the Spencer Gulf & West Coast Prawn Fishery compliance program, gaining efficiencies through data driven and targeted operations and re-directing compliance effort where necessary to address current and emerging issues and risks.

It should be noted that for the year ending 30 June 2019 PIRSA expended 50.8 days of effort (~\$65k) above the cost recovered program for the Spencer Gulf and West Coast Prawn fisheries. These figures include increased effort associated with transitioning the fisheries to electronic reporting. The following tables includes the number of days predicted to reflect the anticipated split of effort and associated costs to deliver the compliance outputs for 2020/21.

Table 1: SGP Effort Allocation by Compliance Outputs

Compliance Outputs	Days	FTE	Cost (\$)
Education Awareness	3	0.015	3,915
Effective Deterrence, Monitoring and Surveillance	28	0.14	36,540
Enforcement	1	0.005	1,305
<b>TOTAL OFFICER DAYS</b>	<b>32</b>	<b>0.16</b>	<b>41,760</b>
<b>Fisheries Patrol Vessel Southern Ranger</b>	<b>10</b>		<b>78,760</b>

Table2: WCP Effort Allocation by Compliance Outputs

Compliance Outputs	Days	FTE	Cost (\$)
Education Awareness	1	0.005	1,305
Effective Deterrence, Monitoring and Surveillance	4	0.02	5,220
Enforcement	1	0.005	1,305
<b>TOTAL OFFICER DAYS</b>	<b>6</b>	<b>0.03</b>	<b>7,830</b>
<b>Fisheries Patrol Vessel Southern Ranger</b>	<b>2</b>		<b>15,752</b>

**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).
- Vessel Monitoring System (VMS).
- 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 Spencer Gulf & West Coast Prawn 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 Prawns. 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, Bycatch and other issues impacting the Spencer Gulf & West Coast Prawn 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 and caution notices.
- Communicate enforcement outcomes in formal reporting
- Service of suspension notices.

## **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 Spencer Gulf & West Coast Prawn Fishery.

1. Fish in Closed Areas or Outside Prescribed Areas and Times.
2. Take Protected or Non Permitted Species.
3. By-Catch.
4. Use Illegal Fishing Gear.
5. Interactions with Obstructions on the Sea Floor (SGP Only).

## **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, behaviour 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.

## **Behaviour**

Successful outcomes and long term sustainable fisheries are ultimately driven by behaviour 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 Spencer Gulf & West Coast Prawn 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 Prawn between user groups, a confidence

in the ability of PIRSA to manage Spencer Gulf & West Coast Prawn 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 Prawn resources is fair and equitable.
- Investment support continues for ecologically and economically sustainable harvest of Prawns.

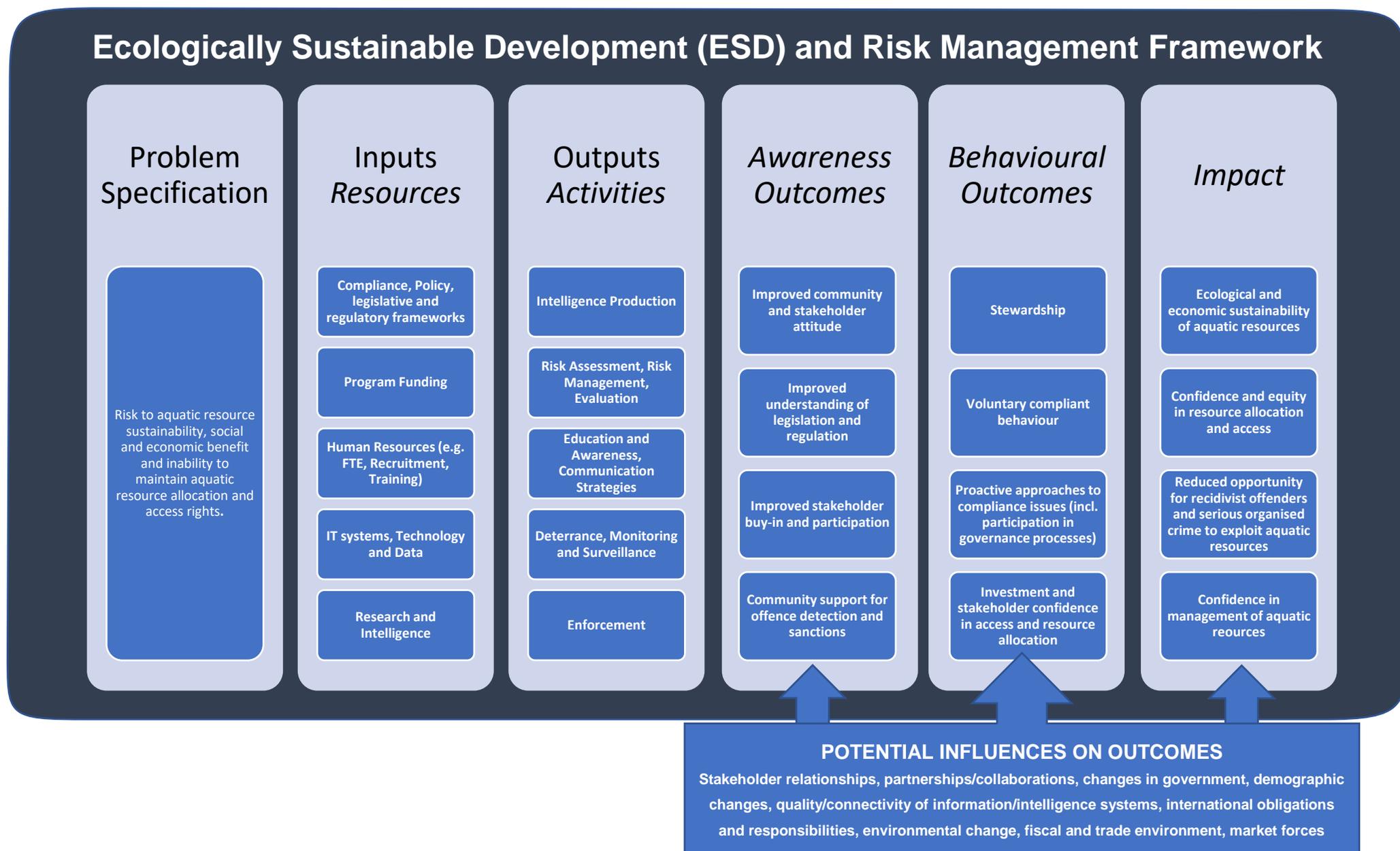
### **Reduced opportunity for recidivist offenders and Serious Organised Crime to exploit aquatic resources**

- Regulators, law enforcement and industry have closed opportunities for Serious Organised Crime to participate in the Spencer Gulf & West Coast Prawn 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 Spencer Gulf & West Coast Prawn stocks.
- Positive consumer perception for commercially harvested Spencer Gulf & West Coast Prawns.
- An absence of adverse industry publicity

## Appendix 1: Fisheries and Aquaculture Compliance Program Logic Model



# Stock Assessment and Monitoring Program

## Spencer Gulf Prawn Fishery

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## 1. Project details

### 1.1 Title

Spencer Gulf Prawn Fishery

### 1.2 Subcontractor/Collaborator

Spencer Gulf and West Coast Prawn Fishermen's Association

### 1.3 Timeframe

Commencement Date:            1 July 2019

Completion Date:                30 June 2023

### 1.4 Summary

This scope of work will provide PIRSA Fisheries and Aquaculture with the scientific information required to underpin the ecologically sustainable management of the Spencer Gulf Prawn Fishery (SGPF) in South Australia. The core stock assessment and monitoring program for the SGPF is comprised of several components:

- Fisheries statistics and fishery logbook (annual).
- Fishing strategy development and real-time management (fishery-independent surveys, FIS) (annual).
- Length-frequency measurements by observers in upper Spencer Gulf (100 prawns at 34 pre-determined locations) during March FIS (as supplementary length-based information on recruitment).
- Bycatch data collection by observers (during annual fishery-independent surveys). This replaces the gulf-wide length-frequency measurement program previously undertaken by observers.
- Stock status Advice Note (annual).

- Stock assessment report (including updated estimate of trawl footprint) (biennial – 2020/21 and 2022/23).
- Advice Note to summarise by-catch program and statistics.
- Provision of aggregated data to the Executive Officer, SGWCPFA (annual).

Details of the work program activities in each year are also identified in Appendix 1. A key difference from previous work programs is the removal of the juvenile prawn abundance and disease-monitoring surveys from this Project Scope.

Secondary outputs include presentations provided to PIRSA Fisheries and Aquaculture and the Management Committee of the Spencer Gulf and West Coast Prawn Fishermen's Association (SGWCPFA) on stock assessment and other information as required.

## 2. Project description

### 2.1 Background

Production from the SGPF has been relatively stable between 1600 t and 2400 t throughout the history of the fishery. Since 1978 effort has effectively halved. Fishing strategies are developed from a combination of fishery-independent and –dependent surveys and data collected during commercial fishing.

SARDI provides an independent assessment of the status of the resource against the PIs of the Management Plan. This assessment is underpinned by prawn survey data collected in a fishery-independent manner. The assessment also incorporates an evaluation of the real-time monitoring (RTM) practices of the fishery. SARDI has developed tools to aid electronic data capture during surveys and regularly provide training to observers and crew on the survey data requirements through a series of workshops.

In recent years, SARDI has also conducted a variety of other research that relates to South Australia's prawn fisheries, such as bycatch surveys (to inform risk assessment and management), development of by-catch reduction devices, ecosystem-based fisheries management, juvenile abundance and disease-monitoring surveys and bio-economic modelling.

### 2.2 Need

Multiple FIS are required throughout the fishing season to report against the PIs of the SGPF, thus providing the basis for assessment of the fishery or determining stock status. Immediate assessment of FIS data, enhanced through electronic data capture and analysis, enables assessment against the criteria of the Management Plan and subsequent development of appropriate fishing strategies. FIS also provide information on egg production and recruitment to the fishery. In addition to delivering fishery assessments, this scope of work includes bycatch monitoring of the fishery.

### 2.3 Objectives

#### 2.3.1 *Collect and analyse FIS and FDS data to:*

- Develop fishing strategies in accordance with the decision rules of the Management Plan.
- Assess performance of the fishery with respect to fishing strategy criteria and against the biological PIs of the Management Plan.
- Determine stock status.
- Deliver two stock assessment reports.

#### 2.3.2 *Collect, collate and analyse fisher logbook information to:*

- Determine spatial and temporal patterns in catch and effort.
- Assess performance of the fishery with respect to fishing strategy criteria and against the biological PIs of the Management Plan.
- Assess the effectiveness of RTM.

#### 2.3.3 Monitor bycatch in the fishery.

- Collect bycatch data on selected species.

- Summarise bycatch statistics.

## 2.4 Methods

### 2.4.1 *Fisheries statistics and fishery logbook:*

- Collate and validate (through consultation with fishers to correct returns) fishing logbook returns.
- Enter catch and effort, FIS and fishery-dependent survey (FDS) data.

### 2.4.2 *Fishing strategy development and real-time management:*

- Run annual workshops (or as required) to educate skippers, crews and observers on the importance of surveys and data collection requirements.
- Manage and coordinate FIS observer program.
- Prepare and distribute spreadsheets for skippers (e-logs) to provide catch rate and prawn size data through email.
- Collate and analyse survey data including spatial analysis.

### 2.4.3 *Stock assessment:*

- Update information on the biology of western king prawns (where necessary).
- Analyse trends in biomass through FIS data.
- Analyse spatial and temporal trends in fishery-dependent catch and effort data.
- Update estimate of trawl footprint.
- Summarise information on by-product and bycatch.
- Assess performance of fishery with respect to fishing strategy criteria and biological performance indicators (PIs) in the Management Plan.
- Determine stock status in accordance with reference points in the Management Plan.
- Recommendations on future research.

### 2.4.4 *Provision of aggregated data:*

- Provide the Executive Officer, SGWCPFA, with aggregated data as specified in Appendix 2.

### 2.4.5 *Stock status advice:*

- Analyse trends in biomass through FIS data.
- Determine stock status in accordance with reference points in the Management Plan.

### 2.4.6 *Bycatch monitoring:*

- Record numbers and weights of previously identified bycatch species of interest (~20 species) during fishery-independent surveys.
- Analyse spatial and temporal distribution of these bycatch species and summarise statistics in Advice Note.

### 3. Deliverables

The key deliverables of the 2020/21 SGPF 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: Bycatch monitoring program 2019/20	1 July 2020
SLA	Advice Note: Stock status	30 September 2020
SLA	November Fishery-independent survey & bycatch data collection completed	30 November 2020
SLA	March Fishery-independent survey (including length-frequency) & bycatch data collection completed	31 March 2021
SLA	April Fishery-independent survey & by-catch data collection completed	30 April 2021
SLA	Provision of aggregated data to the Executive Officer, SGWCPFA	30 June 2021
PIRSA	Support SGPF MSC audit	30 June 2021
FRDC	Project commencement: Nature and extent of the ecological assets conserved by the Spencer Gulf Prawn Fishery to mitigate their ecological footprint (FRDC Project 2020/002)	1 July 2020
FRDC	Chapter update for Status of Australian Fish Stocks 2020	20 December 2020

#### 3.1 Service Provided:

##### 3.1.1 Data collection

Collection of basic fisheries statistics:

- Manage a comprehensive fishing logbook program, including transition to eCatch.
- Collate fishing logbook returns and provide an in-confidence service.
- Validate returns (consultation with fishers to correct returns).
- Entry and storage of data.
- Database administration, maintenance and development.

Collection of basic fisheries statistics:

- Regular training of observers and crew on the survey data requirements.

- Collection and storage of prawn size and abundance distributions from FIS and FDS.
- Collection and storage of prawn size-grading information.
- Collection and storage of basic biological data e.g. fecundity, length-weight relationships for prawns.

### 3.1.2 *Analysis and reporting*

Analysis and interpretation:

- In stock assessments:
  - Analyse trends in biomass through FIS data.
  - Analyse spatial and temporal trends in fishery-dependent catch and effort data.
  - Assess performance of fishery with respect to fishing strategy criteria and biological performance indicators (PIs) in the Management Plan.
- Real-time analysis to inform fishing strategy development.
- Provide an analysis of survey data for determining stock status and annual Harvest Strategy for the following season.

Industry and policy liaison:

- Provision of aggregated data to the Executive Officer, SGWCPFA (annual).
- Participate and contribute to meetings with PIRSA Fisheries and Aquaculture as required.
- Participate and contribute to SGWCPFA Management Committee and Research Subcommittee meetings as required.
- Respond to requests from PIRSA Fisheries and Aquaculture as required.

Reporting:

- Provide end of fishing season status report incorporating catch and effort data.
- Complete survey reports immediately after each FIS to support RTM (triannual).
- Advice note on the stock status of the SGPF prior to the commencement of the next fishing season (annual).
- Stock assessment report on the SGPF to PIRSA Fisheries and Aquaculture (biennial – 2020/21 and 2022/23).
- Advice note on the bycatch monitoring work program.
- Update relevant chapters in fishery stock status reports as required.

## 3.2 **Outcomes:**

- Timely completion of post-survey reports.

- Advice on the Harvest Strategy and stock status classification prior to the start of the next fishing season.
- Stock assessment of the SGPF.
- Advice to support fishery management from stock assessment outputs.
- Establish and implement bycatch-monitoring program undertaken by observers in conjunction with fishery-independent surveys.

### **3.3. Outputs and extension:**

- Provide end of fishing season status report incorporating catch and effort data.
- Presentation to PIRSA Fisheries and Aquaculture and the Management Committee of the SGWCPFA on the stock assessment of the SGPF (biennial).
- Stock assessment report (biennial – 2020/21 and 2022/23).
- Complete survey reports immediately after each FIS to support RTM (triannual).
- Advice note to PIRSA Fisheries and Aquaculture on stock status prior to the start of each fishing season (annual).
- Advice Note to summarise by-catch program and statistics.
- Provision of aggregated data to the Executive Officer, SGWCPFA (annual).

## 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
2019/20	\$569,273	\$61,623	\$630,896
2020/21	\$540,518	\$66,171	\$606,689
2021/22	\$528,046	\$63,421	\$591,467
2022/23	\$566,303	\$69,520	\$635,823
GST	NO GST	NO GST	NO GST
<b>TOTAL</b>	<b>\$2,204,140</b>	<b>\$260,735</b>	<b>\$2,464,875</b>

### 4.3 Milestone and payment schedule

#### 4.3.1 Four-year research program

##### 2019/20

Date	Milestone	Payment Ex GST (\$)
30 September 2019	Stock status Advice Note	
31 December 2019	First half payment	\$284,636
31 May 2020	Second half payment	\$284,637
30 June 2020	Aggregated data provided to EO	
<b>SUBTOTAL</b>		<b>\$569,273</b>
<b>GST</b>		<b>No GST</b>
<b>TOTAL COST</b>		<b>\$569,273</b>

##### 2020/21

Date	Milestone	Payment Ex GST (\$)
1 July 2020	Advice Note: Bycatch monitoring program 2019/20	
30 September 2020	Stock status Advice Note	
31 December 2020	First half payment	\$270,259
30 April 2021	Report: Fishery Stock Assessment	
31 May 2021	Second half payment	\$270,259
30 June 2021	Aggregated data provided to EO	
<b>SUBTOTAL</b>		<b>\$540,518</b>
<b>GST</b>		<b>No GST</b>
<b>TOTAL COST</b>		<b>\$540,518</b>

**2021/22**

<b>Date</b>	<b>Milestone</b>	<b>Payment Ex GST (\$)</b>
30 September 2021	Stock status Advice Note	
31 December 2021	First half payment	\$264,023
31 May 2022	Second half payment	\$264,023
30 June 2022	Advice Note: Bycatch monitoring program 2019/20	
30 June 2022	Aggregated data provided to EO	
<b>SUBTOTAL</b>		<b>\$528,046</b>
<b>GST</b>		<b>No GST</b>
<b>TOTAL COST</b>		<b>\$528,046</b>

**2022/23**

<b>Date</b>	<b>Milestone</b>	<b>Payment Ex GST (\$)</b>
30 September 2022	Stock status Advice Note	
31 December 2022	First half payment	\$283,151
30 April 2023	Report: Fishery Stock Assessment	
31 May 2023	Second half payment	\$283,152
30 June 2023	Aggregated data provided to EO	
<b>SUBTOTAL</b>		<b>\$566,303</b>
<b>GST</b>		<b>No GST</b>
<b>TOTAL COST</b>		<b>\$566,303</b>

## 5. Project staff

### 5.1 Four-year research program

<b>Staff (if identified)</b>	<b>2019/20 FTE</b>	<b>2020/21 FTE</b>	<b>2021/22 FTE</b>	<b>2022/23 FTE</b>
Principal Investigator	0.75	0.85	0.75	0.85
Principal Scientist	0.10	0.10	0.10	0.10
Research Officer	0.17	0.17	0.17	0.17
Research Services Officer	0.45	0.42	0.42	0.42
<b>TOTAL</b>	<b>1.47</b>	<b>1.54</b>	<b>1.44</b>	<b>1.54</b>

## 6. Project cost summary

Cost	Detail	2019/20 Total (\$) Ex GST	2020/21 Total (\$) Ex GST	2021/22 Total (\$) Ex GST	2022/23 Total (\$) Ex GST
Salaries (FTE)		1.47	1.54	1.44	1.54
Salaries (\$)		176,363	190,970	182,029	208,352
<b>Operating</b>					
Logbook program (\$)		40,185	41,391	42,633	43,911
Payment to industry for surveys (\$)		220,515	168,000	168,000	168,000
Fieldwork (\$)		11,980	11,980	11,980	11,980
Laboratory (\$)		1,200	1,200	1,200	1,200
Travel (\$)		6,549	6,549	6,550	6,550
Office & communication (\$)		5,100	5,100	5,100	5,100
Capital equipment (\$)					
SARDI overhead (\$)		107,381	115,328	110,554	121,210
SARDI inkind (\$)		61,623	66,171	63,421	69,520
<b>Total Cost (\$)</b>		<b>630,896</b>	<b>606,689</b>	<b>591,467</b>	<b>635,823</b>
<b>Revenue – PRICE</b>					
PIRSA F&A (\$)	90%	569,273	540,518	528,046	566,303
<b>Total Revenue (\$)</b>		<b>569,273</b>	<b>540,518</b>	<b>528,046</b>	<b>566,303</b>
<b>SARDI Investment (\$)</b>	10%	61,623	66,171	63,421	69,520

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 -63 survey nights.

*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*

## Appendix 1. Proposed schedule of work for 2019/20–2022/23

2019/20	2020/21	2021/22	2022/23
1. Logbook program	1. Logbook program	1. Logbook program	1. Logbook program
2. FI surveys	2. FI surveys	2. FI surveys	2. FI surveys
3. Stock status advice note	3. Stock status advice note	3. Stock status advice note	3. Stock status advice note
-	4. Stock assessment report	-	4. Stock assessment report
4. Fishery bycatch monitoring	5. Bycatch program and statistics Advice Note	5. Fishery bycatch monitoring (incl. advice note)	

## Appendix 2. Provision of aggregated data to Executive Officer, SGWCPFA

	Primary data source	Data fields/outputs	Grouping	Delivery date (Annual)
1.	Skipper's logs (stock assessment surveys)	Replicate shot data as presented in stock assessment survey reports (i.e. Year, Survey Month, Vessel, Shot ID, Shot Location No., Total Catch, Total Catch Rate, 20+ Catch Rate, Bucket Count, Tide, Comments) plus Trawl Duration, Trawl Distance, No. Nets	None (data requested for individual survey trawl shots)	15 September
2.	Stock assessment report (data underpinning figures)	Year, Region (aggregation of blocks), Catch, Effort, CPUE (Figs 3.6–3.10)	Year	31 October
		Year, Grade, Grade Proportion (by Wt) (Fig. 3.11)	Year	
		Year, Bucket Count Category, Proportion of Nights, Mean Bucket Count (weighted) (Fig. 3.12)	Year	
		Standardised Catches (fishing and survey) Means and standard errors for survey catch rates for adults/recruits, egg production, recruitment (Figs 3.1–3.4, 3.13 and 3.14)	Month (for survey catch rates and recruitment) and Year	
3.	Commercial fishing logbook – WKP	Year, Month, Departure Date, Catch (kg, adjusted), Effort (hours), Grade, Grade Wt	Night, Month and Year	31 December
		Year, Month, Region, Catch (kg, adj.), Effort (h), CPUE, No. Nights, No. Vessels	Month, Year and Region	
		Year, Month, Departure Date, Catch (kg, adj.), Effort (h)	Night, Month and Year; filtered for Committee-At-Sea (CAS) members only	
4.	Commercial fishing logbook – Southern Calamari and Balmain Bug	Year, Month, Species, Region, Catch (kg, adj.)	Month, Year and Region	15 January
5.	Wildlife Interaction Logbook and SARDI Observer data sheet	Year, Month, Region, TEP Species, Nature of Interaction, Status, Fate	Month, Year and Region	15 June

# Stock Assessment and Monitoring Program

## West Coast Prawn Fishery

### Fisheries and Aquaculture Contact Person:

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## 1. Project details

### 1.1 Title

West Coast Prawn Fishery

### 1.2 Subcontractor/Collaborator

Spencer Gulf and West Coast Prawn Fishermen's Association

### 1.3 Timeframe

Commencement Date: 1 July 2019

Completion Date: 30 June 2023

### 1.4 Summary

This scope of work will provide PIRSA Fisheries and Aquaculture with the scientific information required to underpin the ecologically sustainable management of the West Coast Prawn Fishery (WCPF) in South Australia. The core stock assessment and monitoring program for the WCPF is comprised of three key components:

- Fishery Independent Surveys (March, June and November).
- Annual advice note reporting on performance indicators.
- Annual stock status report.

Secondary outputs include presentations provided to PIRSA and the Management Committee of the Spencer Gulf and West Coast Prawn Fishermen's Association (SGWCPFA) on stock assessment and other information as required.

## 2. Project description

### 2.1 Background

There are three licensed operators in the West Coast Prawn Fishery. The catch history of the fishery is punctuated by periods of high catch followed by periods of very low catch. Currently the biomass upon which the fishery is based appears to have recovered, with increasing survey catch rates and increasing commercial catch.

PIRSA Fisheries and Aquaculture, in conjunction with SARDI and industry, previously agreed to a minimalist research strategy that involved the conduct of FIS during November, March and June. As per previous SLA's, four observers were costed to SARDI, and one was supplied by industry. The same arrangements for observers are proposed for this agreement.

### 2.2 Need

Annual stock assessment and status reports are required as part of the ongoing management of the South Australian western king prawn resource. The broad statutory framework for the sustainable management of this resource is provided by the *Fisheries Management Act 2007* with specific policies, objectives and strategies to be employed for the sustainable management of the WCPF as set out in the management policy and Harvest Strategy for the fishery.

### 2.3 Objectives

#### 2.3.1 *Fishery independent surveys:*

- To undertake fishery independent surveys of the WCPF. 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 *Performance indicator advice:*

- To provide advice on performance indicators specified in the Harvest Strategy to inform management arrangements for the fishery.

#### 2.3.4 *Stock status report:*

- To provide a synthesis, data analysis and stock status classification for the fishery to ensure sustainable management of the resource.

### 2.4 Methods

#### 2.4.1 *FIS data*

- Collate, validate and analyse FIS data.
- SARDI and industry 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 *Performance indicator advice note:*

- Undertake assessment of performance indicators against reference points specified in the Harvest Strategy.

#### 2.4.4 *Stock status report*

- Provide annual report and presentations as required.

### 3. Deliverables

The key deliverables of the 2020/21 WCPF stock assessment and monitoring program are tabulated below; additional work related to the core program is also identified:

Funding Source	Deliverable	Due Date
SLA	November Fishery-independent survey completed	30 November 2020
SLA	Annual advice note reporting on performance indicators	30 November 2020
SLA	March Fishery-independent survey completed	31 March 2021
SLA	June Fishery-independent survey completed	30 June 2021
SLA	Annual stock status report	30 June 2021
FRDC	Chapter update for Status of Australian Fish Stocks 2020	31 December 2020

#### 3.1 Service Provided

##### 3.1.1 *Collection of basic fisheries statistics*

- Manage comprehensive fishing logbook program.
- Collate fishing logbook returns and provide an in-confidence service.
- Validate returns (consultation with fishers to correct returns).
- Entry of data and storage.
- Database administration, maintenance and development.
- Collection and storage of size and abundance data from FIS.
- Collection and storage of daily bucket count data

##### 3.1.2 *Analysis and reporting*

- Provide an assessment against performance indicators in the Harvest Strategy.
- Update SA fisheries status report as required.

##### 3.1.3 *Industry and Policy liaison*

- Participate and contribute to PIRSA/industry meetings where needed as the research representative.
- Participate in the Research Subcommittee of the Spencer Gulf and West Coast Prawn Fisherman's Association (SGWCPFA).
- Respond to appropriate requests from PIRSA Fisheries and Aquaculture.

##### 3.1.4 *Reporting*

- Deliver annual stock status reports.
- Provide annual performance indicator advice note.
- Provide other relevant material as required.

### **3.2 Outcomes**

- Stock status of the WCPF.
- Advice on assessment of performance indicators and reference points in the Harvest Strategy Policy.
- Advice to support fishery management from stock status outputs.

## 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

Financial Year	Total Funded by Licence Holders \$ (GST N/A)	Total SARDI In-kind \$ (GST N/A)	Total Project Cost \$ (GST N/A)
2019/20	\$37,995	\$6,288	<b>\$44,283</b>
2020/21	\$38,964	\$6,445	<b>\$45,409</b>
2021/22	\$39,872	\$6,606	<b>\$46,478</b>
2022/23	\$41,457	\$6,772	<b>\$48,229</b>
<b>TOTAL PROJECT (over 4 financial years)</b>	<b>\$158,288</b>	<b>\$26,111</b>	<b>\$184,399</b>

### 4.3 Milestone and payment schedule

Date	Milestone	Payment Ex GST (\$)
30 November 2019	2019 performance indicator advice note	
31 December 2019	First Half Payment 2019/20 SLA.	\$18,997
31 May 2020	Second Half Payment 2019/20 SLA.	\$18,998
30 June 2020	2019 Stock status report for the WCPF	
30 November 2020	2020 performance indicator advice note	
31 December 2020	First Half Payment 2020/21 SLA.	\$19,482
31 May 2021	Second Half Payment 2020/21 SLA.	\$19,482
30 June 2021	2020 Stock status report for the WCPF	
30 November 2021	2021 performance indicator advice note	
31 December 2021	First Half Payment 2021/22 SLA.	\$19,936
31 May 2022	Second Half Payment 2021/22 SLA.	\$19,936
30 June 2022	2021 Stock status report for the WCPF	
30 November 2022	2022 performance indicator advice note	
31 December 2022	First Half Payment 2022/23 SLA.	\$20,728
31 May 2023	Second Half Payment 2022/23 SLA.	\$20,729
30 June 2023	2022 Stock status report for the WCPF	
<b>SUBTOTAL</b>		<b>\$158,288</b>
<b>GST</b>		<b>NO GST</b>
<b>TOTAL COST</b>		<b>\$158,288</b>

## 5. Project staff

<b>Staff</b>	<b>2019/20 FTE</b>	<b>2020/21 FTE</b>	<b>2021/22 FTE</b>	<b>2022/23 FTE</b>
Research Scientist	0.075	0.075	0.075	0.075
Research Officers	0.075	0.075	0.075	0.075
<b>TOTAL</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>

## 6. Project cost summary

Cost	Detail	2019/20 Total (\$) Ex GST	2020/21 Total (\$) Ex GST	2021/22 Total (\$) Ex GST	2022/23 Total (\$) Ex GST
Salaries (FTE)		0.15	0.15	0.15	0.15
Salaries (\$)		17,426	17,970	18,448	19,593
<b>Operating</b>					
Logbook program (\$)		4,822	4,967	5,116	5,269
Payment to industry for surveys (\$)					
Fieldwork (\$)		4,440	4,440	4,440	4,440
Laboratory (\$)					
Travel (\$)		250	250	250	250
Office & communication (\$)		100	100	100	100
Capital equipment (\$)					
SARDI overhead (\$)		10,956	11,237	11,519	11,805
SARDI inkind (\$)		6,288	6,445	6,606	6,772
<b>Total Cost (\$)</b>		<b>44,282</b>	<b>45,409</b>	<b>46,479</b>	<b>48,229</b>
<b>Revenue – PRICE</b>					
Licence Holders (\$)		37,995	38,964	39,872	41,457
<b>Total Revenue (\$)</b>	<b>86%</b>	<b>37,995</b>	<b>38,964</b>	<b>39,872</b>	<b>41,457</b>
<b>SARDI Investment (\$)</b>	<b>14%</b>	<b>6,287</b>	<b>6,445</b>	<b>6,607</b>	<b>6,772</b>

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*

